

Scientific Program

Tuesday, 19 July 2016	
10:00-21:00	Registration
Wednesday, 20 July 2016	
08:30	Welcome and Keynote Session (Chair: Sanwen Huang) Welcoming Remarks Chun-Ming Liu (Institute of Botany, CAS)
08:40	Keynote Speech: Plant Vascular Biology: Past, Present and Future William Lucas (UC Davis, USA)
09:15	Professor Biao Ding Memorial Lecture: Transcriptional Regulation by Small RNAs and Argonautes Yijun Qi (Tsinghua University, China)
10:00	Coffee Break
10:30–12:00	Session I. Cambial Meristem Development and Vascular Patterning Chairs: Christian Hardtke and Xinqiang He
10:30	Bert de Rybel (Ghent University, Belgium): Genetic and Hormonal Control of Vascular Cell Proliferation
11:00	Ari Pekka Mähönen (University of Helsinki, Finland): Cell Fate Decisions in the Arabidopsis Root Cambium
11:30	Jing Zhang (University of Cambridge, UK): Genome-wide Analyses Revealed Redundant Transcriptional Pathways for Cambium Development in Arabidopsis Roots
11:45	Riikka Mäkilä (University of Helsinki, Finland): Identification and Characterization of Novel Factors Regulating Cambium
12:00–13:30	Lunch
13:30–15:00	Session II. Development of Vascular Tissues: Xylem and Phloem Cell Differentiation Chairs: Bert de Rybel and Yijun Qi
13:30	Christian Hardtke (University of Lausanne, Switzerland): Receptor-like Kinase Pathways in Phloem Differentiation
14:00	Chun-Ming Liu (Institute of Botany, CAS): CLE Peptide and Phloem Differentiation in Arabidopsis
14:30	Soeun Han (POSTECH, Korea): TDIF-TDR Module Suppresses the Negative Action of BIL1 and its Downstream Component MP/ARF5 in Vasculature Development
14:45	Xiaoya Lin (Peking-Tsinghua Ctr. for Life Sciences, China): Recognition and Activation Mechanisms of TDIF/CLE41 Peptide Signal by its Receptor PXY/TDR and Co-receptors in Arabidopsis Vascular Development

15:00	Coffee Break
15:15–17:00	Session II. Development of Vascular Tissues: Xylem and Phloem Cell Differentiation (Continued) Chairs: Thomas Greb and Laigeng Li
15:15	Antia Rodriguez-Villalon (ETH, Zürich, Switzerland): Plant Phospholipids: The New Gatekeepers of Vascular Cell Differentiation
15:45	Yihua Zhou (Institute of Genetics & Developmental Biology, CAS): Secondary Wall Biosynthesis is Essential for Functions of the Vascular System in Rice
16:15	Vasagi Ramachandran (NAIST, Japan): Analysis of Dof Transcription Factors Regulating the Property of Secondary Cell Walls
16:30	Bo Zhang (Umeå University, Sweden): PIRIN2 Modulates the Non-cell Autonomous Xylem Lignification in <i>Arabidopsis thaliana</i> through Chromatin Modification of Lignin Biosynthetic Genes
16:45	Elisabeth Truernit (ETH, Zürich, Switzerland): A Role for OCTOPUS-like Genes in Plant Vascular Development?
17:00	Coffee Break
17:15–19:00	Session III. Secondary Growth in Woody Species Chairs: Ari Pekka Mähönen and Guodong Wang
17:15	Andrew Groover (USDA Forest Service & UC Davis): Modeling Transcriptional Networks Regulating Secondary Growth and Wood Formation in Forest Trees
17:45	Laigeng Li (Institute of Plant Physiology & Ecology, CAS): Understanding Receptor-like Kinase (RLK) Function in the Process of Secondary Growth
18:15	Juan Alonso-Serra (University of Helsinki, Finland): Birch, a New Model Tree to Study Wood Formation and Tree Architecture
18:30	Haihai Wang (Shanghai Institute of Plant Physiology & Ecology, CAS): PtFLA6, a Fasciclin-like Arabinogalactan Protein, Functions in Tension Wood Formation of <i>Populus</i> , which is Regulated by GA
19:00	Welcome Reception
Thursday, 21 July 2016	
08:30–10:30	Session III. Secondary Growth in Woody Species (Continued) Chairs: Andrew Groover and Xiangdong Fu
08:30	Matias Kirst (University of Florida, USA): EVE Regulates Vessel Element Size and Number
09:00	Meng-Zhu Lu (Chinese Academy of Forestry): Identification of Regulators Involved in Development of Secondary Vascular System in <i>Populus</i>
09:30	Vincent Chiang (North Carolina State University, USA.): Regulation of Lignin Biosynthesis in <i>Populustrichocarpa</i>
10:00	Wei Li (Northeast Forestry University, Harbin, China): Genetic and

	Epigenetic Regulation of Tension Wood Formation
10:15	Song Xueqin (Chinese Academy of Forestry, Beijing): MYB216 is Involved in the Regulation of Cellulose Synthesis in <i>Populus</i>
10:30	Coffee Break
11:00–12:30	Session IV. Mechanisms of Vascular Transport (Xylem and Phloem) Chairs: Rainer Hedrich and Zhong Zhao
11:00	Michael Knoblauch (Washington State University, Pullman, USA): Long-distance Phloem Transport: How Plants Alter Sieve Tube Physiology and Geometry to Maintain Sink Support
11:30	David Braun (University of Missouri, USA): Transporters Controlling Sucrose Phloem Loading in Cereals
12:00	Johannes Liesche (Northwest A&F University, Yangling, China): Efficiency and Regulation of Phloem Transport in Trees
12:15	Jae-Yean Kim (Gyeongsang National University, Jinju S. Korea): AtPDRK1, a Plasmodesmal LRR Repeat Receptor-like Kinase, is Involved in Molecular Trafficking of Herbicides in Arabidopsis
12:30–13:30	Lunch
13:30–15:00	Session IV. Mechanisms of Vascular Transport (Continued) Chairs: Jae-Yean Kim and Yihua Zhou
13:30	Rainer Hedrich (University of Würzburg, Germany) Electrical Wiring and Long-Distance Plant Communication
14:00	Zhaoliang Zhang (Anhui Agric. University & UC Davis): Vascular-mediated Signaling Involved in Early Phosphate Stress Response in Plants
14:30	Lei Yang (Max-Planck-Institute, Golm, Germany): Unlinking Phloem-mediated Protein Transport from mRNA Transport
14:45	Ji-Ming Gong (IPPE, Shanghai Institute of Biological Sciences, China): The Role of POT12 in Nitrate Long-distance Transport
15:00	Coffee Break
15:30–17:00	Poster Session I
18:00	Dinner
Friday, 22 July 2016	
08:30–10:30	Session V. Vascular Trafficking and Development Chairs: Ji-Young Lee and Mengzhu Lu
08:30	Christine Beveridge (University of Queensland, Australia): Sugar Demand, Not Auxin, is the Initial Regulator of Apical Dominance
09:00	Yuling Jiao (Institute of Genetics & Developmental Biology, CAS): Long-distance Transport-mediated Cell Fate Control in the Shoot Apex

09:30	Xiangdong Fu (Institute of Genetics and Developmental Biology, CAS, China): The Mobile Arabidopsis HY5 Protein Coordinates Plant Growth and Nutrition
10:00	Jie Hou (Peking University): Dynamic Change of Callose Deposition in Secondary Phloem
10:15	Marie Barberon (University of Lausanne, Switzerland): The Endodermis as a Checkpoint for Nutrients
10:30	Coffee Break
11:00–12:30	Session V. Vascular Trafficking and Development (Continued) Chairs: Shmulik Wolf and Jianru Zuo
11:00	Tien-Shin Yu (Academia Sinica, Taiwan, China): Systemic Signals Involved in Inhibition of Floral Initiation
11:30	Byung-Kook Ham (University of California, USA): Ribonucleoprotein Complexes as Vehicles for Long-distance Trafficking of siRNA and mRNA
12:00	Fritz Kragler (MPI, Golm, Germany): Long-distance Transported mRNAs and Mobility Motif(s) in <i>A. thaliana</i>
12:30–13:30	Lunch
13:30–15:30	Session VI. Integrative Plant Vascular Biology Chairs: Antia Rodriguez-Villalon and Yongling Yuan
13:30	Thomas Greb (Heidelberg University, Germany): Long- and Short-distance Signaling in the Regulation of Lateral Plant Growth
14:00	Mechthild Tegeder (Washington State University, Pullman, USA): Altering Source-to-Sink Transport of Nitrogen to Improve Crop Productivity
14:30	Ulrich Hammes (University of Regensburg, Germany): Phloem Unloading: Seed and Root Development Depend on UmamiT Amino Acid Facilitators
15:00	Ji-Young Lee (Seoul National University, Korea): From a Model System to Crops: Genome-wide Investigation of Cambial Functions in Root Secondary Development
15:30	Coffee Break
16:00–18:30	Session VI. Integrative Plant Vascular Biology (Continued) Chairs: Mechthild Tegeder and Lijia Qu
16:00	Yong-Ling Ruan (University of Newcastle, Australia): Cell Wall Invertase as a Functional Component for Vascular Evolution and Phloem Unloading
16:30	Lingyun Zhang (Beijing Forestry University): Pathway and Mechanism of Phloem Unloading for Photoassimilate in Fruits of Several Species
16:45	Michitaka Notaguchi (Nagoya University, Japan): Interfamily Grafting with a Variety of Vascular Plants is Achieved Using Tobacco Rootstocks
17:00–19:00	Poster Session II
19:00	Dinner

Saturday, 23 July 2016	
08:30–10:30	Session VII. Biotic Plant Interactions Chairs: Bill Lucas and Chun-Ming Liu
08:30	Ted Farmer (University of Lausanne, Switzerland): Long-distance Wound Signaling Systems in Plants
09:00	Pradeep Kachroo (University of Kentucky, USA): Chemical Signaling and Transport of Signals during Systemic Immunity
09:30	Uwe Sonnewald (University of Erlangen-Nürnberg, Germany): How Potato Plants Take the Heat?
10:00	Thomas Spallek (RIKEN CSRS, Japan): Multiple Transport Routes Along Vascular Junctions in Haustoria of Parasitic Plants
10:15	Koh Aoki (Osaka Prefecture University, Japan): Vascular Connection Between Parasitic Plant and Host Plant
10:30	Coffee Break
11:00–11:30	Closing Remarks & Details on PVB2019
11:45	Lunch