MONDAY 24 JUNE 2013

07:30 – 20:00

REGISTRATION

Location: Parkside Foyer

18:00 – 20:00

OPENING/WELCOME MIXER

18:30 – 18:40

Official Opening
Professor Barry Pogson, Australian National University
Chair, ICAR 2013

Location: Parkside Foyer
08:30 – 09:15
KEYNOTE LECTURE

08:30 – 08:35
Introduction
Dr Jim Peacock, CSIRO Plant Industry, ACT

Location: Parkside Auditorium

08:35 – 09:15
KEY-TUE-01
*Arabidopsis thaliana* and its relatives as model systems for the study of evolutionary questions
Weigel, D. (Germany)

**Dr Detlef Weigel**

Detlef Weigel did his PhD work in Drosophila where he discovered the founding member of an important class of transcription factors, the Forkhead/FOX proteins. He did his postdoctoral research with Elliot Meyerowitz at Caltech, where he cloned the floral regulator *LEAFY* from *Arabidopsis thaliana*. From 1993 to 2002, he was an Assistant and then Associate Professor at the Salk Institute for Biological Studies in La Jolla. In 2002, he was appointed Director at the Max Planck Institute for Developmental Biology, where he founded the Department for Molecular Biology. His current research interests range from plant development and miRNAs to natural genetic variation and evolutionary genomics. Examples of work during the past decade include the discovery of the first plant miRNA mutant, initiating the 1001 Genomes project for *Arabidopsis thaliana*, and discovering autoimmunity in hybrids as a potential barrier of gene flow. In 2008, Detlef was elected a Member of the German Academy of Sciences Leopoldina and in 2009 he was elected to the US National Academy of Sciences. He is a foreign member of the Royal Society, London (2011) and received the Otto Bayer Award of the Bayer Foundations in 2010.
TUESDAY 25 JUNE 2013

09:15 – 10:00

KEYNOTE LECTURE

09:15 – 09:20

Introduction
Dr Jim Peacock, CSIRO Plant Industry, ACT

Location: Parkside Auditorium

09:20 – 10:00

KEY-TUE-02
Experimental genome evolution in plants
Bock, R. (Germany)

Professor Ralph Bock

Professor Ralph Bock is the current Director of the Department for Organelle Biology, Biotechnology and Molecular Ecophysiology at the Max Planck Institute of Molecular Plant Physiology in Potsdam-Golm. Ralph graduated in Biology/Genetics at the University of Halle (1993) and completed his PhD at the State University of New Jersey (USA) and University of Freiburg (Germany) in 1996. Subsequently, he was recruited as an Assistant Professor (University of Freiburg, Germany; 1996 – 2001), where he undertook a German Habilitation in genetics and molecular biology. Ralph became a Full Professor and Chair of the Institute for Biochemistry and Plant Biotechnology at the University of Münster (2001) and became Director and Scientific Member at the Max Planck Institute for Molecular Plant Physiology in Potsdam-Golm in 2004. Ralph is recognised as an Honorary Professor at the University of Potsdam and is an elected member of the National Academy of Science (Leopoldina). Ralph’s research interests include plastid genetics and molecular biology, photosynthesis, evolutionary and systems biology and gene expression in the green algal model Chlamydomonas. In addition, his team has developed biotechnological applications of plastid transformation being used for molecular farming, metabolic engineering and resistance engineering in plants.

10:00 – 10:30

Morning Tea / Exhibition / Posters

Location: Parkside Foyer
Dominique has made major advances in our understanding of the control of cell fate, stem cells, and asymmetric cell division. She has achieved this by genetic dissection of stomatal development in *Arabidopsis* leaves and stems. Her battery of discoveries include genes that encode (1) the bHLH transcription factors SPEECHLESS and FAMA involved in cell fate transitions; (2) upstream signalling molecules CHALLAH (an EPL ligand) and YODA (a MAPKK kinase); and (3) BASL that determines the asymmetry of the first cell division. Her focus on cell division polarity began as a PhD student in Boulder, Colorado, working on the early establishment of left-right asymmetry in the nematode *Caenorhabditis elegans*. Her groundbreaking discoveries in *Arabidopsis* began with Chris Somerville at the Carnegie Institution at Stanford, and have continued in her own research group in the Department of Biology. Dominique was awarded a Presidential Early Career Award in 2010, and in June 2011 she was named a Gordon and Betty Moore Foundation Investigator of the Howard Hughes Medical Institute.
Professor Ian Small leads a team investigating the mechanisms by which the ‘energy organelles’ (mitochondria and chloroplasts) express the genes from their highly derived and much reduced genomes. After a career with INRA in France, he was chosen in 2006 as Director of the new ARC Centre of Excellence in Plant Energy Biology, head-quartered in Perth, Western Australia. The highly successful Centre includes 7 main research teams and several younger affiliated groups all working on understanding how plants acquire, store and use their energy reserves during growth and development. The primary model used in the research is Arabidopsis. Ian is best known for his research on pentatricopeptide repeat (PPR) proteins, a large family of RNA binding proteins with key roles in mitochondrial and chloroplast gene expression. A particular feature of his research is the intertwining of classical molecular biology with computational approaches. In 2006 he was selected as a WA Premier’s Fellow.
Professor Xiaofeng Cao

Professor Xiaofeng Cao is currently working at the Institute of Genetics and Developmental Biology, Chinese Academy of Sciences, Beijing, China. Xiaofeng completed her PhD in Plant Molecular Biology at the National Laboratory of Protein Engineering and Plant Genetic Engineering, College of Life Sciences, Peking University, Beijing, before taking a lecturing position in the College of Life Sciences, Peking University. She was a visiting scholar with Liam Dolan at the John Innes Centre, a postdoctoral fellow with John Rogers at Washington State University and a Research Associate with Steve Jacobsen at UCLA where she cloned and characterised CMT3, a gene encoding a chromomethylase, a novel DNA methyltransferase that is unique to plants. Cao then returned to China where she started her own group working on epigenetic regulation in higher plants. Using both Arabidopsis and rice as model organisms, she is interested in understanding how gene expression and plant development are regulated by histone modifications and small non-coding RNAs. The main focus of her research is the role of histone methylation in Arabidopsis flowering time regulation and small RNA biogenesis and function in rice development. Xiaofeng received the Excellent Performance Award from the Chinese Academy of Science in 2006 and a DuPont Young Professor Award in 2008.
12:50 – 14:20

WORKSHOP 1

EPIC: EPIGENOMES OF PLANTS INTERNATIONAL CONSORTIUM

Chairs: Dr Elizabeth Dennis, CSIRO Plant Industry, ACT
Dr Jim Peacock, CSIRO Plant Industry, ACT
Professor Doris Wagner, University of Pennsylvania, USA

Location: Parkside Auditorium

12:50 WORK-01-01
Chromatin remodelling in inducible gene expression
Wu, M.-F., Han, S.-K., Sang, Y. and Wagner, D. (USA)

13:10 WORK-01-02
The EPIC-CoGe Browser for Arabidopsis epigenomic data
Gregory, D.B., Bomhoff, M., Li, F. and Lyons, E. (USA)

13:35 WORK-01-03
An endogenous mobile RNAi pathway required for stress response in plants
Brosnan, C.A., Lim, P. and Voinnet, O. (Switzerland)

13:46 WORK-01-04
Epigenetic regulation of carotenoid biosynthesis: impacts on plant development
Cazzonelli, C.I., Watkins, J., Holland, S., Hou, X. and Pogson, B.J. (Australia)

13:57 WORK-01-05
Recruitment and changes to histone modifications on FLC chromatin in response to changes in transcription
Helliwell, C.A. and Robertson, M. (Australia)

14:08 WORK-01-06
Identification of long non-coding RNAs involved in RNA-directed DNA methylation in plants
Au, P.C.K., Dennis, E.S. and Wang, M.-B. (Australia)
WORKSHOP 2

REDOX SIGNALING IN MITOCHONDRIA

Chairs: Professor Jim Whelan, University of Western Australia, WA
Dr Michael Considine, University of Western Australia, WA
Professor Christine Foyer, University of Leeds, UK

Location: Parkside 110B

12:50 WORK-02-01
Tissue specificity of proteins of the mitochondrial TCA cycle revealed by selected reaction monitoring mass spectrometry
Taylor, N.L., Fenske, R. and Millar, A.H. (Australia)

13:10 WORK-02-02
Dynamics behind the static mitochondrial proteome through protein turnover analysis in Arabidopsis
Millar, A.H., Nelson, C.J. and Li, L. (Australia)

13:30 WORK-02-03
The role of auxin in the mitochondrial stress response
Ivanova, A.D., Van Der Merwe, M., Law, S., Duncan, O., Ng, S., Van Aken, O. and Whelan, J. (Australia)

13:50 WORK-02-04
Knockdown of mitochondrial-located glutaredoxin S15 reveals a role in arsenic toxicity
Stroecher, E. and Harvey, A.H. (Australia)

14:10 FINAL DISCUSSION
SYMPOSIUM 1

NATURAL VARIATION, EVOLUTION AND PHENOMICS I

Sponsored by School of Biological Sciences, Faculty of Science, Monash University, Australia

Chairs: Dr Norman Warthmann, Australian National University, ACT,
       A/Prof Justin Borevitz, Australian National University, ACT

Location: Parkside Auditorium

14:30 SYM-01-01
The genotype-phenotype map in Arabidopsis
Nordborg, M. (Austria)

15:00 SYM-01-02
Decoding the complexity of quantitative natural variation and response to the environment in Arabidopsis thaliana
Loudet, O. (France)

15:25 SYM-01-03
Natural variation of a gene network regulating trichome patterning

15:40 SYM-01-04
Natural variation in the developmental consequences of a loss of chloroplast translation in Arabidopsis thaliana
Bryant, N., Wang, Y. and Meinke, D. (USA)
14:30 – 16:00

SYMPOSIUM 2

HORMONES

Chairs: Dr Chris Cazzonelli, Australian National University, ACT
Dr Brian Jones, University of Sydney, NSW

Location: Parkside 110B

14:30 SYM-02-01
Ins and outs of Arabidopsis peroxisome biogenesis
Bartel, B. (USA)

15:00 SYM-02-02
Strigolactone biosynthesis and roles in plant development
Brewer, P.B. and Beveridge, C.A. (Australia)

15:25 SYM-02-03
Auxin signaling and growth rhythmicity at the shoot apical meristem
Oliva, M., Milani, P., Brunoud, G., Mirabet, V., Hamant, O., Boudaoud, A. and Vernoux, T. (France)

15:40 SYM-02-04
DAD2, a protein involved in strigolactone perception

16:00 – 16:30 Afternoon Tea / Exhibition / Posters

Location: Parkside Foyer
TUESDAY 25 JUNE 2013

16:30 – 18:00

SYMPOSIUM 3

DEVELOPMENT I

Chairs: Dr Mary Byrne, University of Sydney, NSW
       Dr Richard Macknight, University of Otago, New Zealand

Location: Parkside Auditorium

16:30 SYM-03-01
The developmental phase transition to flower formation
Yamaguchi, N., Winter, C., Yamaguchi, A., Pastore, J. and
Wagner, D. (USA)

17:00 SYM-03-02
Using bryophyte models to understand land plant evolution

17:25 SYM-03-03
The boundary-specific transcription factor LATERAL ORGAN
BOUNDARIES limits growth by repressing brassinosteroid
accumulation
Bell, E.M., Lin, W.-C., Husbands, A.Y., Yu, L., Jaganatha, V.,
Jablonska, B. and Springer, P.S. (USA)

17:40 SYM-03-04
The C2-domain protein QUIRKY and the atypical receptor-like
kinase STRUBBELIG localize to plasmodesmata and mediate
tissue morphogenesis in Arabidopsis thaliana
Vaddepalli, P., Yashodar, B., Hillmer, S., Robinson, D.G. and
Schneitz, K. (Germany)
16:30 – 18:00

SYMPOSIUM 4

PHOTOSYNTHESIS AND DROUGHT

Chairs: Professor Peter Jahns, University of Duesseldorf, Germany
        Dr Robert Sharwood, University of Western Sydney, NSW

Location: Parkside 110B

16:30 SYM-04-01
    Regulation of photosynthetic electron transport by PSI cyclic
    electron transport
    Shikanai, T. (Japan)

17:00 SYM-04-02
    Retrograde signalling and drought
    Estavillo, G.M. (Australia)

17:25 SYM-04-03
    Localization and membrane interaction of the zeaxanthin
    epoxidase
    Schwarz, N., Armbruster, U., Tiebel, L. and Jahns, P. (Germany
    and USA)

17:40 SYM-04-04
    Chloroplast gene expression in C4 Cleome
    Tanz, S.K., Kajala, K. and Small, I.D. (Australia)

18:00 – 20:00  Mixer / Exhibition / Posters
18:15 – 19:15  Odd numbered posters to be manned by presenting authors

Location: Parkside Foyer
08:30 – 09:00
PLENARY LECTURE
*Sponsored by the Faculty of Science*
*The University of Western Australia*

**Chair:** Professor David Smyth, Monash University, VIC  
**Location:** Parkside Auditorium

---

**08:30 PLE-WED-04**  
Regulatory networks controlling hormone-mediated growth  

---

**Professor Joseph Ecker**

Joseph Ecker, professor in the Plant Biology Laboratory, is one of the nation's leading authorities on the molecular biology and genetics of plants. Ecker was a principal investigator in the multinational project that sequenced the genome of *Arabidopsis thaliana*, a modest weed that has become a model organism for the study of plant genetics. This wild mustard variety is the first plant to have its genome sequenced, an achievement expected to have widespread implications for agriculture and perhaps human medicine as well. Ecker’s laboratory was one of the first to map the DNA methylome of Arabidopsis and to compare the methylome across multiple generations of laboratory grown plants. He has applied similar techniques to first develop a detailed map of the human epigenome, comparing the epigenomes of human embryonic stem cells and differentiated connective cells from the lung called fibroblasts. The head-to-head comparison brought to light a novel DNA methylation pattern unique to stem cells, which may explain how stem cells establish and maintain their pluripotent state. Ecker is also widely regarded as one of the foremost experts on how the gaseous hormone ethylene regulates a variety of basic plant processes. For agriculture, ethylene gas is a vital chemical messenger important for such processes as fruit ripening and how plants respond to pathogenic organisms. Ecker was elected to the National Academy of Sciences in 2006 and has received many other awards for his work including the George W. Beadle Award, Genetics Society of America (2011), TIME magazines #2 Discovery of the year (2009) and the John J. Carty Award for the Advancement of Science from the National Academy of Sciences (2007). In 2011, Ecker was appointed as a Gordon and Betty Moore Foundation Investigator in the Howard Hughes Medical Institute.
09:00 – 09:30

PLENARY LECTURE


Chair: Professor David Smyth, Monash University, VIC
Location: Parkside Auditorium

09:00 PLE-WED-05
Towards understanding development and diversity of leaf shape
Tsiantis, M.T. (Germany)

Professor Miltos Tsiantis

Miltos Tsiantis completed a D. Phil in Oxford, UK, on salinity stress in plants. He began studying leaf development as a postdoctoral fellow in Jane Langdale's laboratory in Oxford. Miltos has pioneered molecular research work on Arabidopsis thaliana relatives and has developed Cardamine hirsuta as an experimental system for comparative studies on inter-species trait diversification such as leaf geometry. Another active research area of Miltos involves mathematical modeling of developmental traits on the basis of genetic networks. His aim is to build a concrete picture of the genetic networks that sculpt angiosperm shoot form and then to understand how these networks are modified through evolution to result in the multitude of distinct leaf forms apparent in nature. He has recently accepted an offer from the Max Planck to develop a new Department at the Institute in Cologne with a focus on the evolution of developmental mechanisms.
Professor Peter Waterhouse

Professor Peter Waterhouse is internationally recognised for his groundbreaking research on plant viruses, and he led the way in uncovering the mechanism, roles and applications of post-transcriptional gene silencing in plants, also termed RNA interference (RNAi). Professor Waterhouse is studying the various sRNA pathways that play fundamental roles critical to the development and health of plants. Many of the pathways have essential counterparts in animals and may have implications for medical research. His research program aims to deliver technologies for silencing signals to plants to improve agronomic traits; inserting synthetic microRNAs into plants to alter plant architecture; and altering DNA structure to affect long-term agronomic traits. Dr Waterhouse completed his PhD in plant virology at the University of Dundee and the Scottish Crop Research Institute, and worked first as a postdoctoral fellow and then as a research scientist at CSIRO Plant Industry. He has received several awards, including the Victor Chang Medal (2002) and the CSIRO Chairman's Medal for his work in the gene silencing/RNAi field (2005). In 2003, Dr Waterhouse was named in The Bulletin's 'Top Ten Smartest Scientists in Australia'. In 2007 he won the prestigious Prime Minister’s Prize for Science, and in 2009, he was elected as a fellow to the Australian Academy of Science.
10:30 – 12:00

SYMPOSIUM 5

TRANSLATIONAL BIOLOGY
Sponsored by ARC Centre of Excellence in Plant Cell Walls

Chairs: Dr Yong-Ling Ruan, University of Newcastle, NSW
Dr Penny Smith, University of Sydney, NSW

Location: Parkside Auditorium

10:30 SYM-05-01
Plant cell walls: from cell biology to bioenergy and human health
Fincher, G. (Australia)

11:00 SYM-05-02
Development of a novel fertilization and weed control system based on genetically modified able to metabolize phosphite
Herrera-Estrella, L. (Mexico)

11:25 SYM-05-03
The use of Arabidopsis for cereal grain dormancy studies
Barrero, J.M. and Gubler, F. (Australia)

11:40 SYM-05-04
The use of Arabidopsis as resource to improve field pennycress, a next generation biodiesel feedstock
Dorn, K.M., Fankhauser, J.D., Wyse, D.L. and Marks, M.D. (USA)
10:30 – 12:00

SYMPOSIUM 6

DEVELOPMENT II

Sponsored by EMBL Australia

Chairs:  Dr Tony Gendall, La Trobe University, VIC
         Dr Bruce Veit, Forage Improvement, New Zealand

Location: Parkside 110B

10:30  SYM-06-01  
The establishment of lateral organ polarity in Arabidopsis
Heisler, M.G., Caggianno, M.-P., Bahtia, N., Yu, X., Sappl, P.
and Ohno, C. (Germany)

11:00  SYM-06-02  
Searching upstream regulators of vernalization insensitive3, an
early initiator of vernalization response
Yu, J., Shin, J., Bae, J. and Lee, I. (Republic of Korea)

11:25  SYM-06-03  
Springing into flower after winter: control of flowering in
Medicago
Putterill, J.J., Yeoh, C.C., Zhang, L. and Jaudal, M. (New
Zealand)

11:40  SYM-06-04  
Auxin controls gravitropic setpoint angle in higher plant lateral
organs
Roychoudhry, S., Sageman, K., Kieffer, M. and Kepinski, S.
(United Kingdom)

12:00 – 12:50  Lunch / Exhibition / Posters
Location:  Parkside Foyer
12:50 – 14:20

WORKSHOP 3

INTERNATIONAL ARABIDOPSIS INFORMATICS CONSORTIUM: THE TRANSITION FROM TAIR TO THE ARABIDOPSIS INFORMATION PORTAL (AIP)

Chairs: Dr Magnus Nordborg, Gregor Mendel Institute, Austria
Professor Blake Meyers, University of Delaware, USA

Location: Parkside Auditorium

12:50 WORK-03-01
The International Arabidopsis Informatics Consortium: how we got here, and what's next for Arabidiopsis Informatics
Meyers, B.C. (USA)

13:00 WORK-03-02
AIP: physical resources - in search of the missing link(s)
May, S.T. (United Kingdom)

13:15 WORK-03-03
Overview of EPIC-CoGe and its role as a module of AIP
Gregory, D.B., Bomhoff, M., Li, F. and Lyons, E. (USA)

13:23 WORK-03-04
Posmed: another gateway to the AIP databases from literature
Toyoda, T. (Japan)

13:38 WORK-03-05
Subcellular reaction room proteomes for reconstructing a compartmentalized model of Arabidopsis metabolism
Hooper, C.M., Tanz, S.K., Castleden, I., Vacher, M., Small, I. and Millar, H.A. (Australia)

13:53 WORK-03-06
Mining post translational modifications in Arabidopsis using the modhunter
Mann, G.W., Joshi, H.J., Smith-Moritz, A.M., Parsons, H.T., Petzold, C.J. and Heazlewood, J.L. (USA and Denmark)

14:08 FINAL DISCUSSION
12:50 – 14:20

WORKSHOP 4

LIVING IMAGING OF PROTEIN FUNCTIONS

**Chairs:** Professor Ruediger Simon, Heinrich-Heine University, Germany
Dr Ross Sozzani, Duke University, USA
Dr Jan Willem Borst, Wageningen University, The Netherlands

**Location:** Parkside 110B

---

**12:50 WORK-04-01**
Dynamics gained from fluorescent protein technologies
*Sozzani, R.*, Hinde, E., Crosti, G., Gratton, E. and Benfey, P. (USA)

**13:02 WORK-04-02**
A step toward understanding spatiotemporal dynamics of networks regulating protein movement and asymmetric cell division in the Arabidopsis root meristem

**13:14 WORK-04-03**
Moderation of Arabidopsis root stemness by CLAVATA1 and ARABIDOPSIS CRINKLY4 receptor kinase complexes
*Stahl, Y.*, Grabowski, S., Seidel, C.A.M. and Simon, R. (Germany)

**13:26 WORK-04-04**
Visualizing BRI1-SERK3 hetero-oligomers in *Arabidopsis* roots
13:38  WORK-04-05  
Design and use of fluorescent biosensors in plants  
Jones, A., Danielson, J., Hou, B.H., Bermejo, C., Grossmann, G. and Frommer, W.B. (USA)

13:50  WORK-04-06  
Roots on chips - microfluidic devices for imaging of plant roots  
Grossmann, G., Meier, M., Guo, W.J., Ehrhardt, D.W., Quake, S.R. and Frommer, W.B. (USA)

14:02  WORK-04-07  
4D light sheet based imaging reveal that shape of plant lateral root is dependent on the properties of the overlaying tissues rather than cell division pattern  
Lucas, M., Von Wangenheim, D., Stelzer, E.H.K., Laplaze, L., Bennett, M.J. and Maizel, A. (Germany and France)

14:14  FINAL DISCUSSION
14:30 – 16:00

SYMPOSIUM 7

SMALL RNA, RNA AND EPIGENETICS
Sponsored by Molecular Plant

Chairs: Dr Iain Searle, University of Adelaide, SA
Dr Andy Eamens, University of Newcastle, NSW

Location: Parkside Auditorium

14:30 SYM-07-01
The biogenesis and functional diversity of plant small RNAs
Meyers, B.C. (USA)

15:00 SYM-07-02
Cell type specific DNA methylomes of the Arabidopsis root
Lister, R., Schmitz, R.J., Breakfield, N., Valdes, M., Han, X.,
Nery, J.R., Benfey, P.N. and Ecker, J.R. (USA and Australia)

15:25 SYM-07-03
Plant viral microRNA-like small RNA targets host defense gene
through DCL1-dependent RNAi pathway
Iram, S., Hussain, M., Carroll, B.J., Schneider, C. and Schenk,
P.M. (Australia)

15:40 SYM-07-04
Non-additive gene expression and epigenetic instability in
Arabidopsis hybrids
Tanurdzic, M., Finigan, P., Auer, P., Meyers, B., Doerge,
R.W. and Martienssen, R. (Australia and USA)
14:30 – 16:00

SYMPOSIUM 8

CELL AND ORGANELLE BIOLOGY

Chairs: Professor Juergen Soll, University of Munich, Germany
Dr Laurent Nussaume, CEA, France

Location: Parkside 110B

14:30  SYM-08-01
Regulation of peroxisomal and mitochondrial dynamics in Arabidopsis
Hu, J. (USA)

15:00  SYM-08-02
Chloroplast protein biogenesis
Hwang, I. and Kim, D. (South Korea)

15:25  SYM-08-03
A mechanism for localised lignin deposition in the endodermis
Lee, Y., Rubio, M.C., Alassimone, J. and Geldner, N.
(Switzerland and Spain)

15:40  SYM-08-04
Calmodulin-mediated calcium regulation in plant organelles
Chigri, F., Mehlmer, N., Flosdorff, S., Parvin, N., Ruge, H. and Vothknecht, U.C. (Germany)

16:00 – 16:30  Afternoon Tea / Exhibition / Posters
Location: Parkside Foyer
16:30 – 18:00

SYMPOSIUM 9

EMERGING TECHNOLOGIES AND SYSTEMS BIOLOGY

Sponsored by Annals of Botany

Chairs: Professor Motoaki Seki, RIKEN, Japan
       Professor Brian Gregory, University of Pennsylvania, USA

Location: Parkside Auditorium

16:30 SYM-09-01 Annals of Botany Lecture
Mapping spatiotemporal gene regulatory networks guiding root vascular development

17:00 SYM-09-02
Chromatin dynamics and cell fate specification in Arabidopsis
Deal, R. (USA)

17:25 SYM-09-03
A high-resolution gene expression map of Arabidopsis shoot apex
Yadav, R.K., Tavakkoli, M., Girke, T. and Reddy, G.V. (India and USA)

17:40 SYM-09-04
Border control - the membrane-linked interactome of Arabidopsis
16:30 – 18:00

SYMPOSIUM 10

ENERGY BIOLOGY AND METABOLISM
Sponsored by the ARC Centre of Excellence in Plant Energy Biology

Chairs:  Dr Adam Carroll, Australian National University, ACT
         Dr Elke Stroeher, University of Western Australia, WA

Location:  Parkside 110B

16:30  SYM-10-01
The evolution of signalling proteins from enzymes
Zeeman, S.C. (Switzerland)

17:00  SYM-10-02
Xylose metabolism in Arabidopsis
Heazlewood, J.L. (USA)

17:25  SYM-10-03
Repression of folypolyglutamate synthetase alters lignin composition and cell wall digestibility in Arabidopsis
Srivastava, A.C., Chen, F., Ray, T., Pattathil, S., Avci, U.,
Hongjia, L. Huhman, D., Sumner, L., Hahn, M., Dixon, R.A.,
Blancaflor, E.B. and Tang, Y. (USA)

17:40  SYM-10-04
Requirement for the plastidial oxidative pentose phosphate pathway for nitrate assimilation in Arabidopsis
Bussell, J.D., Keech, O., Fenzke, R. and Smith, S.M. (Australia and Sweden)

18:00 – 19:30  Happy Hour / Exhibition / Posters
18:15 – 19:15  Even numbered posters to be manned by presenting authors
Location:  Parkside Foyer
08:30 – 09:00

PLENARY LECTURE

Chair:  Professor Barry Pogson, Chair, ICAR 2013
Australian National University, ACT

Location:  Parkside Auditorium

08:30  PLE-THU-07
Exploring the "mRNPome": profiling stress-triggered dynamics in mRNA sequestration and translation


---

**Professor Julia Bailey-Serres**

Julia Bailey-Serres is Professor of Genetics & Geneticist in the College of Natural and Agricultural Sciences, Botany & Plant Sciences at the University of California, Riverside, California. Her research focuses on mechanisms of signal transduction and gene regulation that promote plant response and adaptation to unfavourable environmental conditions. Plants respond to many environmental stimuli including light, temperature extremes, water availability, soil minerals, and air pollution (ozone). Her studies have shown that sub-optimal growth conditions typically lead to changes in protein synthesis that result from increased regulation of mRNA translation. She uses knowledge gained from molecular-genetic analyses with Arabidopsis to further our understanding of the responses of crop plants, such as corn and rice. Recently she has been involved in cloning the rice SUB1 gene, which is important for tolerating low oxygen environments such as flooding. A large proportion of the genes that are upregulated in response to hypoxia and other abiotic stresses are proteins with no known biological function. The Bailey-Serres lab coordinates an Arabidopsis 2010 Collaborative Research Project to characterize stress-induced protein of unknown function.
09:00 – 09:30
PLENARY LECTURE
Sponsored by Australian National University

Chair: Professor Barry Pogson, Chair, ICAR 2013
Australian National University, ACT
Location: Parkside Auditorium

09:00  PLE-THU-08
Balancing the carbon budget; does Arabidopsis do a better job than bankers and politicians?

Professor Mark Stitt

Professor Mark Stitt is a leader in the systems biology of central plant metabolism, especially photosynthetic metabolism and its relationship to the environment. Since 2000, he has led the Metabolic Networks department in the Max Planck Institute of Molecular Plant Physiology in Golm, Germany. This institute, founded in 1995 following the reunification of Germany, is located just outside Potsdam, about 60 kilometres southwest of Berlin. Its mission is to carry out system-orientated research that links physiology, molecular biology, genetics, chemistry and physics, in order to understand the synthesis and regulation of metabolites that are important for storage. Mark’s group looks at how biochemical pathways involved in primary carbon and nitrogen metabolism are integrated and regulated, and how they affect plant growth and development. Arabidopsis thaliana, tomato and maize are the main plants used in these investigations. In 2009 he was elected to the Leopoldina National Academy of Science.
Professor Keiko Sugimoto

Keiko Sugimoto is a Group leader of the Cell Function Research team at the Center for Sustainable Resource Center, RIKEN, Yokohama Institute, Japan. She did her PhD at the Australian National University with Geoff Wasteneys and Richard Williamson working on understanding how microtubules regulate growth and post-doctoral research with Keith Roberts at John Innes Centre on how cell size is controlled in plants and how an increase in ploidy by the endocycle contributes to this control. Her research aims at understanding the molecular mechanisms that determine “size” in plants. Cell and organ size in plants is defined by highly dynamic, intersecting signalling pathways that involve genetic, hormonal and environmental cues. Keiko aims to unravel how plants integrate developmental and environmental signals to control the balance between cell proliferation and cell differentiation.
THURSDAY 27 JUNE 2013

10:30 – 12:05

SYMPOSIUM 11

SIMON CHAN MEMORIAL SYMPOSIUM

Chairs: Dr Siobhan Brady, University of California, Davis, USA
Professor Luca Comai, University of California Davis, USA

Location: Parkside Auditorium

10:30 Tribute from Dr Siobhan Brady and Professor Luca Comai

10:40 SYM-11-01
Centromeres and parental genome conflict
Maruthachalam, R., Tan, E.H., Henry, I., Bradnam, K., Korf, I., Comai, L. and Chan, S.W.L. (USA and India)

11:10 SYM-11-02
Simon Chan's three questions
Comai, L., Maheshwari, S., Marimuthu, M.P.A. and Tan, H. (USA)

11:35 SYM-11-03
Exploiting cryptic genetic variation in Arabidopsis
Balasubramanian, S. (Australia)

11:50 SYM-11-04
Spatial and temporal dynamics of DNA methylation and its effectors during sexual reproduction in Arabidopsis thaliana
Jullien, P.E., Berger, F. and Voinnet, O. (Switzerland and Singapore)
THURSDAY 27 JUNE 2013

10:40 – 12:05

SYMPOSIUM 12

CELL TO CELL COMMUNICATION

Chairs: Dr John Walker, University of Missouri, USA
       Dr Rosemary White, CSIRO Plant Industry, ACT

Location: Parkside 110B

10:40 SYM-12-01
Biosensors for recording transporter and enzyme activities in plants

11:10 SYM-12-02
Live-cell study of cell-to-cell communication in pollen tube guidance
Higashiyama, T. (Japan)

11:35 SYM-12-03
The IDA peptide regulates floral abscission and triggers an oxidative burst by direct binding to the HSL2 receptor

11:50 SYM-12-04
Cell-to-Cell signaling mediated by mobile transcription factors in the root vascular tissue patterning
Lee, J.-Y., Zhou, J., Sebastian, J. and Jang, G. (Korea and USA)

12:05 – 12:50
Lunch / Exhibition / Posters
Location: Parkside Foyer
12:50 – 14:20

WORKSHOP 5

THE SMALL REGULATORY MOLECULES: microRNAs AND PEPTIDES

Chairs: Dr Nijat Imin, Australian National University, ACT
Dr Michael Djordjevic, Australian National University, ACT
Professor Blake Myers, University of Delaware, USA

Location: Parkside Auditorium

12:50 WORK-05-01
miRNA evolution in the Camelineae
Smith, L.M., Burbano, H.A., Wang, X., Fitz, J., Ural, Y. and Weigel, D. (Germany)

13:05 WORK-05-02
RNA secondary structure as a potent cis-regulatory element in Arabidopsis

13:20 WORK-05-03
Inhibition of plant microRNA activity using molecular sponges with multiple microRNA binding sites
Reichel, M. and Millar, A.A. (Australia)

13:35 WORK-05-04
Calcium is the molecular switch shifting the phytosulfokine receptor 1 (PSKR1) from kinase to guanylate cyclase activity
13:50 WORK-05-05
Ancestral function of CLE signaling in land plants
Hirakawa Y. and Bowman, J.L. (Australia)

14:05 WORK-05-06
Regulatory peptides that control root development in response to environmental cues
Delay, C., Imin, N. and Djordjevic, M.A. (Australia)
THURSDAY 27 JUNE 2013

12:50 – 14:20

WORKSHOP 6

PROGRAMMED CELL DEATH DURING ARABIDOPSIS DEVELOPMENT AND STRESS RESPONSE

Chairs:  Dr Moritz Nowack, VIB-UGent, Belgium
         Professor Ikuko Hara-Nishimura, Kyoto University, Japan
         Professor Frank Breusegem, VIB-UGent, Belgium

Location:  Parkside 110B

12:50  WORK-06-01
So many smart ways to die - programmed cell death in plants

13:05  WORK-06-02
Characterization of Arabidopsis inhibitor of apoptosis (IAP)-like protein lacking a baculovirus IAP repeat (BIR) domain plays role in cell death pathway in plant and animal systems

13:20  WORK-06-03
A life-or-death decision: intracellular signaling in the plant unfolded protein response

13:35  WORK-06-04
Stax, a novel negative transcriptional regulator of Arabidopsis leaf senescence
Allu, A.D., Xue, G.P., Balazadeh, S. and Mueller Roeber, B. (Germany and Australia)
13:50  WORK-06-05  
VND7-binding sequences revealed by fluoroescence correlation spectroscopy 
Tamura, T., Yamaguchi, M., Endo, H., Kato, K., Yoneda, A., and Demura, T. (Japan)

14:05  WORK-06-06  
The outer mitochondrial membrane AAA ATPase BCS1 is involved in pathogen resistance 
Zhang, B., Thatcher, L., De Clercq, I., Duncan, O., Murcha, M., Singh, K., Van Breusegem, F., Whelan, J. and Van Aken, O.  
(Australia and Belgium)
THURSDAY 27 JUNE 2013

14:30 – 16:00

SYMPOSIUM 13

TRANSGENERATIONAL INHERITANCE

Sponsored by Monsanto Company

Chairs: Dr Ming-Bo Wang, CSIRO Plant Industry, ACT
       Dr Milos Tanurdzic, University of Queensland, QLD

Location: Parkside Auditorium

14:30 SYM-13-01
Transgenerational epigenetic inheritance in Arabidopsis
Colot, V. (France)

15:00 SYM-13-02
Epigenetics in hybrids
Groszmann, M., Greaves, I.K., Ying, H., Taylor, J.M.,
Peacock, W.J. and Dennis E.S. (Australia)

15:25 SYM-13-03
Reconstructing de novo silencing of an active plant
retrotransposon: dynamics, mechanisms, biological implications
Mari-Ordonez, A., Marchais, A., Etcheverry, M., Colot, V.
and Voinnet, O. (Switzerland and France)

15:40 SYM-13-04
Epigenetic transgenerational response to abiotic stress: a
predictive adaptive response priming stomata
Tricker, P.J., Rodriguez Lopez, C.M., Hadley, P. and
Wilkinson, M.J. (United Kingdom and Australia)
14:30 – 16:00

SYMPOSIUM 14

ABIOTIC STRESS

Chairs:  Dr Stuart Roy, University of Adelaide, SA
         Professor Steve Tyerman, University of Adelaide, SA

Location: Parkside 110B

14:30 SYM-14-01
A membrane bound NAC transcription factor is a regulator of mitochondrial retrograde regulation of the oxidative stress response in Arabidopsis
De Clercq, I., Vermeirssen, V., Van Aken, O., Vandepoele, K., Murcha, M., Law, S., Whelan, J. and Van Breusegem, F.  
(Belgium and Australia)

15:00 SYM-14-02
Signaling through GABA-gated anion channels is evolutionarily conserved between animals and plants, and has a key role in stress signaling in plants
Gilliham, M., Ramesh, S.R., Ullah, S., Ryan, P.R. and Tyerman, S.D.  (Australia)

15:25 SYM-14-03
NIA1NIA2 mutation regulates ion homeostasis and nitric oxide-mediated control of guard cell ion channels in Arabidopsis

15:40 SYM-14-04
Mutually exclusive alterations in secondary metabolism are critical for the uptake of insoluble iron compounds by Arabidopsis and Medicago truncatula

16:00 – 16:20  Afternoon Tea / Exhibition / Posters
16:05 PASSPORT PRIZE DRAW
Location: Parkside Foyer
16:20 – 17:05

KEYNOTE LECTURE  
*Sponsored by CSIRO Plant Industry*

16:20 – 16:25  
**Introduction**  
Dr Elizabeth Dennis, CSIRO Plant Industry, ACT

**Location:** Parkside Auditorium

16:25 **KEY-THU-03**  
Regulatory gene networks in drought stress response and tolerance  
**Shinozaki, K.** (Japan)

---

**Professor Kazuo Shinozaki**

Kazuo Shinozaki is the Director of the newly formed RIKEN Centre for Sustainable Resource Science (CSRS) at Yokohama, Japan. He is also director of the Gene Discovery Research Group within the Centre. He was formerly director of the RIKEN Plant Science Centre, one of the leading plant science centres. In the new Centre, his group is characterising plant genes with functions linked to quantitative improvements in plants and those with new functions for minimizing the effects of environmental stresses to achieve maximum productivity. Other targets of research include genes involved in photosynthesis and productions of useful metabolites. Over many years, his research has focussed on identifying key genes involved in improved productivity and abiotic stress tolerance using genomic based methods. Kazuo is the most highly cited plant scientist in the world.
THURSDAY 27 JUNE 2013

17:05 – 17:50

KEYNOTE LECTURE

17:05 – 17:10

Introduction
Dr Elizabeth Dennis, CSIRO Plant Industry, ACT

Location: Parkside Auditorium

17:10  KEY-THU-04

Retrograde signaling during development and high light stress

Professor Joanne Chory

Joanne Chory, a Professor in the Plant Biology Laboratory, is interested in identifying the mechanisms by which plants respond to changes in their light environment. She and her colleagues use genetic, genomic and biochemical approaches in the reference plant, Arabidopsis, to identify components of the phototransduction pathways, with emphasis placed on the events mediated through a family of red/far-red-light-absorbing receptors. Her laboratory has identified mutants in these photoreceptors and in nuclear-localized signal transduction components. Work in Dr. Chory's lab has also led to the discovery of a steroid hormone, brassinolide, which controls plant development in response to light, and has identified the plant steroid receptor and signaling pathway. Chory’s work has been recognised through many awards including the Genetics Society of America Medal (2012) and the Kumho Award in Plant Molecular Biology. She is a foreign associate of Académie des Sciences, France (2009) and a foreign member of the Royal Society, London (2011).

17:50 – 18:00

STUDENT & EARLY CAREER RESEARCHER POSTER PRIZE AWARDS / ICAR 2014 PRESENTATION

Chair: Professor Barry Pogson: Chair, ICAR 2013

Location: Parkside Foyer

18:30 – 23:15  CRUISE TO COCKTAIL DINNER
08:45 – 10:15

SYMPOSIUM 15

NATURAL VARIATION, EVOLUTION AND PHENOMICS II

*Sponsored by the Australian Plant Phenomics Facility*

Chairs: Dr Xavier Sirault, CSIRO Plant Industry, ACT
       Dr David Meinke, Oklahoma State University, USA

Location: Parkside 110A

08:45  SYM-15-01
Phenotyping technologies for quantitative analyses of Arabidopsis shoot and root system
Jansen, M., Nagel, K.A., Braun, S., Kastenholz, B., Schurr, U. and Fiorani, F. (Germany)

09:15  SYM-15-02
Phenotyping photosynthesis, biomass and growth in high throughput with model plants

09:40  SYM-15-03
Genetic architecture of drought tolerance in *A.thaliana*
Korte, A., Novikova, P., Korte, P. and Nordborg, M. (Austria)

09:55  SYM-15-04
Genetic basis of growing season adaptation in Arabidopsis: phenomics in climate chambers
Borevitz, J.O. (Australia)
08:45 – 10:15

SYMPOSIUM 16

BIOTIC INTERACTIONS

Chairs: Dr Jeff Ellis, CSIRO, Plant Industry, ACT
Dr Simon Williams, University of Queensland, QLD

Location: Parkside 110B

08:45 SYM-16-01
Mechanisms by which the paired immune receptors, RPS4 and RRS1, function in *Arabidopsis thaliana*
Sohn, K.H., Segonzac, C., Rallapalli, G., Sarris, P., Woo, J., Williams, S., Paek, K., Kobe, B. and Jones, JD. (United Kingdom, New Zealand, Republic of Korea and Australia)

09:15 SYM-16-02
Analysing plant defence responses in Arabidopsis with a focus on the fungal pathogen, *Rhizoctonia solani*

09:40 SYM-16-03
Chemical genetic analysis of MAMP-triggered calcium signatures
Maintz, J., Kombrink, E. and Panstruga, R. (Germany)

09:55 SYM-16-04
Multiple resistance pathways elicited by TMV in *N* gene tobacco
Yoon, J.-Y., Baek, E. and Palukaitis, P. (Korea)

10:15 – 10:45  Morning Tea
Location: Parkside Foyer
10:45 – 12:15

SYMPOSIUM 17

PROTEINS AND POSTTRANSLATIONAL REGULATION

Sponsored by the Australian Society for Biochemistry and Molecular Biology

Chairs: A/Prof Helen Irving, Monash Institute of Pharmaceutical Sciences, VIC
Professor Harvey Millar, University of Western Australia, WA

Location: Parkside 110A

10:45 SYM-17-01
Immune signalling by redox-based, post-translational protein modifications
Spoel, S.H. (United Kingdom)

11:15 SYM-17-02
Independent evolutionary recruitment of asparaginyl endopeptidase for peptide cyclisation
Mylne, J.S. (Australia)

11:40 SYM-17-03
Analysis of protein domains involved in tonoplast targeting and function of the two-pore channel TPC1
Larisch, N.M., Schulze, C. and Dietrich, P. (Germany)

11:55 SYM-17-04
Protein level regulation in leaves
Svozil, J., Gruissem, W. and Baerenfaller, K. (Switzerland)
10:45 – 12:15

SYMPOSIUM 18

SIGNALING AND GENE REGULATION

Chairs: Dr Chris Helliwell, CSIRO Plant Industry, ACT
Dr John Golz, University of Melbourne, VIC

Location: Parkside 110B

10:45 SYM-18-01
Identification and characterisation of the regulatory pathways for alternative oxidase in plants
Whelan, J. (Australia)

11:15 SYM-18-02
Determinants beyond complementarity and efficient cleavage are required for strong microR159 efficacy in Arabidopsis

11:40 SYM-18-03
Regulation of flowering by Trehalose-6-phosphate signalling

11:55 SYM-18-04
Interplay between the shoot meristem and lateral organ boundary is essential for regulating shoot architecture

12:15 – 12:45 Lunch
Location: Parkside Foyer
FRIDAY 28 JUNE 2013

12:45 – 14:15

WORKSHOP 7

GENETIC TRAITS FROM PHENOMICS DATA

Chairs: Dr Xavier Sirault, CSIRO Plant Industry, ACT
        A/Prof Justin Borevitz, Australian National University, ACT

Location: Parkside 110A

12:45 WORK-07-01
Introduction
Borevitz, J. (Australia)

12:50 WORK-07-02
High-throughput, image-based analysis of traits in model plants

13:10 WORK-07-03
High throughput phenotyping of model plants for biomass accumulation and photosynthetic efficiency traits
Poire, R., Sirault, X., Watt, M., Bragg, J., Vogel, J. and Furbank, R. (Australia and USA)

13:30 WORK-07-04
Positional cloning of a protein kinase involved in Na\(^+\) exclusion in *Arabidopsis*, leading to improved salt tolerance in barley in the field

13:50 WORK-07-05
Genetic dissection of plant development using GWAS and QTL analyses in *Arabidopsis thaliana*
Kooke, R., Fusari, C.M., Becker, F., Vreugdenhil, D., Stitt, M., Sulpice, R. and Keurentjes, J.J.B. (The Netherlands and Germany)

14:10 FINAL DISCUSSION
FRIDAY 28 JUNE 2013

12:45 – 14:15

WORKSHOP 8

TEACHING WORKSHOP FOR EARLY CAREER SCIENTISTS

Chairs: Dr Mary Williams, American Society of Plant Biologists, The Plant Cell, USA
Dr Gonzalo Estavillo, Australian National University, ACT

Location: Parkside 110B

12:45 WORK-08-01
How to be a great teacher: Tips and resources for plant scientists
Williams, M. and Estavillo, G. (United Kingdom and Australia)

13:30 WORK-08-02
Arabidopsis detectives: innovative approach to research-led driven teaching
Estavillo, G.M., Mathesius, U., Beckmann, E. and Nicotra, A. (Australia)

13:45 FINAL DISCUSSION

14:15 – 14:30 Afternoon Tea
Location: Parkside Foyer
FRIDAY 28 JUNE 2013

14:30 – 16:00

WORKSHOP 9

PLANT NUTRITION IN THE FACE OF IMPENDING GLOBAL RESOURCE LIMITATION OPPORTUNITIES FOR MODEL PLANT RESEARCH

Sponsored by University of Western Australia

Chairs: Dr Ricarda Jost, University of Western Australia, WA
       Dr Hideki Takahashi, Michigan State University, USA
       Dr Laurent Nussaume, CEA, France

Location: Parkside 110A

14:30 WORK-09-01
Too many variables - how to choose parameters for nutrient signalling experiments
Jost, R. (Australia)

14:45 WORK-09-02
Regulation of high affinity phosphate transporters in Arabidopsis

15:00 WORK-09-03
Transcriptional and post-transcriptional mechanisms for homeostatic control of sulfate transport and assimilation in plants
Takahashi, H. and Kopriva, S. (USA and UK)

15:15 WORK-09-04
Nitrate sensing and signaling in Arabidopsis thaliana
Nacry, P. (France)
15:30 WORK-09-05
Roles of ubiquitination in the control of phosphate starvation responses in Arabidopsis
Rojas-Triana, M., Iglesias, J., Trigueros, M., Paz-Ares, J. and Rubio, V. (USA and Spain)

15:45 WORK-09-06
Unraveling signaling pathways involved in nutrient acquisition via metabolomics and systems biology driven approaches
Van der Merwe, M.J., Lloyd, J.R. and Whelan, J.S. (Australia and South Africa)
FRIDAY 28 JUNE 2013

14:30 – 16:00

WORKSHOP 10

USING PROTEOMICS TO IDENTIFY RECEPTOR COMPLEXES AND SIGNALING EVENTS

Chairs: Dr Joshua Heazlewood, Lawrence Berkeley National Laboratory, USA
Professor Harvey Millar, University of Western Australia, WA

Location: Parkside 110B

14:30 WORK-10-01
Introduction: Proteomic resources and the Arabidopsis proteomics subcommittee
Heazlewood, J.L. (USA)

14:50 WORK-10-02
Integrating genetics and phosphoproteomics reveals a protein phosphorylation network in the Abscisic acid signaling pathway in Arabidopsis

15:05 WORK-10-03
Redox-regulation of the SUMO E2 in plant immunity
Skelly, M.J., Malik, S.I., Spoel, S.H. and Loake, G.J. (United Kingdom)

15:20 - WORK-10-04
Proteome and metabolome profiling of cytokinin action in Arabidopsis identifying both distinct and similar responses to cytokinin down- and up-regulation
Cerny, M., Kuklova, A., Hoehenwarter, W., Fragner, L., Novak, O., Rotkova, G., Strnad, M., Weckwerth, W. and Brzobohaty, B. (Czech Republic and Austria)
15:35  WORK-10-05
Proteomics of model plant systems to identify mechanisms essential for plant salt tolerance
Vera-Estrella, R., Pantoja, O. and Barkla, B.J. (Mexico)

15:50  FINAL DISCUSSION

16:00 – 17:00  Closing and Farewell Drinks
Location:  Parkside Foyer
Posters are available for viewing in the Parkside Foyer of the Sydney Convention Centre from 10:00 on Tuesday through to 16:30 on Thursday. All posters are on display for three full days (Tuesday through to Thursday).

Posters will be attended by the presenting author from 18:15 to 19:15 on both the Tuesday and Wednesday evenings at the mixer/cocktail functions. The odd numbered posters will be manned on the Tuesday and the even numbered posters on the Wednesday. The day and time of presentation is also listed below in the poster reference number.

<table>
<thead>
<tr>
<th>Posters 001 – 011</th>
<th>Evolution and Natural Variation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Posters 012 – 035</td>
<td>Small RNA, RNA and Epigenetics</td>
</tr>
<tr>
<td>Posters 036 – 102</td>
<td>Development</td>
</tr>
<tr>
<td>Posters 103 – 109</td>
<td>Hormones</td>
</tr>
<tr>
<td>Posters 110 – 144</td>
<td>Cell and Organelle Biology</td>
</tr>
<tr>
<td>Posters 145 – 198</td>
<td>Intracellular Signaling</td>
</tr>
<tr>
<td>Posters 199 – 203</td>
<td>Cell to Cell Communication</td>
</tr>
<tr>
<td>Posters 204 – 248</td>
<td>Abiotic Stress</td>
</tr>
<tr>
<td>Posters 249 – 276</td>
<td>Biotic Stress / Interactions</td>
</tr>
<tr>
<td>Posters 277 – 291</td>
<td>Energy Biology and Metabolism</td>
</tr>
<tr>
<td>Posters 292 – 297</td>
<td>Photosynthesis and Water</td>
</tr>
<tr>
<td>Posters 298 – 299</td>
<td>Phenomics</td>
</tr>
<tr>
<td>Posters 300 – 310</td>
<td>Proteins and Posttranslational Regulation</td>
</tr>
<tr>
<td>Posters 311 – 322</td>
<td>Emerging Technologies and Systems Biology</td>
</tr>
<tr>
<td>Posters 323 – 325</td>
<td>Translational Biology</td>
</tr>
<tr>
<td>Posters 326 – 327</td>
<td>Education</td>
</tr>
<tr>
<td>Posters 328 – 351</td>
<td>Late Posters</td>
</tr>
</tbody>
</table>

Evolution and Natural Variation
Posters 001 - 011

**POS-TUE-001 18:15 - 19:15**
Wild populations of *Arabidopsis thaliana* from South America: a study of physiology and genetic diversity
Kasulin, L., Rowan, B., Sanchez, S.E., Wang, X., Leon, R., Yanovsky, M., Weigel, D., Borevitz, J. and Botto, J. (Argentina and Australia)
POS-WED-002  18:15 - 19:15
Using Bayesian methods to reveal the evolutionary patterns of male fertility restorer (Rf) genes
Boykin, L.M. and Small, I. (Australia)

POS-TUE-003  18:15 - 19:15
Looking at patterning from an evolutionary perspective
Chopra D., Willing, E.M., Schneeberger, K., Albani, M., Coupland, G., Schrader, A. and Hülskamp, M. (Germany)

POS-WED-004  18:15 - 19:15
The genotype data are used for preservation and quality control of Arabidopsis wild type strains and related species at RIKEN BRC

POS-TUE-005  18:15 - 19:15
Natural variation of a gene network regulating trichome patterning

POS-WED-006  18:15 - 19:15
Comparative analysis of miRNAs between the *Brassica rapa* and *Arabidopsis thaliana* genomes

POS-TUE-007  18:15 - 19:15
Natural variation in thermal responses of Arabidopsis
Sanchez-Bermejo, E., Zhu, W., Tasset, C., Sundaramoorthi, V., Tabit, A., Sureshkumar, S. and Balasubramanian, S. (Australia)

POS-WED-008  18:15 - 19:15
Functional analysis of a cryptic intron in *Arabidopsis thaliana*
Sureshkumar, S., Taskar, E. and Balasubramanian, S. (Australia)

POS-TUE-009  18:15 - 19:15
Phenotypic variation in a local island population of *Arabidopsis thaliana*
Tabib, A.R., Balasubramanian, S. and Spillane, C. (Australia and Ireland)
POSTERS

POS-WED-010  18:15 - 19:15
Triplet repeats and phenotypic variation in *Arabidopsis thaliana*
Vishwanathan, S., Sanchez-Bermejo, E. and Balasubramanian, S. (Australia)

POS-TUE-011  18:15 - 19:15
A cryptic phenotypic variation unmasked under higher temperature in *Arabidopsis thaliana*
Zhu, W.S., Bulach, D., Seemann, T. and Balasubramanian, S. (Australia)

Small RNA, RNA and Epigenetics
Posters 012 – 035

POS-WED-012  18:15 - 19:15
Analysis of the epigenome in Arabidopsis hybrids during embryo development

POS-TUE-013  18:15 - 19:15
Exploring the role of RNA 5-methylcytosine in *Arabidopsis thaliana*
Burgess, A., David, R., Sibbritt, T., Priess, T. and Searle, I. (Australia)

POS-WED-014  18:15 - 19:15
miR396 repression of GRFS inhibits cell proliferation by UV-B radiation in *Arabidopsis thaliana* leaves
Casadevall, R., Rodriguez Virasoro, R., Manuel Debernardi, J., Palatnik, J. and Casati, P. (Argentina)

POS-TUE-015  18:15 - 19:15
Rapid recovery gene silencing: the role of small RNAs and RNA decay in stress memory and recovery

POS-WED-016  18:15 - 19:15
All microRNA target sites are equal but some are more equal than others: investigating the influence of target site context on microRNA efficacy
Deveson, I.W. and Millar, A.A. (Australia)
POS-TUE-017  18:15 - 19:15
Measuring the duration of winter: it's all in the chromatin
Finnegan, E.J., Helliwell, C.A., Sheldon, C.C. and Dennis, E.S. (Australia)

POS-WED-018  18:15 - 19:15
Mobility of phosphate starvation-responsive microRNAs in
*Arabidopsis thaliana*
Huen, A.K., Rodriguez-Medina, C., Ho, A., Atkins, C.,
Waterhouse, P. and Smith, P.M.C. (Australia and France)

POS-TUE-019  18:15 - 19:15
A nature of a stress-activated transposon and the effect on the host genome
Ito, H., Kim, J.M., Matsunaga, W., Toyoda, T., Endo, T.A.,
Ishida, J., Morosawa, T. and Seki, M. (Japan)

POS-WED-020  18:15 - 19:15
A role for long non-coding RNAs in Arabidopsis seed development
Jones, A., Lohe, A., Helliwell, C. and Searle, I. (Australia)

POS-TUE-021  18:15 - 19:15
Secondary structure of miR156 precursors is important in ambient temperature-responsive miRNA biogenesis in flowering time regulation in *Arabidopsis thaliana*
Kim, W., Jun, A.R., Kim, H.E., Lee, J.H. and Ahn, J.H. (South Korea)

POS-WED-022  18:15 - 19:15
Characterising mutants in root-to-shoot mobile silencing
Liang, D., Nakasugi, K., Talbot, M.J., White, R.G. and Waterhouse, P.M. (Australia)

POS-TUE-023  18:15 - 19:15
Targeted analysis of parent-of-origin dependent allelic expression in Arabidopsis endosperm
Day, R.C. and Macknight, R.C. (New Zealand)

POS-WED-024  18:15 - 19:15
RNA structure clustering: a path to find novel genetic and epigenetic regulatory modules
Marri, S., Pogson, B.J., Aharoni, A., Gregory, B.D. and Cazzonelli, C. (Australia, Israel and USA)
POSTERS

POS-TUE-025  18:15 - 19:15
Endogene protection from RNA silencing
McHale, M., Eamens, A.L., Finnegan, E.J. and Waterhouse, P.M. (Australia)

POS-WED-026  18:15 - 19:15
Tripogon loliiformis miRNAome: The role of microRNAs in stress response in resurrection plants
Njaci, I., Williams, B., Dickman, M.B., Zhang, X. and Mundree, S.G. (Australia and USA)

POS-TUE-027  18:15 - 19:15
Quantitative proteomic analysis of Arabidopsis thaliana double-stranded RNA binding2 (DRB2) knockout mutant plants
Reis, R.S., Hart-Smith, G., Eamens, A., Wilkins, M. and Waterhouse, P.M. (Australia)

POS-TUE-027A  18:15 - 19:15
Genome-wide distribution of Arabidopsis linker histones in plants grown under normal and limited light conditions

POS-WED-028  18:15 - 19:15
Investigating the synergy between ribonucleases and pentatricopeptide repeat proteins within higher plant chloroplasts
Sharwood, R.E., Luro, S. and Stern, D.B. (Australia and USA)

POS-TUE-029  18:15 - 19:15
Poly(A) specific ribonucleases, AtCCR4s are important for the starch metabolism
Suzuki, Y., Hirai, M.Y., Green, P.J. Yamaguchi, J. and Chiba, Y. (Japan)

POS-WED-030  18:15 - 19:15
Transcriptome analysis of Arabidopsis hybrids during early embryo development
Trigueros, M., Alonso-Peral, M.M., Sherman, B., Taylor, J., Peacock, W.J. and Dennis, E.S. (Australia)

POS-TUE-031  18:15 - 19:15
PsRobot: a web-based plant small RNA meta-analysis toolbox
**POS-WED-032  18:15 - 19:15**  
Wide-spread long non-coding RNAs (IncRNAs) as endogenous target mimics (eTMs) for microRNAs in plants  

**POS-TUE-033  18:15 - 19:15**  
Phosphorylation of UPF1 is essential for NMD in *Arabidopsis*  
Wawer, I., Kerenyi, F., Sikorski, P.J., Kufel, J. and Silhavy, D. (Poland and Hungary)

**POS-WED-034  18:15 - 19:15**  
Visualization of mRNAs *in vivo* in *Arabidopsis* using the modified MS2 system  
Xu, M., White, R. and Helliwell, C. (Australia)

**POS-TUE-035  18:15 - 19:15**  
Plant microRNAs display differential 3’-truncation and tailing, modifications which are Argonaute1-dependent and conserved across species  

**Development**  
Posters 036 – 102

**POS-WED-036  18:15 - 19:15**  
Development of pavement cell shape in Arabidopsis cotyledons  
Armour, W.J., Barton, D.A., Law, A. and Overall, R.L. (Australia)

**POS-TUE-037  18:15 - 19:15**  
Identification of *AtMYB80* downstream target genes involved in pollen development using ChIP  
Avdic, A., Li, S.F. and Parish, R.W. (Australia)

**POS-WED-038  18:15 - 19:15**  
EMF1 regulates vernalization signaling by the repression of *VIN3*  
Bae, J., Yu, J., Shin, J. and Lee, I. (Korea)
WDR55 interacts with DDB1 and is required for apical patterning in the *Arabidopsis* embryo

Bjerkan, K.N., Jung-Romeo, S., Gregis, V., Jurgens, G., Kater, M.M., Genschik, P. and Grini, P.E. (Norway, France, Italy and Germany)

*Short Internodes/Stylish* gene family members are important for development of various organs in Arabidopsis thaliana

Cierlik, I., Baylis, T., Cleas, A., Staldal, V., Mattsson, J. and Sundberg, E. (Sweden and Canada)

Identification of novel components of the genetic pathways controlling shoot branch outgrowth


Identification and next generation mapping of an Arabidopsis EMS mutant that displays lengthened plastochron and pleiotropic effects on reproductive organs

David, R., Lim, H.M. and Searle, I.R. (Australia)

Regulation of the expression of *VND7* gene encoding a master regulator for xylem vessel formation by a GATA type transcription factor

Endo, H., Yamaguchi, M., Kato, K., Yoneda, A. and Demura, T. (Japan)

*AtNHX5* and *AtNHX6* are required for lateral root development

Ford, B.A., Das, P. and Gendall, A.R. (Australia)

Transcriptional regulation of the Medicago *SOC1* gene family for controlling flowering

Fudge, J.B., Lee, R.H. and Macknight, R.C. (New Zealand)
POS-WED-046  18:15 - 19:15
Two MADS-box genes preponderantly expressed in root, XAANTAL1 and 2 (AGL12 and AGL14) participate in flowering transition

POS-TUE-047  18:15 - 19:15
Control of leaf vein formation by auxin signalling
**Gardiner, J.,** Donner, T.J. and Scarpella, E. (Canada)

POS-WED-048  18:15 - 19:15
Acceleration of flowering by Cape Verde Islands alleles of FLOWERING H is dependent on the floral promoter FD
**Seedat, N.,** Dinsdale, A., Ong, E.-K. and **Gendall, A.R.** (Australia)

POS-TUE-049  18:15 - 19:15
Regulation of shoot apical meristem and cotyledon formation by SEUSS and SEUSS-LIKE 2
**Lee, J.E.** and **Golz, J.F.** (Australia)

POS-WED-050  18:15 - 19:15
Bridging signals from receptors to MAPK kinases in stomatal development
**Ho, C.,** Paciorek, T. and Bergmann, D. (USA)

POS-TUE-051  18:15 - 19:15
Sterols are required for the cell fate determination of the stomatal lineage in Arabidopsis
**Qian, P.,** Han, B., Forestier, E., Hu, Z., Gao, N., Schaller, H., Li, J. and **Hou, S.** (China and France)

POS-WED-052  18:15 - 19:15
SH3 domain-containing protein (SH3P) family molecules are involved in the root gravitropic response in Arabidopsis

POS-TUE-053  18:15 - 19:15
Changes in distribution of cell wall polysaccharides in floral and fruit abscission zones during fruit development in tomato
**Terao, A.,** Hyodo, H., Satch, S. and **Iwai, H.** (Japan)
POS-WED-054 18:15 - 19:15
Promotion of chloroplast proliferation upon enhanced post-mitotic cell expansion in leaves

POS-TUE-055 18:15 - 19:15
Variation of the level of the heterosis among F₁ hybrid individuals in Arabidopsis thaliana
Kawanabe, T., Saeki, N. and Fujimoto, R. (Japan)

POS-WED-056 18:15 - 19:15
Function of kip-related proteins of Arabidopsis during plant development
Jun, S.E., Hwang, J.Y., Kim, M.J., Kwon, H.I., Umeda, M. and Kim, G.T. (South Korea and Japan)

POS-TUE-057 18:15 - 19:15
Large scale gene expression analysis in ABC model homeotic mutants
Klepikova, A.V., Logacheva, M.D. and Penin, A.A. (Russia)

POS-WED-058 18:15 - 19:15
Regulation of flowering in Arabidopsis by VOZ transcription factors
Kumar, S. and Choudhary, P. (India)

POS-TUE-059 18:15 - 19:15
Live-cell analysis of embryogenesis in Arabidopsis thaliana
Kurihara, D., Gooh, K. and Higashiyama, T. (Japan)

POS-WED-060 18:15 - 19:15
RAPTOR, a highly conserved element of the eukaryotic TOR kinase growth promoting complex, is not essential for plant survival
Larking, A., Rexin, D. and Veit, B. (New Zealand)

POS-TUE-061 18:15 - 19:15
The new finding of Arabidopsis GRF-INTERACTION FACTOR gene family in development of carpel and ovule
Lee, B.H. and Kim, J.H. (Korea)

POS-WED-062 18:15 - 19:15
MADS-Box protein complexes act as thermal mediators in different ambient temperature regimes
Lee, J.H., Kim, J.J., Hong, S.M. and Ahn, J.H. (South Korea)
POSTERS

POS-TUE-063  18:15 - 19:15
SERKs control embryo development via MAPK signaling pathway in *Arabidopsis thaliana*

POS-WED-064  18:15 - 19:15
Regulation of the *MLP* gene family members, by two layers of tissue specific degradation, play a developmental role in *Arabidopsis*
Litholdo Junior, C.G., Parker, B., Eamens, A., Cordwell, S. and Waterhouse, P. (Sydney and Brazil)

POS-TUE-065  18:15 - 19:15
Epigenetic control of callus regeneration in *Arabidopsis*
Liu, S., He, C., Huang, H. and Xu, L. (China)

POS-WED-066  18:15 - 19:15
The transcriptional network analysis of adaxial-abaxial polarity in *Arabidopsis* leaf development
Liu, T., Reinhart, B., Magnani, E., Huang, T., Kerstetter, R. and Barton, K. (USA)

POS-TUE-067  18:15 - 19:15
Functional characterization of pollen-specific kinases through the generation of knock-down transgenic plants expressing hairpin-RNAs (hpRNAs) and amiRNAs
Lucca, N., Ibeas, M.A., Hafidh, S., Twell, D. and Leon, G. (Chile and United Kingdom)

POS-WED-068  18:15 - 19:15
A ROS responsible transcription factor regulates root growth via ABA signalling
Mabuchi, K., Busch, W., Benfey, P.N. and Tsukagoshi, H. (Japan, Austria and USA)

POS-TUE-069  18:15 - 19:15
Photoperiodic compensation: a mechanism underlying regulation of chlorophyll amount by circadian clock in *Arabidopsis thaliana*
Mizoguchi, T. and Miyata, K. (Japan)

POS-WED-070  18:15 - 19:15
Characterisation of molecular factors determining asymmetry in flowers of *Arabidopsis thaliana*
Mohrholz, A. and Harter, K. (Germany)
POSTERS

POS-TUE-071  18:15 - 19:15
The regulatory role of aAtMYB5 in seed coat and trichome development
Napoli, R., Li, S.F. and Parish, R. (Australia)

POS-WED-072  18:15 - 19:15
The tale of GalT14 and its possible role in AGP glycan biosynthesis in Arabidopsis thaliana
Narciso, J.O., Doblin, M.S., Zeng, W. and Bacic, A. (Australia)

POS-TUE-073  18:15 - 19:15
Approaches to integrate nitrogen signals into the flowering network
Olas, J.J., Schlereth, A., Schmid, M., Stitt, M. and Wahl, V. (Germany)

POS-WED-074  18:15 - 19:15
Development of vegetative axillary branches after vernalization in Arabis alpina, perennial plant
Park, J.Y. and Lee, I (Korea)

POS-TUE-075  18:15 - 19:15
Use of a novel fluorescent based system to investigate protein-protein interactions of petal loss
Quon, T. and Smyth, D.R. (Australia)

POS-WED-076  18:15 - 19:15
Tissue specific requirement of TOR signalling in plants
Rexin, D. (New Zealand)

POS-TUE-077  18:15 - 19:15
Characterization of root cell identity through genomic localization of T-DNA insertions in Arabidopsis thaliana GAL4-GFP enhancer trap lines
Rueda, I.D. and Zavala, M.E. (USA)

POS-WED-078  18:15 - 19:15
Rapid screening for photo-protective mechanism in Arabidopsis using fluorescence imaging
Rungrat, T., Wilson, P., Borevitz, J. and Pogson, B. (Australia)

POS-TUE-079  18:15 - 19:15
Transcriptional control of root cap differentiation
Rymen, B., Mitsuda, N., Matsui, M., Ohme-Takagi, M. and Sugimoto, K. (Japan)
POSTERS

POS-WED-080  18:15 - 19:15  
A larger cotyledon area after germination is a common phenomenon in heterotic F1 of *Arabidopsis thaliana* and Chinese cabbage  

POS-TUE-081  18:15 - 19:15  
The DUF642 protein *At2g41800* localizes to preprophase band, phragmoplast and cell wall in synchronized root meristem cells of *Arabidopsis thaliana*  

POS-WED-082  18:15 - 19:15  
LSM proteins provide accurate splicing and decay of selected transcripts to ensure normal Arabidopsis development  

POS-TUE-083  18:15 - 19:15  
The regulation of grain size in *Brachypodium distachyon*  
**Shaw, L.M., Allen, S., Whan, A., Bischof, L. and Helliwell, C. (Australia)**

POS-WED-084  18:15 - 19:15  
The role of auxin and cytokinins in cambium development  
**Siligato, R., Ruzicka, K. and Mahonen, A.P. (Finland)**

POS-TUE-085  18:15 - 19:15  
Coordination of auxin sensing and meristem activity during development  
**Rast, M.I. and Simon, R. (Germany)**

POS-WED-086  18:15 - 19:15  
Characterization of genes involved in developmental changes in *Agave tequilana* by heterologous expression in *A. thaliana*  

POS-TUE-087  18:15 - 19:15  
Molecular cloning and functional analysis of the expansion gene *PdEXT* in *Populus deltoids*  
POSTERS

POS-WED-088  18:15 - 19:15
Molecular genetic analysis of PDF3, a transcription factor expressed specifically in the shoot epidermis
Sugihara, A. and Takahashi, T. (Japan)

POS-TUE-089  18:15 - 19:15
Translational regulation of the SAC51 mRNA by thermospermine
Takano, A., Ishitsuka, S., Ishii, N. and Takahashi, T. (Japan)

POS-WED-090  18:15 - 19:15
Relation between sepal boundary and petal primordium in Arabidopsis thaliana
Takeda, S., Hamamura, Y., Mitsuda, N., Noguchi, M., Aida, M. and Higashiyama, T. (Japan)

POS-TUE-091  18:15 - 19:15
Genetic screening for novel regulatory factors of secondary cell wall formation during xylem vessel cell differentiation in Arabidopsis
Takenaka, Y., Kawabe, H., Ohtani, M., Kato, K., Yoneda, A. and Demura, T. (Japan)

POS-WED-092  18:15 - 19:15
VND7-binding sequences revealed by fluorescence correlation spectroscopy
Tamura, T., Yamaguchi, M., Endo, H., Kato, K., Yoneda, A.. and Demura, T. (Japan)

POS-TUE-093  18:15 - 19:15
Regulation of plant epidermal cell differentiation by a tomato (Solanum lycopersicum) R3 MYB transcription factor
Tominaga-Wada, R., Nukumizu, Y., Sato, S. and Wada, T. (Japan)

POS-WED-094  18:15 - 19:15
Ploidy-cell size relationship is context-dependent in Arabidopsis
Tsukaya, H., Katagiri, Y., Hasegawa, J. and Matsunaga, S. (Japan)

POS-TUE-095  18:15 - 19:15
Differential phase shift in clock core components alters multiple hormone signaling and reduces coordination for growth and leaf movement
Bours, R., Kohlen, W., Van Zanten, M., Pierik, R., Delatte, T., Bouwmeester, H. and van der Krol, A. (The Netherlands)
POS-WED-096 18:15 - 19:15
The *Arabidopsis* leaf transcriptome carta: dynamic landscapes of multi-dimensional transcriptome along lifespan

POS-TUE-097 18:15 - 19:15
Wound-induced auxin flux triggers stem cell fate transition for de novo root organogenesis in Arabidopsis
Liu, J., Sheng, L., Huang, H. and Xu, L. (China)

POS-WED-098 18:15 - 19:15
Revealing the identity of apple fruit flesh
Yao, J.L., Tomes, S., Luo, Z., Karunairetnam, S., Macdiarmid, R. and Gleave, A.P. (New Zealand)

POS-TUE-099 18:15 - 19:15
A rice TCP transcription factor regulates tiller formation and root growth

POS-WED-100 18:15 - 19:15
*SAC51* mediates thermospermine-dependent repression of xylem proliferation
Yoshimoto, K., Tong, W., Fukushima, H., Motose, H. and Takahashi, T. (Japan)

POS-TUE-101 18:15 - 19:15
The role of Arabidopsis *HAWAIIAN SKIRT (HWS)* gene in floral development and its orthologue gene *ERECT PANICLE3 (EP3)* in rice

POS-WED-102 18:15 - 19:15
ACR4-dependent stem cell division in Arabidopsis roots
Yue, K., Sandal, P., Rao, A.G., De Smet, I. and Beeckman, T. (Belgium, USA and United Kingdom)
Hormones
Posters 103 – 109

POS-TUE-103  18:15 - 19:15
Molecular mechanisms of ethylene-auxin interactions
Alonso, J.M., Merchante, C., Yun, J. and Stepanova, A.N. (USA)

POS-WED-104  18:15 - 19:15
How strigolactones impact root system architecture

POS-TUE-105  18:15 - 19:15
Jasmonic acid signaling is linked to auxin homeostasis through the modulation of YUCCA8 and YUCCA9 expression
Hentrich, M. and Pollmann, S. (Spain)

POS-WED-106  18:15 - 19:15
Brassinosteroids attenuate ABA-inhibited early seedling development via BES1/TPL/HDA19-induced epigenetic silencing of ABI3
Ryu, H., Bae, W. and Hwang, I. (South Korea)

POS-TUE-107  18:15 - 19:15
Comprehensive degradation analyses of AUX/IAAs in combination with several auxins and all TIR1/AFBs
Shimizu-Mitao, Y. and Kakimoto, T. (Japan)

POS-WED-108  18:15 - 19:15
Functional divergence between the strigolactone and kirrkin signalling components D14 and KAI2 pre-dates the emergence of seed plants
Sun, Y.K., Scaffidi, A., Flematti, G.R., Smith, S.M. and Waters, M.T. (Australia)

POS-TUE-109  18:15 - 19:15
The NAC-like gene gibberellin suppressing factor controls plant growth and development by regulating gibberellin metabolism pathway in Arabidopsis
Chen, J.-I. and Yang, C.-H. (Taiwan)
Characterisation of candidate *Glycine max* symbiosome membrane proteins


Natural variation in the developmental consequences of a loss of chloroplast translation in *Arabidopsis thaliana*

**Bryant, N.**, Wang, Y. and Meinke, D. (USA)

Crystal structure of rice importin-a and structural basis of its interaction with plant-specific nuclear localization signals


An essential role for Arabidopsis TRS33, a component of TRAPP in cell growth and organization in plant apical meristems


Asymmetric distribution of AtSWEET sucrose effluxers in phloem parenchyma transfer cells of Arabidopsis veins

Nguyen, S., Zimmerman, K., Arun Chinnappa, K.S., Collings, D. and **McCurdy, D.W.** (Australia and New Zealand)

The sensitivity of actin knockout mutants to microfilament disruption with latrunculin B depends on total actin expression levels

Buijs, G., Garrill, A. and **Collings, D.A.** (New Zealand and Netherlands)

Molecular mechanisms of PVC-vacuole trafficking in plant cells

**Cui, Y.** and Jiang, L. (Hong Kong, China)
POSTERS

POS-TUE-117  18:15 - 19:15
Role of sodium-proton antiporters \textit{nhx5} and \textit{nhx6} in the \textit{Arabidopsis} secretory pathway
\textbf{Ernest, J.R.} and \textbf{Gendall, A.R.} (Australia)

POS-WED-118  18:15 - 19:15
A role for the mitochondrial redox-related lea protein (SAG21/AtLEA5) in the regulation of plant growth and stress tolerance
\textbf{Foyer, C.H.}, \textbf{Theodoulou, F.L.} and \textbf{Rogers, H.} (United Kingdom)

POS-TUE-119  18:15 - 19:15
Characterisation of two glycosyl transferases involved in arabinogalactan-protein biosynthesis
\textbf{Hernandez-Sanchez, A.M.}, \textbf{Lampugnani, E.R.}, \textbf{Doblin, M.S.} and \textbf{Bacic, A.} (Australia)

POS-WED-120  18:15 - 19:15
Constructing the scaffold of the protein-building machinery: identification of a pentatricopeptide repeat protein involved in chloroplast ribosomal RNA biogenesis
\textbf{Liu, S.}, \textbf{Small, I.} and \textbf{Howell, K.A.} (Australia)

POS-TUE-121  18:15 - 19:15
Sharper - a computational tool for automatic quantitative analysis of cell shape and its use in a chemical genetics approach in plants

POS-WED-122  18:15 - 19:15
A novel mechanism of golgi retention for integral membrane proteins
\textbf{Gao, C.} and \textbf{Jiang, L.} (Hong Kong, China)

POS-TUE-123  18:15 - 19:15
Understanding of leaf senescence-associated NAC transcriptional regulatory network in \textit{Arabidopsis}

POS-WED-124  18:15 - 19:15
Understanding how RNA editing factors recognize their TNA targets
\textbf{Kindgren, P.}, \textbf{Yap, A.} and \textbf{Small, I.} (Australia)
POSTERS

POS-TUE-125 18:15 - 19:15
Functional characterization of mitochondrial outer membrane proteins in *Arabidopsis thaliana*
Kubiszewski-Jakubiak, S., Murcha, M., Duncan, O. and Whelan, J. (Australia)

POS-WED-126 18:15 - 19:15
A putative soluble trafficking component might play a novel role as a mediator in post-golgi trafficking of ion exchangers under salinity stress in *Arabidopsis thaliana*
Kwon, Y. and Hwang, I. (Korea)

POS-TUE-127 18:15 - 19:15
A GT47 family glycosyl transferase from *Nicotiana* pollen mediates the synthesis of (1,5)-a-L-arabinan when expressed in *Arabidopsis thaliana*

POS-WED-128 18:15 - 19:15
The molecular mechanism of ELF4 to regulate GI sub-nuclear distribution
Lim, J., Yeom, M., Kim, H., Kim, Y. and Nam, H.G. (Republic of Korea)

POS-TUE-129 18:15 - 19:15
Characterising *Arabidopsis* nitrilase family and 14-3-3 protein interactions
Man, J., Li, R., Van Der Kwast, M., Martin, T. and Millar, H. (Australia)

POS-WED-130 18:15 - 19:15
Understanding the genetic basis for the structural diversity of the hemicellulose xyloglucan
Mansoori, N., Schultink, A. and Pauly, M. (USA)

POS-TUE-131 18:15 - 19:15
Does editing of the *rpoC1* transcript regulate activity of the plastid-encoded RNA polymerase?
POS-WED-132  18:15 - 19:15
Characterisation of transport proteins on the symbiosome membrane of soybean (*Glycine max*)
Mohd Noor, S.N., Clarke, V., Overall, R., Day, D. and Smith, P. (Australia)

POS-TUE-133  18:15 - 19:15
Functional analysis of ribosome assembly cofactors related to 30S ribosome subunits in chloroplast
Motohashi, R., Suzuki, K., Ichinoise, M. and Shinozaki, K. (Japan)

POS-WED-134  18:15 - 19:15
The specific role of mitochondrial protein import for germination
Wang, Y., Law, S.I., Narsai, R., Whelan, J. and Murcha, M.W. (Australia)

POS-TUE-135  18:15 - 19:15
Regulation of *A. thaliana* mesophyll SV channels by phosphoinositides
Perez, V., Ovalle-Garcia, E., Antillon, A., Ortega-Blake, I. and Pantoja, O. (Mexico)

POS-WED-136  18:15 - 19:15
FAX1, a novel membrane protein in the chloroplast inner envelope involved in export of fatty acids and/or derivatives
Li, N., Guegel, I., Philippar, K. and Soll, J. (Germany)

POS-TUE-137  18:15 - 19:15
Multiplicity of the EXO70 exocyst subunit in Arabidopsis
Synek, L., Cvrckova, F., Pecenkova, T., Kulich, I., Soukupova, H. and Zarsky, V. (Czech Republic)

POS-WED-138  18:15 - 19:15
EXPO function in plants
Wang, J., Ding, Y., Wang, J.Q., Lo, S.W. and Jiang, L.W. (Hong Kong, China)

POS-TUE-139  18:15 - 19:15
Biogenesis of EXPO in plant cells
Wang, X.F., Zeng, Y.L. and Jiang, L.W. (Hong Kong, China)
POSTERS

POS-WED-140  18:15 - 19:15
Acquisition, conservation, and loss of dual-targeted proteins in land plants
Xu, L., Carrie, C., Law, S.R., Murcha, M.W. and Whelan, J. (Australia and Germany)

POS-TUE-141  18:15 - 19:15
The last of the editors
Yap, A., Kindgren, P., Colas Des Francs-Small, C. and Small, I. (Australia)

POS-WED-142  18:15 - 19:15
Functional characterization of mitochondrial mechanosensitive channel MSL1 in Arabidopsis thaliana
Yomogihara, S., Harada, N., Asakura, C., Yamaguchi, S., Ichikawa, M., Furuichi, T. and Shiina, T. (Japan)

POS-TUE-143  18:15 - 19:15
From root hairs to spinal neurons: tubular ER network and directional cell growth
Qi, X., Doyle, C., Ma, V. and Zheng, H. (Canada)

POS-WED-144  18:15 - 19:15
Autophagy and autophagosome in plants
Zhuang, X.H. and Jiang, L.W. (Hong Kong, China)

Intracellular Signaling
Posters 145 – 198

POS-TUE-145  18:15 - 19:15
Characterisation of a pectin methylesterase inhibitor involved in cell wall development and mucilage structure in the Arabidopsis seed coat
Allen, P.J., Li, S.F. and Parish, R.W. (Australia)

POS-WED-146  18:15 - 19:15
Characterization of underground stolon "rhizome" of Cardamine leucantha [Brassicaceae] by transcriptome analysis
Identification of two MYB-related transcription factors, At4g09450 and At2g38090, as putative regulators of wall ingrowth deposition in phloem parenchyma transfer cells


Metabolic oscillators: linking NAD+ and the circadian clock

**Bell, L.J., Schulz, P., Hannah, M.A. and Webb, A.R.R. (United Kingdom and Belgium)**

Transported signaling molecules that regulate root stem cell homeostasis

**Berckmans, B., Stahl, Y. and Simon, R. (Germany)**

Action of NF-Y transcription factors in plant stress responses

**Breeze, E., Buchanan-Wollaston, V., Denby, K. and PRESTA Consortium U.O.W. (United Kingdom)**

The LRR ectodomain of the receptor kinase FLS2 not only senses flagellin but also contributes to receptor activation

**Bittel, P., Jehle, A.K., Meuller, K., Boller, T., Felix, G. and Chinchilla, D. (Switzerland and Germany)**

Spatio-temporal transcriptomic responses to nitrate in Arabidopsis roots

**Contreras-Lopez, O., Vidal, E.A., Moyano, T.C. and Gutierrez, R.A. (Chile)**

The Arabidopsis cyclic nucleotide interactome suggests a role for cyclic nucleotides in the regulation of photorespiration during the defense response

**Donaldson, L.E., Gehring, C.A. and Meier, S.K. (Saudi Arabia)**

The influence of auxin transport inhibitors on chloroplast movement and phototropin expression in *Arabidopsis thaliana*

**Eckstein, A. and Gabrys, H. (Poland)**
POSTERS

POS-TUE-155  18:15 - 19:15  
Ambient temperature response and serene/arginine protein mediated alternative splicing in *Arabidopsis thaliana*  
_Fulton, L.M._ and Balasubramanian, S. (Australia)

POS-WED-156  18:15 - 19:15  
Transcriptome analysis of desiccation tolerance in seeds of *Arabidopsis thaliana*  

POS-TUE-157  18:15 - 19:15  
Nitrate regulatory mechanisms involved in the control of flowering time  
_Gras, D.E.,_ Mancilla, Y. and Gutiérrez R.A. (Chile)

POS-WED-158  18:15 - 19:15  
ELF3 as a repressive hub: alternative ELF3 repressive complexes across temperature  
_Griffiths, J.,_ Smith, R.W., Stewart, K.L., Steel, G., MacGregor, D.R. and Halliday, K.J. (United Kingdom)

POS-TUE-159  18:15 - 19:15  
Interaction of nitrogen forms and auxin to promote root formation as revealed by the analysis of an Arabidopsis ammonium transporter mutant  
_Hacisalihoglu, G.,_ Araya, T., Von Wiren, N. and Takahashi, H. (USA and Germany)

POS-WED-160  18:15 - 19:15  
Functional promoter analysis of *GRXC9*, a gene activated by a non-canonical salicylic acid-dependent pathway in Arabidopsis  
_Herrera, A.,_ Carvallo, L. and Holuigue, L. (Chile)

POS-TUE-161  18:15 - 19:15  
Hunting for genes that link _Cis_-carotenes to chloroplast development  
_Hou, X.,_ Cazzonelli, C.I. and Pogson, B.J. (Australia)

POS-WED-162  18:15 - 19:15  
Differential regulation of Arabidopsis plastid gene expression and RNA editing in non-photosynthetic tissues  
Tseng, C.C., Lee, C.J., Chung, Y.T., Sung, T.Y. and _Hsieh, M.H._ (Taiwan)
POSTERS

POS-TUE-163 18:15 - 19:15
Identification of protein-protein interactions regulating sodium-proton antiporter activity
Huynh, D. and Gendall, A.R. (Australia and Vietnam)

POS-WED-164 18:15 - 19:15
A unique approach to identify and validate novel regulatory peptide-coding genes
Imin, N., Ogilvie, H., Delay, C., Frickey, T. and Djordjevic, M. (Australia and Germany)

POS-TUE-165 18:15 - 19:15
Unraveling the gene regulatory network of a senescence-associated NAC transcription factor in Arabidopsis thaliana
Kamranfar, I., Xue, G.P., Balazadeh, S. and Mueller-Roeber, B. (Germany and Australia)

POS-WED-166 18:15 - 19:15
Overexpression of the sweetpotato R2R3-type IbMYB1a gene activates anthocyanin production in heterologous plants

POS-TUE-167 18:15 - 19:15
Characterization of transcription factor HAT2 using T-DNA mutants

POS-WED-168 18:15 - 19:15
The central role of NLP transcription factors in nitrate-inducible gene expression
Konishi, M. and Yanagisawa, S. (Japan)

POS-TUE-169 18:15 - 19:15
Identification and characterisation of a novel mitochondrial stress-responsive protein
Law, S.R., Wang, Y., Guan, K.Y. and Whelan, J. (Australia)

POS-WED-170 18:15 - 19:15
Rapid vacuolar structural changes in guard cells require phosphatidylinositol 3,5-bisphosphate
Bak, G., Lee, E.-J., Lee, Y., Mariko, M., Segami, S., Sze, H., Maeshima, M., Hwang, J.-U. and Lee, Y. (South Korea, Japan, USA and Switzerland)
POSTERS

POS-TUE-171  18:15 - 19:15
Parental imprinting of UCL1 regulating curly leaf polycomb protein activity in Arabidopsis
Jeong, C.W., Yun, H., Choi, Y. and Lee, J.S. (Korea)

POS-WED-172  18:15 - 19:15
Arabidopsis DREB2C transcription factor acts as an activator of the expression of the heat-inducible phytocystatin 4 gene
AtCYS4
Je, J., Song, C. and Lim, C.O. (Korea)

POS-TUE-173  18:15 - 19:15
In silico analysis of cell-type specific omic responses reveal novel spatiotemporal regulatory networks regulating phosphate acquisition during Pi stress in Arabidopsis and rice
Linn, J., Secco, D., Vadermerwe, M. and Whelan, J. (Australia)

POS-WED-174  18:15 - 19:15
Comprehensive analysis of the Arabidopsis stigmatic papilla cell transcriptome

POS-TUE-175  18:15 - 19:15
Characterization of the function of calmodulin-like (CML)23 and CML24 in the Arabidopsis thaliana circadian clock
Mohd Noh, N.I. (United Kingdom)

POS-WED-176  18:15 - 19:15
Genomic analysis of IRE1-dependent decay of mRNAs in Arabidopsis thaliana reveals a connection between unfolded protein response and several physiological plant processes
Moreno, A.A., Blanco, F. and Orellana, A. (Chile)

POS-TUE-177  18:15 - 19:15
A novel circadian clock regulator in Arabidopsis
Nagel, D.H., Pruneda-Paz, J.L. and Kay, S.A. (USA)

POS-WED-178  18:15 - 19:15
Inflorescence stem grafting made easy in Arabidopsis
Nisar, N., Verma, S., Pogson, B.J. and Cazzonelli, C.I. (Australia)
POSTERS

POS-TUE-179  18:15 - 19:15
The tetrapyrrole mediated plastid signal negatively regulates CBF expression under circadian control in Arabidopsis
Norén, L., Kindgren, P. and Strand, A. (Sweden and Australia)

POS-WED-180  18:15 - 19:15
Functional analysis of GRF9 in Arabidopsis thaliana
Omidbakhshfard, M.A., Xue, G.P. and Mueller-Roeber, B. (Germany and Australia)

POS-TUE-181  18:15 - 19:15
Arabidopsis seed germination requires GA signalling in the epidermis through an interplay between DELLA and a cis-element targeted by a homeodomain transcription factor
Rombolá-Caldentey, B., Rueda-Romero, P., Carbonero, P. and Onate-Sanchez, L. (Spain)

POS-WED-182  18:15 - 19:15
Role of a GATA-type transcription factor in regulating seed dormancy downstream of the DELLA protein, RGL2
Ravindran, P., Stamm, P. and Kumar, P.P. (Singapore)

POS-TUE-183  18:15 - 19:15
The role of calcium in the nitrate signaling pathway in Arabidopsis thaliana roots
Riveras, E., Alvarez, J.M., Oses, C., Tamayo, K.P. and Gutierrez, R.A. (Chile)

POS-WED-184  18:15 - 19:15
Control of starch accumulation in Arabidopsis by a P-starvation induced peptide-coding orphan transcript
Musialak-Lange, M., Rojas-Triana, M., Stecyk, E., Araujo, W. and Scheible, W. (Germany and USA)

POS-TUE-185  18:15 - 19:15
Cell type-specific and condition-sensitive alternative splicing and Arabidopsis roots
Li, W., Lan, P., Lin, W.D., Ray, P. and Schmidt, W. (Taiwan, China and USA)

POS-WED-186  18:15 - 19:15
Regulation of the XER02 gene in Arabidopsis
Seyit, R., Li, S.F., Gendall, A. and Parish, R.W. (Australia)
POS-TUE-187  18:15 - 19:15
Identification and characterization of thermomemory-transcriptional regulators
Shahnejat-Bushehri, S., Meuller-Roeber, B. and Balazadeh, S. (Germany)

POS-WED-188  18:15 - 19:15
A novel glyphosate resistant mutant sheds light on the regulation of the shikimate pathway

POS-TUE-189  18:15 - 19:15
CLV3 peptide-induced complex formation between the stem cell regulators CLV1 and CRN
Somssich, M., Ma, Q., Weidtkamp-Peters, S., Seidel, C.A.M. and Simon, R. (Germany)

POS-WED-190  18:15 - 19:15
Identification and functional analysis of novel transcription factors which are phosphorylated in response to abscisic acid in guard cells
Takahashi, Y., Ebisu, Y., Kinoshita, T., Doi, M., Okuma, E., Murata, Y. and Shimazaki, K. (Japan)

POS-TUE-191  18:15 - 19:15
Enhanced resistance to diverse pathogens and pests conferred by mutations in glutathione S-transferase signalling pathways
Thatcher, L.F., Foley, R.C. and Singh, K.B. (Australia)

POS-WED-192  18:15 - 19:15
The N-end rule pathway mediates nitric oxide sensing
Gibbs, D.J., Isa, N.M., Movahedi, M., Mendiondo, G., Corbineau, F., Leon, J., Bachmair, A., Gray, J.E., Theodoulou, F.L. and Holdsworth, M.J. (United Kingdom, France, Spain and Austria)

POS-TUE-193  18:15 - 19:15
Investigating roles for At3g04420 and At1g33060, two NAC-domain transcription factors, as master regulators of transfer cell development in Arabidopsis thaliana
POS-WED-194  18:15 - 19:15  
Systems approaches map regulatory networks downstream of the auxin receptor AFB3 in the nitrate response of Arabidopsis thaliana roots  
Vidal, E.A., Moyano, T.C., Riveras, E., Contreras-Lopez, O., and Gutierrez, R.A. (Chile)

POS-TUE-195  18:15 - 19:15  
Cis-carotenes: do they have regulatory roles in plants?  
Wakins, J.L., Cazzonelli, C.I. and Pogson, B.J. (Australia)

POS-WED-196  18:15 - 19:15  
ATIPK2β regulates flowering time through the autonomous pathway  
Sang, S.H. and Xia, H.J. (China)

POS-TUE-197  18:15 - 19:15  
The ATMYB80 transcription factor, its direct target genes and the cotton homolog GHMYB80 in Arabidopsis male fertility  
Xu, Y., Li, S.F. and Parish, R.W. (Australia)

POS-WED-198  18:15 - 19:15  
Stable internal reference genes for normalization of real-time RT-PCR in tobacco (Nicotiana tabacum) during virus infection  
Yoon, J.Y., Baek, E., Choi, S.K. and Palukaitis, P. (Korea)

Cell to Cell Communication  
Posters 199 – 203

POS-TUE-199  18:15 - 19:15  
Characterisation of putative plasmodesmata proteins of the Arabidopsis calnexin family  
Liu, D.Y.T., Smith, P.M.C., Day, D.A. and Overall, R.L. (Australia)

POS-WED-200  18:15 - 19:15  
Phosphorothioate antisense oligodeoxynucleotides to transiently suppress gene expression in living pollen tubes  
Mizuta, Y. and Higashiyama, T. (Japan)

POS-TUE-201  18:15 - 19:15  
Short-and long-distance signal transmission - following tagged proteins and their mRNA across graft junctions in Arabidopsis  
White, R.G. and Liang, D. (Australia)
POSTERS

POS-WED-202 18:15 - 19:15
Identification of a new ligand for the HAESA-LIKE2 leucine-rich repeat receptor-like kinase
Wildhagen, M., Butenko, M.A., Albert, M., Felix, G. and Aalen, R. (Germany)

POS-TUE-203 18:15 - 19:15
The pollen-expressed transcription factor CUPID family controls male-female interaction in Arabidopsis

Abiotic Stress
Posters 204 – 248

POS-WED-204 18:15 - 19:15
Promoter analysis of an Arabidopsis gene for 9-cis-epoxycarotenoid dioxygenase-3 (AtNCED3) involved in dehydration-inducible transcription

POS-TUE-205 18:15 - 19:15
Acclimation responses of Arabidopsis thaliana to sustained phosphite treatments

POS-WED-206 18:15 - 19:15
Transcriptional regulatory cascade in heat stress response of Arabidopsis thaliana
Buchholz, A., Szymanski, J. and Willmitzer, L. (Germany)

POS-TUE-207 18:15 - 19:15
General and differential changes in the translatome participate in the establishment of the heat stress response in Arabidopsis seedlings
Yanguez, E., Castro Sanz, A.B., Fernandez Bautista, N., Munoz, A. and Castellano, M.M. (Spain)

POS-WED-208 18:15 - 19:15
Four transcription factors are related to the multiple response of Arabidopsis AtGST11 gene under abiotic stresses
Ezaki, B., Kouno, T. and Yulita, K.S. (Japan)
POSTERS

POS-TUE-209 18:15 - 19:15
Abscisic acid and auxin antagonistically regulate root meristem activity through a nodulin homeobox protein in Arabidopsis
Duan, Y., He, J., Zhang, J., Hua, D., Wang, L., Chen, Z., Li, C. and Gong, Z. (China)

POS-WED-210 18:15 - 19:15
Functional and transcriptome analysis reveals an adaptive strategy for abiotic stress tolerance dependant on the bifunctional activity of members of the Arabidopsis NF-YA transcription factor family

POS-TUE-211 18:15 - 19:15
Characterization of an iron over-accumulating mutant of Arabidopsis thaliana
Hindt, M.N., Pivarski, K. and Guerinot, M.L. (United Kingdom)

POS-WED-212 18:15 - 19:15
Thioredoxin h-type has dual functions that molecular chaperone and disulfide reductase in Arabidopsis

POS-TUE-213 18:15 - 19:15
Emerging roles of RNA chaperones in stress response and development of plants

POS-WED-214 18:15 - 19:15
Growth platform-dependent and independent phenotypic and metabolic responses of Arabidopsis thaliana and its halophytic relative, Thellungiella salsuginea, under salt stress

POS-TUE-215 18:15 - 19:15
Determining the effect of phosphate supply on the proteome of Arabidopsis thaliana shoots
Kerbler, S.M., Jost, R., Taylor, N.L. and Finnegan, P.M. (Australia)
POSTERS

POS-WED-216  18:15 - 19:15  
Genes encoding plant-specific class III peroxidases are responsible for increased cold tolerance of the brassinosteroid-insensitive 1 mutant  
Kim, B.H., Kim, S.Y., Fu, M.J. and Nam, K.H. (Korea)

POS-TUE-217  18:15 - 19:15  
Acetic acid is essential for drought tolerance in plants  
Kim, J.M., To, T.K. and Seki, M. (Japan)

POS-WED-218  18:15 - 19:15  
The R2R3 MYB gene $aTMYB73$ negatively regulates the expression of $SO31$ and $SO33$ in $Arabidopsis$ only in response to high salinity  
Kim, J.H., Nguyen, H.N., Hong, S.H. and Lee, H. (Korea)

POS-TUE-219  18:15 - 19:15  
AtDabb1 is a pathogen-responsive protein with antifungal activity in $Arabidopsis$ thaliana  
Kim, M.J., Hwang, G.Y., Oh, H.T., Paeng, S.K., Melencion, S.M.B. and Lee, S.Y. (Korea)

POS-WED-220  18:15 - 19:15  
Functional analysis of novel chloroplast membrane proteins, COR413-IM1-IM2 regulated by an $Arabidopsis$ transcription factor $DREB1A$  
Kodaira, S.K., Kanai, M., Maruyama, K., Yamada, K., Kidokoro, S., Shinozaki, K. and Yamaguchi-Shinozaki, K. (Japan)

POS-TUE-221  18:15 - 19:15  
Heat-induced chaperone activity of serine / threonine protein phosphatase 5, PP5, improves thermotolerance in $Arabidopsis$  

POS-WED-222  18:15 - 19:15  
The influence of two major antioxidants on stress responses in plants  
Lim, B., Smirnoff, N. and Cobbett, C.S. (Australia and United Kingdom)
POSTERS

POS-TUE-223  18:15 - 19:15
The effects of elevated carbon dioxide and temperature on microRNA expression Arabidopsis development

POS-WED-224  18:15 - 19:15
Dual functions of Arabidopsis sulfiredoxin: acting as a redox-dependent sulfinic acid reductase and as a redox-independent nuclease enzyme

POS-TUE-225  18:15 - 19:15
Integrated analysis (phytohormones and transcripts) of the effects of heat shock stress in Arabidoposis, rice and soybean
Maruyama, K., Urano, K., Kojima, M., Sakakibara, H., Shinozaki, K. and Yamaguchi-Shinozaki, K. (Japan)

POS-WED-226  18:15 - 19:15
Effects of progressive drought in Arabidopsis plants overexpressing or silenced for the patatin-like gene pPLAlla Vieira Da Silva, I., Bernardes Da Silva, A., Alcantara, A., Marques Da Silva, J., Arrabaca, J.D. and Matos, A.R. (Portugal)

POS-TUE-227  18:15 - 19:15
Heat-shock dependent oligomeric status alters the function of a plant-specific thioredoxin-like protein, AtTDX

POS-WED-228  18:15 - 19:15
Identification of novel subclass III SnRK2-interacting proteins in Arabidopsis
Mogami, J., Fujita, Y., Kidokoro, S., Tsukiori, Y., Nakagami, H., Yanagisawa, S., Ishida, T., Mizoi, J., Shinozaki, K. and Yamaguchi-Shinozaki, K. (Japan)

POS-TUE-229  18:15 - 19:15
The Arabidopsis nitrate transceptor NRT1.1 governs distinct signaling pathways and governs root colonization via local modification of auxin fluxes
POS-WED-230  18:15 - 19:15
The role of SDG receptor-like kinases in germination under abiotic stress
Nanda, A.K. and Masle, J. (Australia)

POS-TUE-231  18:15 - 19:15
In Arabidopsis, thioredoxin reductase type C (NTRC) organizes enhanced thermo-resistance by its oxidized and reduced-dependent holdase chaperon function

POS-WED-232  18:15 - 19:15
Functional analysis of B-class heat shock transcription factors in Arabidopsis
Ohama, N., Mizoi, J., Yoshida, T., Yoshida, T., Shinozaki, K. and Yamaguchi-Shinozaki, K. (Japan)

POS-TUE-233  18:15 - 19:15
Control mechanism of osmotic stress response and plant growth by potassium transporter in Arabidopsis

POS-WED-234  18:15 - 19:15
The 1-CYS peroxiredoxin functions not only a regulator of seed dormancy but a molecular chaperone under oxidative stress conditions

POS-TUE-235  18:15 - 19:15
ERF115 gene codes for a transcription factor involved in tolerance to high salinity stress in Arabidopsis thaliana
Leon, L., Salinas, P. and Holuigue, L. (Chile)

POS-WED-236  18:15 - 19:15
An epigenetically-controlled transcriptional state underpins a physiological role for the release of heterochromatic silencing under heat
Sanchez, D.H. and Paszkowski, J. (Switzerland)
POSTERS

POS-TUE-237  18:15 - 19:15  
Functional analysis of NF-YC10, a novel interacting protein with Arabidopsis DREB2A, which may be involved in the stress specific expression of DREB2A target genes  
**Sato, H., Mizoi, J., Tanaka, H., Maruyama, K., Qin, F., Osakabe, Y., Shinozaki, K. and Yamaguchi-Shinozaki, K.** (Japan)

POS-WED-238  18:15 - 19:15  
Regulation of NA⁺ transport, the role of **AtHKT1;1** expression in Col-0 and C24  
**Schmoeckel, S.M., Sundstrom, J.F., Tester, M., Berger, B. and Roy, S.J.** (Australia and Saudi Arabia)

POS-TUE-239  18:15 - 19:15  
Characterization of transgenic lines changed in flavonoid biosynthesis reveals contribution of flavonoids to freezing tolerance in Arabidopsis thaliana  
**Schulz, E., Tohge, T., Zuther, E., Fernie, A.R. and Hincha, D.K.** (Germany)

POS-WED-240  18:15 - 19:15  
Comparative analysis of rice and wheat seedling responses to anoxia and re-oxygenation  
**Shingaki-Wells, R.N., Huang, S. and Millar, A.H.** (Australia)

POS-TUE-241  18:15 - 19:15  
Transcriptome analysis under salt stress in Triticum aestivum  
**Takahashi, F., Tilbrook, J., Trittermann, C., Berger, B., Roy, S., Seki, M., Tester, M. and Shinozaki, K.** (Japan and Australia)

POS-WED-242  18:15 - 19:15  
Effects of elevated ambient pressure on the rates of dark respiration and net photosynthesis  

POS-TUE-243  18:15 - 19:15  
GABA-gated anion channels in plants - they exist and have important physiological roles  
**Ramesh, S.D., Tyerman, S., Ryan, P.R. and Gilliham, M.** (Australia)
POSTERS

POS-WED-244  18:15 - 19:15
Molecular mechanism of TCP transcription factor in response to abiotic stress response

POS-TUE-245  18:15 - 19:15
Mutation in replication factor C subunit 3 compromises plant repair capability to replication damage in *Arabidopsis thaliana*
Chen, L., Chen, J., Cui, K., Li, Y. and **Xia, S.** (China)

POS-WED-246  18:15 - 19:15
Translating drought (tolerance) research from *Arabidopsis* to wheat
**Yadav, A.K.,** Tee, E., Howitt, C.A. and Pogson, B.J (Australia)

POS-TUE-247  18:15 - 19:15
The glutamate carboxypeptidase *AMP1* mediates ABA and abiotic stress responses in *Arabidopsis*
Shi, Y., Wang, Z., Meng, P., Zhang, X. and **Yang, S.** (China)

POS-WED-248  18:15 - 19:15
Clinal variation in the freezing tolerance of *Arabidopsis thaliana* accessions and memory of low temperature priming under warm conditions
**Zuther, E.,** Schulz, E., Juszczak, I., Lee, Y.P., Baier, M. and Hincha, D.K. (Germany)

**Biotic Stress / Interactions**
Posters 249 – 276

POS-TUE-249  18:15 - 19:15
Class IX Ethylene Response Factor (ERF) transcription factors include master regulators of ethylene signalling and pathogen resistance
**Anderson, J.P.,** Onate-Sanchez, L. and Singh, K.B. (Australia and Spain)

POS-WED-250  18:15 - 19:15
Analysis of responses of *Arabidopsis thaliana* to infection by *Alternaria brassicicola* using metabolite profiling
**Botanga, C.J.,** Bethke, G., Chen, Z., Gallie, D.R., Fiehn, O. and Glazebrook, J. (USA)
POS-TUE-251  18:15 - 19:15
Root microbiome assemblage is affected by plant development through root exudation
Chaparro, J.M., Badri, D.V. and Vivanco, J.M. (USA)

POS-WED-252  18:15 - 19:15
ERF72 regulates Fusarium oxysporum resistance in Arabidopsis
Chen, Y.C., Wong, C.L., Muzzi, F., Vlaardingerbroek, I., Aitken, E., Kidd, B.N. and Schenk, P.M. (Australia)

POS-TUE-253  18:15 - 19:15
RNase L inhibitor proteins play a negative role in plant response to oxidative stress and bacterial wilt
Cheng, C.-P. and Li, Y.-M. (Taiwan)

POS-WED-254  18:15 - 19:15
Activation of R-mediated innate immunity and disease susceptibility is affected by different mutations in a cytosolic O-Acetylserine (thiol) lyases in Arabidopsis

POS-TUE-255  18:15 - 19:15
Genetic and genomic analysis of Rhizoctonia solani interactions with Arabidopsis
Foley, R.C., Gleason, C.A., Anderson, J.P. and Singh, K.B. (Australia)

POS-WED-256  18:15 - 19:15
A conserved sweet sucrose transporter is key for nectar secretion in eudicot flowers

POS-TUE-257  18:15 - 19:15
Hyaloperonospora arabidopsidis effectors manipulate the defence response of Arabidopsis thaliana
Harvey, S.E., Steinbrenner, J. and Beynon, J. (United Kingdom)
POS-WED-258  18:15 - 19:15
Defence responses of *Arabidopsis thaliana* to infection by *Botrytis cinerea* are regulated by the circadian clock
Adams, N., Stone, W., Denby, K.J., Roden, L. and Ingle, R.A. (South Africa and United Kingdom)

POS-TUE-259  18:15 - 19:15
Characterization of *Arabidopsis* CRT1 in plant immunity and genome stability

POS-WED-260  18:15 - 19:15
Mediator: a new concept for plant defense regulation
Kidd, B.N., Cevik, V., Fallath, T., Cahill, D.M., Beynon, J., Manners, J.M., Kazan, K. and Schenk, P.M. (Australia and UK)

POS-TUE-261  18:15 - 19:15
An *Arabidopsis* calmodulin-like protein AtCML13 can control the formation of PEN1-SNAP33-VAMP722 ternary snare complex
Yun, H.S., Schmidt, J., Schulze-Lefert, P. and Kwon, C. (South Korea and Germany)

POS-WED-262  18:15 - 19:15
Understanding beneficial plant-endophyte interactions at high resolution
Lipkowitz, J.R. and Benfey, P.N. (USA)

POS-TUE-263  18:15 - 19:15
Investigating the link between RNA processing, flowering time and defence

POS-WED-264  18:15 - 19:15
Non-specific phospholipase C2 is involved in defence response of *Arabidopsis thaliana* to *Pseudomonas syringae* attack
Kocourkova, D., Krckova, Z., Pejchar, P., Brouzdova, J., Valentova, O. and Martinec, J. (Czech Republic)
POS-TUE-265  18:15 - 19:15
Overexpression of the Dof protein in tobacco leads to transcriptional activation of the resistance gene N, suggesting potential roles in the regulation of hypersensitive response to TMV
Takano, M., Odaira, S., Haque, M.A., Sasaki, N. and Nuynoya, H. (Japan and Bangladesh)

POS-WED-266  18:15 - 19:15
Chlorosis causing compounds in the Arabidopsis-fusarium interaction
Pretorius, L.S., Kidd, B.N. and Schenk, P.M. (Australia)

POS-TUE-267  18:15 - 19:15
Cell biology of anti-viral silencing in Arabidopsis
Pumplin, N. and Voinnet, O. (Switzerland)

POS-WED-268  18:15 - 19:15
DNA demethylation and disease resistance
Le, N.T., Schumann, U., Tiwari, S., Smith, N.A., Llewellyn, D., Dennis, E. and Wang, M.-B. (Australia)

POS-TUE-269  18:15 - 19:15
The paired R genes RPS4 and RRS1 function together in effector-triggered immunity
Sohn, K., Segonzac, C., Rallapalli, G., Sarris, P., Williams, S., Woo, J., Paek, K., Kobe, B. and Jones, J. (United Kingdom, New Zealand, Australia and South Korea)

POS-WED-270  18:15 - 19:15
Identification and characterization of an Arabidopsis mutant resistant to Phytophthora infection
Pan, Q.N., Deng, F.Y., Quan, J.L. and Shan, W.X. (China)

POS-TUE-271  18:15 - 19:15
A putative salicylic acid transporter EDS5 is localized to the plant chloroplast envelope membrane system in Arabidopsis
Yamasaki, K., Motomura, Y., Kikuchi, S., Nakai, M. and Shiina, T. (Japan)

POS-WED-272  18:15 - 19:15
Control of defense gene expression via chloroplast Ca\(^{2+}\) sensor protein CAS in Arabidopsis thaliana
Shimotani, K., Nakai, K., Sano, S. and Shiina, T. (Japan)
POS-TUE-273 18:15 - 19:15
Viral small interfering RNAs target host genes to mediate disease symptoms in plants
Smith, N.A., Eamens, A.L. and Wang, M.B. (Australia)

POS-WED-274 18:15 - 19:15
HAT4, a novel Arabidopsis thaliana microRNA responsive to Phytophthora infection

POS-TUE-275 18:15 - 19:15
The crystal structure of the heterodimer formed between the toll-interleukin 1 receptor (TIR) domains of the Arabidopsis R proteins RRS1 and RPS4
Williams, S.J., Wan, L., Sohn, K., Ve, T., Bernoux, M., Ellis, J., Dodds, P.N. and Kobe, B. (Australia and United Kingdom)

POS-WED-276 18:15 - 19:15
Shift of NPR1 oligomeric status mediated by nitric oxide regulates basal disease resistance
Yun, B.W., Yin, M., Matika, D., Kim, K.M., Spoel, S.H. and Loake, G.J. (United Kingdom and South Korea)

Energy Biology and Metabolism
Posters 277 – 291

POS-TUE-277 18:15 - 19:15
A public metabolome database tool enables rapid classification of Arabidopsis photorespiratory mutants via metabolite profiling

POS-WED-278 18:15 - 19:15
Functional characterization of xylose isomerase from Arabidopsis
Chiu, T.Y., Lao, J., Stonebloom, S., Scheller, H.V. and Heazlewood, J.L. (USA)
POSTERS

POS-TUE-279  18:15 - 19:15
ECH2 and H⁺-pyrophosphatase correlatively act in oilseed mobilization during germination
Ferjani, A., Katano, M., Kazama, Y., Hirano, T., Abe, T. and Tsukaya, H. (Japan)

POS-WED-280  18:15 - 19:15
Role of the circadian clock in coordination of growth with primary metabolism
Flis, A., Sulpice, R. and Stitt, M. (Germany and Ireland)

POS-TUE-281  18:15 - 19:15
Succinate dehydrogenase assembly factor 2 is needed for assembly and activity of mitochondrial complex II and for normal root elongation in Arabidopsis
Huang, S., Taylor, N.L., Stroher, E., Fenske, R., and Millar, A.H. (Australia)

POS-WED-282  18:15 - 19:15
The 'fungicide' phosphite and its effects on plant metabolism and gene expression
Jost, R., Berkowitz, O., Watanabe, M., Giavalisco, P., Lambers, H., Hoefgen, R., Scheible, W.R. and Finnegan, P.M. (Australia, Germany and USA)

POS-TUE-283  18:15 - 19:15
A novel vacuolar sugar carrier is involved in cellular sugar homeostasis in Arabidopsis
Klemens, P.A.W., Chardon, F., Krapp, A. and Neuhaus, H.E. (Germany and France)

POS-WED-284  18:15 - 19:15
Modulation of plant composition by an orphan gene of Arabidopsis
Li, L., Zheng, W., Jones, D., Shang, X., Sow, W., Song, L, Huang, S. and Wurtele, E.S. (USA)

POS-TUE-285  18:15 - 19:15
An examination of the enzymatic properties of a broad family of alanine aminotransferase
POSTERS

POS-WED-286  18:15 - 19:15
Mitochondrial translation efficiency mediated by LETM proteins leads to enhanced drought stress tolerance in Arabidopsis thaliana
Radomiljac, J.D., Zhang, B., Van Aken, O., Van Der Merwe, M., Considine, M.J. and Whelan, J. (Australia)

POS-TUE-287  18:15 - 19:15
Investigation of the flavin cofactor metabolism using Arabidopsis as a model system
Sandoval, F.J., Lynch, J., Sa, N. and Roje, S. (USA)

POS-WED-288  18:15 - 19:15
Multiplex micro-respiratory measurements of Arabidopsis tissue

POS-TUE-289  18:15 - 19:15
Genome-scale constraint-based In silico modelling of Arabidopsis thaliana energy metabolism
Vacher, M. and Small, I. (Australia)

POS-WED-290  18:15 - 19:15
A functional study of Arabidopsis thaliana sirtiuns
Van Der Kelen, K., Gossele, V., Vandorpe, M., De Block, M., Metzlaff, M., Hannah, M.A. and Van Breusegem, F. (Belgium)

POS-TUE-291  18:15 - 19:15
Characterization of methionine cycle enzymes MTI1 and DEP1 in Arabidopsis thaliana
Zierer, W., Pommerrenig, B. and Sauer, N. (Germany)

Photosynthesis and Water
Posters 292 – 297

POS-WED-292  18:15 - 19:15
Regulation of secondary sulfur assimilation during drought stress in Arabidopsis thaliana

POS-TUE-293  18:15 - 19:15
PsbS protein interactions during non-photochemical quenching
Correa Galvis V.A. and Jahns P. (Germany)
POSTERS

POS-WED-294  18:15 - 19:15
Differential regulation of plastid proteins in stay-green Arabidopsis: beyond the retention of LHCII and chlorophyll
Grassl, J., Prunskjá, A., Hortensteiner, S., Taylor, N.L. and Millar, A.H. (Australia and Switzerland)

POS-TUE-295  18:15 - 19:15
Dynamics and mechanisms of energy dissipation
Jahns, P., Paul, S., Muller, O., Schumann, S., Adams III, W.W., Demmig-Adams, B. and Holzwarth, A.R. (Germany and USA)

POS-WED-296  18:15 - 19:15
A comprehensive global transcriptional analysis of chlorophyll catabolic genes
Meier, S.K and Gehring, C.A. (Saudi Arabia)

POS-TUE-297  18:15 - 19:15
Engineering drought tolerance in brassicaceae by manipulating the SAL1 gene
Phua, S.Y., Estavillo, G.M., Chan, K.X., Pornsiriwong, W., Nisar, N. and Pogson, B.J. (Australia)

Phenomics
Posters 298 – 299

POS-WED-298  18:15 - 19:15
A survey of dominant mutations in Arabidopsis thaliana
Meinke, D. (USA)

POS-TUE-299  18:15 - 19:15
Chloroplast function database II: a large-scale collection of homozygous mutants and their phenotype effects for nuclear-encoded chloroplast proteins
Proteins and Postranslational Regulation
Posters 300 – 310

POS-WED-300  18:15 - 19:15
Organellar protein trafficking and insertion of tail-anchored proteins in plants
Duncan, O. and Whelan, J. (Australia)

POS-TUE-301  18:15 - 19:15
CaM-regulation of CNGCs in Arabidopsis: New insights and new models
Fischer, C., Subert, C. and Dietrich, P. (Germany)

POS-WED-302  18:15 - 19:15
Biochemical characterization of OsERG3 as a small C2-domain protein in rice

POS-TUE-303  18:15 - 19:15
Post-transcriptional regulation by initiation context in Arabidopsis thaliana
Kim, Y. and Hwang, I. (Korea)

POS-WED-304  18:15 - 19:15
Analysis of the Arabidopsis thaliana nuclear proteome

POS-TUE-305  18:15 - 19:15
Stable expression of the sweet protein monellin variant MNEI in tobacco chloroplasts

POS-WED-306  18:15 - 19:15
Proteome coverage of Arabidopsis: implications for shotgun proteomic studies
Mann, G.W., Joshi, H.J., Petzold, C.J. and Heazlewood, J.L. (USA and Denmark)

POS-TUE-307  18:15 - 19:15
Characterisation of Glycine max symbiosome membrane iron transporters
Qu, Y., Clarke, V.C., Loughlin, P.C., Brear, E.M., Chen, C., Day, D.A. and Smith, P.M.C. (Australia)
POSTERS

POS-WED-308  18:15 - 19:15  
AtSerpin1, an inhibitor in vivo of the papain-like cysteine protease RD21  
Roberts, T.H., Lampl, N., Curmi, P.M.G. and Fluhr, R.  
(Australia)

POS-TUE-309  18:15 - 19:15  
Arabidopsis blue light receptor, phototropin 2, is a substrate for modification by SUMO  
Sztatelman, O., Strzalka, W., Krzeszowiec, W., Kedracka-Krok, S. and Gabrys, H.  
(Poland)

POS-WED-310  18:15 - 19:15  
PSKR1 is a moonlighting receptor guanylate cyclase that acts as a homo dimer  
Wheeler, J.I., Muleya, V., Mok, Y.-F., Griffin, M., Chowdhury H. and Irving, H.R.  
(Australia)

Emerging Technologies and Systems Biology  
Posters 311 – 322

POS-TUE-311  18:15 - 19:15  
Rapid and facile EMS mutant identification by a single parental backcross and whole genome sequencing  
Allen, R.S., Nakasugi, K., Doran, R., Millar, A.A. and Waterhouse, P.M.  
(Australia)

POS-WED-312  18:15 - 19:15  
iNID an automatic framework for identifying Network models for Interplays among Developmental signaling in plants  
(Republic of Korea)

POS-TUE-313  18:15 - 19:15  
A novel approach for understanding metabolic system: metabolomics-based mathematical modelling  
Hirai, M.Y., Sriyudthsak, K. and Shiraishi, F.  
(Japan)

POS-WED-314  18:15 - 19:15  
Deciphering and prediction of transcriptome dynamics under fluctuating field conditions  
(Japan)
POS-TUE-315  18:15 - 19:15
Rice DB: an Oryza information portal linking annotation, subcellular location, function, expression, regulation and evolutionary information for rice and Arabidopsis
Narsai, R., Devenish, J., Castleden, I., Narsai K., Xu, L., Shou, H. and Whelan, J. (Australia and China)

POS-WED-316  18:15 - 19:15
Redesigning PPR proteins to bind new RNA targets
Colas des Francs-Small, C. and Small. I. (Australia)

POS-TUE-317  18:15 - 19:15
Genome editing in higher plants; toward precise manipulation of nuclear and organelle genomes
Osakabe, K. (Japan)

POS-WED-318  18:15 - 19:15
Reconstruction of low-fold sequenced recombinant genomes using a HMM approach revealed new flowering time related genes in Fragaria vesca
Patel, V. (Germany)

POS-TUE-319  18:15 - 19:15
Uncovering transcriptional circuits by functional genomics
Pruneda-Paz, J., Breton, G., Nagel, D., Kang, S.E., Ravelo, S., Doherty, C., Sartor, R. and Kay, S. (USA)

POS-WED-320  18:15 - 19:15
Promotercad: data driven design of plant regulatory DNA
Shimoyama, S., Cox, R.S., Nishikata, K., Yoshida, Y. and Toyoda, T. (Japan)

POS-TUE-321  18:15 - 19:15
Spatial operation of anther specific promoter (gALCHS7) using RIP (Ribosomal Inactivating Protein) gene through microscopic analysis in petunia

POS-WED-322  18:15 - 19:15
Direct mass spectrometry imaging of intact tissues of Arabidopsis thaliana
Takahashi, K. (Japan)
Translational Biology
Posters 323 – 325

POS-TUE-323 18:15 - 19:15
Short-term response of amino acid metabolism to phosphate stress
Alexova, R., Nelson, C.J. and Millar, A.H. (Australia)

POS-WED-324 18:15 - 19:15
Proteomic analyses of respiratory metabolism under salinity stress
Jacoby, R., Fenske, R., Nelson, C., Millar, H. and Taylor, N. (Australia)

POS-TUE-325 18:15 - 19:15
How similar are the nitrate uptake systems of Arabidopsis and cereal crops?

Education
Posters 326 – 327

POS-WED-326 18:15 - 19:15
Arabidopsis detectives: innovative approach to research-led driven teaching
Estavillo, G.M., Mathesius, U., Beckmann, E. and Nicotra, A. (Australia)

POS-TUE-327 18:15 - 19:15
Teaching tools in plant biology, to inspire the next generation
Williams, M.E. (United Kingdom)
Late Posters
Posters 328 – 351

POS-WED-328  18:15 - 19:15
Photoperiodic flowering regulators indirectly affect light-induced stomatal opening

POS-TUE-329  18:15 - 19:15
Characterization of Arabidopsis GH5 enzymes
Wang, Y., Groth, E. and Aspeborg, H. (Sweden)

POS-WED-330  18:15 - 19:15
Global Plant Council
Bastow, R.M. (Switzerland)

POS-TUE-331  18:15 - 19:15
Intracellular distribution of 3'-phosphoadenosine 5'-phosphate (PAP) in A. thaliana mutants affected in PAP metabolism and transport

POS-WED-332  18:15 – 19:15
The genes involved in N-glycosylation pathway STT3a and CGL1 affect the resistance against bacterial pathogen Pseudomonas syringae pv. tomatoe DC3000
Kanng, B.S., Macoy, D.M., Chakraborty, R. and Kim, M.G. (Korea)

POS-TUE-333  18:15 - 19:15
Early endosomal components are required for polar pin protein localization and plant architecture in Arabidopsis
Tanaka, H., Kitakura, S., Rakusova, H., Uemura, T., Feraru, M.I., De Rycke, R., Robert, S., Kakimoto, T. and Friml, J. (Belgium, Japan and Austria)

POS-WED-334  18:15 – 19:15
Brassinosteroid-mediated increase in crop yield and resistance to abiotic and biotic stresses
Prasad, B., Sahni, S., Rahman, T., Divi, U. and Krishna, P. (Canada and Australia)
POSTERS

POS-TUE-335 18:15 - 19:15
Evolutionary conserved motifs involved in activity and regulation of the ABA-insensitive (ABI) 4 transcription factor
Gregorio-Jorge, J., Hernández-Bernal, A.F., Cordoba, E. and Leon, P. (Mexico)

POS-WED-336 18:15 – 19:15
Comparative transcriptome analysis of energy-rich Arabidopsis thaliana under dark and light conditions
Liang, C. and Lim, B.L. (Hong Kong, China)

POS-TUE-337 18:15 - 19:15
HSP90 mediates temperature entrainment of the circadian clock
Ma, Z., Davis, A., Philippou, K., Heroven, C. and Davis, S. (Germany)

POS-WED-338 18:15 – 19:15
A retrotranspositional regulation of a heat-activated retrotransposon
Matsunaga, W., Masuta, Y., Kato, A. and Ito, H. (Japan)

POS-TUE-339 18:15 - 19:15
The single-stranded DNA binding protein WHIRLY1 represses WRKY53 expression and leaf senescence in Arabidopsis thaliana, in a developmental stage-dependent manner
Miao, Y. and Jiang, J. (China and Germany)

POS-WED-340 18:15 – 19:15
Plant receptor kinases as targets for bacterial effectors
Reinhard, A. and Nuernberger, T. (Germany)

POS-TUE-341 18:15 - 19:15
Arabidopsis amidase1 contributes to auxin biosynthesis in vivo
Sanchez Parra, B., Lehmann, T., Hentrich, M., Jost, R., Aronsson, H. and Pollmann, S. (Spain, Germany, Australia and Sweden)

POS-WED-342 18:15 – 19:15
Effect of parental reproductive age on the spontaneous mutation rates in Arabidopsis
Singh, A.K., Tufail, B., Anathi, R.M., Shanmuhapreya, D. and Baskar, R. (India)
POS-TUE-343  18:15 - 19:15
An ortholog of human TRAF-like protein of *Arabidopsis thaliana* is essential for pollen wall development
Singh, S.K., Srinivasan, R., Bhat, S.R. and Sreenivasulu, Y. (India)

POS-WED-344  18:15 – 19:15
ATML1 promotes epidermal cell differentiation in Arabidopsis shoots
Takada, S., Takada, N. and Yoshida, A. (Japan)

POS-TUE-345  18:15 - 19:15
*ARABIDOPSIS CRINKLY 4* is a downstream target of ATML1-mediated transcriptional regulation
Takada, N., Yoshida, A. and Takada, S. (Japan)

POS-WED-346  18:15 – 19:15
Entrainment through the Arabidopsis circadian clock factor *ELF3* is conveyed by cellular localization, as revealed by natural variation studies of an altitude-associated allele
Usman Anwer, M., Boikoglou, E., Hallstein, M. and Jon Davis, S. (Germany and USA)

POS-TUE-347  18:15 - 19:15
Emerging evidence on the role of cell wall invertase in regulating vascular development
Wang, L. and Ruan, Y.-L. (Australia)

POS-WED-348  18:15 – 19:15
Functional characterization of non-cytolytic members within the NLP effector superfamily
Albert, I., Boehm, H., Toliashvili, L., Kikic, Z., Oecking, C., Whisson, S., Van Den Ackerveken, G. and Nuernberger, T. (Germany and The Netherlands)

POS-TUE-349  18:15 - 19:15
Cytolytic toxins of the NEP1-like protein family release DAMPs as mobile signal of danger
Boehm, H., Albert, I., Kikic, Z., Toliashvili, L., Oecking, C. and Nuernberger, T. (Germany)
POS-WED-350  18:15 – 19:15
Lysin-motif-proteins mediate peptidoglycan-perception in *Arabidopsis thaliana*
Fellermeier, F., Willmann, R., Lajunen, H.M., Desaki, Y., Kolb, D., Molinaro, A., Nuernberger, T. and Gust, A.A. (Germany and Italy)

POS-TUE-351  18:15 - 19:15
Functional roles of cell wall polysaccharides during ovule and seed development