25th International Conference on Arabidopsis Research

July 28 - August 1, 2014
University of British Columbia in Vancouver, Canada

The North American Arabidopsis Steering Committee
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CONFERENCE PROGRAM

25th International Conference on ARABIDOPSIS RESEARCH

July 28 – August 1, 2014
University of British Columbia
Vancouver, Canada
Scientific Organizing Committees for the 25th International Conference on Arabidopsis Research

Co-Chairs
Jose Alonso (North Carolina State University, USA)¹
Nicholas Provart (University of Toronto, Canada)¹, ²

Lead Organizer
Joanna Friesner (University of California, Davis, USA)³

Scientific Organizing Committee Members
Sarah Assmann (Pennsylvania State University, USA)¹
Dominique Bergmann (Stanford University, USA)¹
Siobhan Brady (University of California, Davis, USA)¹
Wolf Frommer (Carnegie Institution for Science, USA)¹
Erich Grotewold (Ohio State University, USA)¹
Keiko Torii (University of Washington, USA)¹

¹ Member of the North American Arabidopsis Steering Committee
² Co-chair of the Multinational Arabidopsis Steering Committee
³ Coordinator of the North American Arabidopsis Steering Committee

Local Organizing Committee, University of British Columbia
Co-Chairs
Carl Douglas
Xin Li

Additional Local Organizing Committee Members
Keith Adams  Ljerka Kunst  Geoff Wasteneys
George Haughn  Santokh Singh  Yuelin Zhang
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- Registration desk hours at Chan Centre
- What is included in your registration
- Name badge requirement
- Oral presentation guidelines and loading talks onto conference laptops
- Schedule for speakers to load talks onto conference laptops
- Poster session and exhibition hours at Student Recreation Centre
- Internet access, campus lodging, banking and currency exchange
- Transportation (taxis, public transit), childcare
- Emergencies including medical care, clinics, local pharmacies
- Lost and found, nearby food outlets, shops, parking on campus
- Messages, printing and photocopying services, recreational facilities, bookstore

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Move your research to the next generation

**Genomics**
- Next generation EMS mutation mapping
- Comparative genomics & transcriptomics
- Microbiome & metagenomics

**Proteomics**
- Protein identification
- Protein-ligand interactions
- Post-translational modification

**Bioinformatics**
- Gene expression visualization tools (BAR)
- Genomic data analysis services
- Proteomic data analysis services

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- Chemical genomics
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- Flow cytometry

See our brochure in the ICAR 2014 registration bag for more details on our platforms and a special conference promotion!
Throughout this program, the numbers next to abstracts refer to abstract numbers, not page numbers, in the abstract book provided on USB drives. All abstract titles (poster/oral presentations) are also listed in the 'Posters and Talks' section of this program starting on page 24.

### SESSION OVERVIEW

| Monday, July 28, 2014 | 1:30 – 5:30 pm | Workshops 1 (six to choose from, at varying times)  
| | 6:00-7:30 pm | Opening Ceremony and Keynote Lectures (Jeff Dangl, Xuemei Chen)  
| | 7:30-9:30 pm | Opening Reception  
| Tuesday, July 29, 2014 | 8:30 – 10:00 am | Plenary I: Epigenetics/ Chromatin  
| | 10:30-12:00 pm | Plenary II: Plant Defense, Immunity, Host-Microbe Interactions  
| | 1:30-3:00 pm | Concurrent 1: Biotic Responses, Plant Defense OR Light and Plant Growth OR Modeling, Bioinformatics and Systems Biology  
| | 3:30 – 5:00 pm | Concurrent 2: Cell Biology OR Plant Hormones OR Epigenetics, Chromatin  
| | 5:00 pm | Poster and Exhibit Sessions Open  
| | 5:15-6:15 pm | Workshops 2 (three to choose from)  
| | 6:15-7:15 pm | Poster Session 1 (Even-Numbered Abstracts Present 6:15-7:15 pm)  
| | 7:15-8 pm | Open browsing of posters and exhibit booths  
| Wednesday, July 30, 2014 | 8:30 – 10:00 am | Plenary III: Hormone Signaling  
| | 10:30-12:00 pm | Plenary IV: Translational Biology  
| | 12:00 pm On | Free Afternoon/Evening  
| Thursday, July 31, 2014 | 8:30 – 10:00 am | Plenary V: Development  
| | 10:30-12:00 pm | Concurrent 3: Reproductive Development OR Novel Tools & Techniques OR Biotechnology, Bioenergy & Food Security  
| | 1:30-3:00 pm | Concurrent 4: Environmental Responses OR Metabolism, Biochemistry OR Emerging Topics  
| | 3:30 – 5:00 pm | Concurrent 5: Vegetative Development OR Signal Transduction, Signal Integration OR Natural Variation, Ecology, Evolution  
| | 5:00 pm | Poster and Exhibit Sessions Open  
| | 5:15-6:15 pm | Workshops 3 (3 to choose from)  
| | 6:15-7:15 pm | Poster Session 2 (Odd-Numbered Abstracts Present 6:15-7:15 pm)  
| | 7:15-8 pm | Open browsing of posters and exhibit booths  
| Friday, August 1, 2014 | 9:00 – 10:30 am | Plenary VI: Synthetic Biology  
| | 11:00-12:00 pm | Closing Keynote Lectures (Peter McCourt, Brenda Andrews)  
| | 12:00-12:30 pm | Closing Remarks, and ICAR 2015 Announcement  

1
Conference Funding & Support

General Meeting Sponsors

U.S. National Science Foundation

U.S. Department of Agriculture

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Hormone Signaling
Plenary Session Sponsors

Silver Meeting Sponsors

Biotic Responses, Plant Defense
Concurrent Session Sponsors

Light and Plant Growth
Concurrent Session Sponsors

Translational Biology
Plenary Session Sponsors

Synthetic Biology
Plenary Session Sponsors
Conference Funding & Support, continued

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Additional Sponsors

Conference Exhibitors

Exhibitors with Sponsorships or Advertising

Additional Exhibitors

- ABRC- Arabidopsis Biological Resource Center- Booth 15
- Agrisera- Booth 12
- Bio-Analytic Resource for Plant Biology (BAR)- Booth 16
- Conviron- Booth 5
- IDT- Booth 11

- Journal of Experimental Botany- Booth 6
- NASC- Nottingham Arabidopsis Stock Centre- Booth 15
- NEB- New England Biolabs- Booth 11
- Percival Scientific Inc.- Booth 13
- Qubit Systems Inc.- Booth 14
- TAIR- Phoenix Bioinformatics- Booth 10

- Light and Plant Growth Concurrent Session Sponsors Booth 4
- BioChambers Hormone Signaling Plenary Session Sponsors Booth 9
- MOLeULAR PLANT

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The University of British Columbia

Plant Methods Novel Tools and Techniques Concurrent Session Sponsors

Plant Defense, Immunity, Host-Microbe Plenary Session Sponsors

Microplate Readers - Luminometers - Radio Isotope Detectors - Imaging Systems

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- ABRC- Arabidopsis Biological Resource Center- Booth 15
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- Journal of Experimental Botany- Booth 6
- NASC- Nottingham Arabidopsis Stock Centre- Booth 15
- NEB- New England Biolabs- Booth 11
- Percival Scientific Inc.- Booth 13
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- TAIR- Phoenix Bioinformatics- Booth 10
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– Youyoun Moon, Ph.D., Research Assistant Professor at West Virginia University

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PROGRAM OVERVIEW

Poster schedule

All posters will remain up for the entire meeting and can be set up starting Monday evening beginning at 5:00 pm. They can also be posted Tuesday morning starting at 7 am (Location for all posters: Student Recreation Centre, or SRC). Posters must be in place by no later than 5 pm on Tuesday. There will be two poster sessions, one Tuesday evening and one Thursday evening.

To determine when you should stand next to your poster, find your abstract in this book and note the new abstract number. Abstracts are grouped by topic. Scan the abstract list, starting on page 24, to find your Session and new number. The new number is your poster number (if you are presenting a poster) and it is also your oral presentation number (if you are giving an oral presentation.)

All posters with EVEN numbers will be presented on Tuesday evening from 6:15-7:15 pm.

All posters with ODD numbers will be presented on Thursday evening from 6:15-7:15 pm.

Note: poster and exhibit sessions open at 5 pm and close at 8 pm.

Open browsing of all posters is encouraged before and after the designated presentation times (6:15-7:15) listed above.

Monday, July 28, 2014

1:30-3:00 pm  Under-Represented Minority (URM) Career Development Workshops  Buchanan Building
Students: Rm B210; Postdocs/Jr. Faculty: Rm B209; Mid-Career Faculty: Rm B216  Various Rooms

2:00-9:30 pm  Registration  Chan Centre Foyer

2:00-4:30 pm  Arabidopsis Information Portal (AIP) Developer and User Workshop. Chris Town, J. Craig
Venter Institute, and Matt Vaughn, Texas Advanced Computing Center  Buchanan Building
Room A102

3:00-4:00 pm  Joint URM/Early Career Researcher (ECR) Workshops  Buchanan Building
Students: Rm A103; Late Postdocs/Junior Faculty: Rm. A104  Various Rooms

3:00-4:00 pm  Additional Early Career Researcher (ECR) Career Development Workshops  Buchanan Building
Students: Rm A103; Late Postdocs/Junior Faculty: Rm. A104  Various Rooms

4:30-5:30 pm  Community Workshop Session 1A:  Buchanan Building
Small molecules in plant development and defense. Tony Schäffner, German Research
Center for Environmental Health  Room B215

Community Workshop Session 1B:  Buchanan Building
TAIR: A Sustainable Community Database for International Arabidopsis Research. Donghui
Li and Eva Huala, TAIR  Room B313

6:00 pm  ICAR 2014 Opening Ceremony and Keynote Lectures  Chan Centre
ICAR Co-chair, Session Chair: Jose Alonso, North Carolina State University, USA

6:30 pm  Keynote Lecture 1  Chan Centre
Abstract #1: Understanding plant-microbe interactions: Plant immune system
function and the rhizosphere microbiome.
Jeff Dangl, HHMI and University of North Carolina at Chapel Hill, USA

7:00 pm  Keynote Lecture 2  Chan Centre
Abstract #2: Understanding small RNAs – from Arabidopsis to crops and humans.
Xuemei Chen, University of California, Riverside, USA

7:30-9:30 pm  ICAR 2014 Welcome Reception  Chan Centre Foyer
## Tuesday, July 29, 2014

### 6:45-8:20 am
**Breakfast Buffet**  
(Student Union Building (SUB)  
(included in campus lodging fee)

### 7 am – 5 pm
**Poster Set-Up Continues**  
(Student Rec Centre (SRC)

### 7 am-12:30 pm
**Registration Continues**  
(Chan Centre Foyer)

### 8:30-10:00 am
**Plenary Session I: Epigenetics, Chromatin**  
Session Chair: Blake Meyers, University of Delaware, USA  

- **Abstract #3:** Epigenetic Inheritance of silent locus identity. Craig Pikaard, Indiana University, USA
- **Abstract #4:** Polycomb-mediated regulation of floral stem cells. Toshiro Ito, Temasek Life Sciences Laboratory, Singapore
- **Abstract #5:** Mapping and dynamics of regulatory DNA and transcription factor networks in *A. thaliana*. Christine Queitsch, University of Washington, USA

### 10-10:30 am
**Coffee Break**  
(Chan Centre Foyer)

### 10:30 am-12 pm
**Plenary Session II: Plant Defense, Immunity, Host-Microbe Interactions**  
Session Chair: Xin Li, University of British Columbia, Canada

- **Abstract #6:** Bacterial pathogenesis as a probe of Arabidopsis biology. Sheng Yang He, Michigan State University, USA
- **Abstract #7:** Fungal Small RNAs Suppress Plant Immunity by Hijacking Host RNAi Machinery. Hailing Jin, University of California, Riverside, USA
- **Abstract #8:** Plant defense: A balancing act through the immune signal salicylic acid. Xinnian Dong, Duke University, USA

### 12-1:30 pm
**Lunch Buffet**  
(Student Union Building (SUB)

### 1:30-3:00 pm
**Concurrent Session 1A: Biotic Responses, Plant Defense**  
Session Chair: Cyril Zipfel, Sainsbury, UK

- **Overview Speaker:** Xin Li, University of British Columbia, Canada
- **Abstract #9:** Regulation of early receptor kinase-mediated immune signaling. Cyril Zipfel, Sainsbury, UK
- **Abstract #10:** Type III Effectors and the Plant Immune Response. Darrell Desveaux, University of Toronto, Canada
- **Abstract #64:** Patterns and Receptors in Plant Innate Immunity. Thorsten Nuernberger, ZMBP, University of Tuebingen, Germany
- **Abstract #82:** Using plant pathogen effectors as evolved probes to understand the plant immune system. Marc Nishimura, University of North Carolina, Chapel Hill, USA
- **Abstract #80:** Two redundant protein kinases act downstream of PAMP receptors to regulate activation of MAP kinases and SA synthesis in Arabidopsis. Yuelin Zhang, University of British Columbia, Canada
Abstract #71: Acetylation of alternative N-terminal methionines oppositely controls the stability of a plant immune receptor. Fang Xu, University of British Columbia, Canada

Abstract #81: Salicylic acid mediated defence is fine-tuned through the interplay of calmodulin-binding proteins and calmodulin-like proteins in Arabidopsis. William Truman, University of Minnesota, USA

Abstract #84: Decreased abundance of type III-inducing signals in Arabidopsis mkp1 enhances resistance to Pseudomonas syringae. Jeffrey Anderson, University of Missouri, USA

### Concurrent Session 1B: Light and Plant Growth

- Session Chair: Markus Schmid, Max Planck Institute, Tubingen, Germany
- Buchanan Building Room A101

Overview Speaker: Beronda Montgomery, Michigan State University, USA

- Abstract #11: Integration of flowering time signals in Arabidopsis thaliana. Markus Schmid, Max Planck Institute, Tubingen, Germany
- Abstract #12: Entrainment of Arabidopsis circadian oscillators by sugars. Alex Webb, Cambridge University, UK
- Abstract #316: FRS12 and 7 are transcriptional repressors involved in the regulation of circadian growth in Arabidopsis thaliana. Andres Ritter, VIB/Ghent University, Belgium
- Abstract #318: Ribosome Abundance and Protein Turnover are Negatively Linked to Biomass Accumulation in Arabidopsis in a Stable Diurnal Growth Regime. Hirofumi Ishihara, Max Planck Institute of Molecular Plant Physiology, Germany
- Abstract #322: MMF1 regulates the photoperiodic control of hypocotyl elongation in Arabidopsis thaliana. Dmitri Nusinow, Danforth Plant Science Center, USA
- Abstract #325: A MAD (Mutually Assured Destruction) Mechanism Attenuates Light Signaling in Arabidopsis. Weimin Ni, University of California Berkeley, USA
- Abstract #323: Interactions between the photoperiodic flowering pathway and the thermosensory pathway in Arabidopsis. Virginia Fernandez, Max Planck Institute for Plant Breeding Research, Germany
- Abstract #320: Low Energy Stress Response in Arabidopsis thaliana: the SnRK1-bZIP Transcription Factor connection. Lorenzo Pedrotti, University of Wuerzburg, Germany

### Concurrent Session 1C: Modeling, Bioinformatics and Systems Biology

- Session Chair: Siobhan Brady, University of California, Davis, USA
- Buchanan Building Room A201

Overview Speaker: Terri Long, North Carolina State University, USA

- Abstract #13: Xylem Cell Development and Differentiation in Plant Roots. Siobhan Brady, University of California, Davis, USA
- Abstract #14: ‘Omics responses to abiotic stress in Arabidopsis. Sarah Assmann, Pennsylvania State University, USA
- Abstract #336: Modeling stem cell networks to identify key regulators of plant growth. Ross Sozzani, North Carolina State University, USA
- Abstract #342: A proteomic strategy for global analysis of protein complex composition and localization in Arabidopsis leaves. Uma Aryal, Purdue University, USA
- Abstract #337: Knowledge-based bioinformatic analyses of microarrays predict that epigenetic regulator AS1-AS2 controls cell division through ETTIN in leaf adaxial-abaxial patterning. Hiro
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>2:55-2:57</td>
<td><strong>Abstract #343:</strong> 2 min Oral Poster: An organ boundary-enriched gene regulatory network uncovers regulatory hierarchies underlying axillary meristem initiation. Caihuan Tian, Inst. of Genetics and Developmental Biology, Chinese Academy of Sciences, China</td>
<td></td>
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<tr>
<td>2:57-2:59</td>
<td><strong>Abstract #345:</strong> 2 min Oral Poster: Gramene: A Resource for Comparative Plant Genomics and Bioinformatics. Pankaj Jaiswal, Oregon State University, USA</td>
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<tr>
<td>3:00-3:30 pm</td>
<td><strong>Concurrent Session 2A: Cell Biology</strong></td>
<td>Chan Centre Foyer</td>
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<td><strong>Session Chair:</strong> Elizabeth Haswell, Washington University in St. Louis, USA</td>
<td>Chan Centre</td>
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<td>Session Sponsored by UBC Botany in the Faculty of Science</td>
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<tr>
<td>3:30-3:35</td>
<td><strong>Overview Speaker:</strong> Wolf Frommer, Carnegie Institution, USA</td>
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<tr>
<td>3:35-3:55</td>
<td><strong>Abstract #15:</strong> Smarty Plants: Using Mechano-sensitive Ion Channels to Sense and Respond to Mechanical Force. Elizabeth Haswell, Washington University in St. Louis, USA</td>
<td></td>
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<tr>
<td>3:55-4:15</td>
<td><strong>Abstract #16:</strong> Microtubule-mediated control of auxin polar transport and brassinosteroid signaling. Geoff Wasteneys, University of British Columbia, Canada</td>
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<tr>
<td>4:15-4:25</td>
<td><strong>Abstract #108:</strong> The role of a mitochondrial membrane-bound ubiquitin protease in mitochondrial dynamics in Arabidopsis. Jianping Hu, Michigan State University, USA</td>
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<td></td>
<td><strong>Abstract #112:</strong> Tubulin phosphorylation by NIMA-related kinases is involved in cell growth and division. Hiroyasu Motose, Okayama University, Japan</td>
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<tr>
<td>4:25-4:35</td>
<td><strong>Abstract #115:</strong> Proteomic analysis reveals a framework in endomembrane compartments associated with immunity. William Heard, The Sainsbury Lab, UK</td>
<td></td>
</tr>
<tr>
<td>4:35-4:45</td>
<td><strong>Abstract #124:</strong> Domain-specific lignification of Arabidopsis protoxylem is mediated by laccase-catalyzed deposition, Mathias Schuetz, University of British Columbia, Canada</td>
<td></td>
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<tr>
<td>4:45-4:55</td>
<td><strong>Abstract #119:</strong> 2 min Oral Poster: IMPAIRED TRAFFIC TO TONOPLASTS (ITT5) encodes a novel protein of unknown function involved in vacuole bulb formation. Marcela Rojas-Pierce, North Carolina State University, USA</td>
<td></td>
</tr>
<tr>
<td>4:55-4:57</td>
<td><strong>Abstract #109:</strong> 2 min Oral Poster: A novel PVC-localized protein FREE1 is essential for vacuolar protein transport and vacuole biogenesis in Arabidopsis. Caiji Gao, The Chinese University of Hong Kong, Shatin, Hong Kong</td>
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<tr>
<td>4:57-5:00</td>
<td><strong>Concurrent Session 2B: Plant Hormones</strong></td>
<td>Buchanan Building Room A101</td>
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<tr>
<td>3:30-3:35</td>
<td><strong>Overview Speaker:</strong> Sean Cutler, University of California, Riverside, USA</td>
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<td>3:35-3:55</td>
<td><strong>Abstract #17:</strong> Regulation of the central regulator EIN2 in ethylene hormone signaling in Arabidopsis. Caren Chang, University of Maryland, USA</td>
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<tr>
<td>3:55-4:15</td>
<td><strong>Abstract #18:</strong> Friends on surface, foes underground – the complicated relationship between brassinosteroid and auxin. Zhiyong Wang, Carnegie Institution, USA</td>
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<tr>
<td>4:15-4:25</td>
<td><strong>Abstract #385:</strong> A meso-scale ABA interactome reveals a dynamic signaling landscape in Arabidopsis. Shelley Lumba, University of Toronto, Canada</td>
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<tr>
<td>4:25-4:35</td>
<td><strong>Abstract #387:</strong> Recapitulation of the auxin response pathway in yeast. Edith Pierre-Jerome. University of Washington, USA</td>
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<tr>
<td>4:35-4:45</td>
<td><strong>Abstract #390:</strong> SAUR proteins inhibit PP2C.D family phosphatases to control plant cell expansion. Bill Gray, University of Minnesota, USA</td>
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<tr>
<td>4:45-4:55</td>
<td><strong>Abstract #379:</strong> Identification and characterization of the polarly-localized TRANSPORTER OF IBA1. Lucia Strader, Washington University in St. Louis, USA</td>
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<tr>
<td>4:55-4:57</td>
<td><strong>Abstract #388:</strong> 2 min Oral Poster: Can abscisic acid bind to and directly regulate ion channels? Amanda Ooi, KAUST, Saudi Arabia</td>
<td></td>
</tr>
<tr>
<td>4:57-4:59</td>
<td><strong>Abstract #393:</strong> 2 min Oral Poster: To Grow or not to Grow: Hormonal Regulation of Fitness Trade-offs in Arabidopsis. Cris Argueso, Colorado State University, USA</td>
<td></td>
</tr>
</tbody>
</table>
3:30-5:00 pm Concurrent Session 2C: Epigenetics, Chromatin
Session Chair: Julie Law, Salk Institute, USA
Buchanan Building Room A201

3:30-3:35 Overview Speaker: Craig Pikaard, Indiana University, USA

3:35-3:55 Abstract #19: Polymerase IV occupancy at RNA-directed DNA methylation sites requires SHH1. Julie Law, Salk Institute, USA

3:55-4:15 Abstract #20: Epigenetic control of meiotic crossover hotspots in Arabidopsis. Ian Henderson, Cambridge University, UK

4:15-4:25 Abstract #287: Histone Modifications and Histone Code in Brassinosteroid Regulated Gene Expression. Yanhai Yin, Iowa State University, USA

4:25-4:35 Abstract #279: Epigenomic analyses of stem cells in Arabidopsis thaliana. Yu Fu, Heinrich Heine University, Germany

4:35-4:45 Abstract #293: A chromatin switch underlies flower primordium initiation downstream of AUXIN RESPONSE FACTOR 5/MONOPTEROS. Miin-Feng Wu, University of Pennsylvania, USA

4:45-4:55 Abstract #281: NTR1 is involved in splicing check-points formation and RNA Pol II pausing at alternative splicing sites in Arabidopsis. Jakub Dolata, Adam Mickiewicz University, Poznan, Poland

4:55-4:57 Abstract #285: 2 min Oral Poster: Natural Variation in Arabidopsis ATF5 Expression Indicates an Adaptive Role for Polyclomb Regulation of the Seed Endosperm. Jonathan Fitz Gerald, Rhodes College, USA

4:57-4:59 Abstract #290: 2 min Oral Poster: Redox regulation of histone deacetylases. Alexander Mengel, Helmholtz Centre Munich, Germany

5:00 pm Exhibition Trade Show Begins, Posters Open
Poster Session begins at 6:15 pm (even # abstracts)
Student Rec Centre (SRC)

5:15-6:15 pm Community Workshop Session 2A:
Becoming and being a successful researcher at a Primarily Undergraduate Institution.
Pablo Jenik, Franklin and Marshall College, Lynn Pillitteri, Western Washington University
Buchanan Building Room A103

Community Workshop Session 2B:
Abiotic Stress: MASC Workshop. Barry Pogson, Australian National University
Buchanan Building Room A104

Community Workshop Session 2C:
EPIC: Epigenomics of Plants International Consortium. Doris Wagner, University of Pennsylvania, Craig Pikaard, Indiana University
Buchanan Building Room A201

6:15-7:15 pm Poster Session I (drinks and refreshments)
Even # abstracts: stand by your poster to present your research
Student Rec Centre (SRC)

7:15-8 pm Open poster session browsing and discussion/Trade Show Continues
Student Rec Centre (SRC)

8 pm Dinner on your own

Wednesday, July 30, 2014

6:45-7:30 (5K) or 8 am (10K)
Weed Stampede-5K and 10K Fun Runs
On trails of Pacific Spirit Park (led by Keith Adams of UBC)
Meet outside Gage Residence Hall

6:45-8:20 am Breakfast Buffet
(included in campus lodging fee)
Student Union Building (SUB)

8:30-10:00 am Plenary Session III: Hormone Signaling
Session Chair: Cris Argueso, Colorado State University, USA
Chan Centre

Session Sponsored by Molecular Plant

Abstract #21: Agrichemical Control of Drought Tolerance using Engineered ABA Receptors. Sean Cutler, University of California, Riverside, USA
Abstract #22: **Regulatory Networks Controlling Hormone-Mediated Growth.** Joe Ecker, Salk Institute, USA

Abstract #23: **Auxin Perception and Response in Arabidopsis and Moss.** Mark Estelle, University of California, San Diego, USA

10-10:30 am Coffee Break Chan Centre Foyer

10:30 am-12 pm Plenary Session IV: Translational Biology Chan Centre

Session Chair: Santokh Singh, University of British Columbia, Canada

**Session Sponsored by Monsanto**

Abstract #24: **Using Insights from Basic Research and Arabidopsis to Develop Improved Wheat Varieties.** Peggy Lemaux, University of California, Berkeley, USA

Abstract #25: **Spinning straw into gold – translating fundamental lignin research into application.** Claire Halpin, University of Dundee, UK

Abstract #26: **Phased, secondary siRNAs in plants.** Blake Meyers, University of Delaware, USA

12 pm-on Lunch on your own/ Free Afternoon and Evening

10-10:30 pm Honda Celebration of Lights Fireworks Festival- France Optional- On your own

Prime viewing areas include English Bay, Kits Point, Vanier Park, and various locations around the West End, Sunset Beach and Stanley Park.


Thursday, July 31, 2014

6:45-8:20 am Breakfast Buffet Chan Centre

(included in campus lodging fee)

8:30-10:00 am Plenary Session V: Development Chan Centre

Session Chair: Siobhan Brady, University of California, Davis, USA

Abstract #27: **Stomatal Patterning: Communication, Fate, and Decision making.** Keiko Torii, University of Washington, USA

Abstract #28: **Overlap between developmental patterning pathways and abiotic stress response pathways.** Kathy Barton, Carnegie Institution, USA

Abstract #29: **Dynamics of stem cell signalling pathways in meristems.** Rudiger Simon, University of Dusseldorf, Germany

10-10:30 am Coffee Break Chan Centre Foyer

10:30 am-12:00 pm Concurrent Session 3A: Reproductive Development Chan Centre

Session Chair: Kathy Barton, Carnegie Institution, USA

**Overview Speaker: Kathy Barton, Carnegie Institution, USA**

Abstract #30: **Gibberellin acts positively then negatively to control onset of flower formation in Arabidopsis.** Doris Wagner, University of Pennsylvania, USA

Abstract #31: **Gamete activation during double fertilization.** Stefanie Sprunck, University of Regensberg, Germany

Abstract #203: **Maternal temperature history activates Flowering Locus T in fruits to control progeny dormancy according to time of year.** Steven Penfield, University of Exeter/ John Innes Centre, UK

Abstract #205: **Regulation of Arabidopsis flower development by AIL/PLT transcription factors.** Beth Krizek, University of South Carolina, USA

Abstract #215: **Non-equivalent contributions of maternal and paternal genomes to early plant embryogenesis.** Stewart Gillmor, Langebio-CINVESTAV, Mexico

Abstract #219: **Egg cell number and cell type differentiation are dependent on cytokinin in the...**
### Concurrent Session 3B: Novel Tools and Techniques

**Session Chair:** Geoff Wasteneys, University of British Columbia, Canada

- **Overview Speaker:** Geoff Wasteneys, University of British Columbia, Canada

#### 10:30 am to 12:00 pm

<table>
<thead>
<tr>
<th>Time</th>
<th>Abstract #213:</th>
<th>Abstract #234:</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:55-11:57</td>
<td><strong>2 min Oral Poster:</strong> Different mechanisms underlie the regulation of floral transition by a pair of highly related but non-redundant Ubiquitin E3 ligase genes. Nabil Elrouby, University of Wisconsin- Madison, USA</td>
<td><strong>2 min Oral Poster:</strong> The developmental consequences of metabolic inhibition of polyamine biosynthesis. Maye Saechao, University of Waterloo, Canada</td>
</tr>
</tbody>
</table>

### Concurrent Session 3C: Biotechnology, Food Security, Bioenergy

**Session Chair:** Carl Douglas, University of British Columbia, Canada

- **Overview Speaker:** Claire Halpin, University of Dundee, UK

#### 10:30 am to 12:00 pm

<table>
<thead>
<tr>
<th>Time</th>
<th>Abstract #34:</th>
<th>Abstract #35:</th>
<th>Abstract #56:</th>
<th>Abstract #57:</th>
<th>Abstract #58:</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:30-10:35</td>
<td><strong>Arabidopsis as a model to identify genes to overcome biomass recalcitrance for biofuels.</strong> Wout Boerjan, University of Ghent, Belgium</td>
<td><strong>Meristem activity, Inflorescence form and yield of rice.</strong> Junko Kyozuka, Tokyo University, Japan</td>
<td><strong>Analysis of Leaf Proteome to Determine Possible Cross-Tolerance to Abiotic Stresses in Soybean Cultivars.</strong> Ramesh Katam, Florida A&amp;M University, USA</td>
<td><strong>Directed Minichromosome Engineering via Haploid Induction.</strong> Ek Han Tan, UC Davis, USA</td>
<td><strong>Global Marketing Software Connecting Local Foods Socially.</strong> Rajnish Khanna, Global Food Scholar, USA</td>
</tr>
<tr>
<td>10:35-10:55</td>
<td><strong>Arabidopsis female gametophyte.</strong> Xiaoya Song, UC Davis, USA</td>
<td><strong>Inflorescence form and yield of rice.</strong> Junko Kyozuka, Tokyo University, Japan</td>
<td><strong>Analysis of Leaf Proteome to Determine Possible Cross-Tolerance to Abiotic Stresses in Soybean Cultivars.</strong> Ramesh Katam, Florida A&amp;M University, USA</td>
<td><strong>Directed Minichromosome Engineering via Haploid Induction.</strong> Ek Han Tan, UC Davis, USA</td>
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<td><strong>Global Marketing Software Connecting Local Foods Socially.</strong> Rajnish Khanna, Global Food Scholar, USA</td>
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<tr>
<td>11:15-11:25</td>
<td><strong>Directed Minichromosome Engineering via Haploid Induction.</strong> Ek Han Tan, UC Davis, USA</td>
<td><strong>Analysis of Leaf Proteome to Determine Possible Cross-Tolerance to Abiotic Stresses in Soybean Cultivars.</strong> Ramesh Katam, Florida A&amp;M University, USA</td>
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</tr>
<tr>
<td>11:45-11:55</td>
<td><strong>A rapid method for translating molecular tools for crop species.</strong> Mily Ron, University of California, Davis, USA</td>
<td><strong>Directed Minichromosome Engineering via Haploid Induction.</strong> Ek Han Tan, UC Davis, USA</td>
<td><strong>Global Marketing Software Connecting Local Foods Socially.</strong> Rajnish Khanna, Global Food Scholar, USA</td>
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<td><strong>Directed Minichromosome Engineering via Haploid Induction.</strong> Ek Han Tan, UC Davis, USA</td>
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### Lunch Buffet

**Student Union Building (SUB)**
### Concurrent Session 4A: Environmental Responses

**Chan Centre**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session Details</th>
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</thead>
<tbody>
<tr>
<td>1:30-1:35 pm</td>
<td><strong>Overview Speaker:</strong> Katherine Denby, University of Warwick, UK</td>
</tr>
<tr>
<td>1:35-1:55 pm</td>
<td><strong>Abstract #36:</strong> Gene Regulatory Networks Mediating Arabidopsis Responses to Environmental Stress. Katherine Denby, University of Warwick, UK</td>
</tr>
<tr>
<td>1:55-2:15 pm</td>
<td><strong>Abstract #37:</strong> Understanding the transcriptional regulation of the salt-stress response one cis-element at a time. Jose Dinneny, Stanford University, USA</td>
</tr>
<tr>
<td>2:15-2:25 pm</td>
<td><strong>Abstract #246:</strong> GI (GIGANTEA), a missing link between flowering and stress adaptation. Dae-Jin Yun, Gyeongsang National University, Korea</td>
</tr>
<tr>
<td>2:25-2:35 pm</td>
<td><strong>Abstract #249:</strong> Characterization of the oxygen sensing mechanism in plants. Monika Kosmacz, Max Planck Institute for Molecular Plant Physiology, Germany</td>
</tr>
<tr>
<td>2:35-2:45 pm</td>
<td><strong>Abstract #250:</strong> Regulatory network models of drought responses in Arabidopsis thaliana. Ulrike Bechtold, University of Essex, UK</td>
</tr>
<tr>
<td>2:45-2:55 pm</td>
<td><strong>Abstract #252:</strong> Genetic Engineering of Abiotic Stress Response and Plant Growth in Arabidopsis. Yuriko Osakabe, RIKEN CSRS, Japan</td>
</tr>
<tr>
<td>2:55-2:57 pm</td>
<td><strong>Abstract #243:</strong> 2 min Oral Poster: Arabidopsis HPS10/ALS3 interacts with AtSTAR1 in tonoplasts to serve as a signaling hub for responses to P deficiency and Al toxicity. Dong Liu, Tsinghua University, China</td>
</tr>
<tr>
<td>2:57-2:59 pm</td>
<td><strong>Abstract #259:</strong> 2 min Oral Poster: Asymmetric Unproductive Alternative Splicing Mediates Responses of the Central Circadian Oscillator to Environmental Stresses and Pathogen Infection. Sergei Filichkin, Oregon State University, USA</td>
</tr>
</tbody>
</table>

### Concurrent Session 4B: Metabolism and Biochemistry

**Buchanan Building Room A101**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session Details</th>
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</thead>
<tbody>
<tr>
<td>1:30-1:35 pm</td>
<td><strong>Overview Speaker:</strong> Juergen Ehlting, University of Victoria, Canada</td>
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<tr>
<td>1:35-1:55 pm</td>
<td><strong>Abstract #38:</strong> Transcriptional feedback mechanisms that impact lignin biosynthesis in Arabidopsis. Clint Chapple, Purdue University, USA</td>
</tr>
<tr>
<td>1:55-2:15 pm</td>
<td><strong>Abstract #39:</strong> The topsy-turvy world of metabolic regulation. Dan Kliebenstein, University of California, Davis, USA</td>
</tr>
<tr>
<td>2:15-2:25 pm</td>
<td><strong>Abstract #303:</strong> Stress-responsive aldehyde dehydrogenase 3H1: Identification of amino acid residues critical for cofactor specificity and thiol regulation. Naim Stiti, Bonn University, Germany</td>
</tr>
<tr>
<td>2:25-2:35 pm</td>
<td><strong>Abstract #299:</strong> The metabolic target of pyrophosphate, a mysterious player in plant metabolism, identified. Ali Ferjani, Tokyo Gakugei University, Japan</td>
</tr>
<tr>
<td>2:35-2:45 pm</td>
<td><strong>Abstract #308:</strong> Unsaturation of Very-Long-Chain Ceramides Protects Plant from Hypoxia in Arabidopsis. Shi Xiao, Sun Yat-sen University, China</td>
</tr>
<tr>
<td>2:45-2:55 pm</td>
<td><strong>Abstract #305:</strong> An intermediate cleavage peptidase modifies enzyme N-termini, alters protein stability and influences serine metabolism in Arabidopsis mitochondria. Shaobai Huang, The University of Western Australia, Australia</td>
</tr>
<tr>
<td>2:55-2:57 pm</td>
<td><strong>Abstract #302:</strong> 2 min Oral Poster: The Arabidopsis Mediator subunit MED16 regulates iron homeostasis by associating with EIN3/EIL1 through subunit MED25. Yan Yang, Peking University, China</td>
</tr>
<tr>
<td>2:57-2:59 pm</td>
<td><strong>Abstract #310:</strong> 2 min Oral Poster: A selective inhibitor of jasmonate signaling targets the adenylation-forming enzyme JAR1 in Arabidopsis thaliana. Erich Kombrink, Max Planck Institute for Plant Breeding Research, Germany</td>
</tr>
</tbody>
</table>

### Concurrent Session 4C: Emerging Topics

**Buchanan Building Room A201**

<table>
<thead>
<tr>
<th>Time</th>
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<tbody>
<tr>
<td>1:30-1:35 pm</td>
<td><strong>Overview Speaker:</strong> Rainer Waadt, University of California, San Diego, USA</td>
</tr>
<tr>
<td>1:35-1:55 pm</td>
<td><strong>Abstract #40:</strong> Targeted manipulation of gene activity in plants via CRISPR/Cas toolkit. Jianfeng Li, Harvard Medical School, USA</td>
</tr>
<tr>
<td>1:55-2:15 pm</td>
<td><strong>Abstract #41:</strong> Genetically-encoded reporters for the visualization of abscisic acid distribution and concentration changes in Arabidopsis. Rainer Waadt, University of California, San Diego, USA</td>
</tr>
<tr>
<td>2:15-2:25 pm</td>
<td><strong>Abstract #236:</strong> Roles of AtExo70E2 in exocyst recruitment, EXPO biogenesis and function, and plant growth and development. Yu Ding, Hong Kong, The Chinese University of Hong Kong, Shatin</td>
</tr>
</tbody>
</table>
| 2:25-2:35 pm | **Abstract #238:** Keeping it similar: Interaction of HSP90 and miRNAs in the buffering of phenotypic
Abstract #239: Is trehalose 6-phosphate (T6P) a general signal gating developmental transitions? Tzitziki Lemus Vergara, University of Washington, USA

Abstract #240: The Role of mRNA Alternative Polyadenylation in Root Cell Differentiation in Arabidopsis. Q. Quinn Li, Xiamen University, China; and Miami University USA

Abstract #237: 4 min Oral Poster: Effects of aspirin and its metabolite on Arabidopsis thaliana. Catherine Chan, University of Wisconsin-Whitewater, USA

3:30-5:00 pm Concurrent Session 5A: Vegetative Development
Session Chair: Kim Gallagher, University of Pennsylvania, USA
Overview Speaker: Dominique Bergmann, Stanford University, USA
Abstract #42: Symplastic regulation of root patterning. Kim Gallagher, University of Pennsylvania, USA
Abstract #43: What factors determine the positioning of meristematic zones in leaves? Hirokazu Tsukaya, University of Tokyo, Japan
Abstract #146: The execution of developmental programs in all epidermal cell types are restrained by PPI overaccumulation. Shizuka Gunji, Tokyo Gakugei University, Japan
Abstract #154: Irreversible fate commitment upon exit from stem-cell-like divisions in the Arabidopsis stomatal lineage requires a FAMA and RETINOBlastoma-Related module. Juliana L Matos, Stanford University, USA
Abstract #166: Threshold dependent transcriptional discrimination and stem cell homeostasis. G. Venugopala Reddy, UC Riverside, USA
Abstract #167: NIN-Like Protein 7 (NLP7) Modulates Border-Like Cell Adhesion to Protect the Columella Root Cap in Arabidopsis. Anjali Iyer-Pascuzzi, Purdue University, USA
Abstract #24: Regulation of low oxygen signaling in plants. Francesco Licausi, Scuola Superiore Sant’Anna, Italy
Abstract #420: A receptor-like protein links cell wall surveillance with brassinosteroid signaling. Sebastian Wolf, Centre for Organismal Studies Heidelberg, Germany
Abstract #424: The role of Integrin-Linked Kinase 1 in perception and control of ionic signals during biotic and abiotic stress. Elizabeth Brauer, Cornell University, USA
Abstract #412: Phosphorylation of a bZIP transcription factor triggers metabolic reprogramming in acclimation to low energy stress. Markus Teige, University of Vienna, Austria
Abstract #434: The role of auxin response factor 6. Elizabeth Brauer, Cornell University, USA
Abstract #415: Molecular basis for AUXIN RESPONSE FACTOR protein interaction and the control of auxin response repression. David Korasick, Washington University in St. Louis, USA
Abstract #428: Inhibition of developmental and stress-induced leaf senescence by Cytokinin Response Factor 6. Paul Zwack, Auburn University, USA

3:30-5:00 pm Concurrent Session 5B: Signal Transduction, Signal Integration
Session Chair: Sorina Popescu, Boyce Thompson Institute, USA
Overview Speaker: Mark Estelle, University of California, San Diego, USA
Abstract #44: Early signaling in plant stress response. Sorina Popescu, Boyce Thompson Institute, USA
Abstract #45: Molecular mechanisms underlying the dynamics of the plant steroid receptor activation. Yvon Jaillais, ENS-Lyon, France
Abstract #42: Regulation of low oxygen signaling in plants. Francesca Licausi, Scuola Superiore Sant’Anna, Italy
Abstract #420: A receptor-like protein links cell wall surveillance with brassinosteroid signaling. Sebastian Wolf, Centre for Organismal Studies Heidelberg, Germany
Abstract #424: The role of Integrin-Linked Kinase 1 in perception and control of ionic signals during biotic and abiotic stress. Elizabeth Brauer, Cornell University, USA
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Abstract #428: Inhibition of developmental and stress-induced leaf senescence by Cytokinin Response Factor 6. Paul Zwack, Auburn University, USA

3:30-5:00 pm Concurrent Session 5C: Natural Variation, Ecology, Evolution
Session Chair: Keith Adams, University of British Columbia, Canada
Overview Speaker: Keith Adams, University of British Columbia, Canada
Abstract #46: Signatures of polygenic adaptation in the Arabidopsis genus. Juliette de Meaux, University of Muenster, Germany
Abstract #47: Predicting evolutionary dynamics of seasonal adaptation to novel climates in Arabidopsis

variation in Arabidopsis thaliana. Tzitziki Lemus Vergara, University of Washington, USA
3:55-4:15 pm thaliana. Johanna Schmitt, University of California, Davis, USA

Abstract #335: Natural variation of a gene network regulating trichome patterning. Benjamin Jaegle, University of Cologne, Germany

Abstract #357: Global genetic heterogeneity for flowering time in Arabidopsis thaliana. Arthur Korte, Gregor Mendel Institute of Molecular Plant Biology, Austria

Abstract #349: Genetic basis of natural variation in heat-stress response in Arabidopsis thaliana: A genome wide association study. Johanna Molenaar, Wageningen University, Netherlands

4:15-4:25 pm

4:25-4:35 pm

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4:45-4:55 pm

4:55-4:57 pm

4:57-4:59 pm

5:00 pm

Exhibition Trade Show Begins, Posters Open

Poster Session begins at 6:15 pm (odd # abstracts)

Student Rec Centre (SRC)

5:15-6:15 pm

Community Workshop Session 3A:
IAIC-International Arabidopsis Informatics Consortium. Blake Meyers, University of Delaware, Erich Grotewold, The Ohio State University.

Community Workshop Session 3B:
Local signals coordinating growth Sigal Savaldi-Goldstein, Technion, Olivier Hamant, RDP/LJC ENS Lyon, Regina Antoni Alandes, University of Nottingham.

Community Workshop Session 3C:

Buchanan Building Room A103

Buchanan Building Room A104

Buchanan Building Room A201

5:15-6:15 pm

Poster Session II (drinks and refreshments)
Odd # abstracts: stand by your poster to present your research

Student Rec Centre (SRC)

7:15-8 pm

Open poster session browsing and discussion/Trade Show Continues

Student Rec Centre (SRC)

7:30 pm

Conference Banquet- Museum Opens for Viewing*
*advanced purchase of banquet ticket required

Museum of Anthropology

8 pm-9 pm

Take down posters*
*posters may also be taken down Friday morning: 7-9 am

Student Rec Centre (SRC)

8 pm -11 pm

Conference Banquet*
*advanced purchase of banquet ticket required

Museum of Anthropology

Conference Banquet Invited Speaker

Dr. Mary E. Clutter is the former Assistant Director of the U.S. National Science Foundation (NSF) in charge of competitive programs in basic research and education in biology and related disciplines. Dr. Clutter has served on many national and international committees tasked with facilitating coordination and cooperation in leading edge areas of the biosciences. She worked with counterparts in many countries to coordinate long range planning and was honored by NSF with the Distinguished Service Award in recognition of her leadership in plant genomics, notably the Multinational Arabidopsis Sequencing Project. During her tenure at NSF she actively promoted programs such as the Postdoctoral Research Fellowships in Plant Biology, which supported more than 200 outstanding young molecular biologists over the years. Other important programs include multidisciplinary Research Coordination Networks (RCN), computational biology, bioinformatics, the Arabidopsis Plant Genome Research Program (PGRP), and the National Ecological Observatories Network (NEON). Dr. Clutter was also instrumental in developing NSF’s broadening participation programs, such as ADVANCE which endeavored to increase the participation and advancement of underrepresented groups in academic science and engineering careers. She chaired the interagency biotechnology subcommittee of the National Science and Technology Council (NSTC) and the interagency working group on plant genomes. She also was an active participant on the Board of Directors of the International Human Frontier Science Program (HFSP). Her most recent research interest is in epigenomics.
Friday, August 1, 2014

6:45-8:50 am  Breakfast Buffet  
(included in campus lodging fee)  
Student Union Building (SUB)

9-10:30 am  Plenary Session VI: Synthetic Biology  
Session Chair: Keiko Torii, University of Washington, USA  
Chan Centre

**Session Sponsored by International Plant Molecular Biology**

Abstract #48: Molecular mechanism and physiological function of cytoplasmic streaming. Motoki Tominaga, RIKEN, Japan

Abstract #49: Plant Synthetic Biology. June Medford, Colorado State University, USA

Abstract #50: Synthetic biology in photosynthetic organisms: Redirecting reducing power. Poul Erik Jensen, University of Copenhagen, Denmark

10:30-11 am  Coffee Break  
Chan Centre Foyer

11 am-12:30 pm  ICAR 2014 Closing Keynote Lectures  
ICAR Co-chair and Session Chair: Nick Provart, University of Toronto, Canada

11 am  Keynote Lecture 3  
Peter McCourt, University of Toronto, Canada  
Chan Centre

11:30 am  Keynote Lecture 4  
Brenda Andrews, University of Toronto, Canada  
Chan Centre

12 Noon  Conference Closing Remarks and Announcement of ICAR 2015  
ICAR Co-chairs: Jose Alonso, North Carolina State University, USA and Nick Provart, University of Toronto, Canada

Announcement of ICAR 2015- Catherine Perrot-Rechenmann, CNRS INSB, Saclay Plant Science LabEx, Co-organizer of ICAR 2015  
Chan Centre

**ICAR 2014 was organized by the North American Arabidopsis Steering Committee**

Thank you for attending!
Arguments in the evo-devo debate: say it with flowers!
The transcription factor SlAREB1 regulates primary metabolic pathways in tomato fruits

Enhancing the aluminium tolerance of barley by expressing the citrate transporter genes SbMATE and FRD3

Arabidopsis ANGULATA10 is required for thylakoid biogenesis and mesophyll development

Redox activity of thioredoxin z and fructokinase-like protein 1 is dispensable for autotrophic growth of Arabidopsis thaliana

Phenol homeostasis is ensured in vanilla fruit by storage under solid form in a new chloroplast-derived organelle, the phenyloplast

Down-regulation of AUXIN RESPONSE FACTORS 6 and 8 by microRNA 167 leads to floral development defects and female sterility in tomato

Enrichment of provitamin A content in wheat (Triticum aestivum L.) by introduction of bacterial carotenoid biosynthetic genes CrtB and CrtI

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**Journal of Cell Science**
The science of cells [jcs.biologists.org](http://jcs.biologists.org)

**The Journal of Experimental Biology**
At the forefront of comparative physiology and integrative biology [jeb.biologists.org](http://jeb.biologists.org)

**OPEN ACCESS**

**Disease Models & Mechanisms**
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For more information please visit our website [biologists.com](http://biologists.com)
Monday, July 28: Various times: 1:30-5:30 pm

(1) 1:30-3:00 pm: US Under-Represented Minority (URM) Workshops. Organizers: Siobhan Brady, Terri Long, Cris Argueso, Terry Jackson, Beronda Montgomery (Buchanan: B210-Students, B209-Postdocs/Jr. faculty, B216-Mid career faculty)

(2) 2:00-4:30 pm: Arabidopsis Information Portal Developer & User Workshop. Organizers: Chris Town, Matt Vaughn (Buchanan A102)

(3) 3:00-4:00 pm: Joint URM/Early Career Researcher (ECR) Workshops. Organizers: Dominique Bergmann, Siobhan Brady, Terri Long, Cris Argueso, Beronda Montgomery (Buchanan: A103- Students/Early PDs, A104- Late Postdocs/Junior Faculty)

(4) 4:00-5:00 pm: More Early Career Researcher Workshops. Organizer: Dominique Bergmann (Buchanan A103- Students/Early PDs, A104- Late Postdocs/Junior Faculty)

(5) 4:30-5:30 pm: Small molecules in plant development and defense. Organizer: Tony Schäffner (Buchanan B215)

(6) 4:30-5:30 pm: TAIR: A Sustainable Community Database for International Arabidopsis Research. Organizers: Donghui Li & Eva Huala (Buchanan 313)

Tuesday, July 28: 5:15-6:15 pm

(1) Becoming and being a successful researcher at a Primarily Undergraduate Institution. Organizers: Pablo Jenik, Lynn Pillitteri (Buchanan A103)

(2) Abiotic Stress: MASC Workshop. Organizer: Barry Pogson (Buchanan A104)

(3) Epigenomics of Plants International Consortium. Organizers: Doris Wagner, Craig Pikaard (Buchanan A201)

Thursday, July 31: 5:15-6:15 pm

(1) The International Arabidopsis Informatics Consortium: Community Research & Resources, including the Arabidopsis Information Portal (AIP) & Modules. Organizers: Blake Meyers, Erich Grotewold, Nick Provart, (Buchanan A103)

(2) Local signals coordinating growth. Organizers: Sigal Savaldi-Goldstein, Olivier Hamant, Regina Antoni Alandes (Buchanan A104)

(3) Phenomics in Arabidopsis: from phenes to genes. Organizers: José R. Dinneny, Wolfgang Busch (Buchanan A201)

Descriptions and Programs for Workshops

(1) 1:30-3 pm: US Under-Represented Minority (URM) Workshops
Room Locations: Buchanan- Students: B210, Postdocs/Junior Faculty: B209, Mid-career Faculty: B216
Workshop Organizers: Siobhan Brady, University of California, Davis; Terri Long, North Carolina State University; Cris Argueso, Colorado State University; Terry Jackson, Duke University; Beronda Montgomery, Michigan State University

These workshops, proposed by Siobhan Brady and Terri Long, co-chairs of the Minority Affairs Committee (MAC) of the North American Arabidopsis Steering Committee (NAASC), are the first such workshops at ICAR. These career development workshops will enable participants to gain experience with essential skills including career options in science, funding opportunities and presenting themselves and their work well. They will also reflect the experience of science from the perspective of three URM scientists including one at the graduate level (Terry Jackson, Duke University), one at the early career level (Cristina Argueso, Colorado State University), and one at the mid-career level (Beronda L. Montgomery, Michigan State University).

Programs will reflect input solicited during online surveys prior to ICAR 2014 from conference attendees.

(2) 2:00-4:30 pm: Arabidopsis Information Portal (AIP) Developer and User Workshop
Room location: Buchanan A102
Workshop Organizers: Chris Town, J. Craig Venter Institute and Matt Vaughn, Texas Advanced Computing Center (TACC)

The workshop will be divided into two parts. The first and longer part is oriented to the users of ARAPORT. The second is an informal discussion aimed at potential developers. Within the user-oriented part, the introductory session introduces the AIP team to the community and provides an overview of the project and its technical implementation. The second section on user-interface presentations provides a walk-through of the entire ARAPORT site and its current functionalities and previews a new interface being developed by the Provart group. This is followed by hands-on tutorials on the two main user interfaces - JBrowse and ThaleMine. This user-oriented part will conclude with an open period for comments, questions and suggestions. Part 2 will be a shorter, technical session in which potential developers can learn how to develop app and/or provide their data sets to AIP via web services.

PART I: Introductory session
1. Meet the AIP team (Chris Town, JCVI)
2. Overview of the AIP project (Chris Town, JCVI)
3. Technical implementation - what's under the hood (Jason Miller, JCVI)
User interface presentations
4. An overview of the ARAPORT site (Matt Vaughn, TACC)
5. A zoomable user interface for the AIP (Jamie Waese, University of Toronto)

Hands-on tutorials
6. An introduction to JBrowse (led by Ben Rosen, JCVI; assists by other team members)
7. An introduction to ThaleMine (led by Ben Rosen, JCVI; assists by other team members)

Both the JBrowse and ThaleMine sessions will consist of a live demo and walk through of the main features from the podium interspersed with interactive exercises for the participants to work through, most likely in small groups. Bring your laptop if you wish to actively participate in these sessions.

Questions and Suggestions

PART II- Informal Discussion for Developers (Matt Vaughn, TACC): We will provide a high-level overview of AIP’s development roadmap and how we anticipate you will be able to provide apps and/or data sources for inclusion in AIP. This will be a prelude to a developer workshop planned for Fall 2014.

(3) 3:00-4:00 pm: Joint URM/Early Career Researcher (ECR) Workshops
Room Locations: Buchanan A103- Students, Early Postdocs; Buchanan A104: Late Postdocs, Junior Faculty

Workshop Organizer: Tony Schäffner, Helmholtz Zentrum Muenchen, Germany
Room Locations: Buchanan A103- Students, Early Postdocs; Buchanan A104: Late Postdocs, Junior Faculty

These workshops, proposed by Dominique Bergmann, Siobhan Brady (NAASC ICAR organizing committee), and Terri Long, are the first such workshops at ICAR. The workshops are modeled on successful events held at other society meetings which recognize that “early career” is really two separate populations, scientists at the beginning of their training (ECR1-graduate students and early postdocs) and scientists making transitions into independent positions (ECR2-late postdocs, early faculty). Both ECR1s and ECR2s will benefit from programs that target essential skills like networking within the community, communicating science to the public and time management, but the groups also have unique needs. For the ECR1 group, we will focus on career options in science and presenting themselves and their work well while for the ECR2 group, we will have successful pre-tenure and established scientists tackle such issues as how to get an independent research position and thrive in it, what mentoring and management techniques are effective, how to establish collaborations and work with people whose skill sets differ from ones own, and how to find funding in this challenging time.

Programs will reflect input solicited during online surveys prior to ICAR 2014 from conference attendees.

(4) 4:00-5:00 pm: Additional Early Career Researcher (ECR) Workshops.
Room Locations: Buchanan A103- Students, Early Postdocs; Buchanan A104: Late Postdocs, Junior Faculty

Program and Description similar to Sessions above (3)

(5) 4:30-5:30 pm: Small Molecules in Plant Development and Defense
Room Location: Buchanan B215.

Workshop Organizer: Tony Schöffner, Helmholtz Zentrum Muenchen, Germany, Ravishankar Palanivelu, University of Arizona, USA

Recently, a growing number of novel small molecules have been implicated in regulating plant development and/or defense (e.g. sulfinylated azadecalins1, glycerol-3-phosphate2, 3, isoleucic acid4, b-amino butyric acid, azelaic acid3,5) in addition to or in...
In the first part, we’ll cover the following topics related to the new funding model: 1) the rationale for TAIR to move to a more sustainable funding model supported by subscriptions (non-profit); 2) an update on the progress we’ve made so far in developing this new funding model supported by institutional and individual subscriptions. This model provides a sustainable path for TAIR to continue to serve the increasing needs for high quality curated data from the international Arabidopsis and plant research community.

This workshop is divided into 2 parts:

In the first part, we’ll cover the following topics related to the new funding model: 1) the rationale for TAIR to move to a more sustainable funding model supported by subscriptions (non-profit); 2) an update on the progress we’ve made so far in developing this new funding mechanism; 3) the steps we’ve taken to maximize the number of researchers with access to TAIR data by offering a variety of subscription options (national, institutional, individual and complimentary access for teaching); 4) vision for the future development of TAIR. The second part of this workshop is designed for users who wish to learn more about the various curated data sets and software resources provided by TAIR. We will address curation of the major data types at TAIR. We will describe the process of annotating from the literature using GO and PO controlled vocabularies, and then demonstrate how controlled vocabularies allow for standardization of annotation, assist in comparative genomics and can be used to classify large data sets. We’ll demonstrate how to use the bioinformatics tools provided on the TAIR website. This workshop will be of interest to a broad audience including researchers who wish to learn more about the wide array of data and tools provided by TAIR, community members who wish to contribute to the future development of this community resource, and developers of other informatics resources who would like to learn more about this innovative new funding approach. This workshop will be of interest to a broad audience including researchers who wish to learn more about the wide array of data and tools provided by TAIR, community members who wish to contribute to the future development of this community resource, and developers of other informatics resources who would like to learn more about this innovative new funding approach.

Part 1: 4:30- 5 pm: Eva Huala
Part 2: 5:30- pm: Donghui Li

Tuesday, July 28: 5:15- 6:15 pm

(1) Becoming and Being a Successful Researcher at a Primarily Undergraduate Institution
Room Location: Buchanan A103

Workshop Organizers: Pablo Jenik, Franklin and Marshall College and Lynn Pillitteri, Western Washington University

Abstract #484: Primarily Undergraduate Institutions (PUIs) are Colleges and Universities that, as the name indicates, enroll mostly undergraduate (and in some cases Master) students, but have no Ph.D. programs. Although, these institutions are a relatively unexplored career alternative for people formed at research-intensive universities, they provide an exciting environment for those interested in combining research and teaching. Doing research at PUIs has its unique rewards and challenges. This workshop is targeted at postdoctoral fellows and graduate students interested in faculty positions at PUIs, and is aimed at introducing faculty life at a PUI. Participants in the workshop will be organized into small groups with 1-2 current PUI faculty facilitators for each group to lead discussion and answer questions. Facilitators are drawn from a range of PUI institutions and will rotate between groups to provide alternative perspectives. Three main topics will be covered: (1) What is a PUI? (2) How to be a successful researcher at a PUI. (3) Applying for a job and preparing for an interview at a PUI. Discussion of other topics and alternate questions from participants is encouraged. Workshop Facilitators include: Amy Briggs – Beloit College; Catherine Chan – University of Wisconsin – Whitewater; Jonathan Fitzgerald – Rhodes College; Pablo Jenik – Franklin & Marshall College; Ramesh Katan – Florida A&M University; Lynn Pillitteri - Western Washington University; and Dan Vernon – Whitman College.

(2) Abiotic Stress Workshop, MASC-sponsored
Room location: Buchanan A104.

Workshop Organizer: Barry Pogson, Australian National University, Canberra

Advances in our knowledge of signaling pathways in abiotic stress have till recently largely focused on the imposition and a measurement of the response in terms of acclimation to the stress with a goal to identifying key regulators. Considerable progress has been made in understanding the molecular mechanisms that regulate tolerance to abiotic stress, yet the integration of signaling pathways is still not fully understood. Signaling pathways are complex, and there is a need to integrate the knowledge of these pathways to fully understand the molecular mechanisms of abiotic stress tolerance.

References
2 Chanda et al. (2011) Glycerol-3-phosphate is a critical mobile inducer of systemic immunity in plants. Nat. Genet. 43, 421-427

(6) 4:30-5:30 pm: TAIR: A Sustainable Community Database for International Arabidopsis Research
Room Location: Buchanan B313.

Workshop Organizers: Donghui Li, Eva Huala, TAIR

Started as a NSF-funded project in 1999, TAIR has served as the primary source and the main portal of curated Arabidopsis data, with worldwide usage of 66,000 visitors per month and 2.4 million visits per year. Over the past year TAIR has transitioned to a new funding model supported by institutional and individual subscriptions. This model provides a sustainable path for TAIR to continue to serve the increasing needs for high quality curated data from the international Arabidopsis and plant research community.

This workshop is divided into 2 parts:

Part 1: 4:30- 5:30 pm: Donghui Li
Part 2: 5:30-6:00 pm: Eva Huala
that may accelerate and enhance their research. This workshop will include four talks covering diverse topics including: The interaction of organelle signaling on guard cells and seeds; How a protein involved in organelle genome recombination can function in environmental sensing and transgenerational epigenetic memory to alter growth; GWAS on the impact of heat stress on fruit yield in Arabidopsis towards gene identification and translation in tomato; and new insights into the mechanisms for low oxygen sensing. The workshop will also include a very brief introduction to the roles of MASC and raise questions as to what MASC might need to do in the future to best serve the International Arabidopsis Community.

1. 5:15-5:20: What could be the roles for MASC in the future? Barry Pogson, Australian National University, Canberra
2. 5:20-5:32: Abstract #485, Beyond the chloroplast: linking retrograde signals to ABA signaling in guard cells and seeds. B. Pogson
3. 5:32-5:44: Abstract #156, Active growth reduction of leaves under osmotic stress is executed by decreasing SPEECHLESS protein in Arabidopsis, Archana Kumari, Osaka University, Japan
4. 5:44-5:56: Abstract #284, Arabidopsis MSH1 mutation alters the epigenome and produces heritable changes in plant growth. John Laurie, University of Nebraska, USA
5. 5:56-6:09: Abstract #253, How and Why Plants 'Memorize' their Experience of Heat Stress. Yee-yung Charng, Academia Sinica, Taiwan
6. 6:09-6:15: Wrap-up and Discussion

(3) EPIC- Epigenomics of Plants International Consortium
Room Location: Buchanan A201

Workshop Organizers: Doris Wagner, University of Pennsylvania and Craig Pikaard, Indiana University

The Epigenomics of Plants International Consortium (EPIC) is an international initiative whose goal is to promote epigenomic and epigenetic research in plants and develop community tools and resources for the deposition and analysis of relevant data. Funded by a research coordination network (RCN) grant from the United States National Sciences Foundation (NSF), EPIC is working to identify key epigenetic and epigenomic questions in need of answers, transformative methodologies, training needs, and infrastructure needs to accelerate progress and catalyze important new breakthroughs in this field. In collaboration with the Gordon and Betty Moore Foundation and iPlant, EPIC is developing a comparative genomics browser for plant epigenomic data. The browser will be integrated as a module into the Arabidopsis Information Portal (AIP). This workshop will explain the role of EPIC in the Arabidopsis community and encourage community participation in the consortium. In addition, four short talks representing cutting-edge epigenetic research will be presented. Given the expanding recognition that epigenetic processes influence development, pathogen infection, and responses to abiotic stresses, it is timely to showcase new findings in this area.

1. 5:15-5:30: EPIC: Introduction and overview. Doris Wagner and Craig Pikaard
2. 5:30-5:41: Abstract #292, ARGONAUTE10 promotes the degradation of miR165/6 through the SDN1 and SDN2 exonucleases in Arabidopsis. Yu Yu, UC Riverside, USA
4. 5:52-6:03: Abstract #288, Silencing Initiation: Recognizing an Exogenous Transposon. Dalen Fultz, The Ohio State University, USA
5. 6:03-6:14: Abstract #289, The EARLY SENESCENCE AND DWARF 1 (ESD1) Gene, Encodes an DNA Glycosylase, Functions as A Novel DNA Demethylase in Arabidopsis. Zhonghai Li, Peking University, China

Thursday, July 31: 5:15-6:15 pm

(1) The International Arabidopsis Informatics Consortium: Community Research and Resources, including the Arabidopsis Information Portal and Modules
Room Location: Buchanan A103

Workshop Organizers: Blake Meyers, University of Delaware; Erich Grotewold, Ohio State University; Nick Provart, University of Toronto

This workshop, developed by members of the International Arabidopsis Informatics Consortium (IAIC), will present a brief overview of the efforts underway internationally to support development of the new information repository and informatics resource, the AIP. Speakers will provide an overview of the international development of the IAIC, and the AIP and its components, its plan for sustainability, recent progress, and planned connections with a broad array of community-generated modules and their associated data. Presentations by plant biologists and computational experts will highlight resources that are, or will be, connecting with the AIP. A key goal of the workshop is to connect with researchers who (1) are developing tools and resources (potential 'modules'), and who are wondering how they might fit with the AIP, or (2) are not developing modules but want to learn of features of the new portal (AIP) and modules that might accelerate and enhance their research. This workshop will complement the longer and more hands-on user/developer workshop that is scheduled for Monday, July 28 at the ICAR. Members of the IAIC and the AIP will be participating, presenting an excellent opportunity to connect with potential collaborators. The IAIC is supported by a Research
Background: The IAIC was initiated following two community-organized workshops held in 2010. This international consortium is addressing growing bioinformatics needs for Arabidopsis data, with the goal of coordinating the management of data and leveraging growth in resources, knowledge, and collaborations. The IAIC's first major task was to facilitate the establishment of the Arabidopsis Information Portal (AIP), the underlying infrastructure to integrate Arabidopsis data on a global scale. Following establishment of the AIP, its connections to additional community-led will facilitate data integration. The IAIC Steering Committee organized an 'AIP Design Workshop' in December 2011, to solicit input from an international group of Arabidopsis researchers and computational experts on the functionalities of the AIP. The NSF funded the AIP in September 2013, a five-year award made to a group led by Chris Town at the J. Craig Venter Institute.

1. 5:15-5:20: Introduction to the IAIC. Blake Meyers, University of Delaware, USA
2. 5:20-5:32: Data Sets, Webservices and Visualization Apps from the Bio-Analytic Resource for use in the AIP and other Cyberinfrastructure Assets. Nick Provart, University of Toronto, Canada
3. 5:32-5:42: Small RNA informatics resources at the University of Delaware, Mayumi Nakano, University of Delaware
4. 5:42-5:54: AIP and Araport: Overview/introduction and module integration and development. Matt Vaughn, Texas Advanced Computing Center, USA
5. 5:54-6:04: How TAIR could incorporate into the Arabidopsis Information Portal (AIP) as a module. Eva Huala, TAIR, USA
6. 6:04-6:15: Group and presenter discussion/Q &A on AIP, IAIC, Modules, etc.

(2) Local Signals Coordinating Growth
Room location: Buchanan A104.
Workshop Organizers: Sigal Savaldi-Goldstein, Technion, Israel; Olivier Hamant, RDP/LJC ENS Lyon, France; Regina Antoni Alandes, University of Nottingham, UK

Multi-cellular organisms have evolved different mechanisms to ensure the reproducibility of shapes in development. In the past years, accumulating research in plants revealed an unexpected ability of hormonal signaling pathways (e.g. ABA, brassinosteroids, gibberellins) to drive and restrict whole-organ growth, even when active in a subset of cells. Moreover, new experimental approaches support the role of mechanical signals as an important determinant guiding growth and contributing to its robustness. Thus, experimental dissection of mechanisms underlying this enigmatic ability of plant cells to communicate is fundamental for understanding growth regulation. In this workshop we would like to highlight new studies and approaches attempting to reveal these mechanisms, where above- and below-ground organs are used as model systems. We will direct attention to research studying the coordination between cell proliferation and cell expansion among neighboring cells and tissues, and present novel insights into the impact of mechanical signals and the environment in these processes. Together, the presentations will promote discussions about how cellular signals are interpreted at the organism level.

1. 5:15-5:30: Metabolism and inter-tissue growth coordination: lessons from low-cell-density mutants. Anna Stepanova
2. 5:30-5:45: Coordinating growth through directional mechanical signals. Olivier Hamant
3. 5:45-6:00: Abstract #483, Local ABA signalling pathway influences direction of root tip growth under low water potentials. Antoni Alandes,
4. 6:00-6:15: Understanding coordinated root growth through Brassinosteroid activity. Sigal Savaldi-Goldstein

(3) Phenomics in Arabidopsis: From Phenes to Genes (MASC Subcommittee-sponsored)
Room Location: Buchanan A201
Workshop Organizers: José R. Dinneny, Carnegie Institution for Science and Wolfgang Busch, Gregor Mendel Institute

The workshop will explore recent advances in the development of phenotyping platforms, particularly those that enable high-throughput quantification of plant traits for the genetic analysis of natural variation in Arabidopsis accessions. Powerful genetic methods such as genome wide association studies (GWAS) enable the identification of sequence variants controlling phenotypes. While technical progress has enabled high-resolution genotyping and whole genome sequencing at a large scale, the major limitation is the ability to accurately phenotype plant traits that are physiologically relevant with high-throughput. Phenotyping technology development as well as computational methods for the analysis of image data will be emphasized in the workshop.

1. 5:15-5:25: Advances in phenotyping technologies for plants. José R. Dinneny, Carnegie Institution for Science, USA
2. 5:25-5:35: Current challenges in plant phenotyping. Wolfgang Busch, Gregor Mendel Institute, Vienna, Austria
3. 5:35-5:45: Related to Abstract#373, Natural variation in nutrient concentration as a tool for studying manganese uptake and storage in plants. Amanda Socha, Dartmouth University, USA
5. 5:55-6:05: Abstract# 60, Understanding Quantitative Resistance through Natural Variation in both Botrytis cinerea and Arabidopsis thaliana. Jason Corwin, UC Davis, USA
6. 6:05-6:15: Abstract#244, Diversity of Stomatal Responses to Different Environmental Conditions in Arabidopsis thaliana Ecotype. Sho Takahashi, Kyushu University, Japan
ABSTRACTS LIST- POSTERS AND TALKS

ABSTRACT NUMBERING AND POSTER SESSION SCHEDULE

All abstracts have been renumbered from the original submission assignment. Abstracts #1-#52 are from invited speakers. Abstracts numbered #53 and higher are from general participant submission and grouped according to the session to which they were submitted.

Abstracts numbered #53 and higher will have one of three designations next to them:
- Poster: This abstract is presented as a poster only.
- Talk: This abstract is presented in an oral presentation only in a concurrent session or workshop.
- Poster/Talk: This abstract is presented as a talk (in a concurrent session or workshop) AND as a poster.

[The original abstract Submission number assigned by the abstract database follows each abstract title]

There will be two official poster sessions, one Tuesday evening and one Thursday evening. To determine when you should stand next to your poster, find your abstract in this list by scanning the session that you submitted your abstract to. **Note the new abstract number.** The new number is your poster number (if you are presenting a poster) and it is also your oral presentation number (if you are giving an oral presentation.)

All posters with EVEN numbers will be presented on Tuesday evening from 6:15-7:15 pm.
All posters with ODD numbers will be presented on Thursday evening from 6:15-7:15 pm.

Note: poster and exhibit sessions open at 5 pm and close at 8 pm.
Open browsing of all posters is encouraged before and after the designated presentation times listed above.

Session Page Numbers

- Invited Speakers- page 24
- Biotechnology, Bioenergy & Food Security- page 26
- Biotic Responses/ Plant Defense- page 26
- Cell Biology- page 28
- Development: Vegetative including root and shoot biology- page 29
- Development: Reproduction including floral development and seed biology- page 31
- Emerging Topics- page 32
- Environmental Responses- page 33
- Epigenetics/Chromatin- page 34
- Metabolism/Biochemistry- page 35
- Light and Plant Growth- page 35
- Modeling, Bioinformatics & Systems Biology- page 36
- Natural Variation, Ecology, Evolution- page 36
- Novel Tools and Techniques- page 37
- Plant Hormones- page 38
- Signal Transduction, Signal Integration - page 39
- Cell Walls- page 40
- Gene Regulation- page 40
- RNA Biology- page 41
- Translational Biology and Non-Arabidopsis Systems- page 41
- Workshop abstracts- page 41
- Late Poster Abstract (cell biology)- page 41

Invited Speakers

**Keynote Invited Speaker Abstract #1.** Understanding plant-microbe interactions: Plant immune system function and the rhizosphere microbiome (Submission 289) Jeff Dangl

**Keynote Invited Speaker Abstract #2.** Understanding small RNAs - from Arabidopsis to crops and humans (Submission 475) Xuemei Chen

**Invited Speaker Abstract #3.** Epigenetic Inheritance of silent locus identity (Submission 337) Craig Pikaard, Todd Blevins

**Invited Speaker Abstract #4.** Polycomb-mediated regulation of floral stem cells (Submission 328) Toshiro Ito

**Invited Speaker Abstract #5.** Mapping and dynamics of regulatory DNA and transcription factor networks in A. thaliana (Submission 282) Alessandra Maria Sullivan, Andrej Arsovski, Janne Lempe, Kerry L Bubb, Matthew T Weirauch, Peter J Sabo, Richard Sandstrom, Robert E Thurman, Shane Neph, Alex P Reynolds, Andrew Stergachi, Benjamin Vernot, Audra K Johnson,
Invited Speaker Abstract #6. Bacterial pathogenesis as a probe of Arabidopsis biology (Submission 339) Sheng-Yang He
Invited Speaker Abstract #7. Fungal Small RNAs Suppress Plant Immunity by Hijacking Host RNAi Machinery (Submission 442) Arne Weiberg, Ming Wang, Hailing Jin
Invited Speaker Abstract #8. Plant defense: A balancing act through the immune signal salicylic acid (Submission 343) Zheng-Qing Fu, Shunping Yan, Xinnian Dong
Invited Speaker Abstract #9. Regulation of early receptor kinase-mediated immune signalling (Submission 301) Cyril Zipfel
Invited Speaker Abstract #10. Type III Effectors and the Plant Immune Response (Submission 124) Darrell Desveaux, Amy Lee, Jianfeng Zhang, Patrick Bastedo, Timothy Lo, Jennifer Lewis, David Guttman
Invited Speaker Abstract #11. Integration of flowering time signals in Arabidopsis thaliana (Submission 319) Markus Schmid
Invited Speaker Abstract #12. Entrainment of Arabidopsis circadian oscillators by sugars (Submission 297) Alex Webb
Invited Speaker Abstract #13. Xylem Cell Development and Differentiation in Plant Roots (Submission 497) Siobhan Brady
Invited Speaker Abstract #14. -Omics responses to abiotic stress in Arabidopsis (Submission 352) Sarah Assmann, Biswa Acharya, Karim Osman, Yilang Ding, Yin Tang, Chun Kit Kwok, Reka Albert, Philip Bevilacqua
Invited Speaker Abstract #15. Smart Plants: Using Mechanosensitive Ion Channels to Sense and Respond to Mechanical Force (Submission 276) Elizabeth Haswell
Invited Speaker Abstract #16. Microtubule-mediated control of auxin polar transport and brassinosteroid signalling (Submission 379) Yuan Ruan, Chris Ambrose, Geoffrey Wasteneys
Invited Speaker Abstract #17. Regulation of the central regulator EIN2 in ethylene hormone signaling in Arabidopsis (Submission 355) Jennifer Shemansky, David Lin, Chunaili Ju, Sebastien Thomine, Caren Chang
Invited Speaker Abstract #18. Friends on surface, foes underground - the complicated relationship between brassinosteroid and auxin (Submission 493) Eunkyoo Oh, Juthamas Chaiwanon, Jia-Ying Zhu, Zhiyong Wang
Invited Speaker Abstract #19. Polymerase IV occupancy at RNA-directed DNA methylation sites requires SHH1 (Submission 305) Julie A Law, Jiamu Du, Christopher J Hale, Suhua Feng, Ana Marie S Palanca, Krzysztof Krajewski, Brian D Strahl, Dinshaw J Patel, Steven E Jacobsen
Invited Speaker Abstract #20. Epigenetic control of meiotic crossover hotspots in Arabidopsis (Submission 288) Ian Henderson
Invited Speaker Abstract #21. Agrichemical Control of Drought Tolerance using Engineered ABA Receptors (Submission 489) Sang-Youl Park, Francis Peterson, Assaf Mosquina, Jin Yao, Brian Volkman, Sean Cutter
Invited Speaker Abstract #22. Regulatory Networks Controlling Hormone-Mediated Growth (Submission 490) Joseph Ecker
Invited Speaker Abstract #23. Auxin Perception and Response in Arabidopsis and Moss (Submission 473) Mark Estelle
Invited Speaker Abstract #24. Using Insights from Basic Research and Arabidopsis to Develop Improved Wheat Varieties (Submission 327) Peggy G. Lemaux
Invited Speaker Abstract #25. Spinning straw into gold - translating fundamental lignin research into application (Submission 342) Claire Halpin
Invited Speaker Abstract #26. Phased, secondary siRNAs in plants (Submission 316) Blake Meyers
Invited Speaker Abstract #27. Stomatal Patterning: Communication, Fate, and Decision making (Submission 310) Keiko U. Torii
Invited Speaker Abstract #28. Overlap between developmental patterning pathways and abiotic stress response pathways. (Submission 499) M. Kathryn Barton
Invited Speaker Abstract #29. Dynamics of stem cell signalling pathways in meristems (Submission 322) Rudiger Simon
Invited Speaker Abstract #30. Gibberellin acts positively then negatively to control onset of flower formation in Arabidopsis (Submission 302) Nobutoshi Yamaguchi, Cara Winter, Miin-Feng Wu, Yuri Kanno, Aayako Yamaguchi, Mitsunori Seo, Doris Wagner
Invited Speaker Abstract #31. Gametophyte activation during double fertilization (Submission 494) Frank Vogler, Maria Engilhart, Philipp Denninger, Andrea Bleckmann, Philipp Cyprys, Guido Grossmann, Thomas Dresselhaus, Stefanie Sprunck
Invited Speaker Abstract #32. Dissecting Quantitative Regulation of Root Growth Using Large-Scale Phenotyping and Systems Genetics (Submission 333) Wolfgang Busch
Invited Speaker Abstract #33. Quantitative tools to understand the mechanics of morphogenesis (Submission 280) Olivier Hamant
Invited Speaker Abstract #34. Arabidopsis as a model to identify genes to overcome biomass recalcitrance for biofuels (Submission 344) Wout Boerjan
Invited Speaker Abstract #35. Meristem activity, Inflorescence form and yield of rice (Submission 453) Junko Kyozyuka, Hiroki Tokunaga, Akiko Yoshida
Invited Speaker Abstract #36. Gene Regulatory Networks Mediating Arabidopsis Responses to Environmental Stress (Submission 484) Katherine Denby
Invited Speaker Abstract #37. Understanding the transcriptional regulation of the salt-stress response one cis-element at a time. (Submission 388) Jose Dinneny, Rui Wu, Shahram Emami
Invited Speaker Abstract #38. Transcriptional feedback mechanisms that impact lignin biosynthesis in Arabidopsis (Submission 336) Clint Chapple
Invited Speaker Abstract #39. The topsy-turvy world of metabolic regulation (Submission 10) Daniel Kliebenstein
Invited Speaker Abstract #40. Targeted manipulation of gene activity in plants via CRISPR/Cas toolkit (Submission 312) Jianfeng Li

Invited Speaker Abstract #41. Genetically-encoded reporters for the visualization of abscisic acid distribution and concentration changes in Arabidopsis (Submission 8) Rainer Waadt, Kenichi Hitomi, Noriyuki Nishimura, Chiharu Hitomi, Stephen R. Adams, Elizabeth D. Getzoff, Julian I. Schroeder

Invited Speaker Abstract #42. Symplastic regulation of root patterning (Submission 338) Shuang Wu, Christophe Perin, Kimberly Gallagher

Invited Speaker Abstract #43. What factors determine the positioning of meristematic zones in leaves? (Submission 228) Hirokazu Tsukaya

Invited Speaker Abstract #44. Early signaling in plant stress response (Submission 320) Sorina Popescu

Invited Speaker Abstract #45. Molecular mechanisms underlying the dynamics of the plant steroid receptor activation (Submission 286) Mathilde L.A. Simon, Matthieu P. Platre, Yvon Jaillais

Invited Speaker Abstract #46. Signatures of polygenic adaptation in the Arabidopsis genus (Submission 420) Juliette de Meaux, Fei He, Agustin Arce, Martin Lercher, Ulrich Wittelsbueger

Invited Speaker Abstract #47. Predicting evolutionary dynamics of seasonal adaptation to novel climates in Arabidopsis thaliana (Submission 487) Alexandre Fournier-Level, Johanna Schmitt

Invited Speaker Abstract #48. Molecular mechanism and physiological function of cytoplasmic streaming (Submission 314) Motoki Tominaga

Invited Speaker Abstract #49. Plant Synthetic Biology (Submission 498) June I. Medford, Mauricio S. Antunes, Kevin J. Morey, Ashok Prasad

Invited Speaker Abstract #50. Synthetic biology in photosynthetic organisms: Redirecting reducing power (Submission 278) Poul Erik Jensen

Keynote Invited Speaker Abstract #51. Arabidopsis and Plant Hormones: The evolution of the revolution (Submission 378) Peter McCourt

Keynote Invited Speaker Abstract #52. From phenotypes to pathways: global exploration of cellular networks using yeast functional genomics (Submission 491) Brenda J Andrews

Biotechnology, Bioenergy & Food Security


Poster/Talk #55. A novel density-based screen for mutants with altered seed oil (Submission 165) Gillian Dean, Lin Shi, Martine Devic, Thomas Roscoe, Hui Chen Wu, Mark Smith, George Haughn, Ljerka Kunst

Poster/Talk #56. Analysis of Leaf Proteome to Determine Possible Cross-Tolerance to Abiotic Stresses in Soybean Cultivars (Submission 183) Ramesh Katam, Raja Reddy Kambham, Sharadendu K Singh, Nitya S Murty

Poster/Talk #57. Directed Minichromosome Engineering via Haploid Induction (Submission 239) Ek Han Tan, Ravi Maruthachalam, Luca Comai

Poster #58. Biotechnological Improvement of Plant Biomass for desired applications (Submission 273) Hyung-Woo Jeon, Jinsung Cho, Young-Im Choi, Jae-Soon Lee, Mi Kwon, Jae-Heung Ko

Poster #59. Translating frost tolerant seed degreening from Arabidopsis to Canola (Submission 417) Mendel Perkins, Subramanian Sankaranarayanan, Srijani Deb, Gayathri Wewala, Marcus Samuel

Biotic Responses/Plant Defense

Poster/Talk #60. Understanding Quantitative Resistance through Natural Variation in both Botrytis cinerea and Arabidopsis thaliana (Submission 9) Jason Corwin, Susanna Atwell, Daniel Kliebenstein

Poster #61. SNC1-mediated immunity is negatively regulated by a chromatin remodeler (Submission 17) Kaeli Johnson, Shitou Xia, Xinxin Li

Poster #62. AQUAPORIN-INTERACTING1 (AQ1), a new player in cell death regulation (Submission 35) Eva Glink, Tanja Hoch, Karla Fischer, Benjamin Neuhauser, Uwe Ludewig, Artur Pfitzner

Poster #63. The Arabidopsis triphosphate tunnel metalloenzyme, AtTTM2, is a negative regulator of the salicylic acid-mediated feedback amplification loop for defense responses (Submission 37) Huoi Ung, Wolfgang Moeder, Keiko Yoshioka

Poster #64. PATTERNS AND RECEPTORS IN PLANT INNATE IMMUNITY (Submission 40) Thorsten Nuemberger, Andrea Gust, Isabell Albert, Hannah Boehm, Xiaokun Liu, Li Fan, Eric Melzer

Poster #65. Structure-function dissection of EDS1 disease resistance signaling (Submission 47) Jane Parker, Deepak Bhandari, Clementine Le Roux, Karsten Niefind, Laurent Deslandes

Poster #66. HSP90s are required for NLR immune receptor accumulation in Arabidopsis (Submission 60) Shuai Huang, Jacqueline Monaghan, Xionghui Zhong, Tongjun Sun, Oliver Xiaolu Dong, Ling Lin, Xin Li

Poster #67. Identification and characterization of an E3 ubiquitin ligase U4 in plant immunity (Submission 116) Meixuezi Tong, Yuelin Zhang, Xin Li

Poster #68. MUSE1 and MUSL redundantly regulate SNC1-mediated immunity (Submission 117) Oliver Dong, Yuxiang Wu, Kaeli Johnson, Yan Huang, Xuejin Chen, Shitou Xia, Xin Li
Poster #69. Pathogens in the Jam - Pectin and Plant Immunity (Submission 123) Gerit Bethke, Rachael Grundman, Fumiaki Katagiri, Jane Glazebrook

Poster #70. Identifying Arabidopsis thaliana genes for recognition of the HopAM1 type III effector from plant pathogenic Pseudomonas syringae. (Submission 128) Michail Iakovidis, Theresa F Law, Matthew Cowper, Troy Dang, Jeffery L Dangl, Sarah Grant

Poster/Talk #71. Acetylation of alternative N-terminal methionines oppositely controls the stability of a plant immune receptor (Submission 135) Fang Xu, Yan Huang, Lin Li, Patrick Gannon, Eric Linster, Willy Bienvenut, Bogdan Polvevoda, Markus Wirtz, Thierry Meinnel, Ruediger Hell, Carmela Giglione, Yuelin Zhang, She Chen, Xin Li

Poster #72. Triple function of phosphorylation in pathogen-induced callose biosynthesis: enzyme transport, localization, and activity (Submission 163) Marcel Naumann, Bjorn Sode, Christian Voigt

Poster #73. Pathogen-Induced Callose Deposition and Poly(ADP-ribosylation) (Submission 164) Brian D. Keppler, Junqi Song, Andrew F. Bent

Poster #74. Actin dynamics is a central node for innate immune signaling in plant cells (Submission 169) Jiejie Li, Jessica Henty-Ridilla, Benjamin Staiger, Brad Day, Christopher Staiger

Poster #75. Dissecting PAD4-independent immunity with chs3-2d pad4 (Submission 173) Chipan Zhu, Xin Li, Yanan Liu

Poster #76. SARD1 and CBB60g function as master transcriptional regulators of early plant defense responses (Submission 179) Tongjun Sun, Yaxi Zhang, Yan Li, Qian Zhang, Yuelin Zhang

Poster #77. The role of CDC48A in the negative regulation of R protein-mediated immunity (Submission 187) Charles Copeland, Virginia Woloshen, Xin Li

Poster #78. Manipulation of ABA signalling by Pseudomonas syringae type III effectors. (Submission 188) Feng Yi Cao, Shelley Lumba, Shigeo Toh, Peter McCourt, Keiko Yoshioika, Darrell Desveaux

Poster #79. AtNUDX8 has a role in plant immunity through regulation of thioredoxins TRX-h2, TRX-h3 and TRX-h5 involved in pathogen response in Arabidopsis (Submission 191) Jose Pedro Fonseca, Xinnian Dong

Talk #80. Two redundant protein kinases act downstream of PAMP receptors to regulate activation of MAP kinases and SA synthesis in Arabidopsis (Submission 193) Qiang Kong, Na Qun, Junling Ma, Yuelin Zhang

Poster/Talk #81. Salicylic acid mediated defence is fine-tuned through the interplay of calmodulin-binding proteins and calmodulin-like proteins in Arabidopsis (Submission 208) William Truman, Suma Sreekanta, Jane Glazebrook

Poster #82. Using plant pathogen effectors as evolved probes to understand the plant immune system (Submission 209) Marc Nishimura, Jeff Dangl

Talk/Paper #83. Cellulose-derived oligomers activate defense responses in Arabidopsis thaliana. (Submission 210) Clarice de Azevedo Souza, Shauna Somerville

Poster/Talk #84. Decreased abundance of type III-inducing signals in Arabidopsis mkp1 enhances resistance to Pseudomonas syringae (Submission 214) Jeffrey Anderson, Ying Wan, Young-Mo Kim, Lilijana Pasa-Tolic, Thomas Metz, Scott Peck

Poster #85. Functional Diversification of the HopF Type III Secreted Effector Family (Submission 215) Timothy Lo, Noushin Koulena, David Guttmann, Darrell Desveaux

Talk/Paper #86. Pseudomonas syringae effector AvrE is a novel phosphatidylinositol-binding protein that down-regulates the expression of NDR1/HIN1-Like 13 required for immunity (Submission 226) Xiufang Xin, Kinya Nomura, Xinhua Ding, Lisa Kinch, Sheng Yang He

Poster #87. Towards elucidation of the jasmonate-independent function of the jasmonate receptor COI1 in mediating susceptibility against the vascular pathogen Verticillium longisporum (Submission 250) Johanna Schmitz, Christiane Gatz

Poster #88. Splicing of Receptor-like kinase-encoding SNC4 and CERK1 is regulated by two conserved splicing factors that are required for plant immunity (Submission 291) Yinan Liu, Zhibin Zhang, Pingtao Ding, Yan Li, Qing Kong, Yuelin Zhang

Poster #89. Identification of plant non-retroviral-like sequences present in Arabidopsis genome (Submission 295) Yeonhwa Jo, Hyosub Chu, Dami Song, Won Kyong Cho

Poster #90. Effect of bacterial lipopolysaccharides on the microtranscriptome of Arabidopsis thaliana leaf and callus tissues (Submission 311) Arnaud Thierry Djamit Chatouchau, Ian Dubery

Poster #91. Genetic analysis of receptor-like protein SNC2-mediated plant resistance in Arabidopsis (Submission 341) Yuli Ding, Yuelin Zhang

Poster #92. Identification of mitogen-activated protein kinases involved in pathogen-associated molecular pattern (PAMP)-triggered immunity (Submission 345) Yukino Nitta, Pingtao Ding, Yuelin Zhang

Poster #93. The viral protein P19 requires host factors for successful suppression of RNA silencing in Arabidopsis thaliana. (Submission 374) Felipe de Felippes, Jacinthe Azevedo, Olivier Voinnet

Poster #94. Regulation of SOBIR1 accumulation and activation of defense responses in bir1-1 by specific components of ER quality control (Submission 391) Qian Zhang, Tongjun Sun, Minghui Gao, Yuelin Zhang

Poster #95. Phosphorylation is a Key Mechanism in stress-induced Callose Biosynthesis (Submission 399) Bjoern Sode, Marcel Naumann, Christian A. Voigt

Poster #96. Involvement of CLE peptide signaling in nematode infection process (Submission 402) Satoru Nakagami, Chika Ehima, Ryo Tabata, Takashi Ishida, Shinichiro Sawahara

Poster #97. Requirement of the chloroplast DNA repair protein RECA1 for the immune response in Arabidopsis (Submission 411) Hyesung Jeon, Hyeun Lee, Jaemin Hwang, Minkyun Kim

Poster #98. Arabidopsis Immunity Triggered by the HopF Family of Type III Effectors (Submission 430) Noushin Koulena, Darrell Desveaux

Poster #99. Genetic analysis of receptor-like protein SNC2-mediated plant resistance in Arabidopsis (Submission 431) Yuli Ding, Yuelin Zhang
Poster #128. The microtubule plus end tracking Armadillo Repeat Kinesin 1 promotes microtubule catastrophe in Arabidopsis thaliana. (Submission 232) Ryan Christopher Eng, Geoffrey Wasteneys

Poster #129. Plastid Genome Instability Leads to Reactive Oxygen Species Production and Plastid-to-Nucleus Retrograde Signaling in Arabidopsis. (Submission 244) Erick Zampini, Etienne Lepage, Normand Brisson

Poster #130. Integration of ROP signaling with cytoskeletal and cell wall systems during Arabidopsis trichome morphogenesis. (Submission 269) Makoto Yanagisawa, Anatasia Desyatova, Samy Belleton, Eileen Mallery, Joseph Turner, Dan Szymanski

Poster #131. Plant exocyst complex in autophagy and defence. (Submission 275) Viktor Zarsky, Ivan Kulich, Tamara Pecenková

Poster #132. Mapping of Xylan Biosynthesis in the Golgi of Developing Xylem. (Submission 294) Miranda J. Meents, Mathias Schuetz, Shawn D. Mansfield, A. Lacey Samuels

Poster #133. Arabidopsis Dynamin-Related Proteins, DRP2A and DRP2B, function coordinately in post-Golgi trafficking. (Submission 318) Jiahe Huang, Masaru Fujimoto, Masayuki Fujiwara, Yoichiro Fukao, Shin-Ichi Arimura, Nobuhiro Tsutsumi

Poster #134. Proline residues in the transit peptides play crucial roles at multiple steps during protein import into chloroplasts. (Submission 321) Dong Wook Lee, Yun-Joo Yoo, Younghyun Kim, Hyangju Kang, Yong Jik Lee, Seung Jin Woo, Inhwan Hwang

Poster #135. A novel type of mitochondrial fission induced by cold treatment depends on DRP3 without ELM1 in Arabidopsis thaliana. (Submission 370) Shin-Ichi Arimura, Kenta Katayama, Nobuhiro Tsutsumi

Poster #136. EBS7 is a plant-specific component of the highly conserved endoplasmic reticulum-associated degradation machinery in Arabidopsis. (Submission 418) Yidan Liu, Congcong Zhang, Dinghe Wang, Wei Su, Muyang Wang, Jianming Li

Poster #137. To loop or not to loop? the role of the microtubule-associated protein End Binding 1b in root responses to mechanical cues. (Submission 438) Vita Lai, Shannon Squires, Doris Cheng, Sherryl Bisgrove

Poster #138. Revisiting the role of microtubules in root hairs. (Submission 440) Hae Ryoung Kim, Neilam Amir, Attique Chattha, Sherryl Bisgrove

Poster #139. Root responses to mechanical cues and the microtubule associated protein END BINDING 1b: Examining the effects of GFP fusions to the C-terminal tail. (Submission 441) Shannon Squires, Vita Lai, Doris Cheng, Sachini Ariyaratne, Sherryl Bisgrove

Poster #140. The Arabidopsis ERAD pathway does not require the middle-branch mannose trimming of asparagine-linked glycans on misfolded glycoproteins. (Submission 449) Dinghe Wang, Qiji Hu, Yang Xia, Zhi Hong, Wei Su, Muyang Wang, Jianming Li

Poster #141. THE PLASTID SEC2 SYSTEM PLAYS A ROLE IN CHLOROPLAST BIOGENESIS. (Submission 451) Donna Fernandez, Rajneesh Singhal, Cullen Vens

Poster #142. Sequence features that confer the targeting specificity of mitochondrial signal-anchored proteins. (Submission 455) Junho Lee, Hong Hanh Nguyen, Myoung Hui Lee, Inhwan Hwang

Poster #143. EndoQuant: A Tool for Automatic Quantification of Endomembrane Phenotypes. (Submission 474) Nolan Ung, Asong Tambo, Bir Bhanu, Natasha Raikhef

Poster #144. The role of CLASP and microtubule in BR signalling in Arabidopsis. (Submission 476) Yuan Ruan, Geoffrey Wasteneys

Poster #145. Do cortical microtubules define the cortex domains that affect the velocity of cellulose-synthesizing complexes during directional cell expansion? (Submission 477) Miki Fujita, Adam Mulvihill, Geoffrey Wasteneys

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Poster/Talk #146. The execution of developmental programs in all epidermal cell types are restrained by PPI overaccumulation. (Submission 16) Shizuka Gunji, Hirokazu Tsukaya, Ali Ferjani

Poster #147. The GLV6/RGF8/CLE2 signaling peptide is involved in primordium organogenesis. (Submission 39) Ana Fernandez, Andrzej Drozdzecki, Kurt Hoogewijs, Vlaya Vassileva, Annemieke Madder, Pierre Hilson, Tom Beeckmann

Poster #148. The cell-cycle interactome: a source of growth regulators. (Submission 43) Jonas Blomme, Nathalie Gonzalez, Dirk Inze

Poster #149. How mutations in ribosomal protein genes affect leaf polarity in the asymmetric leaves 2 genetic background. (Submission 45) Gorou Horiguchi, Mikito Inoue, Hidenori Masuda, Miyuki Nakata, Iwai Ohbayashi, Munetaka Sugiyama, Hirokazu Tsukaya

Poster/Talk #150. Transcriptional regulation of organ growth under limiting conditions. (Submission 54) Bart Rymen, Miho Ikeda, Nobutaka Mitsuda, Masaru Ohme-Takagi, Minami Matsui, Keiko Sugimoto

Poster #151. Embryonic and Vegetative TETRASPANIN Gene Activities Identify Functions in Specific Tissues, Domains and Cell Types. (Submission 59) Feng Wang, Mieke Van Lijsebettens

Poster #152. Genetic interactions between GL2, HDG11 and MYB23 transcription factors in maintenance of the trichome cell fate. (Submission 74) Aashima Khosla, Janet Paper, Allison Boehler, Amanda Bradley, Titus Neumann, Kathrin Schrick

Poster #153. Defining novel gene regulatory networks in the Arabidopsis root. (Submission 85) Colleen Drapek, Philip Benfey

Poster/Talk #154. Irreversible fate commitment upon exit from stem-cell-like divisions in the Arabidopsis stomatal lineage requires a FAMA and RETINOBLASTOMA-RELATED module. (Submission 93) Juliana L Matos, Charles Hachey, On Sun Lau, Dominique C Bergmann

Poster #155. brassinosteroids control root epidermal cell fate via direct regulation of a MYB-bHLH-WD40 transcriptional complex by GSK3-like kinases in arabidopsis. (Submission 94) Yinwei Cheng, Wenzhao Zhu, Yuxiao Chen, Xuelu Wang
Talk/Poster #156. Active growth reduction of leaves under osmotic stress is executed by decreasing SPEECHLESS protein in Arabidopsis (Submission 96) Archana Kumari, Pawan Jwaria, Dominique Bergmann, Tatsuo Kakimoto

Poster #157. The SHORT-ROOT Pathway in the Arabidopsis Shoot (Submission 101) Jun Lim, Eun Kyoung Yoon, Souvik Dhar

Poster #158. PEAPOD2 regulates leaf growth through its binding to the promoter of CYCD3s genes and its interaction with KIX6 and KIX9 (Submission 119) Nathalie Gonzalez, Laurens Pauwels, Liesbeth De Milde, Alexandra Baekelandt, Amparo Cuellar, Astrid Nagels Durand, Jelle Van Leene, Geert De Jaeger, Alain Goossens, Dirk Inze

Poster #159. The CLAVATA1 receptor kinase controls plant stem cell niche size via transcriptional repression of related receptor kinase family members. (Submission 121) Zachary Nimchuk, Yun Zhou, Paul Tarr, Brenda Peterson, Elliot Meyerowitz

Poster #160. ERECTA family genes are essential regulators of shoot apical meristem function. (Submission 125) Elena Shpak, Ming-Kun Chen, Klaus Palme, Franck Anicet Ditengou

Poster #161. Direct roles of SPEECHLESS in lineage specification, asymmetric cell division and hormone regulation during stomatal initiation (Submission 126) On Sun Lau, Kelli Davies, Jessica Chang, Jessika Adrian, Matthew Rowe, Catherine Ballenger, Dominique Bergmann

Poster #162. Chemical genetic analyses infer that AS1-AS2 controls cell division through ETTIN in leaf adaxial-abaxial and medio-lateral patterning (Submission 144) Ayami Nakagawa, Hiro Takahashi, Takuma Ito, Shoko Kojima, Yasunori Machida, Chiyoko Machida

Poster #163. Arabidopsis root miRNA Gene regulatory network supports functional role of transcription factors in vegetative development process (Submission 161) Young Kyoung Lee, Lifang Zhang, Allison Gaudinier, Christophe Liseron-Monfils, Christos Noutsos, Siobhan M. Brady, Doreen Ware

Poster #164. Root endoderm differentiation requires an uncharacterized MYB family transcription factor (Submission 167) Louisa M. Liberman, Takehiro Kamiya, Erin E. Sparks, Jalean Petricka, Miguel Moreno-Riseuno, Niko Geldner, David E. Salt, Philip N. Benley

Poster #165. Epigenetic regulator ASYMMETRIC LEAVES2 protein presented around nucleoli and required for establishment of leaf adaxial cell differentiation consistently forms speckles during mitosis (Submission 171) Chiyoko Machida, Lilan Luo, Sumie Keta, Daisuke Kurihara, Nanako Ishibashi, Michiko Sasabe, Yasunori Machida

Talk #166. Threshold dependent transcriptional discrimination and stem cell homeostasis (Submission 172) G. Venugopala Reddy, Mariano Perales, Kenneth Rodriguez, Stephen Snipes, Mercedes Diaz-Mendoza

Talk #167. NIN-Like Protein 7 (NL7) Modulates Border-Like Cell Adhesion to Protect the Columella Root Cap in Arabidopsis (Submission 182) Ruchu Karve, Anjali Iyer-Pascuzzi

Poster #168. Plasma membrane aquaporins facilitate lateral and adventitious root emergence (Submission 203) Jin Zhao, Maximilian Buttner, Benjamin Peret, Guowei Li, Christophe Maurel, Leah R. Band, Ute Voss, Malcolm J. Bennett, Anton R. Schaeffner

Poster #169. Myrosinase idioblast cell fate and development are regulated by the Arabidopsis transcription factor FAMA and polar auxin transport (Submission 206) Meng Li, Fred Sack

Talk/Poster #170. Arogenate Dehydratase 3 (ADT3) plays a key role in the developmental and metabolic switch from seed-to-seeding (Submission 213) Katherine Warpeha, Danielle Orozco-Nunnelly, Durreshahwar Muhammad, Michael Naldrett, Sophie Alvarez, Alessia Para

Poster #171. Differentiation and functional specialization of Arabidopsis root cap by NAC transcription factors (Submission 235) Masako Kamiya, Shinya Higashio, Atsushi Isomoto, Miyako Nakanishi, Shunsuke Miyashima, Keiji Nakajima

Poster #172. New stories from an old messenger: Different roles of cyclic GMP and nitric oxide during plant development (Submission 245) Claudia Scheler, Katharina Meier, Felicitas Gross, Jorg Durner

Poster #173. Disruption of PME activity alters hormone homeostasis and triggers compensatory mechanisms controlling adventitious rooting (Submission 248) Stephanie Guenin, Gaeilong Mengelaert, Hervé Demailly, Ondrej Novak, Kieran Lee, Sophie Bouton, Petra Amakorova, Miroslav Strnad, Paul Knox, Gregory Mouille, Jerome Pelloix, Laurent Gutierrez

Poster/Talk #174. Natural variation of an A-type ARR quantitatively tunes cytokinin dependent cell size determination in the root (Submission 254) Radka Slovák, Santoš Sabthai, Daniela Ristova, Wolfgang Busch

Poster #175. Identification of factors acting downstream of PYX signalling (Submission 260) Clara Williams, Claire Provost, Siobhan Brady, Simon Turner, Peter Etchells

Poster #176. Trans-acting siRNA-mediated silencing of CER3 controls cuticular wax biosynthesis during Arabidopsis inflorescence stem development (Submission 263) Lifang Zhao, Patricia Lam, Yu Yu, Xuemei Chen, Ljerka Kunst

Poster #177. SPF is required for sieve plate and sieve pore development to mediate long distance cell-to-cell communication (Submission 265) Robertas Ursache, Jan Dettner, Ana Campilho, Shunsuke Miyashima, Ilya Belevich, Seana Oregan, Daniel Leroy Mullendorf, Thomas Montz, Michael Knoblauch, Eija Jokitalo, Yka Helariutta

Poster #178. The LFM1 gene Controls Leaf Morphogenesis in Arabidopsis (Submission 274) Wei Baoye, Yu Hao, Zhang Jinzhe, Pang Changxu, Gu Hongya, Qu Lijia, Qin Genji

Poster #179. Interaction of cytokinin with auxin to control cell elongation and regulate root growth (Submission 277) lan H. Street, Dennis E. Mathews, Joseph J. Kieber, G. Eric Schaller

Poster #180. Overexpression of Tap46, the PP2A regulatory subunit, leads to enhanced plant growth through stimulation of TOR signaling pathway. (Submission 285) Hee-Kyung Ahn, Chang Sook Ahn, Hyun-Sook Pai

Poster #181. Identification of a new acetyl-CoA carboxylase 1 mutant allele responsible for the repression of seed storage proteins (Submission 290) Chen Chen, Tian Gang, Behnaz Saatian, Ryan Austin, Susanne Kohalmi, Yuhai Cui

Poster #182. Arabidopsis guard cell integrity involves the epigenetic stabilization of the FLP and FAMA transcription factor genes (Submission 348) Eunkyoung Lee, Jessica Lucas, Justin Goodrich, Fred Sack
Poster #183. Deep functional redundancy between FAMA and FOUR LIPS in stomatal development (Submission 349) Eunkyoung Lee, Jessica Lucas, Fred Sack

Poster #184. Functional characterization of LATERAL ORGAN BOUNDARIES DOMAIN (LBD)13 and LBD14 in Arabidopsis (Submission 368) Eunkyeong Jeon, Chuloh Cho, Jungmook Kim

Poster #185. Heterotrimeric G proteins control stem cell proliferation through CLAVATA signaling in Arabidopsis. (Submission 386) Takashi Ishida, Ryo Tabata, Masaharu Yamada, Shinichiro Sawa

Poster #186. Analysis of CLE peptide signaling in root apical meristem (Submission 387) Ayane Motomitsu, Takashi Ishida, Noriko Shimizu, Masaharu Yamada, Shinichiro Sawa

Poster #187. The Leucine-Rich Repeat Receptor-Like Kinase MUSTACHES Regulates Bilateral Symmetry in Stomata (Submission 393) Sandra Keerthisinghe, Fred Sack

Poster #188. A ROS responsible TF regulates root growth by directly controlling expression of novel protein that modulates cell length. (Submission 400) Kaho Mabuchi, Takamasa Suzuki, Mika Nomoto, Yasuomi Tada, Sumie Ishiguro, Wolfgang Busch, Tetsuya Higashiyama, Philip Benfey, Hironaka Tsukagoshi

Poster #189. Shedding light on SCHIZORIZA function in the Arabidopsis root meristem (Submission 415) Sabine van Liere, Vera M A Jansweijer, Ben Scheres, Renze Heidstra


Poster #191. AtbZIP63 targets energetic stress response and cell wall growth-related genes (Submission 432) David Newman, Americo Viana, Cleverston Matioli, Michel Vincentz


Poster #193. Overexpression of the pollen-essential PIRL9 gene stuunts plant growth and suggests a function in sporophyte development (Submission 439) Nancy Forsthoefer, Kendall A Gilmore, Amelia Hasson, Daniel M Vernon

Poster #194. SCRAMBLED LIKE 1 regulates the epidermal cell patterning in the Arabidopsis root (Submission 450) Jaehyo Song, John Schiefelbein, Myeong Min Lee


Poster #196. Functional analysis in Arabidopsis thaliana of a gene involved in Agave tequilana bulbil development (Submission 472) Jose Alfredo Guzman-Lopez, Maria Jazmin Abraham-Juarez, Paulina Lozano-Sotomayor, Stefan de Folter, June Simpson

Poster #197. Genetic dissection of the melon gynoecy gene-homologs of in A. thaliana (Submission 485) Victoria Gomez, Teddy Jegu, Adnane Boualem, Mousa Benhamed, Abdel Bendahmane

Poster #198. Identification of cis-acting elements in the MUTE promoter (Submission 488) Katrina Sullivan, Aaron Mahoney, Rachael Bakker, Anthony Williams, Lynn Pillitteri

Poster #199. A link between the SHOOTERMSTEMLESS transcription factor and abiotic stress regulated genes identifies genes involved in growth control. (Submission 500) Tie Liu, Franklin Talavera-Rauh, Anita Fernandez, Sam Hokin, Kathryn Barton

Poster #200. Mining genes in the ad/abaxial network for new components of ABA and drought signaling pathways (Submission 501) Tie Liu, Adam Longhurst, Franklin Talavera-Rauh, Kathryn Barton

Poster #201. ABA acts upstream of REVOLUTA and KANADI to control germination and meristem activity. (Submission 502) Lance Cabalona, Enrico Magnani, Nidhi Sharma, Adam Longhurst, Sam Hokin, Kathryn Barton

Development: Reproduction including floral development and seed biology

Poster #202. The role of LEUNING_HOMOLOG in regulating mucilage release from the Arabidopsis testa (Submission 12) Nadeeka Jayawardana, Monika Doblin, Antony Bacic, John Golz

Talk #203. Maternal temperature history activates Flowering Locus T in fruits to control progeny dormancy according to time of year (Submission 31) Steven Penfield, Min Chen, Dana MacGregor, Anuja Dave, Ian Graham

Poster #204. Glyoxalase I at the nexus of compatible and self-incompatible pollinations in Brassica (Submission 66) Subramanian Sankaranarayanan, Muhammad Jamshed, Marcus Samuel

Talk #205. Regulation of Arabidopsis flower development by AIL/PLT transcription factors (Submission 87) Beth Krizek

Poster #206. Expression of Arabidopsis thaliana HB17 gene in corn leads to improved sink potential (Submission 89) Bridy Maxwell, Abba Khandelwal, Elena Rice, Paul Loida

Poster #207. SCARECROW-LIKE 15 interacts with HISTONE DEACETYLASE19 and is essential to the repression of the seed maturation program (Submission 90) Ming-Jun Gao, Xiang Li, Jun Huang, Gordon Gropp, Donna Lindsay, Branimir Gjetvaj, Shu Wei, Xiao-Chun Wan, Zhixiang Chen, Margaret Gruber, Abdelali Hannouf, Derek Lydiate, Z. Jeffrey Chen, Dwayne Hegedus

Poster #208. Paradigm shift: Extreme functional redundancy at the MKK level in control of pollination by mitogen activated protein kinase cascade in Arabidopsis (Submission 102) Muhammad Jamshed, Subramanian Sankaranarayanan, Marcus Samuel

Poster #209. A Screen for MUCILAGE-RELATED Genes Reveals Novel Players in Cell Wall Biosynthesis (Submission 112) Catalin Voiniciuc, Markus Gunl, Maximilian Schmidt, Bjorn Usadel

Poster #210. UNDERSTANDING THE REGULATION OF FLOWERING-TIME IN LEGUMES (Submission 133) Manda Safavi, Jared Fudge, James L. Weller, Richard C. Macknight

Poster #211. Regulation of Proteasome Activity by Abscisic Acid and High Temperature during germination in Arabidopsis (Submission 137) Rex Shun Chiu, Sonia Gazzarrini
Poster #212. Mutations in the RUBY gene can suppress the defective mucilage extrusion phenotype of mum2 mutants. (Submission 138) Erin Gilchrist, Kresimir Sola, George Haugheh

Poster/Talk #213. Different mechanisms underlie the regulation of floral transition by a pair of highly related but non-redundant Ubiquitin E3 ligase genes (Submission 159) Nabil Elrouby, George Coupland

Poster #214. Characterization of IS2E-mediated RNA Editing in Arabidopsis (Submission 174) Tyra McCray, Tessa Burch-Smith

Talk #215. Non-equivalent contributions of maternal and paternal genomes to early plant embryogenesis (Submission 180) Gerardo Del Toro De Leon, Marcelina Garcia Aguilar, Stewart Gillmor

Poster #216. A putative maternal polarity complex for posterior (chalazal) endosperm development in Arabidopsis (Submission 185) Phuong Le, Brenna Durbin, Jonathan Fitz Gerald

Poster #217. Functional differences in two Arabidopsis AIL/PLT transcription factors result primarily from differences in their expression levels and domains (Submission 186) Han Han, Beth Krizek

Poster #218. Create the scene and watch the show unfold: Identification of seed genes repressors in Arabidopsis Seedlings (Submission 196) Behnaz Saatian, Gang Tian, Ryan S. Austin, Edward W. T. Tsang, Susanne Kohalmi, Yuhai Cui

Poster/Talk #219. Egg cell number and cell type differentiation are dependent on cytokinin in the Arabidopsis female gametophyte. (Submission 230) Xiaoya Song, Venkatesan Sundaresan

Poster #220. Regulation of maize seed filling: the role of ZmZOU in embryo-endosperm communication (Submission 243) Aurelie Grimaud, Ghislaine Gendrot, Sophy Chamot, Thomas Widiez, Herve Rabille, Marie-France Gerentes, Johanne Thevenin, Bertrand Dubreucq, Gwyneth Ingram, Peter Rogowsky, Nathalie Depege-Fargeix

Poster #221. Connecting the role of Arabidopsis BPM proteins in CUL3-based E3 ligases to Fatty Acid Metabolism in Plants (Submission 249) Liyuan Chem, Joo Hyun Lee, Henriette Weber, Christina Choi, Sanja Roje, Hanjo Hellmann

Poster #222. Natural variation in epigenetic pathways affects the specification of male gamete precursors in Arabidopsis (Submission 279) Daniel Rodriguez-Leal, Gloria Leon-Martinez, Jean-Philippe Vielle-Calzada

Poster #223. Distribution of cellulosic wall in the anthers of Arabidopsis during microsporogenesis (Submission 357) Yuichi Matsumo, Shin-Ichi Arimura, Nobuhiro Tsutsuji

Poster #224. LATERAL ORGAN BOUNDARIES DOMAIN (LBD)10 interacts with SIDECAR POLLEN/LBD27 to critically control pollen development in Arabidopsis (Submission 360) Min-Jung Kim, Mirim Kim, Mi Rha Lee, Jungmook Kim

Poster #225. MOS7, an Arabidopsis Nup88 homolog Plays a Crucial role in Gametophytic and Zygotic Development. (Submission 363) Guen Tae Park, Yun Sook Min, Yeonhee Choi

Poster #226. Interplay between SWR1 and NuA4 chromatin remodeling complexes in the regulation of plant development in Arabidopsis (Submission 372) Alfonso Mouriz, Angeles Gomez-Zambrano, Pedro Crevillen, Manoel Pio, Jose A. Jarril

Poster #227. Embryonic and seedling phenotypes of csn2, a mutant for the COP9 signalosome (Submission 373) Kaiqi Du, Nahill Matari, Laila Moubayidin, Sabrina Sabatini, Anna Franciosini, Giovanna Serino, Pablo Jenik

Poster #228. A mutant with helically twisted petal epidermal cells implicates cell wall polysaccharides in the control of conical petal cell morphology (Submission 375) Adam Saffer, Vivian Irish

Poster #229. BASIC PENTACYSTEINE proteins regulate the expression of a floral repressor FLOWERING LOCUS C (Submission 389) Hyunjoo Eom, Ji hyeon Yu, Ilha Lee

Poster #230. Screening upstream regulators of VERNALIZATION INSENSITIVE 3 in Arabidopsis (Submission 390) Goowon Jeong, Jinwoo Shin, Jihyeon Yu, Ilha Lee

Poster #231. The role of ethylene action on CYP707A2 in seed germination (Submission 413) Lisza Duermeyer, Dawei Yan, Eiji Nambara

Poster #232. Uncoupling mid-and late embryogenesis phases by partial complementation of afl mutants in Arabidopsis (Submission 419) Thomas Roscoe, Jocelyne Guilleminot-Montoya, Jean-Jacques Bessoule, Frederic Berger, Martine Devic

Poster #233. Natural Accessions of Arabidopsis Differ in Sensitivity to a Loss of Chloroplast Translation (Submission 436) Nicole Parker, Ying Wang, David Meinke

Poster/Talk #234. The developmental consequences of metabolic inhibition of polyamine biosynthesis (Submission 462) Maye Saechao, Ishari Waduwarajayabahu, Shuningbo Ye, A. Nimhani Perera, Barb Moffatt

Emerging Topics

Poster #235. EXPO and Autophagosome in Arabidopsis: Biogenesis and Function (Submission 30) Liwen Jiang

Poster/Talk #236. Roles of AtExo70E2 in exocyst recruitment, EXPO biogenesis and function, and plant growth and development (Submission 32) Yu Ding, Juan Wang, John Ho Chun Lai, Vivian Hoi Ling Chan, Xiangfeng Wang, Gaskin Jie Wang, Liwen Jiang

Poster/Talk #237. Effects of aspirin and its metabolite on Arabidopsis thaliana (Submission 58) Catherine Chan, Michelle Storage

Poster/Talk #238. Keeping it similar: Interaction of HSP90 and miRNAs in the buffering of phenotypic variation in Arabidopsis thaliana (Submission 132) Tizitiki Lemus Vergara, Jennifer Lachowiec, Christine Quetsch

Poster #239. Is trehalose 6-phosphate (T6P) a general signal gating developmental transitions? (Submission 157) Vanessa Wahl, Armin Schiereth, Jathisn Ponnu, Magdalena Dzialo, Markus Schmid, Mark Stitt

Poster #240. The Role of mRNA Alternative Polyadenylation in Root Cell Differentiation in Arabidopsis (Submission 224) Q. Quinn Li, Jingyi Cao, Xiaohui Wu, Guoli Ji

Poster #241. A new paradigm for sustaining scientific resources (Submission 262) Eva Huala, Donghui Li, Tanya Berardin, Robert Muller
Environmental Responses

Poster #243. Arabidopsis HPS10/ALS3 interacts with AtSTAR1 in tonoplasts to serve as a signaling hub for responses to P deficiency and Al toxicity (Submission 34) Jinsong Dong, Dong Liu

Poster #244. Diversity of Stomatal Responses to Different Environmental Conditions in Arabidopsis thaliana Ecotypes (Submission 50) Sho Takahashi, Keina Monda, Juntaro Negi, Fumitaka Konishi, Shinobu Ishikawa, Mimi Hashimoto-Sugimoto, Nobuharu Goto, Koh Iba

Poster #245. Regulation of miR399f transcription by AtMYB2 affects phosphate-starvation responses in Arabidopsis (Submission 64) Chan Min Kim, Dongwon Beak, Dae-Jin Yun

Poster #246. GI (GIGANTEA), a missing link between flowering and stress adaptation (Submission 65) Chae Jin Lim, Woe Yeon Kim, Mingzhe Shen, Dae-Jin Yun

Poster #247. Epigenetic switch of acetic acid synthesis confers plant drought tolerance (Submission 78) Jong-Myong Kim, Taiko To, Motoaki Seki

Poster #248. Search of the chemical compounds which alleviates thermal damage of photosynthetic electron-transport systems (Submission 79) Fumiyo Shigematsu, Kazuo Shinozaki

Talk #249. Characterization of the oxygen sensing mechanism in plants (Submission 80) Monika Kosmacz, Francesco Licausi, Joost van Dongen

Poster #250. Regulatory network models of drought responses in Arabidopsis thaliana (Submission 110) Ulrike Bechtold, Vicky Buchanan Wollaston, Jim Beynon, Katherine Denby, David Wild, David Rand, Nicholas Smirnoff, Phillip Mullineaux

Poster #251. Germinability as a “reader” of heterologous gene effects in early responses to abiotic stress (Submission 129) Michael Schlappi, Marian Lund

Poster #252. GENETIC ENGINEERING OF ABIOTIC STRESS RESPONSE AND PLANT GROWTH IN ARABIDOPSIS (Submission 151) Yuriko Osakabe, Kazuo Shinozaki

Talk/Poster #253. How and Why Plants 'Memorize' their Experience of Heat Stress (Submission 152) Yee-Yung Charmg, Siou-Ying Lin, Yu-Ting Juan

Poster #254. Molecular dissection of the Arabidopsis phosphate exporter PHO1 reveals three domains fulfilling distinct functions in subcellular localization, phosphate transport and response to phosphate deficiency (Submission 153) Stefanie Wege, Ji-Yul Jong, Ghazanfar Khan, Evangelia Vogiatzaki, Isabel Aller, Andreas Meyer, Yves Poirier

Poster #255. Understanding Molecular Interactions Controlling Iron Homeostasis in Plants (Submission 223) Devarshi Selote, Rozalynne Samira, Anna Stallmann, Jeffrey Gillikin, Terri Long

Poster #256. Ethanol-Induced Autophagy Is Required for Regulation of Ethylene-Mediated Hypoxia Signaling in Arabidopsis (Submission 237) Qinfang Chen, Liang Chen, Wensheng Shu, Shi Xiao

Poster #257. Characterization of the MybD transcription factor involved in the regulation of anthocyanins biosynthesis in Arabidopsis (Submission 259) Nguyen Hoai Nguyen, Hojoyung Lee

Poster #258. The Role of F-box-proteins in Stress-related Signaling in Arabidopsis thaliana (Submission 266) Maria Plisila, Mehmet Ali Keceli, Gunter Brader, Tarja Kariola, Tapio Palva

Poster #259. The Role of Peroxisomal Metabolism in Modulating Photosynthesis (Submission 277) Jiyong Li, Jeffrey A. Cruz, Jin Chen, David M. Kramer, Jianping Hu

Poster #260. A physiological and gene expression approach to the relationship between multiple stresses in Arabidopsis thaliana and its close relatives in the genus Boechera (Submission 307) Hiroe Imai, Masanori Tamaoki

Poster #261. Water loss sensitivity varies with the difference of slac1 promoter region between Col andWs of Arabidopsis thaliana (Submission 307) Hiroe Imai, Masanori Tamaoki

Poster #262. Elucidating the Role of Symplastic Signaling in the Phosphate Starvation Response (Submission 324) Ruthsabel Cortes, Kimberly Gallagher

Poster #263. Role of predicted RAD4 interacting proteins in Arabidopsis thaliana UV damaged DNA repair (Submission 340) Triporna Lahari, Dr. Dana. F. Schroeder

Poster #264. The Role of Peroximalis Metabolism in Modulating Photosynthesis (Submission 347) Jiyong Li, Jeffrey A. Cruz, Jin Chen, David M. Kramer, Jianping Hu

Poster #265. A physiological and gene expression approach to the relationship between multiple stresses in Arabidopsis thaliana and its close relatives in the genus Boechera (Submission 350) Genna Gallas, Sarah D'Antonio, Elizabeth Waters

Poster #266. Environmental Responses of An Arabidopsis Ecotype, Me-0, with Giant Stomata (Submission 359) Keina Monda, Juntaro Negi, Genki Ishigaki, Hiromitsu Araki, Sho Takahashi, Mimi Hashimoto-Sugimoto, Satoru Kuhara, Ryo Akashi, Nobuharu Goto, Koh Iba

Poster #267. NADPH-dependent thioredoxin reductase A (NTRA) confers elevated tolerance to oxidative stress and drought (Submission 361) Miri Kim, Joon-Yung Cha, Woe-Yeon Kim

Poster #268. Collection of the response data to abiotic stress from Arabidopsis closely related species stored in RIKEN BRC (Submission 362) Satoshi luchi, Setsuko Kawamura, Masatomo Kobayashi

Poster #269. Arabidopsis Cortical Microtubule- and Nucleus-localized RING E3 Ubiquitin Ligase AtAIRP4 is Positively Involved in ABA-mediated Germination Arrest and Stomatal Closure (Submission 364) Jong Hum Kim, Tae Rin Oh, Woo Taek Kim
Poster #270. Functional Analysis of DREB1-type Transcription Factors under abiotic stress in Soybean (Submission 367) Satoshi Kidokoro, Keitaro Watanabe, Teppei Ohori, Takashi Moriwaki, Kyonoshin Maruyama, Nang Myint Phyu Sin Htwe, Yasunari Fujita, Junya Mizoi, Kazuo Shinozaki, Kazuko Yamaguchi-Shinozaki

Poster #271. The Arabidopsis RING E3 Ubiquitin Ligase AtAIRP2 Positively Regulates ABA-mediated Drought Response via the interaction with the Possible Substrate Protein CAS1 (Submission 368) Tae Rin Oh, Jong Hum Kim, Moon Young Ryu, Woo Taek Kim

Poster #272. Molecular Mechanisms of Temperature-Dependent Crossovers in Arabidopsis thaliana (Submission 371) Jennifer L. Modliszewski, Scott M. Lewis, Gregory P. Copenhaver

Poster #273. Functional analysis of the Hikeshi-like protein that interacts with HSP70 in Arabidopsis (Submission 381) Shinya Koizumi, Naohiko Ohama, Junya Mizoi, Kazuo Shinozaki, Kazuko Yamaguchi-Shinozaki

Poster #274. Identification of cis-acting elements in dehydration-inducible promoters in Zea mays and Glycine max (Submission 382) Kyonoshin Maruyama, Shingo Goto, Kaoru Urano, Kazuo Nakashima, Tetsuya Sakurai, Kazuo Shinozaki

Poster #275. Transcriptional regulation of oxidative stress related genes plays an important role for cadmium tolerance in Arabidopsis thaliana (Submission 385) Deepa Khare, Nobukata Mitsuda, Seungchul Lee, Masaru Ohme-Takagi, Youngsook Lee

Poster #276. The photoperiod pathway modulates flowering time in response to nitrate. (Submission 435) Diana E. Gras, Eleodoro Riveras, Yarelia Mancilla, Elena A. Vidal, Rodrigo A. Gutierrez

Poster #277. Differential roles of the Arabidopsis Synaptotagmins 1 and 3 in Cold Acclimation and Freezing Tolerance (Submission 467) Abel Rosado, Arnaldo L. Schapire, Jessica Perez-Sancho, Steffen Vanneste, Carlos Perea-Resa, Sonia Osorio, Lothar Willmitzer, Jiri Friml, Victoriano Valpuesta, Miguel A. Botella

Poster #278. Responses of Arabidopsis peroxidase RNAi lines to oxidative stresses (Submission 482) Aiden Y. Park, Yu Jeong Jeong, Siki Park, Sunghwa Choe

Epigenetics/Chromatin

Poster/Talk #279. Epi-genomic analyses of stem cells in Arabidopsis thaliana (Submission 84) Yu Fu, Claudia Chica, François Rouyier, Vincent Colot, Daniel Schubert

Poster #280. Two RNA binding proteins are integral part of the HUB1/2 complex (Submission 105) Magdalena Woloszynska, Tommaso Boccardi, Kristiina Himanen, Stijn Aesaert, Stijn Dhondt, Leonardo Bruno, Geert De Jaeger, Mieke Van Lijsebettens

Poster/Talk #281. NTR1 is involved in splicing check-points formation and RNA Pol II pausing at alternative splicing sites in Arabidopsis (Submission 106) Jakub Dolata, Yanwu Guo, Agnieszka Kolowerzo, Dariusz Smolinski, Szymon Swieczewski, Artur Jarmolowski

Poster #282. Functional characterization of BLISTER - A Polycistron group associated protein in Arabidopsis (Submission 108) Julia Anna Kleinmanns, Daniel Schubert, Nicole Schatlowski

Poster #283. Epigenetic regulator AS1-AS2 is involved in gene body DNA methylation of ETTIN in establishment of leaf adaxial-abaxial polarity in Arabidopsis thaliana (Submission 143) Takuma Ito, Simon Vial-Pradel, Eri Takada, Ayami Nakagawa, Mayumi Iwasaki, Yasunori Machida, Chiyoko Machida

Talk/Poster #284. Arabidopsis MSH1 mutation alters the epigenome and produces heritable changes in plant growth (Sub. 170) John Laurie, Ying-Zhi Xu, Kamaldeep Virdi, Dong Wang, Yashtitolta Wamboldt, Mei Chen, Jean-Jack RIethoven, Jian Tao Yu, Suhua Feng, Mon-Ray Shao, Roberys Sanchez, Maria Arrieta-Montiel, Hardik Kundariya, Vikas Sedge, Sally Mackenzie

Poster/Talk #285. NATURAL VARIATION IN ARABIDOPSIS ATF5 EXPRESSION INDICATES AN ADAPTIVE ROLE FOR POLYCOMB REGULATION OF THE SEED ENDOSPERM.(Submission 181) Jonathan Fitz Gerald, Ellen Dahl, Brandon Smith

Poster #286. Sequence-specific nucleosome positioning in putative transcription factor binding sites in Arabidopsis thaliana (Submission 189) Ming-Jung Liu, Shinh-Shih Shiu, Alexander Seddon, Ian Major, Gregg Howe, Monique Floer

Talk/Poster #287. Histone Modifications and Histone Code in Brassinosteroid Regulated Gene Expression (Submission 212) Yanhai Yin, Xiaoai Li Wang, Jia Hui, Zhouqi Xie, Sanchen Liu, Trevor Nolan, Patrick Schnable, Zhao Li, Hongqing Guo

Poster #288. Silencing Initiation: Recognizing an Exogenous Transposon (Submission 233) Delan Fultz, Keith Slotkin

Poster/Talk #289. The EARLY SENESCENCE AND DWARF 1 (ESD1) Gene, Encodes an DNA Glycosylase, Functions as A Novel DNA Demethylase in Arabidopsis (Submission 234) Zhonghai Li, Hongwei Guo

Poster #290. Redox regulation of histone deacetylases (Submission 253) Alexander Mengel, Azam Shekariesfahlan, Christian Lindemayr

Poster #291. Chromatin remodelling in response to seasonal environmental signals during seed dormancy (Submission 283) Steven Fottit, Kerstin Mueller, Allison Kermode, William Finch-Savage

Talk/Poster #292. ARGONAUTE10 promotes the degradation of miR165/6 through the SDN1 and SDN2 exonuclease in Arabidopsis (Submission 292) Lijuan Ji, Yu Yu, Jixian Zhai, Elizabeth Luscher, Lei Gao, Chunyan Liu, Xiao Feng Cao, Beixin Mo, Blake C. Meyers, Xue Mei Chen

Poster #293. A chromatin switch underlies flower primordium initiation downstream of AUXIN RESPONSE FACTOR 5/MONOPTEROS (Submission 377) Min-Feng Wu, Nobutoshi Yamaguchi, Jun Xiao, Doris Wagner

Poster #294. Heat activation and epigenetic silencing in a retrotransposon (Submission 392) Wataru Matsunaga, Atsushi Kato, Hidetaka Ito


Poster #296. Cell-type specific chromatin accessibility dynamics in the Arabidopsis root. (Submission 428) Fiona Bergin, Mana Croft, Keegan Leckie, Ryan Austin
Poster #297. Arabidopsis BPC6 interacts with Polycomb Proteins at PRE-like GAGA DNA-motifs (Submission 469) Andreas Hecker, Luise H. Brand, Sebastian Peter, Joachim Kilian, Valerie Gaudin, Dierk Wanke

Poster #298. Zinc finger based proteins to control meiotic recombination (Submission 496) Martijn Rolloos, Frederik Spanhoff, Bert van der Zaal, Paul Hooykaas

Metabolism/Biochemistry
Poster/Talk #299. The metabolic target of pyrophosphate, a mysterious player in plant metabolism, identified (Submission 14) Ali Ferjani, Kensuke Kawade, Akira Okawa, Mariko Asaoa, Kazuki Takahashi, Masayoshi Maeshima, Masami Yokota Hirai, Kazuki Saito, Hirokazu Tsukaya

Poster #300. Identification of an activation-tagged mutant reveals a role of GLABRA2 in anthocyanin synthesis in Arabidopsis (Submission 18) Xiaoyou Wang, Qinghua Hu, Xuemei Dai, Xianling Wang, Jin-Gui Chen, Shucui Wang

Poster #301. N-linked glycosylation of ATR1 is essential for vacuolar protein sorting in Arabidopsis (Submission 46) Jinbo Shen, Yu Ding, Caiji Gao, Enrique Rojo, Liwen Jiang

Poster/Talk #302. The Arabidopsis Mediator subunit MED16 regulates iron homeostasis by associating with EIN3/EIL1 through subunit MED25 (Submission 71) Yan Yang, Bin Ou, Li-Jia Qu

Poster/Talk #303. Stress-responsive aldehyde dehydrogenase 3H1: Identification of amino acid residues critical for cofactor specificity and thiol regulation (Submission 83) Naim Stiti, Balakumaran Chandrasekar, Renier A. L. van der Hoorn, Dorothea Bartels

Talk/Poster #304. Pollen-specific flavonol biosynthesis in Arabidopsis thaliana: identifications of the key enzyme UGT33 and the tailored flavonol structures (Submission 134) Keiko Yonekura-Sakakibara, Ryo Nakabayashi, Satoko Sugawara, Takayuki Tohge, Takuya Ito, Misuzu Koyanagi, Mariko Kitajima, Hiromitsu Takayama, Kazuki Saito

Poster #305. An intermediate cleavage peptidase modifies enzyme N-termini, alters protein stability and influences serine metabolism in Arabidopsis mitochondria (Submission 145) Shaobai Huang, Clark Nelson, Lei Li, Nicolas Taylor, Elke Stroher, Harvey Millar

Poster #306. Promoter Analysis of Glycrrhizin Biosynthetic Genes Using Transgenic Arabidopsis thaliana (Submission 156) Keita Tamura, Hikaru Seki, Yasuko Hiroa, Kazuki Saito, Toshiya Muranaka


Talk #308. Unsaturation of Very-Long-Chain Ceramides Protects Plant from Hypoxia in Arabidopsis (Submission 236) Li-Juan Xie, Wensheng Shu, Shi Xiao

Poster #309. Alternative translation of ATP sulfurylase 2 allows dual localization of sulfate assimilation in chloroplasts and cytosol in Arabidopsis thaliana (Submission 238) Anne-Sophie Bohrer, Hideki Takahashi

Poster/Talk #310. A selective inhibitor of jasmonate signaling targets the adenylate-forming enzyme JAR1 in Arabidopsis thaliana (Submission 242) Christian Meesters, Timon Monig, Julian Oeljeklaus, Daniel Krahn, Corey S. Westfall, Bettina Hause, Joseph M. Jez, Markus Kaiser, Erich Kombrik

Poster #311. Identification of ADP-ribosyl cyclase in Arabidopsis thaliana (Submission 251) S. M. Abdul-Awal, Alison Smith, Alex A. R. Webb

Poster #312. Structure-function analysis of Arabidopsis feruloyl-CoA 6′-hydroxylase 2 allows dual localization of sulfate assimilation in chloroplasts and cytosol in Arabidopsis thaliana (Submission 255) Joanna Siwinska, Alexandre Oly, Victoire Coqueret, Alain Hehn, Frederic Bourgaud, Ewa Lojkowska, Anna Ihnatowicz

Poster #313. Comparison of the Starch Binding Module of the SnRK1 Akinb and Akinbg subunits (Submission 281) Beatriz Alejandro Avila, Jose Luis Maya, Ana Karen Ruiz, Patricia Coello, Eleazar Martinez

Poster #314. ARF7 regulates the expression of BR-inactivating gene BAS1 in Arabidopsis (Submission 356) Ji Hyun Youn, Hyo Jung Kim, Tae-Wuk Kim, Seong Ki Kim

Poster #315. CER2-LIKE proteins modify the activities of specific condensing enzymes to make exceptionally long acyl-lipids of the cuticle and pollen coat (Submission 380) Tegan Haslam, Jerome Joubes, Ljerka Kunst

Light and Plant Growth
Talk #316. FRS12 and 7 are transcriptional regulators involved in the regulation of circadian growth in Arabidopsis thaliana (Submission 25) Andres Ritter, Patricia Fernandez-Calvo, Laurens Pauwels, Astrid Nagels Durand, Ken Heyndrickx, Klaas Vandepoele, Geert De Jaeger, Alain Goossens

Poster #317. Chloroplast membrane protein CPP1 is involved in stabilization of light-dependent protoclorophyllide oxidoreductase. (Submission 51) Ho-Seok Lee, Hyun-Sook Pai

Poster/Talk #318. Ribosome Abundance and Protein Turnover are Negatively Linked to Biomass Accumulation in Arabidopsis in a Stable Diurnal Growth Regime (Submission 56) Hirofumi Ishihara, Eva-Theresa Pyl, Waltraud Schulze, Toshihiro Obata, Alisdair Fernie, Ronan Sulpice, Mark Stitt

Poster #319. Phytochrome B and the Circadian Clock modulate Glyphosate Resistance through regulating the Shikimate Pathway (Submission 70) Atanbadralt Sharkhuu, Chris Gehring

Poster/Talk #320. Low Energy Stress Response in Arabidopsis thaliana: the SnRK1-bZIP Transcription Factor connection. (Submission 81) Lorenzo Pedrotti, Christoph Weiste, Thomas Naegle, Andrea Mair, Markus Teige, Wolfram Weckwerth, Wolfgang Drooge-Laser

Poster #321. PEAPOD coordinates cell expansion and proliferation in response to canopy shade in Arabidopsis thaliana. (Submission 141) Derek White

Poster/Talk #322. MMF1 regulates the photoperiodic control of hypocotyl elongation in Arabidopsis thaliana. (Submission 168) He Huang, Rebecca Nolan, Sophie Alvarez, Dmitri Nusinow

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Poster/Talk #323. Interactions between the photoperiodic flowering pathway and the thermosensory pathway in Arabidopsis (Submission 177) Virginia Fernandez, Yasuyuki Takahashi, George Coupland
Poster #324. Evaluation of Screening Methods for Salt Tolerance in Soybeans (Submission 247) Lauretta Ihenatu, Ken Korth, Alma Laney
Poster #325. A MAD Mechanism Attenuates Light Signaling in Arabidopsis (Submission 258) Weimin Ni, Shou-Ling Xu, James Tepperman, Alma Burlingame, Zhi-Yong Wang, Peter Quail
Poster #326. F-box and U-box Proteins and their Involvement in the Arabidopsis Circadian Clock (Submission 323) Ann Feke, Kristofer Webb, Steve Kay, Eric Bennett, Joshua Gendron
Poster #327. Investigating the cross-talk between phototropism and shade avoidance in Arabidopsis thaliana (Submission 331) Anupama Goyal, Christian Fankhauser
Poster #328. DETERMINING CIRCADIAN CONTROL OF GLOBAL PROTEIN DEGRADATION THROUGH DAILY UBQUITYLome DYNAMICS (Submission 414) Catherine Chamberlin, Joshua Gendron
Poster #329. Investigating the Role of NUCLEAR FACTOR Y Transcription Factors in Light Signaling (Submission 437) Zachary Myers, Roderick Kumimoto, Ben Holt
Poster #330. Identification of suppressors of NUCLEAR FACTOR Y mutants with elongated hypocotyls (Submission 444) Krystal Gayler, Ben F. Holt
Poster #331. The role of the NF-YB histone-like fold in Photoperiodic Floral Induction (Submission 479) Emily Carpenter, Ben Holt
Poster #332. Reprogramming Photosynthesis in Arabidopsis thaliana (Submission 495) Niels van Tol
Poster #333. Impact of Manganese stress on Photosystem II in Arabidopsis thaliana. (Submission 504) Ken Suszkiewicz
Poster #334. Building regulatory networks to predict gene function (Submission 11) Krzysztof Polanski, Johanna Rhodes, Sascha Ott, Katherine Denby, Presta Consortium
Poster #335. Identifying Chloroplast Thiamine/TPP transporter(s) (Submission 67) Bandar Aljuaid, Christine Rains
Poster/Talk #336. Modeling stem cell networks to identify key regulators of plant growth (Submission 122) Ross Sozzani, Natalie Clark, Adam Fisher, M. Angels De Luis Balaguer
Talk #337. Knowledge-based bioinformatic analyses of microarrays predict that epigenetic regulator AS1-AS2 controls cell division through ETTIN in leaf adaxial-abaxial patterning (Submission 136) Hiro Takahashi, Ayami Nakagawa, Nanako Ishibashi, Shoko Kojima, Yasunori Machida, Chiyoko Machida
Poster #338. NetExCorr: A Pipeline to Rank Gene Prevalence in Tissue-Specific Responses to Stresses within Arabidopsis in-vitro Meta-Network. (Submission 225) Christophe Liseron-Monfils, Qikun Liu, Lifang Zhang, Michael J. Axtell, Doreen Ware
Poster #339. TAIR: A Sustainable Community Database for International Arabidopsis Research (Submission 229) Donghui Li, Tanya Berardini, Robert Muller, Eva Huala
Poster #340. Arabidopsis Information Portal (AIP): a user's perspective (Submission 246) Chris Town, Jason Miller, Matt Vaughn, Gos Micklem, Eva Huala, Benjamin Rosen, Bob Muller, Erik Ferrantli, Maria Kim, Svetlana Karymycheva, Vivek Krishnakumar, Sergio Contrino, Julie Sullivan, Matt Hanlon, Rion Dooley, Steve Mock
Poster #341. Arabidopsis Information Portal (AIP): a contributor's perspective (Submission 256) Matt Vaughn, Jason Miller, Chris Town, Gos Micklem, Erik Ferrantli, Vivek Krishnakumar, Svetlana Karymycheva, Maria Kim, Ben Rosen, Sergio Contrino, Julie Sullivan, Matt Hanlon, Rion Dooley, Steve Mock
Poster/Talk #342. A proteomic strategy for global analysis of protein complex composition and localization in Arabidopsis leaves (Submission 264) Uma Aryal, Jun Xie, Daisuke Khara, Mark Hall, Daniel Szymanski
Poster/Talk #343. An organ boundary-enriched gene regulatory network uncoovers regulatory hierarchies underlying auxillary meristem initiation (Submission 268) Caihuan Tian, Xiaolin Zhang, Jun He, Haopeng Yu, Ying Wang, Bihai Shi, Yingying Han, Guoxun Wang, Xiaoming Feng, Cui Zhang, Jin Wang, Rong Yu, Yuling Jiao
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Poster/Talk #345. Gramene: A Resource for Comparative Plant Genomics and Bioinformatics (Submission 429) Pankaj Jaiswal, Vindhya Amarasinghe, Dan Bolser, Peter D'Eustachio, Palitha Dharmawardhana, Nuno Fonseca, Yingping Jiao, Marcela Monaco, Maria Keays, Paul Kersey, Sunita Kumari, Sushma Naithani, Andrew Olson, Helen Parkinson, Robert Petryszak, Justin Preece, Joshua Stein, Lincoln Stein, James Thomason, Bo Wang, Sharon Wei, Guanming Wu, Ken Youens-Clark, Doreen Ware
Poster #346. Periodic gene expression precedes lateral root formation (Submission 448) Guy Wachsman, Jaimie Van Norman, Philip Benfey
Poster #347. Modeling gene regulatory networks that control Arabidopsis stem cell identity (Submission 463) Maria Angels de Luis Balaguer, Adam Fisher, Natalie Clark, Morjan Rahhal, Cranos Williams, Ross Sozzani
Poster #348. Application of Petri nets to the analysis of auxin-driven plant morphogenesis (Submission 466) Mikolaj Cieslak, Adam Runions, Przemyslaw Prusinkiewicz
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Poster #350. Natural variation in temperature perception and response in Arabidopsis thaliana (Submission 73) Sureshkumar Balasubramanian
**Poster #351.** Single-locus hybrid necrosis caused by common, co-occurring ACD6 alleles. (Submission 86) Marco Todesco, Sang-Tae Kim, Eunyoung Chae, Kirsten Bomblies, Maricris Zaidem, Lisa M. Smith, Detlef Weigel, Roosa A. E. Laitinen

**Poster/Talk #352.** An evolutionary perspective on plant epidermal patterning (Submission 115) Divykrit Chopra, Heike Wolff, Johannes Span, Maria C. Albani, George Coupland, Andrea Schrader, Martin Hulskamp

**Poster #353.** Recovering a triplet expansion in the wild: Repeat expansion and phenotypic variation in Irish populations of Arabidopsis thaliana. (Submission 139) Amanda Tabib, Charles Spillane, Sureshkuram Balasubramanian

**Poster #354.** Protein subcellular relocalization after gene and genome duplication during the evolution of the Brassicaceae (Submission 140) Allen Liu, Keith Adams

**Talk #355.** Natural variation of a gene network regulating trichome patterning (Submission 147) Benjamin Jaegle, Andrea Schrader, Henrik Failmezger, Achim Tresch, Martin Hulskamp

**Poster #356.** Evolution of the DUF26-containing gene families in plants (Submission 154) Aleksia Vaattovaara, Chunxiang Li, Ari Loytynoja, Jarkko Salojarvi, Jaakko Kangasjarvi, Michael Wrazcek

**Talk #357.** Global genetic heterogeneity for flowering time in Arabidopsis thaliana (Submission 160) Arthur Korte, Susanna Atwell, Dazhe Meng, Magnus Nordborg

**Poster #358.** Variation in Arabidopsis flowering time associated with cis-regulatory variation in CONSTANS (Submission 194) Ulises Rosas, Yu Mei, Qiguang Xie, Josh Banta, Royce W Zhou, Gabriela Seufferheld, C. Robertson McClung, Michael Purugganan, Yoshie Hanzawa

**Poster #359.** Resolving the genetic and epigenetic variations of Arabidopsis with complete genome assemblies (Submission 201) Chongyang Luo, Ronan O'Malley, Jason Chin, Alex Hastie, Paul Peluso, Weiping Wang, Heng Dai, Michael Egholm, Tim Harkins, James Knight, Han Cao, David Rank, Joseph Ecker

**Poster #360.** Demographic history and genetic diversity of modern and herbarium collections of Arabidopsis thaliana from the Southern Hemisphere (Submission 218) Beth Rowan, Luciana Kasulin, Verena Schuenemann, Justin Borevitz, Johannes Krause, Detlef Weigel

**Poster #361.** The origin of the plant hormone ethylene predates the colonization of land (Submission 241) Bram Van de Poel, Chuanli Ju, Endymion Cooper, James Thiere, Ted Gibbons, Charles Delwiche, Caren Chang

**Poster #362.** Frequent changes in expression profile and accelerated sequence evolution of duplicated imprinted genes in Arabidopsis (Submission 315) Yichun Qiu, Shao-Lun Liu, Keith Adams

**Poster #363.** GENETIC ARCHITECTURE OF PARENTALLY-BIASED SEED SIZE DETERMINANTS (Submission 369) Jamara Haymore, Jonathan Fitz Gerald

**Poster #364.** To Flower or Not to Flower (in Maine)? (Submission 425) Coral Botting, Martha Cooper, Reena Sellamuthu, Johanna Schmitt, Judith Roe

**Novel Tools and Techniques**

**Poster #365.** ePlant: A user friendly data visualization tool for integrating and exploring multiple levels of biological data. (Submission 13) Jamie Waese, Zhenming Yu, Asher Pasha, Nicholas J. Provart


**Talk #367.** Gamma-ray imaging system for studying heavy metal transport in plants (Submission 95) Kaisa Kajala, Katherine Walker, Simon Cherry, Gregory Mitchell, Siobhan Brady

**Poster #368.** An affinity-based target identification approach for a small molecule inhibitor of endocytosis in Arabidopsis (Submission 103) Wim Dejonghe, Kiril Mishev, Evelien Mylle, Anna-Maria Szatmari, Bram Denoo, An Staes, Daniel Van Damme, Annemieke Madder, Kris Gevaert, Johan Winne, Natasha Raikhel, Eugenia Russinova

**Talk #369.** Inverting E3 Ligase Function in the Circadian Clock Using a Decoy Strategy (Submission 120) Joshua Gendron, Steve Kay, Kristofer Webb, Eric Bennett

**Poster #370.** High-power genetic mapping using target-enrichment sequencing (Submission 130) Jianjun Guo, Yue Fan, Seung Y. Rhee

**Poster/Talk #371.** Protein-ligand Interaction Exploration Based On Proteome-wide Tertiary Structure Prediction and Further in vitro Validation (Submission 166) Michael Dong, Andrew Doyxey, Maja Gro Rydahl, William Willats, Nicholas Provart

**Poster #372.** Green to Red Photocconversion of Wild Type EGFP as a Simple and Powerful Tool for Investigating Protein and Organelle Dynamics (Submission 175) Amirali Sattarzadeh, Reza Saberianfar, Warren R. Zipfel, Rima Menassa, Maureen R. Hanson

**Poster/Talk #373.** Mn-euvering Manganese: using Synchrotron X-Ray Fluorescence on living plant tissue to understand metal mobilization (Submission 192) Amanda Socha, Tracy Punshon, Mary Lou Guerinot

**Poster #374.** A novel method to understand short tandem repeat variation and function in Arabidopsis thaliana (Submission 197) Keisha Carlson, Peter Sudmant, Jay Shendure, Christine Queitsch

**Talk #375.** Advances in crossover localization and QTL mapping using high-throughput sequencing. (Submission 220) Beth Rowan, Vipul Patel, Detlef Weigel, Korbinnian Schneeberger

**Poster/Talk #376.** RAPA: RaspberryPi Automated Phenotyping Array provides low-cost, scalable, automated, high-throughput, in-place phenotyping (Submission 222) George Wang, Andre Noll, Christian Widmer, Beth Rowan, Detlef Weigel

**Poster #377.** A high-throughput and high-resolution dynamic imaging system and its application in studying hormone/light-regulated hypocotyl and root growth of seedlings (Submission 471) Yusi Ji, Hongwei Guo
Plant Hormones

Poster #378. Evolution of strigolactone-specificity in the karrikin receptor KAI2 is a likely basis for host-recognition in parasitic plants (Submission 33) Caitlin Conn, Drexel Neumann, Dave Nelson

Talk #379. Identification and characterization of the polarly-localized TRANSPORTER OF IBA1 (Submission 57) Marta Michniewicz, Lucia Strader

Poster #380. The function of EIN2 in the nucleus (Submission 61) Bing Qi, Hong Qiao

Poster #381. A novel thioredoxin reductase activity of Arabidopsis YUC6 confers drought tolerance independently of auxin biosynthesis (Submission 63) Joon-Yung Cha, Woe-Yeon Kim, Dae-Jin Yun

Poster #382. Generation of a superactive MYC2 transcription factor to increase the jasmonate response in plants (Submission 68) Jonas Goossens, Laurens Pauwels, Robin Vanden Bossche, Alain Goossens

Poster #383. Repellent auxin response remodels AUX/IAAs-ARFs-Tir1/AFBs mediated feedback system. (Submission 82) Masaaki Watahiki

Poster/Talk #384. A meso-scale ABA interactome reveals a dynamic signaling landscape in Arabidopsis (Submission 99) Shelley Lumba, Shigeo Toh, Louis-Francois Handfield, Ji-Young Youn, Sean R. Cutler, Rajagopal Subramaniam, Nicholas Provart, Alan Moses, Darrell Desveaux, Peter McCourt

Poster #385. Ribosome footprinting and genetic analysis unveil the role of a novel translational regulation module in the Arabidopsis ethylene signaling pathway (Submission 111) Catharina Merchante, Anna N Stepanova, Jose M Alonzo

Poster/Talk #387. Recapitulation of the auxin response pathway in yeast (Submission 127) Edith Pierre-Jerome, Seunghee Jang, Kyle Havens, Jennifer Nemhauser, Eric Klavins

Poster #388. Can abscisic acid bind to and directly regulate ion channels? (Submission 155) Amanda Ooi, Fouad Lemtiri-Chlieh, Aloysius Wong, Chris Gehring

Poster #389. Strigolactone modulation of systemic cytokinin homeostasis (Submission 178) Ioanna Antoniadi, Nicolas Kral, Neelam Chaudhary, William Pelton, James Strutt, Mark Bennett, Colin Turnbull

Poster/Talk #390. SAUR proteins inhibit PP2C.D family phosphatases to control plant cell expansion (Submission 199) Bill Gray, Mee Yeon Park, Hong Ren, Angela Spartz, Paul Overvoorde

Poster #391. Functional Genomics of Cytokinin Response Factors: Analysis of a Diverse Sub-Group of AP2/ERF Transcription Factors (Submission 202) Paul Zwack, Christine Swinka, Erika Keshishian, Cami Adams, Margaret Compton, Alexander Heyl, Aaron Rashotte

Poster #392. ABI5-binding proteins (AFPs) interact with histone deacetylase complex subunits and repress transcription (Submission 217) Tim Lynch, Joy Erickson, Ruth Finkelstein

Poster/Talk #393. TO GROW OR NOT TO GROW: HORMONAL REGULATION OF FITTING TRADE-OFFS IN ARABIDOPSIS (Submission 219) Cris Argueso, Mary Chapman, Dandan Hajdu

Poster #394. Small-molecule screening in Arabidopsis and yeast uncovers agonists for the strigolactone receptor HTL/KAI2 that are bioactive in Arabidopsis and Striga hermonthica (Submission 257) Duncan Holbrook-Smith, Shigeo Toh, Yuichiro Tsuchiya, Peter McCourt

Poster #395. Characterization of mutants with enhanced resistance to IBA (Submission 261) Vanessa Jawahir, Bethany Zolman

Poster #396. Functional Analysis of Arabidopsis thaliana OVATE FAMILY PROTEINS ( Submission 299) Shumim Wang, Carl Douglas

Poster #397. Characterization of NCED and CYP707A gene families encoding ABA metabolic enzymes of Arabidopsis (Submission 303) Dominic Ludovice, Dawei Yan, Eiji Nambara

Poster #398. Nuclear Factor Y-mediated SOC1 expression orchestrates flowering responses of Arabidopsis (Submission 325) Xingliang Hou, Hao Yu

Poster #399. Auxin or high temperature controls the symptoms of necrotic spotted lesion 2 (nsl2) (Submission 326) Huihui Sun, Junji Yamaguchi, Masaaki K. Watahiki

Poster #400. Identification of gravitropism-related PIN3 polarity regulators in Arabidopsis (Submission 334) Hana Rakusova, Jiri Friml

Poster #401. Identification of the PP2C HA1 as an Inteceptor of ABA2, an ABA Biosynthetic Enzyme (Submission 335) Catalina Leoveanu, Yi Zhang, Shelley Lumba, Eiji Nambara

Poster #402. Indole-3-acetic acid and phenylacetic acid are two types of auxins in Arabidopsis with distinct transport characteristics (Submission 358) Hiroyuki Kasahara

Poster #403. An ABC transporter mediates ethylene signaling under HY5-regulation (Submission 384) Areum Kim, Jun-Young Jin, Youn-II Park, Enrico Martinioa, Youngsook Lee

Poster #404. Root-derived active cytokinins regulate shoot growth in Arabidopsis (Submission 397) Asami Osugi, Mikiko Kojima, Takakoshi Kiba, Hitoshi Sakakibara

Poster #405. GAF1, A DELLA INTERACTING PROTEIN, REGULATES GIBBERELLIN HOMEOSTASIS AND SIGNALING (Submission 408) Jutarou Fukazawa, Takahiro Fujiki, Masahiro Mori, Chika Miyamoto, Yuka Mishima, Yuji Kamiya, Shinjiro Yamaguchi, Yoshihiko Takahashi

Poster #406. UGT74D1 catalyzes the glucosylation of 2-oxindole-3-acetic acid in Arabidopsis thaliana (Submission 422) Keita Tanaka, Ken-Ichi Hayashi, Masahiro Natsume, Yuji Kamiya, Hitoshi Sakakibara, Hiroyuki Kasahara
Poster #407. Hormonal cross-talk between brassinosteroids (BR) and abscisic acid (ABA) indicates an antagonistic role for BR in ABA responses and drought tolerance (Submission 423) Siyu Liang, Gina Eun-Joo, Gordon Chua, Marcus Samuel
Poster #408. Development of new undergraduate research projects on plant hormones in relation to growth in Arabidopsis mutants and transformed plants (Submission 446) Santokh Singh
Poster #409. FAB1/PIMfyve establishes late endosomes/PVC/MBV identity in Arabidopsis thaliana (Submission 447) Tomoko Hirano, Masa H Sato
Poster #410. Role of PP2C MAPK phosphatases in stress hormone production (Submission 458) Alois Schweighofer, Volodymyr Shuchbchynsky, Kotryna Kvederaviciute, Michael Stumpe, Justinas Simulis, Felix Mauch, Irute Meksiene
Poster #411. Understanding strigolactone signalling by the use of chemical genetics (Submission 492) Cedrick Matthis, Dominique Audenaert, Tom Beeckman, Sofie Goormachtig

Signal Transduction, Signal Integration

Talk #412. Phosphorylation of a bZIP transcription factor triggers metabolic reprogramming in acclimation to low energy stress (Submission 15) Andrea Maier, Lorenzo Pedrotti, Bernhard Wurzinger, Dorothea Anrath, Andrea Simeunovic, Wolfram Weckwerth, Wolfgang Droge-Laser, Markus Teige
Poster #413. Complex mechanisms of cell expansion in dark grown hypocotyl requires functional AUXIN BINDING PROTEIN 1 (Submission 36) Laurie Grandont, Sebastien Pague, Gregory Mouille, Catherine Perrot-Rechenmann
Poster #414. Salicylic acid induces conformational remodeling in C-termini of NPR family proteins (Submission 38) David Neeley, Felix Maier, Klaus Tietjen, Ursula Pfiztnzer
Poster/Talk #415. Molecular basis for AUXIN RESPONSE FACTOR protein interaction and the control of auxin response repression (Submission 49) David Korasick, Corey Westfall, Soon Goo Lee, Max Nanao, Renaud Dumas, Gretchen Hagen, Thomas Guifoyle, Joseph Jez, Lucia Strader
Poster #416. rdd1, the suppressor of Arabidopsis cyclic nucleotide-gated ion channel mutant dnd1, revealed that AtCNCG2 and AtCNCG4 work in the same signaling pathway to regulate pathogen defense and salicylic acid-independent floral transition. (Submission 72) Kimberley Chin, Alex Fortuna, Jihyun Lee, Wolfgang Moeder, Keiko Yoshioka
Poster #417. BES1 serves as a substrate of MAX2 and a negative regulator of the strigolactone signaling pathway to regulate shoot branching in Arabidopsis (Submission 77) Yuan Wang, Shiyong Sun, Wenjiao Zhu, Xuelu Wang
Poster #418. Nitric oxide binds to and modulates the activity of a pollen specific Arabidopsis diacylglycerol kinase (Submission 104) Aloyisius Wong, Lara Donaldson, Maria Portes, Jose Feijo, Chris Gehring
Poster #419. A plasma membrane-localized kinase buffers plant immunity by modulating BIK1 protein levels (Submission 113) Jacqueline Monaghan, Susanne Matschi, Oluwaseyi Shorinola, Hanna Rosenich, Alexandra Matei, Cecilie Segonzac, Frederikke Gro Malinovsky, John Rathjen, Dan MacLean, Tina Romeis, Cyril Zipfel
Poster/Talk #420. A receptor-like protein links cell wall surveillance with brassinosteroid signaling (Submission 114) Sebastian Wolf, Dieuwertje van der Does, Andreas Kolbeck, Ann-Kathrin Schurholz, Sebastian Augustin, Cyril Zipfel, Herman Hofte
Poster #421. A cell wall-associated, Pro-rich receptor-like kinase RHS10 negatively modulates root hair growth (Submission 146) Changfa Lin, Minho Park, Yungsook Lee, Hyung-Taeg Cho
Poster #422. Stimulus perception and signal transduction during plant cell wall integrity maintenance (Submission 148) Joe McKenna, Manikandan Veerabagu, Timo Engeldorf, Thorsten Hamann
Poster #423. The IDA peptide regulating floral abscission triggers an oxidative burst by direct binding to the HSL2 receptor (Submission 149) Mari Wildhagen, Melinka Butenko, Markus Albert, Georg Felix, Reidunn Aalen
Talk #424. Regulation of low oxygen signaling in plants (Submission 162) Daan A. Weits, Beatrice Giuntoli, Monika Kosmacz, Pierdomenico Perata, Joost T. van Dongen, Francesco Licausi
Poster #425. The Floral Abscission Zone as an Organ Boundary (Submission 446) Santokh Singh
Poster #410. Role of PP2C MAPK phosphatases in stress hormone production (Submission 458) Alois Schweighofer, Volodymyr Shuchbchynsky, Kotryna Kvederaviciute, Michael Stumpe, Justinas Simulis, Felix Mauch, Irute Meksiene
Poster #411. Understanding strigolactone signalling by the use of chemical genetics (Submission 492) Cedrick Matthis, Dominique Audenaert, Tom Beeckman, Sofie Goormachtig
Poster #463. Arabidopsis dehydration-responsive element binding factor, DREB2C, modulates ABA biosynthesis during germination (Submission 284) Jihyun Je, Chieun Song, Chae Oh Lim

Poster #464. Ectopic expression of a cold-regulated 15A (COR15A) gene improves salt stress tolerance in Arabidopsis (Submission 287) Chieun Song, Jihyun Je, Chae Oh Lim

Poster #465. The roles of iron-responsive transcription factors in gene regulatory networks involved in key processes of iron homeostasis. (Submission 293) Durre Muhammad, Rozalynne Samira, Rosangela Sozzani, Terri Long

Poster #466. High Throughput Quantification of Phytohormones During Pseudomonas syringae p.v. tomato DC3000 - Arabidopsis Interactions (Submission 304) Andrew Thran, Cris Argueso, Daniel Bush

Poster #467. Identification of the NF-Y trimer including NF-YC10, which interacts with Arabidopsis DREB2A and regulates the stress specific expression of DREB2A target genes (Submission 309) Hikaru Sato, Junya Mizoi, Hidenori Tanaka, Kyonosin Maruyama, Feng Qin, Yuriko Osakabe, Kazuo Shinozaki, Kazuko Yamaguchi-Shinozaki

Poster #468. Involvement of mRNA stability control in ABA-promoted responses (Submission 332) Gustavo T. Duarte, Joao G. P. Vieira, Michel Vincentz

Poster #469. AtGFA1 plays an essential role in pollen germination in Arabidopsis. (Submission 353) Ngoc Trinh Nguyen, Vu Van Kien, Suk-Whan Hong

Poster #470. Regulation of TALE gene expression in Arabidopsis thaliana (Submission 412) Premysl Soucek, Pavel Hanacek, Vilem Reinohl

Poster #471. Whose transcript is it anyway? Global analysis of cytoplasmic mRNA decay rates. (Submission 445) Malia J. Deshotel, Leslie E. Sieburth

RNA Biology

Poster #472. RBP1, a novel plant specific mRNA-binding protein (Submission 298) Sandra Bertrand, Andrea Bleckmann, Johannes K. Schoner, Kristina Wild, Ulrich Hamas, Thomas Dresselhaus

Poster #473. dsRNA-cleaving activities of DCL3 and DCL4 are changed with depending on organs or developmental stages in Arabidopsis thaliana and Brassica rapa. (Submission 330) Midori Tabara, Misato Ohtani, Hiromitsu Moriyama, Toshiyuki Fukuhara

Poster #474. Nutritional deficiency stresses affect DCL3 and DCL4 activities in Arabidopsis thaliana. (Submission 351) Atsushi Seta, Hideaki Nagano, Akihito Fukudome, Naoko Okhama-Ohtsu, Tadashi Yokoyama, Hiromitsu Moriyama, Toshiyuki Fukuhara

Poster #475. The effect of dsRNA structures on RNA interference in Arabidopsis prooplasts (Submission 365) Sayaka Kakiyama, Hideaki Nagano, Hiromitsu Moriyama, Toshiyuki Fukuhara

Poster #476. Towards the identification and characterization of RNA-binding proteome in Arabidopsis thaliana (Submission 376) Claudius Marondedze, Ludivine Thomas, Christoph Gehring

Translational Biology and Non-Arabidopsis Systems

Poster #477. Small GTP binding protein, OsRab11 is involved in defense Signaling (Submission 22) Jae Bok Heo

Poster #478. Deep Sequencing Analysis of Brassica napus Lines Selected for Low Respiration and High Yield (Submission 52) Marina Byzova, Cindy Martens, Magdalena Woloszynska, Tom Verwulgen, Marc De Block, Mieke Van Lijsebettens

Poster #479. IRES-mediated expression of an RNA silencing suppressor (Submission 306) Yukio Kurihara, Emiko Kurihara, Minami Matsui

Poster #480. QTL analysis of leaf morphological traits in Japanese traditional leafy vegetables, Mizuna and Mizuna (Submission 308) Yachiko Kawakatsu, Koeri Kamionoyama, Kori Igarashi, Hokuto Nakayama, Nakao Kubo, Kentaro Yano, Seisuke Kimura

Poster #481. Developmental and molecular mechanisms of the heterophylly in North American lake cress (Rorippa aquatica; Brassicaceae) (Submission 403) Hokuto Nakayama, Naomi Nakayama, Mikiko Kojima, Hitoshi Sakakibara, Neelima Sinha, Seisuke Kimura

Poster #482. Diversity of Camelina spp. (Submission 456) Sanghyeob Lee

Workshop Abstracts

Talk #483. ABA signalling pathway influences direction of root tip growth under low water potentials (Submission 404) Regina Antoni Alandes, Daniela Dietrich, Pedro L. Rodriguez Egea, Malcolm Bennett

Talk #484. Becoming and being a successful researcher at a PUI (Primarily Undergraduate Institution) (Submission 421) Pablo Jenik, Lynn Piliitteri

Talk #485. Beyond the chloroplast: linking retrograde signals to ABA signaling in guard cells and seeds (Submission 503) Wannarat Pornsiriwong, Gonzalo M. Estavillo, Kai Xun Chan, Peter A. Crisp, Su Yin Phua, Pip B. Wilson, Christopher I. Cazzonelli, Barry J. Pogson

Late Poster Abstract

Poster #486. (Cell Biology) FOUR LIPS/MYB124 stabilises PIN3-mediated auxin transport to regulate lateral root initiation. Qian Chen. Department of Plant Systems Biology, VIB/Ghent University, Gent, Belgium
General Information for ICAR 2014

Registration/Information Desk
The ICAR Registration desk is at the Chan Centre. The hours are:
Monday, July 28th 2:00pm- 9:30pm
Tuesday, July 29th 7:30am - 10:30am
Wednesday, July 29th 7:30am- 10:30am

Your registration fee includes the following:
ICAR delegate kit and name badge
Kit includes bag, pen, printed program and a 2Gb USB drive containing the full program and all abstracts
Opening Reception, Coffee Breaks (6), and lunch (2)

Name Badge
Admission to all conference activities are by name badge; please wear your badge at all times, even for ticketed events.

Opening Ceremony and Welcome Reception
The Opening Ceremony precedes the Opening Keynote Lectures at the Chan Centre on Monday July 28 from 6:00-7:30 pm. The welcome reception will be held in the Chan Foyer from 7:30pm to 9:30pm.

Conference Banquet
The banquet is a ticketed event and will be held the Museum of Anthropology in a tented space. Please dress with light layers and comfortable shoes that are suitable for walking on grass.

Oral Presentation Guidelines- for all speakers (invited and selected from abstracts)
Please save your oral presentation onto a USB drive in this format: Session_LastName (e.g. Translational_Meyers) in either .pptx or .ppt format. Presentations must be loaded onto the podium computer prior to the start of your session. You will be provided a 2Gb USB drive when you register (containing the abstracts and full program) which has additional space for files.

We highly recommend that all speakers on Tuesday load their talks during hours listed below, on MONDAY, to avoid lines prior to your session. On Monday, speakers in all Monday and Tuesday sessions may load at the Chan Centre, Royal Bank Cinema. Starting on Tuesday morning, speakers must load talks in the building in which they will present.
• Plenary Sessions: All Plenaries are in the Chan Centre.
• Concurrent Sessions and Workshops: Sessions take place in Chan Centre and in Buchanan. Consult program for details.

Schedule for Speakers to load their presentations from their USB to campus laptops:

<table>
<thead>
<tr>
<th>Day</th>
<th>Time</th>
<th>Location and session speakers to transfer talks</th>
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<tbody>
<tr>
<td>Monday, July 28</td>
<td>2:00pm to 6:15pm</td>
<td>Chan Centre: Royal Bank Cinema:</td>
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<td>Monday and Tuesday speakers:</td>
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<td>• Opening Keynote Speakers and Tuesday plenary speakers for Chan Centre (and Wednesday plenary speakers, optional)</td>
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<td>please transfer your talk during this time</td>
<td>• All Tuesday concurrent session or workshops speakers for Buchanan sessions</td>
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<tr>
<td>Tuesday, July 29</td>
<td>7:15am to 8:00am</td>
<td>Chan Centre: Royal Bank Cinema. Tuesday plenary speakers; Tuesday concurrent speakers for Chan sessions only</td>
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<td>7:15am to 10:30am</td>
<td><strong>Buchanan Rm B219</strong>: Tuesday concurrent and workshop speakers for Buchanan sessions only (Optional: Thursday concurrent speakers at Buchanan sessions only)</td>
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<td>12:00pm to 1:00pm</td>
<td><strong>Buchanan Rm B219</strong>: Tuesday concurrent and workshop speakers for Buchanan sessions only (Optional: Thursday concurrent speakers at Buchanan sessions only)</td>
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<td>Tuesday, July 29</td>
<td>12:00pm to 1:00pm</td>
<td><strong>Chan Centre: Royal Bank Cinema</strong>: Tuesday concurrent speakers for Chan afternoon sessions only (and Wednesday plenary speakers, optional)</td>
</tr>
<tr>
<td>Wednesday, July 30</td>
<td>7:15am to 8:00am</td>
<td><strong>Chan Centre: Royal Bank Cinema</strong>: Wednesday plenary speakers (Optional: Thursday morning plenary and concurrent speakers at Chan)</td>
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<tr>
<td>Thursday, July 31</td>
<td>7:15am to 8:00am</td>
<td><strong>Chan Centre: Royal Bank Cinema</strong>: Thursday plenary speakers; Thursday morning concurrent speakers for Chan sessions only</td>
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<td><strong>Buchanan Rm B219</strong>: Thursday morning concurrent session speakers for Buchanan sessions only.</td>
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<td>Thursday, July 31</td>
<td>12:00pm to 1:00pm</td>
<td><strong>Chan Centre: Royal Bank Cinema</strong>: Thursday afternoon concurrent speakers for Chan sessions only (Optional: all Friday speakers)</td>
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<td>12:00pm to 1:00pm</td>
<td><strong>Buchanan Rm B219</strong>: Thursday afternoon concurrent and evening workshop speakers for Buchanan sessions only.</td>
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<tr>
<td>Friday, August 1</td>
<td>8:00am to 8:45am</td>
<td><strong>Chan Centre: Royal Bank Cinema</strong>: Closing Keynote and Plenary Speakers</td>
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</table>
We will be unable to load any talks during the session periods as the program is very tight. Therefore, please have your presentations complete when you arrive in Vancouver, particularly if you are speaking on Tuesday.

The conference supplies PC laptops (not Macintosh). We highly prefer that all talks be loaded onto UBC PC laptops (as outlined above) since we cannot switch laptops between each presentation. In the rare case you must use a Macintosh laptop, you must supply the laptop AND bring any necessary adapter (e.g. VGA).

Conference Exhibition and Poster Sessions

**POSTER SESSION AND EXHIBITION HOURS AT THE STUDENT RECREATION CENTRE**

<table>
<thead>
<tr>
<th>Day</th>
<th>Time</th>
<th>Function</th>
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<tbody>
<tr>
<td>Monday, July 28</td>
<td>5:00pm to 9:00pm</td>
<td>Set-up</td>
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<tr>
<td>Tuesday, July 29</td>
<td>7:00 to 10:00am</td>
<td>Set-up</td>
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<td></td>
<td>7:00am to 5:00pm</td>
<td>No scheduled poster session, exhibit open</td>
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<td>5:00pm to 8:00pm</td>
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<td><strong>6:15pm to 8:00pm</strong></td>
<td><strong>Official Exhibit and Poster Session</strong></td>
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<tr>
<td>Wednesday, July 30</td>
<td>8:00am to 2:00pm</td>
<td>No scheduled poster session, exhibit open</td>
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<td>Thursday, July 31</td>
<td>8:00am to 5:00pm</td>
<td>No scheduled poster session, exhibit open</td>
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<td><strong>Odd # abstracts present</strong></td>
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<td><strong>Official Exhibit and Poster Session</strong></td>
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<td>8:00pm to 9:00pm</td>
<td>Take-Down (first chance)</td>
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<tr>
<td>Friday, August 1</td>
<td>7:00am to 9:00am</td>
<td>Take-Down (last chance)</td>
</tr>
</tbody>
</table>

**Coffee Breaks**

Coffee breaks for conference attendees will be held at the Chan Centre.

**Responsibility**

The Organizing Committee assumes no responsibility for accident, losses, damage, delays, or any modifications to the program arising from unforeseen circumstances. It accepts no responsibility for travel or accommodation arrangements.

The participant acknowledges that he or she has no right to lodge damage claims against the Organizing Committee should the conference proceedings be hindered or prevented by unexpected political or economic events or generally by acts of God, or should the non-appearance of speakers or other reasons necessitate program changes.

**Internet Access**

Wireless Internet access is available in most buildings and outdoor spaces on campus by choosing the "ubcvisitor" network from your wireless options. Additional Internet stations are available at any UBC library.

**On-Campus Accommodation**

Walter Gage Residence & the West Coast Suites - 5959 Student Union Boulevard
Marine Drive Residence- 2205 Lower Mall

All residences are open 24 hours per day, 7 days per week. Check-in is from 3:00pm and check-out is by 11:00am. For more information, please contact the front desks through the Conferences and Accommodation Reservations Office at 604-822-1000 or toll free at 1-888-822-1030.

**Banking and Foreign Exchange**

Two banks are located in the University Village, providing banking and exchange facilities (times subject to change.)

Bank of Montreal (MasterCard): Monday – Wednesday 9:00am – 5:00pm; Thursday – Friday 9:00am - 6:00pm
Canadian Imperial Bank of Commerce (Visa): Monday – Friday, 9:30am – 5:00pm; Saturday 9:30am – 4:00pm

Automated teller machines are available in all banks, in the lobby of Gage Residence, and the Student Union Building.

**Taxis**

Taxis are available in front of Gage Residence or by calling 604-681-1111. Fare to airport or downtown ≈ $35 - $40 CAD.

**Public Transit**

The Translink (Vancouver's public transit system) Bus Loop is located across the street from Walter Gage Residence. Bus schedules are available in the Student Union Building. Buses require exact change ($2.75 for a One Zone fare within Vancouver, valid 90 minutes). Packs of 10 bus tickets may be purchased in the Student Union Building or at Shoppers Drug Mart. [www.translink.ca](http://www.translink.ca)

**Childcare**

Childcare services are not offered by ICAR. Childcare can be booked directly with a suggested company, Nannies On Call. Bookings must be made a minimum 36-48 hours in advance and are based on availability. Nannies On Call can be reached at 604-734-1776.

**Campus Safety**
Campus security can be reached at 604-822-2222 in an emergency, otherwise at 604-822-8609 for non-emergencies. There are also blue light phones located on campus, which provide a direct connection to security for emergency situations or general assistance.

**Emergency Telephone Numbers**

**Emergency Medical Care**
Urgent Care Centre at UBC Hospital (2211 Wesbrook Mall.) Open daily from 8 am to 10 pm. Phone: 604-822-7121 or 911.

**Insurance**
Liability insurance is the responsibility of each individual delegate. Visitors are not covered by the Canadian Medical Health Insurance Plan. Delegates should have their own medical coverage.

**Walk-In Clinic**
University Village Medical, Monday to Friday 8 am to 6 pm. Saturday 10 am – 4 pm. Hours are subject to change, please call the clinic to check their current hours. Phone: 604-222-2273. Address: 228-2155 Allison Road (upstairs from Staples)

**On Campus Pharmacies:**
- University Pharmacy. Open Monday to Friday, 9 am to 8 pm, Saturday & Sunday, 10 am to 6 pm. Phone: 604-224-3202. Address: 5754 University Blvd.
- Shoppers Drug Mart. Open daily from 8 am to 10 pm. Phone: 604 228-1533. Address: 5950 University Blvd.

**Lost and Found**
All materials lost or found in academic buildings are brought to the Lost and Found Office located in the Campus Security Office. The Security Office is located at 2133 East Mall, or can be reached from 8:30am to 4:30pm, Monday through Friday at 604-822-9922. Visit security.ubc.ca/content/lost-and-found to report a lost item.

**Student Union Building (SUB) and University Village**
Central to the conference venues, the SUB offers food outlets, shops, and postal services. At the entrance to the campus on University Blvd. is a small shopping centre within walking distance of the conference venues. University Village includes banks, pharmacy, photocopying & printing services, small grocery, restaurants, coffee shops, & fast food outlets.

**Messages**
Messages for delegates staying on-campus may be left by calling the Conferences and Accommodation Reservations Office at 604-822-1000 extension 3 or toll free at 1-888-822-1030 (calls to the toll free line cannot be transferred to a guest’s room). All private suites have voicemail capabilities. Budget rooms in shared suites are not equipped with telephones, but messages can be posted on the Message Board in the residence lobby or delivered to the room.

**Parking**
Limited parking is available for those guests staying on-campus for a daily rate. Delegates staying off campus can park in the one of the parkades or budget surface lots on campus.

**Printing and Photocopying Services**
Copiesmart and Staples both offer a range of printing and copying services, and are located in the University Village. ICAR and Conference Staff do not offer printing services for presenters.

**Recreational Facilities**
The BirdCoop is located in the Student Recreation Centre and has a comprehensive range of exercise equipment. There is a reduced daily drop-in rate of $7.00 for guests staying on-campus (www.recreation.ubc.ca/fitness/contact)
The UBC Aquatic Centre has public drop-in times for its pool, gym, sauna and whirlpool facilities (www.aquatics.ubc.ca)

**UBC Bookstore**
The university bookstore, on the corner of University Boulevard & East Mall, is open Monday-Friday, 9:30am to 5:30pm, Saturday, 11:00am to 5:00pm.

**Construction on Campus**
The ICAR Organizing Committee greatly appreciates the patience of all our conference delegates, with regards to the construction on campus. UBC is undergoing several major projects to improve the layout and sustainability of campus facilities for students and visitors.

**UBC Sustainability Initiatives**
UBC offers a comprehensive set of sustainability projects and initiatives to help facilitate the change towards a sustainable future. UBC demonstrates leading practices in both institutional and residential green building on campus. Accommodation: Housekeeping is dedicated to using green and environmentally friendly products when servicing your room. Guests can opt of having their towels changed daily.
ICAR 2014
EXHIBITS & POSTERS
STUDENT RECREATION CENTRE, UBC

Exhibit Booths: 10’x10’ with 8’ back drape and 3’ side rails
Includes 1- 6’ skirted table and 2 chairs

101 Poster Boards-8’x4’ (4 posters per board)

Exhibitors
3. Molecular Plant
4. Heliospectra AB
5. Convirion
6. Journal of Experimental Botany
10. TAIR- Phoenix Bioinformatics
11. NEB and IDT (shared)
12. Agrisera
13. Percival
14. Qubit Systems Inc.
15. ABRC and NASC (shared)
Restaurants
<table>
<thead>
<tr>
<th>Name</th>
<th>Hours</th>
<th>Days</th>
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<tbody>
<tr>
<td>The Point Grill at Marine Drive, Building #4</td>
<td>11:00am – 10:00pm</td>
<td>Daily</td>
</tr>
<tr>
<td>Sage at the University Centre</td>
<td>11:30am – 2:00pm</td>
<td>M–F</td>
</tr>
<tr>
<td>Triple-O’s at David Lam Research Centre</td>
<td>11:00am – 7:00pm</td>
<td>Daily</td>
</tr>
</tbody>
</table>

Eateries
<table>
<thead>
<tr>
<th>Name</th>
<th>Hours</th>
<th>Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pacific Spirit Place at Student Union Building</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bakeshop</td>
<td>7:30am – 2:00pm</td>
<td>M–F</td>
</tr>
<tr>
<td>Pasta Bar</td>
<td>10:00am – 2:00pm</td>
<td>M–F</td>
</tr>
<tr>
<td>Salad and Soup Bar</td>
<td>11:00am – 2:00pm</td>
<td>M–F</td>
</tr>
<tr>
<td>Subway</td>
<td>8:30am – 7:00pm</td>
<td>M–Th</td>
</tr>
<tr>
<td>A &amp; W</td>
<td>7:30am – 3:00pm</td>
<td>M–F</td>
</tr>
<tr>
<td>Breakfast Buffet</td>
<td>6:45am – 9:00am</td>
<td>Daily</td>
</tr>
<tr>
<td>Caffè Perugia at Life Sciences Centre</td>
<td>7:30am – 4:30pm</td>
<td>M–Th</td>
</tr>
<tr>
<td>ike’s Café at Irving K. Barber Learning Centre</td>
<td>9:00am – 5:00pm</td>
<td>M, Th, F</td>
</tr>
<tr>
<td></td>
<td>9:00am – 7:00pm</td>
<td>T, W</td>
</tr>
<tr>
<td>Mercante</td>
<td>8:00am – 5:00pm</td>
<td>M–F</td>
</tr>
<tr>
<td>The Loop Café at CIRS</td>
<td>9:00am – 2:00pm</td>
<td>M–F</td>
</tr>
<tr>
<td>Tim Hortons at Forest Sciences Centre</td>
<td>7:00am – 6:00pm</td>
<td>M–F</td>
</tr>
</tbody>
</table>

Cafes
<table>
<thead>
<tr>
<th>Name</th>
<th>Hours</th>
<th>Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Café MOA</td>
<td>10:00am – 4:00pm</td>
<td>Daily</td>
</tr>
<tr>
<td></td>
<td>10:00am – 4:00pm</td>
<td>Daily</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2:00pm M</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8:00pm T (starting May 20)</td>
</tr>
<tr>
<td>Neville’s at Scarfe</td>
<td>7:45am – 2:45pm</td>
<td>M–F</td>
</tr>
<tr>
<td>Niche Café at Beaty Biodiversity</td>
<td>11:00am – 3:00pm</td>
<td>M–F</td>
</tr>
<tr>
<td></td>
<td>12:00pm – 4:00pm</td>
<td>Weekends &amp; Holidays</td>
</tr>
<tr>
<td>Stir It Up at the Buchanan</td>
<td>7:30am – 2:30pm</td>
<td>M–F</td>
</tr>
<tr>
<td>Sauder Exchange Café at Henry Angus</td>
<td>8:00am – 3:00pm</td>
<td>M–F</td>
</tr>
<tr>
<td>Tim Hortons at David Lam Research Centre</td>
<td>7:30am – 4:00pm</td>
<td>M–F</td>
</tr>
<tr>
<td>Starbucks Coffee at SUB</td>
<td>7:00am – 7:00pm</td>
<td>M–Th</td>
</tr>
<tr>
<td>Starbucks Coffee at Fred Kaiser</td>
<td>7:00am – 3:30pm</td>
<td>M–F</td>
</tr>
<tr>
<td>Starbucks Coffee at UBC Bookstore</td>
<td>Opening soon!</td>
<td></td>
</tr>
</tbody>
</table>

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