

The 28th Plant Organelle Workshop

Grant-in-Aid for Transformative Research Areas (A)

Cytoplasmic Genome Regulation JOINT SYMPOSIUM

Date Thu., March 12, 13:00–19:00

Venue Liberty Hall (room#1013), Liberty Tower, Meiji University

Organizers (*in alphabetical order*): Shin-ichi Arimura (Univ. of Tokyo), Yoko Ito (Ochanomizu Univ.), Masanori Izumi (RIKEN), Yusuke Kato (Setsunan Univ.), Yoshiki Nishimura (Waseda Univ.), Atsushi Takabayashi (Hokkaido Univ.), Asuka Yamaguchi (Univ. of Tokyo), Kohki Yoshimoto (Meiji Univ.)

13:00 : Opening remarks

Session1

13:05 : The role of autophagy in seed property formation and dormancy establishment
Keisuke Seta¹, Kohki Yoshimoto^{1,2} (¹Life Sci., Grad. Sch. Agri., Meiji Univ., ²Dept. Life Sci., Sch. Agri., Meiji Univ.)

13:40 : Plant myosin XI coordinates cargo transport and actin remodeling
Jun Obara¹, Motoki Tominaga^{1,2} (¹Grad. Sch. Adv. Sci. Eng., Waseda Univ., ²Fac. Educ. Integrated Arts. Sci. Bio., Waseda Univ.)

14:15 : Break

Session 2

14:30 : Compartment-specific properties and functions of mitochondria in cortical pyramidal neurons
Yusuke Hirabayashi (Sch. of Eng., The Univ. of Tokyo)

15:05 : Novel mechanism of iron supply to mitochondria via ER-mitochondria contact sites
Hijiri Oshio (Dept. of Life Sci., Fac. of Sci., Gakushuin Univ.)

15:40 : Break

Session 3

15:55 : Evolution of Light-Harvesting Complex I Driven by Serial Endosymbiosis in Algae
Minoru Kumazawa¹, Kentaro Ifuku², Atsushi Takabayashi¹ (¹Inst. Low Temp. Sci., Hokkaido Univ., ²Grad. Sch. Agri., Kyoto Univ.)

16:30 : Novel regulatory mechanism of chloroplast biogenesis focused on polysulfide
Takayuki Shimizu (Div. of Nat. Sci., Nara Women's Univ.)

17:05 : Light and hormonal signaling maintain chloroplast homeostasis via transcriptional regulation of photosynthetic genes
Ryo Tachibana^{1,2} (¹Grad. Sch. of Biostudies, Kyoto Univ., ²Dep. of Plant Sci., Univ. of Cambridge, UK)

17:40 : Break

Keynote lecture

17:55 : Plant strategy for photoprotection under fluctuating light conditions
Toshiharu Shikanai (Grad. Sch. of Sci., Kyoto Univ.)

18:55 : General discussion

19:00 : Closing remarks

This workshop is open to all interested participants, but online registration in advance is required.
(<https://sites.google.com/view/plant-organelle-workshop>).

Contact address:

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Phytohormones analysis workshop

Date Thu., March 12, 13:30–16:30**Venue** Room Y**Organizers:** Masashi Asahina (Teikyo Univ.), Izumi Mori (IPSR, Okayama Univ.)

Phytohormones are a group of compounds that have important role in many aspects of the life cycle. They are known to act at extremely low concentrations, less than a few ng~pg/mg DW. This workshop aims to introduce analytical techniques and fascinating research related to phytohormone analysis and provide an opportunity to discuss the technical basis, methodology, and development of phytohormone research.

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| 13:30 | Opening remarks
Masashi Asahina (Teikyo Univ.) |
| 13:35 | Quantitative plant hormone analysis at Adv. Instrum. Anal.Ctr, Teikyo Univ.
Emi Yumoto (Adv. Instrum. Anal.Ctr, Teikyo Univ.) |
| 13:50 | Establishing a Bitterness-Reduction Method for YUZU-Based Processed Products.
Agric. Environ. Club-Food Sci. Group (Dept. Food Sci., Tochigi Agric. High Sch.) |
| 14:05 | Quantitative plant hormone analysis at IPSR, Okayama University–Renewal of the LC-MS system
Takakazu Matsuura (IPSR, Okayama Univ.) |
| 14:20 | Characteristics of dormancy and phytohormones related to dormancy in dominant tree species of a subtropical evergreen broadleaf forest
Shoma Hiejima ¹ , Rico Hachisuka ¹ , Takakazu Matsuura ² , Izumi C. Mori ² , Shin Ugawa ¹ (¹ Fac. Agr., Kagoshima Univ., ² IPSR, Okayama Univ.) |
| 14:40 | Regulation of auxin levels and responsiveness sustaining indeterminate growth and vegetative propagation in <i>Marchantia polymorpha</i>
Ryuichi Nishihama (Dept. Appl. Biol. Sci., Fac. Sci. Tech., Tokyo Univ. Sci.) |
| 15:00 | Mechanisms of Auxin Homeostasis Mediated by Organelle-Specific Localization of Auxin Metabolites
Ken-ichiro Hayashi (Dept. Biosci, Okayama Univ. Sci.) |
| 15:20 | Introduction to the RIKEN CSRS Advanced Plant Hormone Analysis Platform.
Masanori Okamoto ¹ , Mikiko Kojima ¹ , Yumiko Takebayashi ¹ , Mitsunori Seo ² , Hitoshi Sakakibara ³ , Masami Hirai ¹ (¹ RIKEN CSRS, ² Tropical Biosphere Res Center, Univ Ryukyus, ³ Grad. Sch. BioagriSci., Nagoya Univ.) |
| 15:40 | Detection and quantification of proteins related plant hormones using MRM method with LC/MS/MS
Hitoshi Mori ^{1,2} (¹ Grad. Sch. Bioagric. Sci., Nagoya Univ. ² Grad. Sch. Food Agric. Sci., Fukushima Univ.) |
| 16:00 | Closing remarks
Izumi Mori (IPSR, Okayama Univ.) |

5th Symposium on Phototropic Prokaryotes

Date Thu., March 12, 14:00–18:00 (Reception: 13:30–) **Venue** Room Z (Room 1022, Liberty Tower, Meiji Univ.)

Organizers: Jiro Harada (Kurume Univ. Sch. Med.), Yusuke Tsukatani (JAMSTEC), Chihiro Azai (Chuo Univ.), Takayuki Shimizu (Nara Women's Univ.)

Phototropic prokaryotes such as cyanobacteria and anoxygenic photosynthetic bacteria are now subjects for various fields of studies including biochemistry, molecular biology, structural biology, biophysics, bioorganic chemistry, and microbial ecology. This symposium invites speakers talking their latest achievements and provides new insights into studies on photosynthetic microorganisms including chloroplasts through discussion.

Entry form: <https://forms.gle/o5FFWRoR9hW2xcjo7>

Deadline: Fri., March 6 (If you do not plan to attend the banquet, registration will be accepted until the day before.)



Chairperson: Yusuke Tsukatani

- 14:00 Opening remarks (Jiro Harada)
- 14:05 “Structure–function relationships of light-harvesting protein complexes in algae”
Keisuke Kawakami (RIKEN SPring-8 Center)
- 14:35 “Light-harvesting strategies of photosynthetic antenna systems revealed at the single-molecule level”
Toru Kondo (National Institute for Basic Biology, The Graduate University for Advanced Studies SOKENDAI, Exploratory Research Center on Life and Living Systems)
- 15:05 “Analysis of uphill excitation energy transfer in the far-red light-harvesting antenna protein complex in a green alga, *Prasiola crispera*”
Makiko Kosugi^{1,2}, Yutaka Shibata³, Keisuke Saito^{4,5}, Yusuke Yoneda^{2,6}, Hikaru Kuramochi^{2,6,7}, Hiroshi Ishikita^{4,5}, and Jun Minagawa^{1,2} (¹National Institute for Basic Biology, ²Graduate Institute for Advanced Studies, SOKENDAI, ³Graduate School of Science, Tohoku University, ⁴Department of Applied Chemistry, The University of Tokyo, ⁵Research Center for Advanced Science and Technology, The University of Tokyo, ⁶Reserch Center of Integrative Molecular Systems, Institute for Molecular Science, ⁷Graduate School of Engineering Science, The University of Osaka)

15:35 Break

Chairperson: Chihiro Azai

- 15:55 “Analysis of the secretion and transport mechanisms of photosynthetic pigments via extracellular vesicles in the cyanobacterium *Leptolyngbya boryana*”
Kentaro Usui¹, Haruki Yamamoto¹, Hitoshi Mori^{1,2}, Takao Oi¹, Mitsutaka Taniguchi¹, and Yuichi Fujita¹ (¹Graduate School of Bioagricultural Science, Nagoya University, ²Institute for Glyco-core Research, Nagoya University)
- 16:25 “Cultivation of the previously uncultured bacterial phylum *Vulcanimicrobiota*: phylogeny, ecology, and photosynthesis”
Shuheii Yabe (Holobiont Resilience Research Team, Center for Sustainable Resource Science (CSRS), RIKEN, Japan)
- 16:55 “The path to “nitroplast”: Evolutionary modes elucidated by endosymbionts in diatoms and haptophytes”
Takuro Nakayama (Center for Computational Sciences, University of Tsukuba)
- 17:25 Closing remarks (Jiro Harada)

23rd Japan plasmodesmata meeting

Date Fri., March 13, 18:30–20:30

Venue Room Y

Organizers: Yusuke Ohba (Teikyo University), Michitaka Notaguchi (Kyoto University)

Plasmodesmata are microscopic channels that connect adjacent plant cells and are thought to be sites for the translocation of proteins, RNA, plant hormones, etc. Twice a year, this workshop has held a study session to discuss topics presented by speakers involved in research related to plasmodesmata. This time, we would like to ask Dr. Chiyo Jinno (Okinawa Institute of Science and Technology) to be our speaker and hold a discussion. No registration is required, but please be advised that you will be asked to sign a confidentiality agreement on the day of the meeting. The presentations will be given in Japanese.

Chair: Yusuke Ohba

18:30	Opening remarks
18:35	Search for novel factors involved in primary PD biogenesis using <i>Physcomitrium patens</i>
19:15	Discussion
19:55	Closing Remarks

Plant Science Presentation Workshop 2026

“Communicating Your Research Clearly with Graphical Abstracts”

Date Fri., March 13, 19:00–20:45 (Reception: 18:45–) **Venue** Room Z

Lecturer: Misaki Ouchida (Communication in Science and Technology Education and Research Program, Hokkaido Univ.)

Organizers: Chihiro Furumizu (Shimane Univ.) / Yasunori Ichihashi (RIKEN) / Tomoyuki Furuya (Osaka Univ.)

A graphical abstract (GA) is a visual summary that conveys the essence of research at a glance. In recent years, many academic journals have begun requiring GAs, and it has become clear that papers with GAs are more likely to be read and shared through press releases and social media.

However, many researchers may face challenges such as “How should I create an effective GA?” or “What techniques should I use to make the GA clearer and more accessible?” In this workshop, participants will learn practical tips for creating GAs from a science illustrator and engage in hands-on exercises to create their own GAs using sample materials.

19:00	Self-introductions and GA Overview
19:15	GA Creation Workshop ①
19:45	Review of Workshop ①
20:00	GA Creation Workshop ②
20:20	Review of Workshop ②
20:30	Wrap-up and Q&A
20:45	Closing

*This workshop will use PowerPoint during the workshop. Please bring your laptop with you.

This workshop is free and open to everyone. Please register in advance using the form below. Registration may close early due to limited seating.

Registration form: <https://forms.gle/4eNabWUky8xq1yQU8>

Contact: Chihiro Furumizu (chihiro.furumizu@life.shimane-u.ac.jp)

This workshop is supported by a conference grant from the Nakatsuji Foresight Foundation.

Japan-Taiwan Joint Seminar for Young Plant Physiologists and Photosynthesis Researchers 2026

Date Sun., March 15, 16:40–18:40

Venue Room Z (Room1022, Liberty Tower, Meiji University)

Organizers (Alphabetical): Ting-Hsuan Chan (National Taiwan Univ.), Yuta Hino (Nagoya Univ.), Ming-Yang Ho (National Taiwan Univ.), Ko Imaizumi (Kyoto Univ.), Asuka Kobayashi (Univ. Tsukuba), Takeru Kumagai (Kyoto Univ.), Kana Kuroe (Okayama Univ.), Fumiya Nakano (Osaka Metropolitan Univ.), Airi Oh (SOKENDAI), Ryoya Tadaki (Meiji Univ.), Ryo Tachibana (Univ. Cambridge), Taro Yamanashi (Tohoku Univ., Univ. Cambridge)

Japan Society for Young Plant Physiologists and the Japanese Society of Photosynthesis Research for Young Researchers will host a seminar and social mixer to promote interaction among young researchers from Japan and Taiwan, preceding Japan–Taiwan Plant Biology 2026 (JTPB2026). In this event, we will invite two speakers who have strong connections with both Japan and Taiwan to give talks on research environments and career paths in different countries. In addition, we will organize small-group networking activities to further facilitate interaction among participants.

16:40	Reception Desk Open
16:45	Opening Remarks
16:50	My cross-country journey in plant biology: Taiwan, the UK, and Japan Dr. Yen-Ting Lu (Univ. Tokyo)
17:15	Singapore, Germany, Taiwan, then back to Japan—my journey on career development Dr. Yuki Nakamura (RIKEN CSRS, Univ. Tokyo)
17:40	Break
17:45	Self Introduction & Research Sharing Session
18:25	Closing Remarks

*A social mixer is scheduled to start at 19:00. Advance registration is required for both the seminar and the social mixer. Please check the websites and social media accounts of the Japan Society for Young Plant Physiologists and the Japanese Society of Photosynthesis Research for Young Researchers for registration details and the latest updates.