

Program

TUESDAY, OCTOBER 7, 2014

15:00–17:00 Registration

17:10–17:20 Opening Remarks: Hiroo FUKUDA

17:20–18:20 **Plenary Lecture 1**

Chair: Ikuko HARA-NISHIMURA

[Plenary Lecture-1]

Cells into tissues: dynamic remodeling of cell-cell contacts22

Masatoshi TAKEICHI

(RIKEN Center for Developmental Biology, Japan)

18:20–19:20 **Plenary Lecture 2**

Chair: Hiroo FUKUDA

[Plenary Lecture-2]

Development rooted in regulatory networks24

Philip BENFEY

(Department of Biology and HHMI, Duke University, USA)

19:30–21:00 Reception

WEDNESDAY, OCTOBER 8, 2014

9:00–12:15 **Session A**

Epigenomics

Chairs: Tetsuji KAKUTANI

Daniel ZILBERMAN

9:00–9:30 **[A-1]**

Evolution and function of DNA methylation in the context of chromatin26

Daniel ZILBERMAN

(Department of Plant and Microbial Biology, University of California, Berkeley, USA)

9:30–10:00 **[A-2]**

Chromatin and antisense transcript dynamics underlying seasonal timing28

Caroline DEAN

(Department of Cell and Developmental Biology, John Innes Centre, UK)

10:00–10:15 **[A-3 (PS No. 20)]**

Molecular phenology in plants100

Hiroshi KUDOH

(Center for Ecological Research, Kyoto University, Japan)

10:15–10:45 Coffee Break**10:45–11:15 [A-4]****Epigenetic and genetic changes that caused evolution of land plant body plans**30Mitsuyasu HASEBE

(National Institute for Basic Biology, Japan)

11:15–11:45 [A-5]**Spontaneous epigenetic variation in *Arabidopsis thaliana***32Robert SCHMITZ

(Department of Genetics, University of Georgia, USA)

11:45–12:15 [A-6]**Epigenetic silencing and anti-silencing of TEs in *Arabidopsis***34Tetsuji KAKUTANI

(National Institute of Genetics, Japan)

12:15–14:00 Lunch**14:00–17:15 Session B****Metabolomic function**

Chairs: Robert L. LAST

Kazuki SAITO (Tetsuro MIMURA)

14:00–14:30 [B-1]**Tomato glandular trichomes: factories of metabolic diversity**36Robert L. LAST

(Department of Biochemistry and Molecular Biology, Michigan State University, USA)

14:30–15:00 [B-2]**Data publication and sharing in metabolome research**38Masanori ARITA

(National Institute of Genetics, Japan)

15:00–15:15 [B-3 (PS No. 27)]**A novel strategy to identify a gene to regulate nutrient requirement in plants**108Kyoko MIWA

(Graduate School of Environmental Science, Hokkaido University, Japan)

15:15–15:45 Coffee Break**15:45–16:15 [B-4]****Strigolactone biosynthesis and action**40Shinjiro YAMAGUCHI

(Graduate School of Life Sciences, Tohoku University, Japan)

16:15–16:45 [B-5]**How plants synthesise alkaloids**42Sarah E. O'CONNOR

(Department of Biological Chemistry, John Innes Centre, UK)

- 16:45–17:15 [B-6]
Metabolomics and origin of chemical diversity in plants44
 Kazuki SAITO (Mami YAMAZAKI, Chiba University, Japan)
 (Graduate School of Pharmaceutical Sciences, Chiba University, Japan/
 RIKEN Center for Sustainable Resource Science, Japan)

17:15–19:00 Dinner

19:00–21:00 Poster Session 1

THURSDAY, OCTOBER 9, 2014

- 9:00–12:05 **Session C**
Protein complexes and biological functions
 Chairs: Takao KONDO
 Cyril ZIPFEL
- 9:00–9:30 [C-1]
**Circadian pacemaker and oscillator by dual ATPase of the cyanobac-
 terial clock protein KaiC**46
 Takao KONDO
 (Graduate School of Science, Nagoya University, Japan)
- 9:30–10:00 [C-2]
Regulation of early receptor kinase-mediated immune signaling ...48
 Cyril ZIPFEL
 (The Sainsbury Laboratory, UK)
- 10:00–10:15 [C-3 (PS No. 13)]
Systematic approaches to understand plant circadian clock system
92
 Norihito NAKAMICHI
 (Institute of Transformative Bio-Molecules, Nagoya University and WPI,
 Japan)
- 10:15–10:45 Coffee Break
- 10:45–11:05 [C-4]
**The flowering hormone florigen: its structure, receptor complex, and
 beyond**50
 * Hiroyuki TSUJI
 (Graduate School of Biological Sciences, Nara Institute of Science and
 Technology, Japan)
- * On behalf of the late Prof. Ko SHIMAMOTO
- 11:05–11:35 [C-5]
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 Jian-Ren SHEN
 (Graduate School of Natural Science and Technology, Okayama
 University, Japan)

11:35–12:05 [C-6]
A multipronged approach for unraveling nutrient uptake and translocation54
Wolf B. FROMMER
 (Carnegie Institution for Science, USA)

12:05–14:00 **Lunch**

14:00–17:15 **Session D**
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Chairs: Thierry GAUDE
Ikuko HARA-NISHIMURA

14:00–14:30 [D-1]
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Thierry GAUDE
 (Plant Reproduction and Development Laboratory, Ecole Normale Supérieure, France)

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Tamotsu YOSHIMORI
 (Graduate School of Medicine, Osaka University, Japan)

15:00–15:15 [D-3 (PS No. 45)]
Diversification of membrane trafficking pathways
~lessons from plants~129
Takashi UEDA
 (Graduate School of Science, The University of Tokyo, Japan)

15:15–15:45 **Coffee Break**

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Christopher J. STAIGER
 (Department of Biological Sciences, Purdue University, USA)

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Ikuko HARA-NISHIMURA
 (Graduate School of Science, Kyoto University, Japan)

16:45–17:15 [D-6]
A new mechanosensitive actin filament regeneration mechanism revealed by live-cell fluorescence single-molecule imaging64
Naoki WATANABE
 (Kyoto University Faculty of Medicine, Japan)

17:15–19:00 **Dinner**

19:00–21:00 **Poster Session 2**

FRIDAY, OCTOBER 10, 2014

**9:00–12:15 Session E
Signaling**

Chairs: Hiroo FUKUDA
Ben SCHERES

**9:00–9:30 [E-1]
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Mark ESTELLE
(University of California San Diego, USA)

**9:30–10:00 [E-2]
Perception of root-derived peptides by shoot LRR-RKs mediates
systemic N-demand signaling68**
Yoshikatsu MATSUBAYASHI
(Graduate School of Science, Nagoya University, Japan)

**10:00–10:15 [E-3 (PS No. 47)]
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Tetsuya HIGASHIYAMA
(Institute of Transformative Bio-Molecules, Nagoya University, Japan)

10:15–10:45 Coffee Break

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Hiroo FUKUDA
(Graduate School of Science, The University of Tokyo, Japan)

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Yukiko GOTOH
(Graduate School of Pharmaceutical Sciences, The University of Tokyo,
Japan)

**11:45–12:15 [E-6]
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Ben SCHERES
(Plant Developmental Biology Group, Wageningen University Research,
The Netherlands)

12:15–12:30 Announcement of Grant Recipients

12:30–12:35 Closing Remarks: Ikuko HARA-NISHIMURA

12:35–13:30 Lunch