

KEYSTONE SYMPOSIA

on Molecular and Cellular Biology

Plant Signaling: Molecular Pathways and Network Integration (A4)

January 21-24, 2018 • Granlibakken Tahoe • Tahoe City, California, USA

Scientific Organizers: Ken Shirasu, Uta Paszkowski and Christian S. Hardtke

Supported by the Directors' Fund

Abstract & Scholarship Deadline: September 25, 2017 / Abstract Deadline: October 23, 2017 / Discounted Registration Deadline: November 21, 2017

SUNDAY, JANUARY 21

Arrival and Registration

MONDAY, JANUARY 22

Welcome and Keynote Address

Charlie M. Boone, University of Toronto, Canada
Systems Biology/Genetic Network in Yeast

Signaling Network as a System

Sabeeha Merchant, University of California, Los Angeles, USA
Synchronized Cell 'Omics for Metabolic Networks

Rosangela (Ross) Sozzani, North Carolina State University, USA
Gene Regulatory Networks Controlling Root Stem Cells

Christian Fleck, Wageningen University, Netherlands
Modeling of Signaling Pathways

Short Talk(s) Chosen from Abstracts

Signaling in Development

Christian S. Hardtke, University of Lausanne, Switzerland
A molecular rheostat adjusts auxin flux to promote root protophloem differentiation

Dolf Weijers, Wageningen University, Netherlands
Origin and Evolution of the Nuclear Auxin Response System

Tetsuya Higashiyama, Nagoya University, Japan
Molecule-Controlled Plant Reproduction

Short Talk Chosen from Abstracts

Poster Session 1

TUESDAY, JANUARY 23

Propagation and Coordination (Long Distance Signaling)

Edward E. Farmer, University of Lausanne, Switzerland
Vascular Signalling Routes for Wound-Stimulated Jasmonate Synthesis

Sheng Luan, University of California, Berkeley, USA
Regulation of Plant Nutrient Homeostasis by a Ca Signaling Network

Yoshikatsu Matsubayashi, Nagoya University, Japan
Peptided Based Long Distance Signaling

Zhen-Ming Pei, Duke University, USA
Ca Perception

Short Talk(s) Chosen from Abstracts

Environmental Signaling

Tzyy-Jen Chiou, Academia Sinica, Taiwan
MicroRNA-mediated Surveillance of Phosphate Transport – Uptake, Translocation, and Storage

Gabriel Krouk, CNRS, France
A Systems View of Nitrogen Signaling Interactions

Siobhan M. Brady, University of California, Davis, USA
Transcriptional Regulation of Nitrogen Metabolism

Short Talk Chosen from Abstracts

Poster Session 2

WEDNESDAY, JANUARY 24

Signaling in Biotic Interaction

Uta Paszkowski, University of Cambridge, UK
Signaling in AM Symbiosis

Giles E.D. Oldroyd, John Innes Centre, UK
Establishing Symbiotic Associations through Symbiosis Signaling

Melissa G. Mitchum, University of Missouri, USA
Signaling in Plant-Nematode Interactions

Ken Shirasu, RIKEN, Japan
Signaling in Plant-Plant Interaction

Marise Borja, Plant Response Biotech, Spain
Novel Water Stress Tolerance Molecular Pathways

Short Talk(s) Chosen from Abstracts

Hormone Sensing/Integration

David C. Nelson, University of California, Riverside, USA
Strigolactone and Karrikin Perception

Doris Wagner, University of Pennsylvania, USA
Signaling during spatiotemporal Control of Flower Formation in the Context of Chromatin

Cris Argueso, Colorado State University, USA
Hormone Signal Integration, Cytokinin

Meeting Wrap-Up: Outcomes and Future Directions (Organizers)

THURSDAY, JANUARY 25

Departure