



ICAR

International Conference



2011

on Arabidopsis Research

22ND INTERNATIONAL CONFERENCE ON ARABIDOPSIS RESEARCH

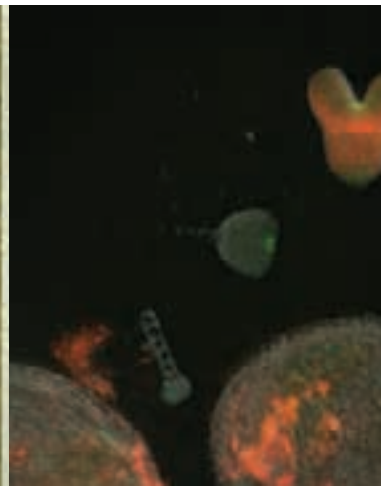
UNIVERSITY OF WISCONSIN, MADISON
USA

JUNE 22-25, 2011



NAASC

The North American
Arabidopsis Steering Committee



Throughout this **PROGRAM**, the numbers next to abstracts refer to abstract numbers, not the page number in the **ABSTRACT** part of this book.

SESSION OVERVIEW

WEDNESDAY, JUNE 22

6:00 - 7:30 pm	Keynote Address	Union Theater
7:30 - 10:00 pm	Opening Reception	Tripp Commons

THURSDAY, JUNE 23

8:30 - 8:40 am	Presentation of the 2011 Genetics Society of America George Beadle Award to Joe Ecker, by Elliot Meyerowitz	Union Theater
8:40 - 10:10 am	Plenary Session 1: Epigenetics/Small RNAs	Union Theater
10:30 am - 12:00 pm	Plenary Session 2: Biotic Interactions/Biotic Stress	Union Theater
1:30 - 3:30 pm	Concurrent Session 1: Cell Biology	Union Theater
1:30 - 3:30 pm	Concurrent Session 2: Computational Biology	3650 Humanities
4:00 - 6:00 pm	Concurrent Session 3: Biochemistry/Metabolism	Union Theater
4:00 - 6:00 pm	Concurrent Session 4: New Technologies	3650 Humanities
7:30 - 9:00 pm	Workshops I a & b (Concurrent)	See detailed program
9:00 - 11:00 pm	Poster Session I (Odd Numbered Posters)	See detailed program
9:00 - 11:00 pm	Exhibitors	Great Hall and Main Lounge

FRIDAY, JUNE 24

8:30 - 10:00 am	Plenary Session 3: Stem Cells	Union Theater
10:30 - 12:00 pm	Plenary Session 4: Hormone Signaling	Union Theater
1:30 - 3:30 pm	Concurrent Session 5 Cell Walls and the Cuticle	3650 Humanities
1:30 - 3:30 pm	Concurrent Session 6: Light/Circadian Regulation	Union Theater
4:00 - 6:00 pm	Concurrent Session 7: Translational Plant Biology	3650 Humanities
4:00 - 6:00 pm	Concurrent Session 8: Development I: Organ and Cellular Polarity	Union Theater
7:30 - 9:00 pm	Workshops II a & b (Concurrent)	See detailed program
9:00 - 11:00 pm	Poster Session II (Even Numbered Posters)	See detailed program

SATURDAY, JUNE 25

6:45 - 7:45 am	5K Weed Stampede Fun Run	Union Theater Lobby
8:30 - 10:00 am	Plenary Session 5: Natural Variation/Quantitative Genetics/Evolution	Union Theater
10:30 am - 12:00 pm	Plenary Session 6: Systems Biology	Union Theater
12:00 - 2:00 pm	Poster Session III (Free for All)	See detailed program
12:00 - 2:00 pm	Exhibitors	Great Hall and Main Lounge
2:00 - 3:30 pm	Workshops III a & b (Concurrent)	See detailed program
4:00 - 6:00 pm	Concurrent Session 9: Abiotic Stress Responses	3650 Humanities
4:00 - 6:00 pm	Concurrent Session 10: Development II: Cell Specification	Union Theater
7:00 - 10:00 pm	Conference Banquet	The Sett@ Union South

Note: Members of the North American Arabidopsis Steering Committee (NAASC) are serving as the program committee for the 2011 meeting.

NAASC Conference Co-Chairs

Mark Estelle, University of California, San Diego
Jane Glazebrook, University of Minnesota

Lead Conference Organizer/NAASC Coordinator

Joanna Friesner

NAASC Conference Organizing Committee Members

Scott Poethig, University of Pennsylvania
George Haughn, University of British Columbia
Xinnian Dong, Duke University
Blake Meyers, University of Delaware
Dominique Bergmann, Stanford University
Wolf Frommer, Carnegie Institution for Science

PROGRAM

Poster schedule

All posters will remain up for the entire meeting and can be set up Thursday starting at 7:00 am. There will be three poster sessions, one Thursday evening, one Friday evening, and one Saturday during lunch. To determine when you should stand next to your poster, find your abstract in this book and note the new abstract number. The new number is your poster number, NOT the number it was assigned when you originally submitted. Posters are sequenced by topic and presenter. See the poster list below to determine which group contains your topic.

All posters with ODD numbers will be presented on Thursday evening.
All posters with EVEN numbers will be presented on Friday evening.

Saturday's midday poster session will be a "free-for-all" – plenty of time to look at all posters, or stand by your own if you need more time for discussion,

Wednesday, June 22, 2011

1:00 pm – 7:00 pm	Registration	Main Lounge
6:00 – 7:30 pm	Keynote Address Session chairs: Jane Glazebrook (University of Minnesota) and Mark Estelle (University of California, San Diego)	Union Theater
6:00 pm	Sophien Kamoun, The Sainsbury Laboratory <i>Suppression of plant immunity by Phytophthora effectors</i>	
6:45 pm	Joanne Chory, The Salk Institute for Biological Studies and The Howard Hughes Medical Institute <i>Using genetics and structural biology to dissect the molecular mechanisms of BR perception and signaling</i>	
7:30 – 10:00 pm	Opening Reception	Tripp Commons

Thursday, June 23, 2011

7:00 am – all day	Poster set-up	See locations below
	Capital View/Langdon Room (4th floor, East and West) Posters of orals (see abstract for indication if poster provided) (1-101)	
	Main Lounge (2nd floor, Central) Abiotic Stress Responses (102 – 166) Biochemistry/Metabolism (167 – 195) Bioinformatics, Modeling, Systems Biology (196 – 211)	
	Tripp Commons (2nd floor, East) Biotic Interactions/Biotic Stress (212 – 271) Cell Biology (272 – 339) Cell Walls and the Cuticle (340 – 355) Community Resources (356 – 366) Computational Biology (367 – 378)	

Great Hall/Reception Room (4th floor, Central)

Development I: Organ and Cellular Polarity (379 – 415)
 Development II: Cell Specification (416 – 471)
 Epigenetic and Genetic Mechanisms (472 – 499, 628)
 Light/Circadian Regulation (500 – 533)
 Natural Variation/Quantitative genetics/Evolution (534 – 553)
 New Technologies (554 – 567)
 Other (568 – 572)
 Signal Transduction (573 – 622)
 Translational Plant Biology (623 – 627)

7:00 am – 8:00 pm	Registration Continues	Annex Room
7:00 – 8:30 am	Breakfast	Inn Wisconsin
8:30 – 8:40 am	Award Presentation <i>2011 GSA George Beadle Award to Joe Ecker by Elliot Meyerowitz</i>	Union Theater
8:40 – 10:10 am	Plenary Session 1: Epigenetics/Small RNAs Blake Meyers, University of Delaware, Session Chair	Union Theater
8:40 am	Xuemei Chen, University of California, Riverside <i>Biogenesis and functions of plant microRNAs</i>	
9:10 am	Joseph Ecker, The Salk Institute <i>Epigenomic Variation in Plants (and People)</i>	
9:40 am	Rebecca Mosher, University of Arizona <i>Imprinted expression of Pol IV-dependent siRNAs</i>	

Session Sponsored by Genetics Society of America

10:10 – 10:30 am	Coffee Break	Union Theater Lobby
10:30 – 12:00 pm	Plenary Session 2: Biotic Interactions/Biotic Stress Xinnian Dong, Duke University, Session Chair	Union Theater
10:30 am	Xin Li, University of British Columbia <i>Stability of Resistance proteins is controlled by SCF-mediated protein radation</i>	
11:00 am	Paul Schulze-Lefert, Max Planck Institute for Plant Breeding Research <i>From plant-pathogen interactions to plant-microbe communities</i>	
11:30 am	Jeff Dangl, University of North Carolina at Chapel Hill <i>Understanding plant-microbe interactions: Plant immune system function and rhizosphere metagenomics</i>	

Session Sponsored by Monsanto

12:00 – 1:30 pm	Lunch	Inn Wisconsin
12:30 – 1:30 pm	Lunch Workshop: Epigenomics of Plants International Consortium (EPIC) - bring lunch to room Organizers: Doris Wagner and Blake Meyers	Old Madison
1:30 – 3:30 pm	Concurrent Session 1: Cell Biology	Union Theater
1:30 pm	Federica Brandizzi, Michigan State University, Session Chair <i>Morphological and Functional Identity of Organelles of the Early Plant Secretory Pathway</i>	
1:55 pm	Roger Hangarter, Indiana University <i>Light-induced chloroplast movements in leaf cells</i>	
2:20 pm	Michael Hothorn, Salk Institute for Biological Studies <i>Structural basis of brassinosteroid perception by a membrane receptor kinase</i>	
2:34 pm	Hiroyasu Motose, Okayama University <i>NIMA-related Kinases Redundantly Regulate Directional Cell Expansion in Arabidopsis thaliana</i>	
2:48 pm	Francisca Reyes, University of Wisconsin-Madison <i>The Role of SKIP3, a Novel Plant-Specific Endosomal Protein, in Plant Development and Brassinosteroid Signaling</i>	
3:02 pm	Hyung-Taeg Cho, Seoul National University <i>Slow Trafficking of Arabidopsis ATP-Binding Cassette Protein Subfamily B4 Indicates Its Basal Auxin Efflux Function in the Plasma Membrane</i>	
3:16 pm	Diane Bassham, Iowa State University <i>Degradation of the Endoplasmic Reticulum by Autophagy during ER stress in Plants</i>	

Session Sponsored by Journal of Cell Science



1:30 – 3:30 pm	Concurrent Session 2: Computational Biology	3650 Humanities
1:30 pm	Veronica Grienesen, John Innes Centre, Session Chair <i>The Go-Between: Auxin as a mediator of cell-cell signaling</i>	
1:55 pm	Przemyslaw Prusinkiewicz, University of Calgary <i>A computational model of Arabidopsis thaliana Leaf Margin Development</i>	
2:20 pm	Justin Vaughn, University of Tennessee <i>Novel and Known Post-transcriptional Regulatory Sequences are Conserved across Plant Families</i>	
2:34 pm	Shin-Han Shiu, Michigan State University <i>Cis-Regulatory Code of Stress Responsive Transcription in Arabidopsis thaliana</i>	

2:48 pm	Pascal Braun, Center for Cancer Systems Biology at Dana Farber Cancer Institute <i>Insights into Systems Organization, Network Evolution, and Pathogen Attack from a High-Quality Arabidopsis Interactome Network Map</i>	
3:02 pm	Laura Helft, University of Wisconsin – Madison <i>Repeat Conservation Mapping of Leucine-Rich Repeat Domains</i>	
3:16 pm	Joshua Steffen, University of Utah <i>Accurate Sequencing of 18 Genomes of Arabidopsis thaliana and Its Use in Imputing the Genome Sequences of Over 600 MAGIC Recombinant Inbred Lines</i>	
3:30 – 4:00 pm	Coffee Break	3650 Humanities and Union Theater Lobby
4:00 – 6:00 pm	Concurrent Session 3: Biochemistry/Metabolism	Union Theater
4:00 pm	Mary Lou Guerinot, Dartmouth College, Session Chair <i>Integrating metal uptake and distribution in plants</i>	
4:25 pm	Yan Lu, Michigan State University <i>The Role of a Zinc Finger Protein in Photosynthesis and Light Stress Tolerance</i>	
4:50 pm	Ling Li, Iowa State University <i>Uncovering Novel Signaling Interactions in Regulation of the Plant Metabolic Networks</i>	
5:04 pm	Gregg Howe, Michigan State University <i>Cytochrome P450 CYP94B3 Mediates Catabolism and Inactivation of Jasmonate</i>	
5:18 pm	Anna Stepanova, North Carolina State University <i>“Rooting” YUCCA Genes in the Auxin Biosynthetic Pathway</i>	
5:32 pm	Cyril Zipfel, The Sainsbury Laboratory <i>Mechanisms of BAK1-Dependent Signaling</i>	
5:46 pm	Stéphanie Arrivault, Max-Planck-Institute of Molecular Plant Physiology <i>Photosynthetic Carbon Assimilation in Arabidopsis thaliana</i>	

Session Sponsored by Mendel Biotechnology



4:00 – 6:00 pm	Concurrent Session 4: New Technologies	3650 Humanities
4:00 pm	Simon Chan, University of California, Davis, Session Chair <i>Haploid Arabidopsis thaliana: Power Tools for Plant Genetics</i>	
4:25 pm	Steven Briggs, University of California San Diego <i>Proteome Dynamics Indicate That PAMP-Triggered and Effector-Triggered Signaling Converge Early</i>	

- 4:50 pm** **Magali Moreau, Boyce Thompson Institute for Plant Research**
Identifying protein-small molecule interactions using functional protein microarrays coupled with a photoactivated crosslinked ligand
- 5:04 pm** **Bob Schmitz, Salk Institute for Biological Studies**
Base-Resolution Population Epigenomic Variation
- 5:18 pm** **Mitch Sudkamp, Monsanto**
Exploring the Arabidopsis genome with single molecule PacBio sequencing
- 5:32 pm** **Jose Alonso, North Carolina State University**
High-Throughput Recombineering and Its Applications for Arabidopsis Gene Function Characterization
- 5:46 pm** **Siobhan Braybrook, Institute of Plant Science, University of Bern**
The Application of Atomic Force Microscopy as a Micro-Force Sensor: Probing the Mechanics of Living Plant Cell Walls During Development

Session Sponsored by Plant Methods Journal



PLANT METHODS

6:00 – 7:30 pm	Dinner	Inn Wisconsin
7:30 – 9:00 pm	<p>Workshops I (concurrent)</p> <p>1a: Gramene Database: A Resource For Plant Comparative Genomics and Arabidopsis Research Organizers: Pankaj Jaiswal and Doreen Ware (See abstract #91)</p> <p>1b: Integrative analysis of molecular profiling data Organizers: Pierre Hilson and Katja Baerenfaller (See abstracts #92 – 95)</p>	<p>Union Theater</p> <p>3650 Humanities</p>
9:00 – 11:00 pm	<p>Poster Session 1</p> <p>Please present (stand by) your poster if your abstract in this book is ODD numbered</p> <p>Capital View/Langdon Room (4th floor, East and West) Posters of orals (see abstract for indication if poster provided) (1-101)</p> <p>Main Lounge (2nd floor, Central) Abiotic Stress Responses (102 – 166) Biochemistry/Metabolism (167 – 195) Bioinformatics, Modeling, Systems Biology (196 – 211)</p> <p>Tripp Commons (2nd floor, East) Biotic Interactions/Biotic Stress (212 – 271) Cell Biology (272 – 339) Cell Walls and the Cuticle (340 – 355) Community Resources (356 – 366) Computational Biology (367 – 378)</p>	See locations below

Great Hall/Reception Room (4th floor, Central)

Development I: Organ and Cellular Polarity (379 – 415)
 Development II: Cell Specification (416 – 471)
 Epigenetic and Genetic Mechanisms (472 – 499, 628)
 Light/Circadian Regulation (500 – 533)
 Natural Variation/Quantitative genetics/Evolution (534 – 553)
 New Technologies (554 – 567)
 Other (568 – 572)
 Signal Transduction (573 – 622)
 Translational Plant Biology (623 – 627)

9:00 – 11:00 pm **Exhibitors** **Great Hall and Main Lounge**

Friday, June 24, 2011

7:00 – 8:30 am **Breakfast** **Inn Wisconsin**

8:30 – 10:00 am **Plenary Session 3: Stem Cells** **Union Theater**
Scott Poethig, University of Pennsylvania, Session Chair

8:30 am **Elliot Meyerowitz, California Institute of Technology**
Arabidopsis Stem Cells in Development and Regeneration

9:00 am **Sabrina Sabatini, University of Rome Sapienza**
SCARECROW Sustains Stem Cell Activity Inhibiting Cytokinin Dependent Cell Differentiation Input

9:30 am **Ben Scheres, Utrecht University**
An integrated circuit for asymmetric cell division in Arabidopsis roots

10:00 – 10:30 am **Coffee Break** **Union Theater Lobby**

10:30 – 12:00 pm **Plenary Session 4: Hormone Signaling** **Union Theater**
Mark Estelle, University of California, San Diego, Session Chair

10:30 am **Ottoline Leyser, Sainsbury Laboratory University of Cambridge**
Hormonal Control of shoot branching

11:00 am **Joseph Kieber, University of North Carolina**
The interaction of the cytokinin-regulated phosphorelay with other signals in Arabidopsis

11:30 am **Ning Zheng, University of Washington**
Structural Mechanism of Jasmonate Perception

12:00 – 1:30 pm **Lunch** **Inn Wisconsin**

12:10 – 1:30 pm **Lunch Workshop: MASC Subcommittee Workshop** **Old Madison**
- bring lunch to room
Organizer: Joshua Heazlewood

1:30 – 3:30 pm **Concurrent Session 5: Cell Walls and the Cuticle** **3650 Humanities**

1:30 pm **Ljerka Kunst, University of British Columbia, Session Chair**
CER7, a Core Subunit of the RNA-processing Exosome, has a Specific Role in Regulation of Cuticular Wax Deposition in Arabidopsis

1:55 pm	Volker Bischoff, INRA <i>The Role of Cell Wall Synthesis and Remodeling in Organ Growth</i>	
2:20 pm	Katy Christiansen, Joint BioEnergy Institute <i>A Functional Screen for Nucleotide Sugar Transporters</i>	
2:34 pm	Catalin Voiniciuc, University of British Columbia <i>The Arabidopsis FLYING SAUCERS Gene Encodes a Membrane Protein Required for Connections to the Cell Wall</i>	
2:48 pm	Gerit Bethke, University of Minnesota <i>The Effects of Plant Cell Wall Alterations on Plant Disease Susceptibility</i>	
3:02 pm	Joshua Heazlewood, Lawrence Berkeley National Laboratory <i>Subcellular Partitioning of Plant Cell Wall Biosynthesis in Arabidopsis</i>	
3:16 pm	Basil Nikolau, Iowa State University <i>Combining Molecular Genetics and Mass-Spectrometry-Based High-Resolution Metabolite Imagine to Unravel the Surface Lipids of Arabidopsis</i>	
1:30 – 3:30 pm	Concurrent Session 6: Light/Circadian Regulation	Union Theater
1:30 pm	Stacey Harmer, University of California, Davis, Session Chair <i>Identification of Plant Clock Genes Using Functional Genomics</i>	
1:55 pm	Jose Pruneda-Paz, University of California, San Diego <i>Uncovering clock transcriptional circuits by functional genomics</i>	
2:20 pm	Jodi Stewart, University of Washington <i>Growth Promoting Factors Have Distinct Effects on Seedling Growth Dynamics</i>	
2:34 pm	Ling Zhu, University of Texas at Austin <i>Antagonistic Regulation of Photomorphogenesis by Oppositely Acting bHLH Transcription Factors in Arabidopsis</i>	
2:48 pm	Dmitri Nusinow, University of California, San Diego <i>A Circadian Complex is Critical for Growth Control in Arabidopsis</i>	
3:02 pm	Naeem Syed, University of Dundee <i>Alternative Splicing Mediates Responses of the Arabidopsis Circadian Clock to Temperature Changes</i>	
3:16 pm	Ming-Jung Liu, Academia Sinica <i>Translational Control: a New Dimension in the Regulation of Arabidopsis Photomorphogenesis</i>	
3:30 – 4:00 pm	Coffee Break	3650 Humanities and Union Theater Lobby
4:00 – 6:00 pm	Concurrent Session 7: Translational Plant Biology	3650 Humanities
4:00 pm	Zachary Lippman, Cold Spring Harbor Laboratory, Session Chair <i>Single Gene Mutations Causing Heterosis in Tomato</i>	
4:25 pm	Julia Bailey-Serres, Center for Plant Cell Biology/ UC Riverside <i>Translation of submergence tolerance from the gene to the field using rice and Arabidopsis</i>	

- 4:50 pm** **Devin O'Connor, University of California, Berkeley**
*Localization of PIN1-Like Proteins in Grasses Suggests a Functional
Specialization of Different PINs into 'Up-the-Gradient' and 'With-the-Flux'
Modes of Auxin Transport*
- 5:04 pm** **Nubia Eloy, Ghent University, Belgium**
*SAMBA- a new subunit of the Anaphase Promoting Complex (APC/C) with
an essential role in plant growth and pollen development in Arabidopsis*
- 5:18 pm** **Kenichi Tsuda, University of Minnesota**
*Modeling of the Plant Hormone Signaling Network in MAMP-Induced
Resistance*
- 5:32 pm** **Dirk Buessis, Max-Planck-Institute of Molecular Plant Physiology, Germany**
German Plant Research Goes BioEconomy
- 5:46 pm** **Marie Navarro, University of Western Ontario**
*Genomic Dissection of the Plant/pest Interaction: Transcriptome Analysis of
Arabidopsis Response to Tetranychus urticae (Two Spotted Spider Mite)
Feeding*

Session Sponsored by International Plant Molecular Biology



-
- 4:00 – 6:00 pm** **Concurrent Session 8: Development I: Organ and Cellular Polarity** **Union Theater**
- 4:00 pm** **Jennifer Fletcher, Plant Gene Expression Center, Session Chair**
*Regulation of Arabidopsis Gynoecium Polarity by ULT and KAN Family
Proteins*
- 4:25 pm** **Niko Geldner, University of Lausanne**
The Endodermis- building a selective and polarized cellular barrier
- 4:50 pm** **Ji-Young Lee, Boyce Thompson Institute for Plant Research**
An apical root growth program directed in the vascular stem cells
- 5:04 pm** **Emanuele Scacchi, University of Lausanne, UNIL**
*Spatio-Temporal Sequence of Cross-Regulatory Events in Root Meristem
Growth*
- 5:18 pm** **Brenda Reinhart, Carnegie Institution, Stanford**
*Expanding the Genetic Pathway for Polarity in Arabidopsis Leaf
Development*
- 5:32 pm** **Monica Carabelli, Institute for Molecular Biology and Pathology,
National Research Council**
*HD-Zip II Transcription Factor Genes Control Adaxial-Abaxial Patterning
in Arabidopsis*
- 5:46 pm** **Sangho Jeong, University of Georgia**
Functional and informatic analyses of the Arabidopsis plastid

6:00 – 7:30 pm	Dinner	Inn Wisconsin
7:30 – 9:00 pm	Workshops II (Concurrent)	
	2a: TwitTAIR: Discover what's happening right now at TAIR! Organizers: Philippe Lamesch, Eva Huala, and Donghui Li	Union Theater
	2b: Receptor Ligands Regulating Plant Development Organizers: Melinka Butenko, Rüdiger Simon, and Yvonne Stahl (See abstracts #96 – 98)	3650 Humanities
9:00 – 11:00 pm	Poster Session II and Exhibitors Please present (stand by) your poster if your abstract in this book is EVEN numbered	See locations below
	Capital View/Langdon Room (4th floor, East and West) Posters of orals (see abstract for indication if poster provided) (1-101)	
	Main Lounge (2nd floor, Central) Abiotic Stress Responses (102 – 166) Biochemistry/Metabolism (167 – 195) Bioinformatics, Modeling, Systems Biology (196 – 211)	
	Tripp Commons (2nd floor, East) Biotic Interactions/Biotic Stress (212 – 271) Cell Biology (272 – 339) Cell Walls and the Cuticle (340 – 355) Community Resources (356 – 366) Computational Biology (367 – 378)	
	Great Hall/Reception Room (4th floor, Central) Development I: Organ and Cellular Polarity (379 – 415) Development II: Cell Specification (416 – 471) Epigenetic and Genetic Mechanisms (472 – 499, 628) Light/Circadian Regulation (500 – 533) Natural Variation/Quantitative genetics/Evolution (534 – 553) New Technologies (554 – 567) Other (568 – 572) Signal Transduction (573 – 622) Translational Plant Biology (623 – 627)	

Saturday, June 25, 2011

6:45 – 7:45 am	Weed Stampede 5K Fun Run - Free!	Union Theater Lobby
7:00 – 8:30 am	Breakfast	Inn Wisconsin
8:30 – 10:00 am	Plenary Session 5: Natural Variation/Quantitative Genetics/Evolution George Haughn, University of British Columbia, Session Chair	Union Theater
8:30 am	Johanna Schmitt, Brown University <i>Mapping local adaptation in Arabidopsis thaliana</i>	

9:00 am	George Coupland, Max Planck Institute for Plant Breeding Research <i>Using Arabidopsis relatives as sources of natural genetic variation in regulatory networks</i>	
9:30 am	Cynthia Weinig, University of Wyoming <i>Quantitative variation in the circadian clock and adaptation to heterogeneous settings</i>	
10:00 – 10:30 am	Coffee Break	Union Theater Lobby
10:30 am – 12:00 pm	Plenary Session 6: Systems Biology Nicholas Provart, University of Toronto, Session Chair	Union Theater
10:30 am	Rodrigo Gutierrez, Pontificia Univeridad Catolica de Chile <i>Systems Biology to Dissect Nitrogen Regulatory Networks</i>	
11:00 am	Siobhan Brady, University of California, Davis <i>Mapping Spatiotemporal Gene Regulatory Networks in the Arabidopsis Root Stele</i>	
11:30 am	Fumiaki Katagiri, University of Minnesota <i>Properties and structure of the plant immune signaling</i>	
12:00 – 2:00 pm	Lunch	Inn Wisconsin
12:00 – 2:00 pm	Poster Session III/Exhibitor Meeting Free-for-All: A time for further discussions Exhibitors – Great Hall and Main Lounge	See schedule for locations
2:00 – 3:30 pm	Workshops III (Concurrent)	
	3a: RNA-level gene regulation Organizer: Albrecht von Arnim (See abstracts #99 – 101)	Union Theater
	3b: Hormone cross-talk: gene families and phenotypes Organizer: Mary Wildermuth	3650 Humanities
3:30 – 4:00 pm	Coffee Break	Union Theater Lobby
4:00 – 6:00 pm	Concurrent Session 9: Abiotic Stress Responses	3650 Humanities
4:00 pm	Julian Schroeder, University of California, San Diego, Session Chair <i>Chemical Genetics Reveals Negative Regulation of Abscisic Acid Signaling by a Type III Effector Signaling Pathway</i>	
4:25 pm	Kazuo Shinozaki, RIKEN Plant Science Center <i>Regulatory gene network in stress responses to drought conditions</i>	
4:50 pm	Jose Dinneny, Carnegie Institution, Stanford <i>Moisture locally induces ABA biosynthesis to determine growth direction in Arabidopsis</i>	
5:04 pm	Malia Dong, Michigan State University <i>Clock Components CCA1 and LHY Regulate Expression of the CBF Cold Response Pathway and Freezing Tolerance in Arabidopsis</i>	
5:18 pm	Jesse Woodson, The Salk Institute <i>Heme Synthesis by Plastid Ferrochelatase I Regulates Nuclear Gene Expression</i>	

5:32 pm **Terri Long, University of Illinois**
POPEYE, BRUTUS and Other Characters: Elucidating Molecular Mechanisms of the Iron Deficiency Response in Plants

5:46 pm **Won-Gyu Choi, University of Wisconsin, Madison**
The role of calcium signaling in the molecular response network to anaerobic stress in Arabidopsis

Session Sponsored by Agrisera



4:00 – 6:00 pm **Concurrent Session 10: Development II: Cell Specification** **Union Theater**

4:00 pm **Dominique Bergmann, Stanford University, Session Chair**
Stomatal development: signaling fate and renewal

4:25 pm **Dolf Weijers, Wageningen University**
Cell Specification and cell communication in embryonic root formation

4:50 pm **Fabrice Besnard, ENS**
Cytokinin Inhibitory Fields control Phyllotaxis

5:04 pm **Bastiaan Bergmann, New York University**
A Transcriptional Auxin Response Gradient in the Arabidopsis Root

5:18 pm **Cara Winter, Duke University**
LEAFY Target Genes Reveal Floral Regulatory Logic, cis Motifs, and a Link to Biotic Stimulus Response

5:32 pm **Michael Nodine, Whitehead Institute**
Contributions of the Maternal, Paternal, and Zygotic Genomes during Early Plant Embryogenesis

5:46 pm **Ulrich Wenig, University of Erlangen, Germany**
RUG8, a Novel Player in Auxin-Dependent Stem Cell Specification and Meristem Patterning in Arabidopsis Roots

Session Sponsored by ASPB



7:00- 10:00 pm **Conference Banquet** **The Sett @ Union South (See Map)**