The 65th Annual Meeting of the Japanese Society of Plant Physiologists

https://jspp.org/annualmeeting/65/

Date: March 17th (Sun) through March 19th (Tue), 2024

Venue: in hybrid style (both online and on-site at Kobe International Conference Center)

6-9-1 Minatojima Nakamachi, Chuo-ku, Kobe 650-0046
Port Liner, Shimin Hiroba station
https://kobe-cc.jp/en/facilities/conference-center/

Online participation: https://jspp.org/annualmeeting/65/

Banquet: THE KOBE CRUISE Luminous Kobe 2 (https://thekobecruise.com/)

Organizing Committee

President: Hidehiro Fukaki
Vice president: Chikahiro Miyake
General Affairs: Kimitsune Ishizaki, Masaharu Mizutani
Accounting: Yuki Kondo
Program: Kimitsune Ishizaki (Chair), Seiji Akimoto, Yuichi Uno, Haruko Ueda, Kengo Kanamaru, Nobukazu Shitan, Ginga Shimakawa, Kenichiro Taoka, Naoya Takeda, Hiroshi Fukayama, Ken-ichiro Hibara, Masaharu Mizutani
Venue: Akira Akamatsu, Seiji Akimoto, Takuji Ichino, Hiroyuki Imai, Yuichi Uno, Satoko Okamura, Kenta Katayama, Chieko Goto, Daisuke Sasayama, Ginga Shimakawa, Kenichiro Taoka, Kenji Nishimura, Tomoko Hatanaka, Hiroshi Fukayama, Ken-ichiro Hibara, Akihito Mamiya, Hiroki Yagi, Daisuke Yamauchi, Yasuyuki Yamada
Hybrid: Shinya Wada, Yuuki Kondo
Advertisement: Hidehiro Fukaki, Haruko Ueda
Presentations by High School Students: Yukihiro Kimura, Yasuo Yamauchi
Banquet: Chikahiro Miyake, Shinya Wada, Ginga Shimakawa
Nursery: Yuri Munekage-Nakajima, Yuuki Sakai

Conference Secretariat

c/o Nakanishi Printing Co., Ltd.
Shimodachiuri-Ogawa, Kamigyo-ku, Kyoto 602-8048, Japan
E-mail: jspp2024@nacos.com

Meeting Information

Program

1. General Information

1-1. Important Notice

1) Response to new coronavirus infections

The new coronavirus (COVID-19) and influenza have been spreading. This meeting will bring together many people, so we ask that each participant take good care of his or her health and wear a mask to prevent infection.
Please note that the information in this document is subject to change depending on outbreaks of infectious diseases. Please see the latest information on the meeting website (Japanese: https://jspp.org/annualmeeting/65/, English: https://jspp.org/annualmeeting/65/e_greeting.php).

2) Hybrid meeting

The Annual Meeting will be held in a hybrid style, with poster presentations on-site and all presentations other than poster presentations, including oral presentations, symposia and ceremonies, at the Kobe International Conference Center. Online participants are requested to log in to the web abstracts (ORSAM portal) on the Annual Meeting website. After logging in, you can attend all sessions, including oral presentations, symposia, award ceremonies, luncheon seminars and related meetings. You can also view posters and chat with presenters online. Poster presentations of high school students' biological research will be given on-site but will not be distributed online.
For the latest information on the Annual Meeting, please visit the Annual Meeting website (https://jspp.org/annualmeeting/65/).

3) Program

- A simple program booklet will be sent only to participants who have paid the registration fee.

4) Abstract Book

- The program and abstracts are accessible electronically via the ORSAM portal site.
- The PDF for the Abstract Book can be downloaded from the meeting website only by participants who have paid the registration fee.

5) Registration of attendance [see also section 1-3]

- The deadline for registration and payment of the registration fee is February 6th (Tue), 2024. Please note that even if you have registered online, you will not be able to participate if you have not paid the registration fee by the deadline. The password for logging into the ORSAM portal site will be sent to registered participants in early March.
- On-site registration is available at the venue. We only accept cash payments.

6) Oral Presentation [see also section 1-4]

Oral presentations, including symposia, luncheon seminars, and award lectures will be held both on-site and via Zoom meetings.

7) Poster presentations [see also section 1-4]

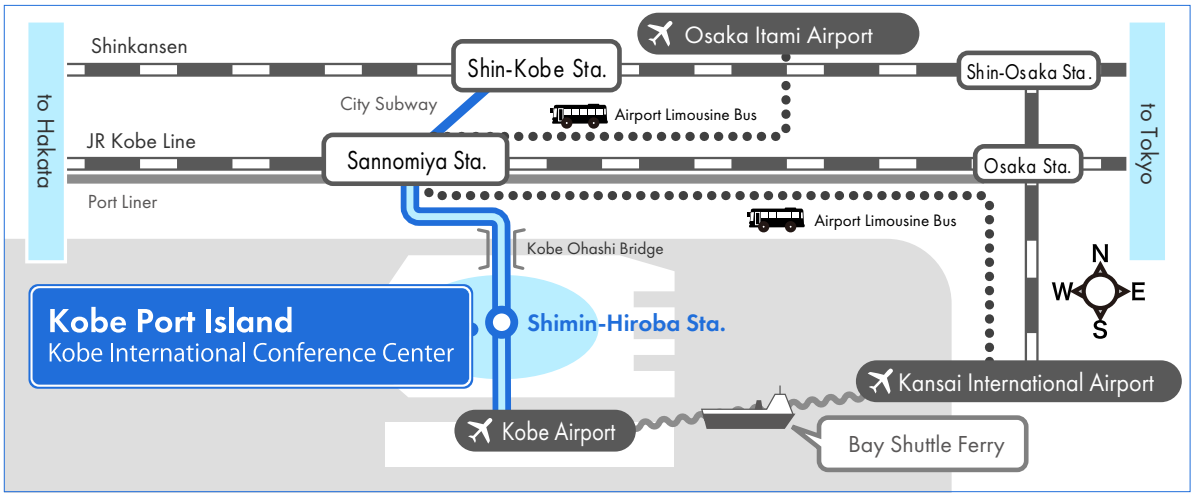
- Poster viewings and discussions will be held on-site. You can also view posters and chat with presenters online.

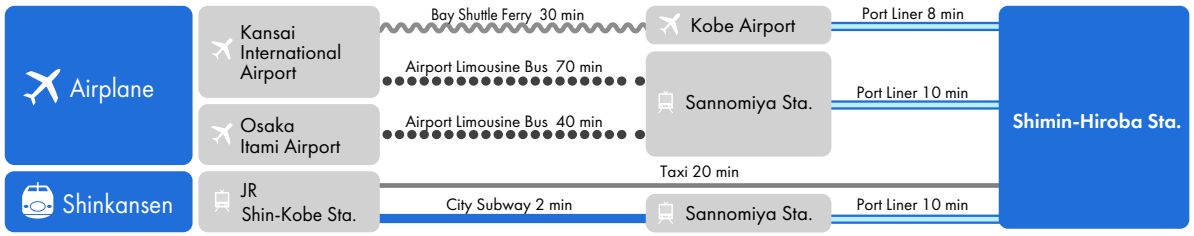
About the Meeting Logo

The logo of the Kobe Annual Meeting was designed by Seita Watanabe, Osaka Public University Botanical Garden. The logo features the red port tower of Kobe Port and a ship's anchor, and is decorated with hydrangea, the city flower of Kobe, and sasanqua, the city tree, to symbolize Kobe, a city surrounded by the sea and mountains.

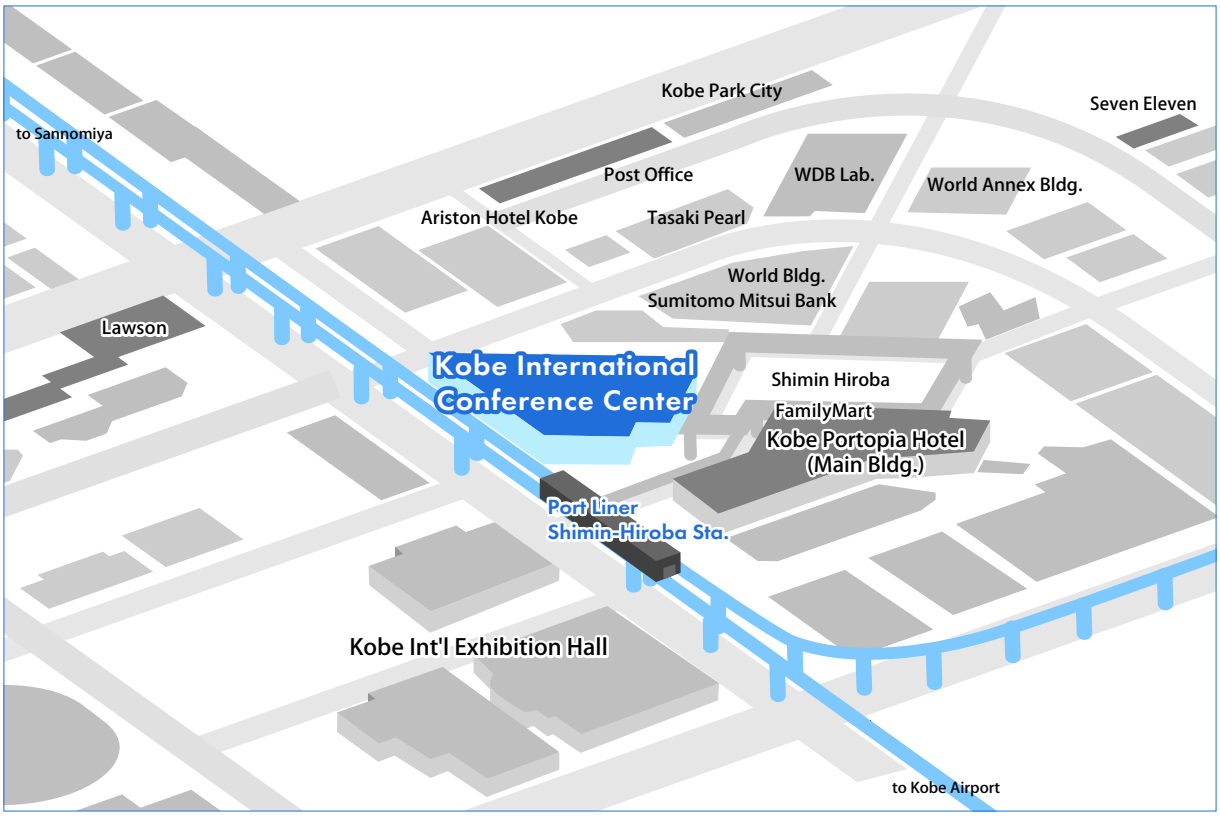
1-2. Venue and Access

◆Access





◆Area Map



Conference Room

Kobe International Conference Center

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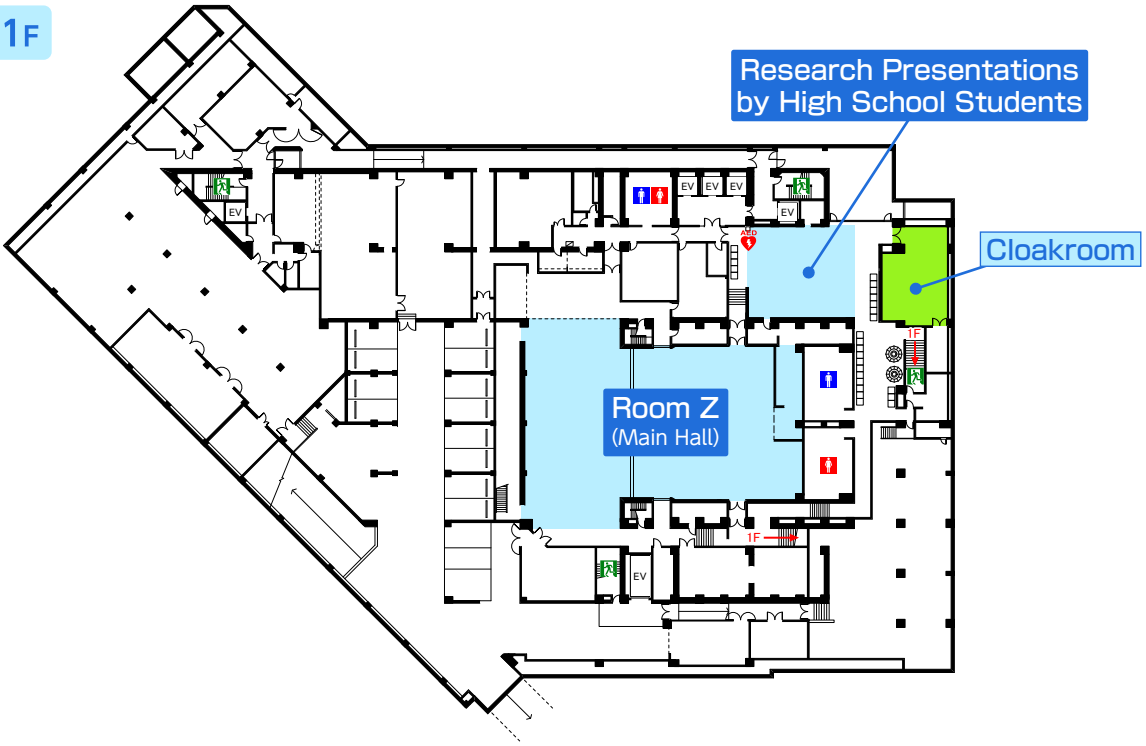

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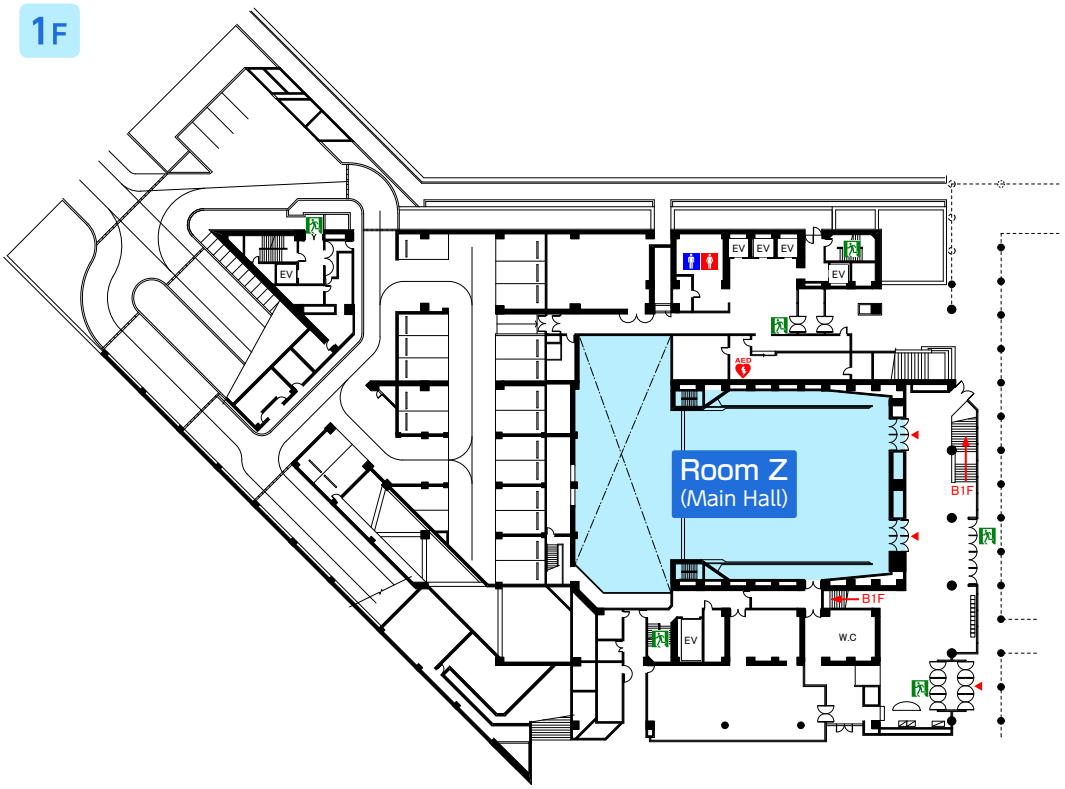
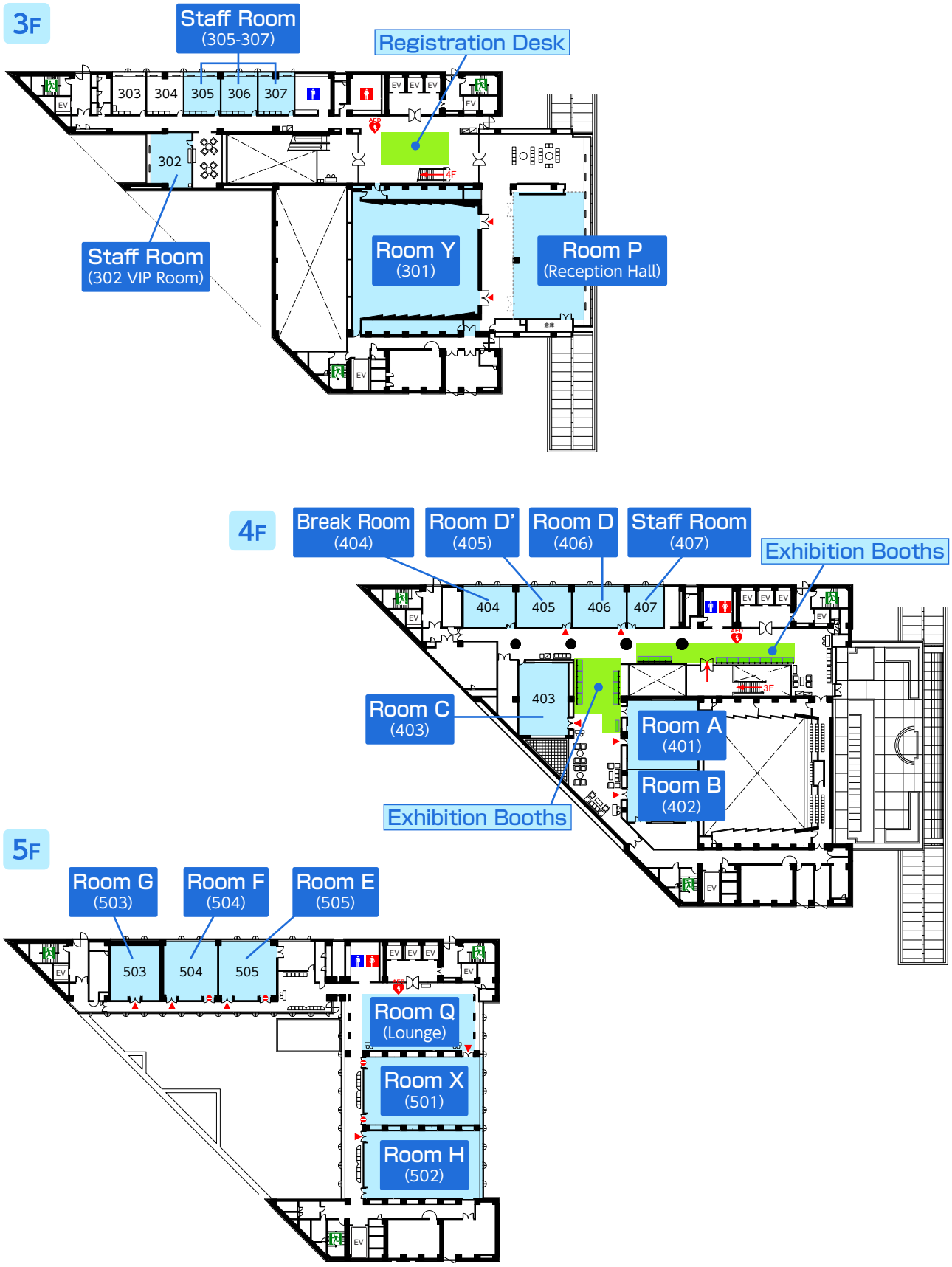


Conference Room



1-3. Registration of Participants

- Participants will receive a nametag, a receipt, and a program. The password for logging into the ORSAM portal site will be sent to registered participants in early March.
- Visit on-site registration desk and pay the fee(s) shown below for on-site registration. We only accept cash payments. The registration desk may be congested shortly before the start of sessions on Day 1. Those who will register on-site and those who did not bring their nametags are requested to visit the desk in plenty of time.

	On-site registration fee (including fee for online access to the Abstract Book)	Banquet fee
JSPP, TSPB, ASPB member	12,000yen (tax free)	13,000yen (tax included)
JSPP, TSPB, ASPB student member	5,000yen (tax free)	10,000yen (tax included)
Non-member	15,000yen (tax included)	13,000yen (tax included)

- If you wish to attend the reception on the day of the reception, please pay the reception fee at the reception desk by 12:00 pm on the day of the reception (March 18).
- Undergraduate students and junior- and high-school students and leading teachers can attend this Meeting free of charge regardless of their JSPP membership. Please see "registration" page on the Meeting website. Although these participants cannot access the online Abstract book or receive a printed program, they can download the program from the meeting website.
- Always wear your name tag at the venue. The Meeting Committee will check your name tag.

1-4. Notes for Presenters

Regardless of the language of the presentation, all figures and tables should be prepared in English. In preparing figures and tables, please refer to the website of Barrier-Free Presentation Methods for Colorblind People (https://www.nig.ac.jp/color/gen/).

1) General presentations

1. Qualification of presenters

   In accordance with JSPP Article 7(3) and 9(2), the presenters of the Annual Meeting must be JSPP members. If you are a presenter who is in the process of enrollment, please complete the procedure and the payment of the membership fee before the Annual Meeting; otherwise, your presentation will be canceled.

2. Style of presentation

   The type of presentation (poster or oral presentation) is decided by the program committee to meet the requests at the time of application. Please make sure to confirm the type of presentation through the program before proceeding with your preparations.

3. Poster presentations

   Posters should be in English. The Poster panel is 90cm (width) × 210cm(height from the floor). Pushpins for mounting your poster are provided by the Meeting Committee.

- Schedule

	Day 1 (March 17)	Day 2 (March 18)
Presentation No. / place	1P01–1P88 / 3rd floor 1Q01–1Q69 / 5th floor	2P01–2P90 / 3rd floor 2Q01–2Q69 / 5th floor
Mounting	March 17 9:00–12:00	March 18 10:30–12:00
Discussion	March 17 Odd numbers 17:15–18:00 Even numbers 18:00–18:45	March 18 Odd numbers 13:20–14:05 Even numbers 14:05–14:50
Removal	March 18 9:00–10:30	March 19 13:30–16:00

- The presenters should be in front of their posters during the discussion time.
- Any posters remaining after removal time will be removed by the Meeting Committee.
- Please convert your poster to PDF format so that it can be viewed online. The data size of your poster should be less than 2 MB if possible. The maximum size is 3 MB. Data larger than 3 MB cannot be submitted. We appreciate your cooperation in reducing the load on the system so that many people can participate in the symposium in a comfortable environment.
- Please upload PDF files to the abstract submission system between February 26 and March 4 (tentative). Uploading instructions will be provided to presenters. Please note that PDF files can only be viewed, not downloaded.
- Please make sure to upload the PDF file.
- During the online poster viewing period (March 14, 9:00 a.m. - March 19, 5:00 p.m.), you can also use the comment box on the abstract page of your poster posted on the web abstract portal (ORSAM portal) for questions and answers. Please respond to questions in the comments section in a timely manner.
- Posters will be available in the Web Abstracts (ORSAM Portal) until March 31, after which they will be automatically deleted. If you wish to have your data deleted immediately after the Annual Meeting, please check the “I wish to have my data deleted” checkbox when uploading your poster.

4. Oral presentations
   - Slides used in oral presentations should be in English. Prepare a brief summary slide in English as the last slide.
   - Each presentation is allotted a 15-min slot, a talk for 12 min and a discussion for 2 min 30 s, followed by a 30 s interval before the next speaker. To keep the session on schedule, please strictly follow the time limits.
   - It is recommended that presentation slides be prepared with an aspect ratio of 4:3.

   On-site presentations
   - There will be no preview room at this Annual Meeting. Instead, the room will be opened 15 minutes prior to each session, as the presenters can make operation test.
   - Presenters will connect to the Zoom meeting and share their slides on the screen. The Zoom screen received by the host PC will be projected on the screen at the venue. Since this annual meeting is a hybrid meeting, presentations will not be given via cable connection.
   - Presenters are requested to enter Zoom meeting URL that will be available on the web abstracts (ORSAM portal).
   - Presenters are requested to enter the Zoom meeting before the previous presenter finishes his/her presentation and to wait at the next presenter’s table with the file open. Screen Name should be composed of “Abbreviated

affiliation" and "Your name". After the previous presenter finishes his/her presentation, please "screen share" your presentation file and start your presentation immediately.

- The SSID and password for the presenter's Wi-Fi connection will be provided to the presenters at the next presenter's table. Please be sure to disconnect from the Wi-Fi connection when you finish your presentation.
- Please set the Zoom meeting with the video camera on and microphone off and use the microphone at the venue for your presentation. Please note that if you make a mistake in the settings, you may cause audio feedback. Audio from the venue will be distributed to online participants via a host PC.
- Laser pointers cannot be used. Presenters are requested to use the pointer function of their own PCs, as online audience can also see the pointer.
- Please deactivate "Screen Sharing" after your presentation as soon as possible.
- Presentations will be streamed via Zoom Meeting and online participants will be able to listen to them on the spot.

Online presentations

- Online presenters use the Zoom meeting. Presenters are requested to connect to the URL that will be available on the web abstracts (ORSAM portal).
- Screen Name should be composed of "Abbreviated affiliation" and "Your name."
- Zoom meetings will be opened 15 minutes to each session.
- Please enter the Zoom meeting and have your file open before the previous presenter finishes his/her presentation. After the previous speaker finishes his/her presentation, please tur n on the microphone and camera, "share screen" your presentation file, and start your presentation.
- Please cancel "Screen Sharing" after your presentation as soon as possible.

Questions and comments

- During the Q&A session, please follow the chairperson's instructions. Online participants should use the "raise your hand" function of the Zoom meeting and wait for the chairperson to call you. Please remove your raised hand at the end of the Q&A period.
- Questions and answers can also be submitted in the comments box on the abstract page of the web abstracts (ORSAM portal). Presenters are requested to reply to the questions and comments by "Reply" in a timely manner.

2) Symposium presentations

The procedures for symposium presentations are the same as those for oral presentations except for the presentation time slots. Please refer to "1) General presentations 4. Oral presentations" above or ask the organizers of your symposium for details.

1-5. Notes for Chairpersons

- Please come to the venue at least 15 minutes before the session and give your name to the room attendant (host PC operator / timekeeper).
- When it's time, please start your session using the microphone at the venue. Please check the host PC to see if online participants are "raising their hands" to make questions and comments. To avoid sound troubles, please don't enter the Zoom meeting with your own PC.
- It is possible that some questions are hard to catch. In such cases, please encourage the audience to ask the question again in a louder voice or briefly repeat the question using the microphone.
- Participants at the venue will have priority for making questions. Online participants will use Zoom's hand-

raising function. Please nominate a participant who is raising his/her hand and ask him/her to speak after unmuting. After the Q&A session, please instruct the participants to mute again.

1-6. Free Wireless LAN Service

Wi-Fi accounts that will be available.

ID: JSPP

Password: kobe2024

1-7. Information Security

The participants in this Annual Meeting must agree not to tell third parties various passwords and URLs, not to record or shoot presentation screens, and not disseminate unpublished results learned at the meeting. In addition, the presenters should understand that the risk of recording and shooting your presentation and unpublished results will be increased at the online meeting compared with a conventional meeting. On the basis of the consent of the participants to the confidentiality obligation, the annual committee will take measures, such as to prevent participants from recording or shooting the presentation as much as possible.

1-8. Prohibitions

Taking pictures by the camera, video, cell phone, or audio recording without the permission of the presenter is strictly prohibited. It is also prohibited to publish the contents of the presentation on the Internet or SNS without the presenter's permission.

1-9. Misconduct

All presentations (including symposia, oral presentations, poster presentations, and award presentations) must be free of plagiarism, fabrication, and plagiarism of data, as well as slander, libel, defamation, and other socially unacceptable content that is beyond the scope of academic criticism. If we judge that there is a problem with the content of the presentation, we may request that the content be revised or deleted, or that the presentation itself be cancelled.

1-10. Patents

Upon the revision of "Operational Guidelines for Applicants Seeking the Application of Exceptions to Lack of Novelty of Invention", a certificate of presentation unnecessary. Therefore, JSPP will not issue such a certificate in this Annual Meeting.

1-11. Conflict of Interest

If you have any conflicts of interest that should be reported in your presentation at the Annual Meeting, please disclose them.

1-12. Lunch

Please use restaurants (https://kobe-cc.jp/en/visitors/local-area-guide/) and convenience stores around the venue. However, there are not many restaurants in the area. Eating and drinking are allowed in the rest areas in the venue.

1-13. Cloakroom

The cloakroom will be located on the first basement floor. The cloakroom will be open during the following hours. Please be sure to pick up your baggage before the end of the day.

March 17th (Sun): 9:00–19:15

March 18th (Mon): 8:30–17:30

March 19th (Tue): 8:30–17:00

1-14. Nursery Service

A nursery service will be set up in the conference venue for participants who bring their children. The nursery will be staffed by outsourced nurser y staff. Those who have pre-registered to use the room will receive an e-mail with details about the terms of use and the official application procedure. Pre-registration has been closed due to reaching capacity. Only those who have pre-registered will be accepted for the formal registration. The deadline for the formal registration is February 29, 2024.

1-15. Contact Information

Send any questions to the Annual Meeting Committee by e-mail to jspp2024@nacos.com or visit the registration desk.

2. Contents of the Annual Meeting

2-1. Banquet

The banquet will be a restaurant cruise (standing style) of approximately 2 hours and 30 minutes, departing from Kobe Port and passing directly under the Akashi Kaikyo Bridge. It takes about 50 minutes from the venue (Kobe International Conference Center) to the boarding point (Naka Jetty Passenger Terminal 2F / Kobe Meriken Park Oriental Hotel 2F) via Sannomiya by subway (get on at Sannomiya-Hanadokei-Mae Station and get off at Minato-Motomachi Station on the Kaigan Line) and on foot. Participants (limited to those who have made reservations in advance or registered on the day of the event and paid the registration fee) are requested to bring their participation certificates and to be at the boarding area (Naka Jetty Passenger Terminal 2F) by 18:10. Registration will take place at the boarding area before boarding, and boarding is scheduled to begin at 18:30. Please note that more information about the reception will be posted on the Annual Meeting website (Japanese: https://jspp.org/annualmeeting/65/, English: https://jspp.org/annualmeeting/65/e_greeting.php).

Meeting place: Naka Jetty Passenger Terminal 2F (Kobe Meriken Park Oriental Hotel 2F)
(https://thekobecruise.com/#access)

Registration: 17:30–18:10

Boarding begins: 18:30

Although there is plenty of room for participants, the seating style may be changed depending on circumstances such as the reemergence of COVID-19 infection. If the number of participants exceeds the maximum number, we plan to accept registrations in the order in which they are received.

After registering for the reception (in advance or on the day of the reception), you will be asked to confirm your boarding before boarding the ship on the day of the reception.

The deadline for shipboarding confirmation at the reception desk is 18:20. Please be punctual as the reception will be held on a cruise ship.

2-2. JSPP Awards Ceremony and Award Lectures

Date and time: March 18th (Mon) 15:00–17:00

Venue: Room Z

Please see the program p. 17 for details.

2-3. Symposia

Ten symposia will be held at the 65th Annual Meeting. For the contents and purpose of each symposium, please see the program p. 18 for details.

Day 1, March 17th (Sun) 9:30–12:30

♦ **S01** Stomatal research frontline -From molecules and cells to individual organisms- (Room X)

♦ **S02** Interactions between Plants and Atmosphere: from Atom to Ecosystem (Room Y)

♦ **S03** Unveil the enigma of plant actuators: exploring molecular and evolutionary mechanisms and engineering applications (Room Z)

Day 1, March 17th (Sun) 14:00–17:00

♦ **S04** Genetic transfer technology for plants and its associated sciences (Room X)

♦ **S05** Creating new molecules to manipulate plant functions (Room Y)

♦ **S06** Local and systemic signaling for environmental responses in plants (Room Z)

Day 2, March 18th (Mon) 9:00–12:00

♦ **S07** Plant and Algal Lipids: How they cope with environment by modifying lipids? (Room Y)

♦ **S08** Survival strategies and its molecular basis of plants through switching life histories (Room Z)

Day 3, March 19th (Tue) 9:00–12:00

♦ **S09** Bio-metal Strategies of Living Organisms (Room Y)

Day 3, March 19th (Tue) 13:30–16:30

♦ **S10** Multilayered Regulation of Plastid and Mitochondrial genomes and gene expression (Room Y)

2-4. Special Program: “Research Presentations by High School Students”

A special program, “Research Presentations by High School Students” will be held during the Annual Meeting. It is expected that many high school students will participate in the special program and carry out the active discussion. Awards will be given to high school students on a competitive basis. The abstracts of poster presentations by high school students will be distributed as a separate supplement (PDF).

Date and time: March 19th (Tue) 10:30–15:00

Venue: Kobe International Conference Center B1 floor (On-site only)

2-5. Luncheon Seminars

Registration is not required. Please see the outline on the meeting website and the program p. 28 for details.

♦ **PCP Luncheon Seminar “PCP’s expanding vision for the next four years”**

Date and time: March 17th (Sun) 12:45–13:45

Venue: X

Organizer: PCP Editors Committee

Sponsor: Oxford University Press

♦ **EVIDENT Luncheon Seminar**

Date and time: March 18th (Mon) 12:15–13:15

Venue: H

Organizer: EVIDENT corp.

♦ **JSPP Luncheon Seminar "An Encouragement of Studying/Working Abroad"**

Date and time: March 18th (Mon) 12:15–13:15

Venue: X

Organizer: JSPP International Committee

♦ **JSPP Luncheon Seminar "Let's start a company"**

Date and time: March 19th (Tue) 12:15–13:15

Venue: H

Organizer: JSPP Gender Equality Committee

2-6. Satellite Meetings

Please see the outline on the program p. 32 for details.

♦ **The 26th Plant Organelle Workshop**

Date and time: March 16th (Sat) (The day before the Meeting), 13:00–18:50

Venue: Convention Hall, Integrated Research Center of Kobe University

Representative Organizer: Yoshiki Nishimura (Kyoto University)

♦ **The 41st Meeting of the Japanese Society for Young Plant Physiologists**

Date and time: March 16th (Sat) (The day before the Meeting), 14:30–17:00

Venue: Room C

Representative Organizer: Takehiro Ito (Tokyo University of Agriculture and Technology)

♦ **19th Japan Plasmodesmata Meeting**

Date and time: Day 1, March 17th (Sun), 19:00–21:00

Venue: Room G

Representative Organizer: Yuji Fujimoto (Rikkyo University)

♦ **Plant Science Presentation Workshop 2024 "Let's Speak, Communicate, and Connect!"**

Date and time: Day 1, March 17th (Sun), 19:00–21:00

Venue: Room H

Representative Organizer: Chihiro Furumizu (Hiroshima University)

♦ **3rd Symposium on Phototrophic Prokaryotes**

Date and time: Day 1, March 17th (Sun), 19:00–21:00

Venue: Room X

Representative Organizer: Jiro Harada (Kurume University)

♦ **Phytohormones Analysis Workshop**

Date and time: Day 3, March 19th (Tue), 13:30–16:00

Venue: Room B

Representative Organizer: Masashi Asahina (Teikyo University)

2-7. JSPP Committee Meetings

Date and time: March 16th (Sat) (The day before the meeting)

17:00–19:30 Board of Delegates' Meeting

The other committee meetings will be held onsite or online on other dates.

The invitations will be sent to the committee members from the JSPP Secretariat.

Time table Day 1, Sun., March 17

in hybrid style (both online and on-site at Kobe International Conference Center)

	9	10	11	12	13	14	15	16	17	18	19
A		Photosynthesis				Photosynthesis					
B		Environmental response A/ Physiological responses				Environmental response A/ Physiological responses					
C		Organelles/Cytoskeleton				Organelles/Cytoskeleton					
D		New technology				Reproduction					
E		Systems biology				Plant-organism interaction A					
F		Environmental response B/ Environmental stresses				Environmental response B/ Environmental stresses					
G		Primary metabolism				Primary metabolism/Specialized (secondary) metabolism/Plant hormones/Signaling molecules					
H		Development/Morphogenesis				Development/Morphogenesis					
P・Q		Poster presentation: Mounting posters							Questions and answers 1P, 1Q: Odd numbers	Even numbers	
X		Symposium S01 Stomatal research frontline —From molecules and cells to individual organisms—			Luncheon Seminar PCP	Symposium S04 Genetic transfer technology for plants and its associated sciences					
Y		Symposium S02 Interactions between Plants and Atmosphere: from Atom to Ecosystem				Symposium S05 Creating new molecules to manipulate plant functions					
Z		Symposium S03 Unveil the enigma of plant actuators: exploring molecular and evolutionary mechanisms and engineering applications				Symposium S06 Local and systemic signaling for environmental responses in plants					
Other											

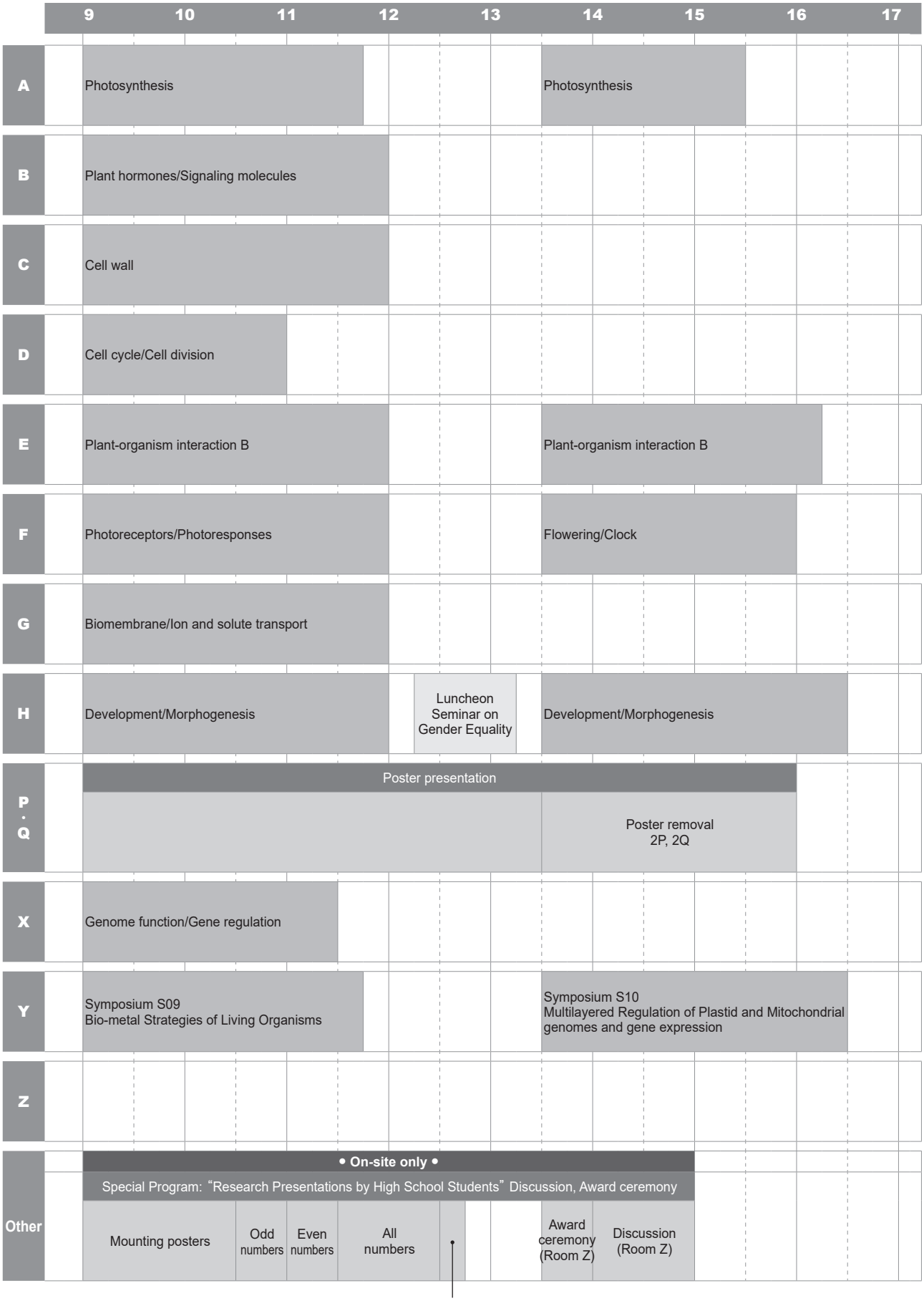
Time table Day 2, Mon., March 18

in hybrid style (both online and on-site at Kobe International Conference Center)

	9	10	11	12	13	14	15	16	17	18	19
A	Photosynthesis										
B	Plant hormones/ Signaling molecules										
C	Organelles/Cytoskeleton/Membrane trafficking										
D	Reproduction										
E	Plant-organism interaction A										
F	Environmental response B/ Environmental stresses										
G	Specialized (secondary) metabolism/ Biomembrane/Ion and solute transport										
H	Development/Morphogenesis				Luncheon Seminar Evident Corporation						
P・Q	Poster presentation										
	Poster removal 1P, 1Q		Mounting posters			Questions and answers 2P, 2Q					
						Odd numbers	Even numbers				
X	Genome function/Gene regulation				Luncheon Seminar International Committee						
Y	Symposium S07 Plant and Algal Lipids: How they cope with environment by modifying lipids?										
Z	Symposium 08 Survival strategies and its molecular basis of plants through switching life histories						JSPP Awards: Ceremony and Lectures				
Other											• On-site only •
											Banquet THE KOBE CRUISE

Time table Day 3, Tue., March 19

in hybrid style (both online and on-site at Kobe International Conference Center)



JSPP Award, JSPP Young Investigator Awards, PCP Awards, PCP Top Cited Paper Awards, and JSPP Honorary Membership Award

Date Mon., March 18, 15:00–17:00 **Venue** Room Z

15:00 Reports on Selection Process — Chairpersons of Award Committees

15:09 JSPP Award, JSPP Young Investigator Awards, PCP Awards and PCP Top Cited Paper Awards — JSPP President

15:20 Honorary Membership Award — JSPP President
Kenzo Nakamura (Professor Emeritus, Nagoya Univ.; Professor Emeritus, Chubu Univ.)

Award Lectures

Language: Japanese & English

15:30 A01 JSPP Award
"Regulatory mechanisms of enzymes in the photosynthetic energy conversion system"
Toru Hisabori (International Research Frontier Initiative, Tokyo Inst. Tech.; Research Institute for Integrated Science, Kanagawa Univ.)

15:48 A02 JSPP Young Investigator Award
"Uncovering regulatory framework on cellular plasticity and regenerative capacity in plants"
Momoko Ikeuchi (Grad. Sch. Sci. and Tech, NAIST)

15:57 A03 JSPP Young Investigator Award
"Elucidation of transcriptional regulatory mechanisms in the early response to cold stress in plants"
Satoshi Kidokoro (Sch. Life Sci. and Tech, Tokyo Tech)

16:06 A04 JSPP Young Investigator Award
"Study on the mechanisms behind cell fate determination of vascular stem cells"
Yuki Kondo (Grad. Sch. Sci., Kobe Univ.)

16:15 A05 JSPP Young Investigator Award
"Mechanisms of mechano-sensory signal transduction in plants"
Masatsugu Toyota (Dept. Biochem. and Mol. Biol., Saitama Univ.)

16:24 A06 JSPP Young Investigator Award
"Research on plant immune and nutritional responses during interactions with fungi"
Kei Hiruma (Grad. Sch. Arts and Sci., Univ. Tokyo)

16:33 A07 PCP Award
Takahiro N Uehara, Takashi Nonoyama, Kyomi Taki, Keiko Kuwata, Ayato Sato, Kazuhiro J Fujimoto, Tsuyoshi Hirota, Hiromi Matsuo, Akari E Maeda, Azusa Ono, Tomoaki T Takahara, Hiroki Tsutsui, Takamasa Suzuki, Takeshi Yanai, Steve A Kay, Kenichiro Itami, Toshinori Kinoshita, Junichiro Yamaguchi and Norihito Nakamichi (2022)
"Phosphorylation of RNA Polymerase II by CDKC;2 Maintains the Arabidopsis Circadian Clock Period"
Plant Cell Physiol. 63 (4): 450-462 (2022)
Norihito Nakamichi (Grad. Sch. Sci., Nagoya Univ.), et al.

16:42 A08 PCP Award
Sakiko Ishida, Hidemasa Suzuki, Aya Iwaki, Shogo Kawamura, Shohei Yamaoka, Mikiko Kojima, Yumiko Takebayashi, Katsushi Yamaguchi, Shuji Shigenobu, Hitoshi Sakakibara, Takayuki Kohchi and Ryuichi Nishihama
"Diminished Auxin Signaling Triggers Cellular Reprogramming by Inducing a Regeneration Factor in the Liverwort Marchantia polymorpha"
Plant Cell Physiol. 63 (3): 384-400 (2022)
Ryuichi Nishihama (Fac. Sci. and Tech., Tokyo Univ. Sci.), et al.

16:51 A09 PCP Top Cited Review Paper Award
Peter Hedden
"The Current Status of Research on Gibberellin Biosynthesis"
Plant Cell Physiol. 61 (11): 1832-1849 (2020)
Peter Hedden (Laboratory of Growth Regulators, Palacký Univ. & Inst. of Experimental Botany AS CR; Rothamsted Research)

Stomatal research frontline -From molecules and cells to individual organisms-

Date Sun., March 17, 9:30–12:30 **Venue** Room X

Organizers: Yuki Hayashi (Grad.Sch.Sci., Nagoya Univ.) / Yoshiyuki Murata (Grad. Sch. Environ. Life Nat. Sci. and Tech., Okayama. Univ.) / Izumi Mori (IPSR, Okayama Univ.)

Recent research has revealed the molecular mechanism of stomatal movements and the physiological and ecological significance of stomata. In this symposium, we aim to present the latest findings from the molecular level to ecological levels and introduce a new perspective based on deep learning. We also hope to discuss the future directions of stomatal research and its role in agriculture.

9:30		Introduction Yuki Hayashi
9:33	S01-1	Regulation of plasma membrane ion channels in guard cells Shintaro Munemasa, Yoshiyuki Murata (Grad. Sch. Environ. Life Nat. Sci. and Tech., Okayama. Univ.)
9:51	S01-2	Carbon dioxide sensing and signal transduction mechanisms in plant stomata Yohei Takahashi (ITbM, Nagoya U.)
10:09	S01-3	A new perspective on the features and functions of guard cell chloroplasts through comparative proteomic analysis Juntaro Negi (Fac. Sci., Kyushu Univ.)
10:27	S01-4	Signaling network in light-induced stomatal opening Atsushi Takemiya (Grad. Sch. Sci. Tech. Innov., Yamaguchi Univ.)
10:45	S01-5	Signal transduction in stomatal opening and control of stomatal aperture Yuki Hayashi[1], Kohei Fukatsu[1], Toshinori Kinoshita[1,2] ([1]Grad. Sch. Sci., Nagoya Univ., [2]ITbM, Nagoya Univ.)
11:03	S01-6	Stomatal control through leaf hydraulic traits Yusuke Mizokami, Nanae Takai, Ko Noguchi (Univ. Tokyo Pharm. Life Sci.)
11:21	S01-7	CO_2 Transport by Aquaporin Shaila Shermin Tania, Izumi Mori (INSTITUTE OF PLANT SCIENCE AND RESOURCES)
11:39	S01-8	Stomatal Dynamics and Water Use Characteristics of C_3 and C_4 Crops from Leaf to Field Scale Daisuke Sugiura (Grad. Sch. Bioagri., Univ. Nagoya)
11:57	S01-9	Recent Methods in Stomatal Trait Phenotyping Yosuke Toda (phytometrics co ltd)
12:15		Discussion

Interactions between Plants and Atmosphere: from Atom to Ecosystem

Date Sun., March 17, 9:30–12:30 **Venue** Room Y

Co-sponsored by Transformative Research Areas (A) "photosynthesis ubiquity" and "plant-climate feedback"

Organizers: Atsushi J. Nagano (Ryukoku Univ. / Keio Univ.) / Nobutoshi Yamaguchi (NAIST) / Yukako Hihara (Saitama Univ.) / Wataru Sakamoto (Okayama Univ.)

Plants and the atmospheric environment interact through photosynthesis and biogenic volatile organic compound (BVOC) emissions. Recent technological innovations have opened up the possibility of understanding these interactions from the atomic level to the ecosystem level. In this symposium, these interactions will be discussed in terms of "photosynthesis ubiquity" and "plant-climate feedback".

Chairperson: Wataru Sakamoto

9:30 Introduction

9:35 S02-1 A community effort to understand the evolutionary principles of photosynthetic antenna organization in green plants
Shinichiro Maruyama (Grad. Sch. Front. Sci., Univ. Tokyo)

9:55 S02-2 Toward quantitative modeling of environmental responses in BVOC emissions
Atsushi J. Nagano[1,2] ([1]Fac. of Agr., Ryukoku Univ., [2]IAB, Keio Univ.)

Chairperson: Yukako Hihara

10:15 S02-3 Photosynthetic responses of overwintering evergreen leaves
Ryouichi Tanaka (Inst Low Temp Sci, Hokkaido Uni)

10:35 S02-4 Heat adaptation by transcription factors, epigenome, and bVOCs in plants
Nobutoshi Yamaguchi (Nara Institute of Science and Technology)

10:55 Break

Chairperson: Nobutoshi Yamaguchi

11:00 S02-5 Energy network analysis using molecular structure: Coexistence of chlorophyll *a* and *b* to optimize the light-harvesting system
Eunchul Kim[1], Daekyung Lee[3], Souichi Sakamoto[2], Akihito Ishizaki[2], Jun Minagawa[1], Heetae Kim[3] ([1]NIBB, [2]IMS, [3]KENTECH)

11:20 S02-6 Real-time measurements of biogenic volatile organic compounds using PTR-MS
Kanako Sekimoto (Grad. Sch. Nanobiosci., Yokohama City Univ.)

Chairperson: Atsushi J. Nagano

11:40 S02-7 Light harvesting complexes of model organisms and other organisms
Shin-ichiro Ozawa (IPSR, Okayama Univ.)

12:00 S02-8 Biochemical properties of isoprene synthase and its physiological role in plants
Kazufumi Yazaki, Ryosuke Munakata, Sora Koita (RISH, Kyoto University)

12:20 Discussion

Unveil the enigma of plant actuators: exploring molecular and evolutionary mechanisms and engineering applications

Date Sun., March 17, 9:30–12:10 **Venue** Room Z

Organizers: Moe Yamada (Grad. Sch. Sci., Nagoya Univ.) / Daisuke Inoue (Fac. Des., Kyushu Univ.) / Yoshihisa Oda (Grad. Sch. Sci., Nagoya Univ.)

Plants have evolved unique actuators to regulate material transport, cellular dynamics and organ morphogenesis. In this symposium, young researchers will discuss the regulatory mechanisms of the unique actuators in plants from various aspects, such as molecules involved in regulation, evolutionary insights, and engineering applications.

9:30 Opening remarks
Moe Yamada

Chairperson: Daisuke Inoue

9:35 S03-1 The mechanism of cell plate formation
Moe Yamada (Grad. Sch. Sci., Nagoya Univ.)

10:00 S03-2 Flagella and the molecular evolution of related factors in plant species
Shizuka Koshimizu (Biological Networks, NIG)

10:25 S03-3 Exploring autolytic mechanisms of sieve elements with an improved phloem induction system
Yuki Sugiyama[1,2], Yoshihisa Oda[2] ([1]IAR, Nagoya Univ., [2]Grad. Sch. Biol. Sci., Nagoya Univ.)

Chairperson: Moe Yamada

10:50 S03-4 Study of plant cytoskeletons using cell-free systems
Daisuke Inoue[1], Takema Sasaki[2], Saku Kijima[3], Do Huong[4], Yoshihisa Oda[2], Tomomichi Fujita[4] ([1]Fac. Des., Kyushu univ., [2]Grad. Sch. Sci., Nagoya Univ., [3]AIST, [4]Grad. Sch. life Sci., Hokkaido Univ.)

11:15 S03-5 What we can learn from plants to design a robot? -The motion mechanism of the carnivorous plants and robots inspired by them
Xiangli Zeng (OSAKA UNIVERSITY)

11:40 S03-6 Gravitropic signal input and conversion in Arabidopsis Root Gravitropism
Takeshi Nishimura, Hiromasa Shikata, Shogo Mori, Miyo Terao-Morita (National Institute for Basic Biology)

12:05 Closing remarks
Daisuke Inoue

Genetic transfer technology for plants and its associated sciences

Date Sun., March 17, 14:00–17:00 **Venue** Room X

Co-sponsored by JST COI-Next

Organizers: Keiji Numata (RIKEN CSRS / Kyoto University) / Shinya Hagihara (RIKEN CSRS)

The aim of this symposium is to promote understanding of the current state of plant transformation and transgenic technology as well as related peripheral science, chemical biology, and nanotechnology, by inviting lecturers from inside and outside the Japanese Society of Plant Physiologists (JSPP). We also tried to involve international scientists who work in Japan in the related research fields.

14:00 Opening remarks
Keiji Numata

Chairperson: Makoto Hayashi

14:05 S04-1 Building physics-principle-based gene delivery methods toward the versatile gene editing in plants
Shigeo S. Sugano (Bioproduction Research Institute, AIST)

14:25 S04-2 Molecular strategies for improving plant regeneration efficiencies
Keiko Sugimoto, Akira Iwase, Yu Chen (RIKEN CSRS)

14:45 S04-3 Plant genome editing using CRISPR/Cas3 and CRISPR/Cas12f
Hiroaki Saika[1], Satoru Sukegawa[1], Osamu Nureki[2], Shuhei Yasumoto[3], Toshiya Muranaka[3], Kazuto Yoshimi[4], Tomoji Mashimo[4], Seiichi Toki[1,5,6,7] ([1]Inst. Agrobiol. Sci., NARO, [2]Grad. Sch. Sci., Univ. Tokyo, [3]Grad. Sch. Eng., Osaka Univ., [4]Inst. Med. Sci., Univ. Tokyo, [5]Grad. Sch. Nanobiosci., Yokohama City Univ., [6]KIBR, Yokohama City Univ., [7]Fac. Agri., Ryukoku Univ.)

Chairperson: Keiji Numata

15:05 S04-4 Targeted base editing in the plant organellar genome
Issei Nakazato, Shin-ichi Arimura (Grad. Sch. Agri. Life Sci., Univ. Tokyo)

15:20 S04-5 Mitochondria-targeted TALEN-mediated gene knockout and reorganization of mitochondrial genome in Tadukan-type cytoplasmic male sterile rice
Ayumu Takatsuka[1], Tomohiko Kazama[2], Shin-ichi Arimura[3], Kinya Toriyama[1] ([1]Grad. Sch. Agri. Sci., Tohoku Univ., [2]Fac. Agri., Kyushu Univ., [3]Grad. Sch. Agri. Life Sci., Univ. Tokyo)

15:35 Break

Chairperson: Taku Demura

15:40 S04-6 Organelle-targeted cargo delivery within plants using carbon-based nanocarriers
Simon Sau Yin Law[1], Keiji Numata[1,2] ([1]RIKEN CSRS, [2]Kyoto University Dept. of Engineering)

15:55 S04-7 Exogenous and endogenous genetic transfer to organelles
Masaki Odahara[1], Keiji Numata[1,2] ([1]CSRS, RIKEN, [2]Grad. Sch. Eng., Kyoto Univ.)

16:10 S04-8 Advancing plant transformation techniques for engineering of economically-related genes in wild strawberries
Chonprakun Thagun, Yutaka Kodama (C-Bio, Utsunomiya Univ.)

16:25 S04-9 Improving efficiency of the *Agrobacterium*-mediated transformation by drugs
Yutaro Shimizu[1], Kotaro Nishiyama[1], Jekson Robertlee[1], Shigeo S. Sugano[2], Shinya Hagihara[1] ([1]Center for Sustainable Resource Science, RIKEN, [2]Bioproduction Research Institute, AIST)

16:40 S04-10 Phenylboronic Acid-Functionalized Micelles Dual-Targeting Boronic Acid Transporter and Polysaccharides for siRNA Delivery into a Model Brown Alga, *Ectocarpus siliculosus*
Naoto Yoshinaga[1,2], Takaaki Miyamoto[1], Atsuko Tanaka[3], Keiji Numata[1,2,4] ([1]Center for Sustainable Resource Science, RIKEN, [2]IAB, Keio Univ., [3]Faculty of Sci., Univ. of the Ryukyus, [4]Grad. Sch. Eng., Kyoto Univ.)

16:55 Closing remarks
Shinya Hagihara

Creating new molecules to manipulate plant functions

Date Sun., March 17, 14:00–17:00 **Venue** Room Y

Co-sponsored by JST PRESTO "Function and regulation of plant molecules"

Organizers: Kazuhiko Nishitani (Fac Sci, Kanagawa Univ.) / Tomoko Hirano (Grad. Sch. of Life and Env. Sci., Kyoto Pref. Univ.)

Plants have evolved a wide variety of unique metabolic systems as adaptation strategies to the terrestrial environment and produce a large number of molecular species. Most of them, however, remain unidentified or unused. This PRESTO project aims to discover their new functions and explore their effective use and to develop innovative technologies. At this symposium, we will report the latest findings from this research project.

Chairperson: Tomoko Hirano

14:00	S05-1	Creating new molecules to manipulate plants Kazuhiko Nishitani (Kanagawa Univ. Fac. Sci.)
14:05	S05-2	Creation of structurally novel plant molecules with organic chemistry Kei Murakami (Sch. Sci., Kwansei Gakuin Univ.)
14:35	S05-3	Establishment of efficient combinatorial biosynthesis by co-localization of enzymes Takahiro Mori (Grad. Sch. Pharm. Sci. The Univ. Tokyo)
15:05	S05-4	Deciphering plant cell totipotency by small molecules Akira Iwase[1,2] ([1]RIKEN CSRS, [2]JST PRESTO)
15:35		Break
15:45	S05-5	Manipulation of arbuscular mycorrhizal fungi with plant molecules Hiromu Kameoka (CAS CEMPS)
16:15	S05-6	The spatiotemporal control of root defense responses emerging from the tissue formation of the root cap Shunsuke Miyashima (Res. Inst. Biores. Biotech., Ishikawa Pref. Univ.)
16:45		General discussion Kazuhiko Nishitani, Tomoko Hirano

Local and systemic signaling for environmental responses in plants

Date Sun., March 17, 14:00–17:00 **Venue** Room Z

Co-sponsored by Grant-in-Aid for Transformative Research Areas (A) Multi-layered regulatory system of plant resilience under fluctuating environment

Organizers: Mika Nomoto (Centr. Gene Res., Nagoya Univ.) / Michitaka Notaguchi (Grad. Sch. Sci, Kyoto Univ., Biosci. Biotech. Cent, Nagoya Univ.)

The ability of plants to adapt to ever-changing environments plays a major role in survival. In this symposium, we will provide the latest insights into the strategies of plant environmental responses and their molecular mechanisms, ranging from the initial perception to the systemic intercellular signaling pathway.

Chairperson: Mika Nomoto

14:00 Opening remarks

14:05 S06-1 Mechanical stimuli-induced immunity initiated by epidermal trichome cells
Mika Nomoto[1,2,3], Yu Saito[4], Tomoko Suzuki[1], Kiminori Toyooka[5], Yasuomi Tada[1,2] ([1]Centr. Gene Res., Nagoya Univ., [2]Grad. Sch. Sci., Nagoya Univ., [3]PRESTO, JST, [4]Dept. Biol. Sci., Grad. Sch. Sci., Nagoya Univ., [5]RIKEN CSRC)

14:25 S06-2 Regulatory mechanisms of plant growth phase transition and source-sink functions in response to nutrient availability
Takeo Sato[1], Miho Sanagi[1,2], Junpei Takagi[1] ([1]Fac. Sci., Hokkaido Univ., [2]CRIS, Hokkaido Univ.)

14:45 S06-3 Towards understanding the modulation mechanism of the senescence initiation by the novel receptor-like kinase family
Asuka Higo[1,2], Tamami Kamiya[2], Koji Uda[2], Naoyuki Uchida[1,2] ([1]Center for Gene Research, Nagoya Univ., [2]Grad. Sch. Sci., Nagoya Univ.)

15:05 S06-4 Rice flood tolerance through phase transition of stem elongation
Keisuke Nagai, Motoyuki Ashikari (Biosci. Biotech. Ctr., Nagoya Univ.)

15:25 Break time

Chairperson: Michitaka Notaguchi

15:35 S06-5 A peptide signaling regulates root nodule symbiosis and nitrogen homeostasis
Takuya Suzaki[1,2] ([1]Fac. Life. Sci., Univ. Tsukuba, [2]T-PIRC, Univ. Tsukuba)

15:55 S06-6 Integration of shoot-derived polypeptide signals by root TGA transcription factors is essential for survival under fluctuating nitrogen environments
Ryutaro Kobayashi, Yuri Ohkubo, Mai Izumi, Ryosuke Ota, Keiko Yamada, Yoko Hayashi, Yasuko Yamashita, Saki Noda, Mari Ogawa-Ohnishi, Yoshikatsu Matsubayashi (Grad. Sch. Sci., Nagoya University)

16:15 S06-7 Signaling molecules that move long-distance in plants
Michitaka Notaguchi[1,2] ([1]Grad. Sch. Sci, Kyoto Univ., [2]Biosci. Biotech. Cent, Nagoya Univ.)

16:35 General discussion & Closing remarks

PCP sponsored symposium

Plant and Algal Lipids: How they cope with environment by modifying lipids?

Date Mon., March 18, 9:00–12:00 **Venue** Room Y

Organizers: Mie Shimojima (Tokyo Inst. Tech.) / Rebecca Roston (Nebraska Univ.) / Yonghua Li-Beisson (Aix Marseille Univ, CEA, CNRS) / Koichiro Awai (Shizuoka Univ.)

Most of photosynthetic organisms can not move out or change their habitats, and they have ability to cope with multitude of environmental stresses. Lipids are one of the frontlines of adaptations to manage such stresses, but the underlying molecular mechanisms have not been explored yet. In this symposium, recent advance in physiological roles of membrane and neutral lipids on adaptation to environmental stresses and their regulations mechanisms will be discussed.

Chairperson: Mie Shimojima

9:00 Opening remarks
Miki Matoba (Oxford Univ. Press), Mie Shimojima

Chairperson: Rebecca L. Roston

9:05 S07-1 Plastid lipid biosynthesis facilitates light-responsive gene expression and chlorophyll biosynthesis during chloroplast biogenesis
Sho Fujii (Fac. Agric. Life Sci., Hirosaki Univ.)

9:25 S07-2 LYSOPHOSPHATIDIC ACID ACYLTRANSFERASES involved in membrane lipid remodeling during nutrient starvation response in Arabidopsis
Van C. Nguyen[1], Artik Elisa Angkawijaya[1], Yuki Nakamura[1,2] ([1]RIKEN-CSRS, [2]Dep. of Biological Sci., Grad. Sch. of Sci., The Univ. of Tokyo)

9:45 S07-3 Modification of membrane lipids in *Marchantia polymorpha* in response to abiotic stress
Mie Shimojima (Sch. Life Sci. and Tech., Tokyo Tech.)

10:05 S07-4 Remodeling of membrane lipid composition under phosphate starvation in Euglena
Idris Maliki[1], Toshiki Ishikawa[2], Koichiro Awai[1,3,4] ([1]Grad. Sch. Integrated Sci. Tech., Shizuoka Univ., [2]Grad. Sch. Sci. Engineer., Saitama Univ., [3]Fac. Sci., Shizuoka Univ., [4]Res. Inst. Electronics, Shizuoka Univ.)

Chairperson: Koichiro Awai

10:25 S07-5 All Members of the Arabidopsis DGAT and PDAT Acyltransferase Families Operate During High and Low Temperatures
Rebecca Roston[1], Zachery D. Shomo[1], Samira Mahboub[1], Hathaichanok Vanviratikul[2], Mason McCormick[1], Tatpong Tulyananda[3], Jaruswan Warakanont[2] ([1]Dep. Biochem., Univ. of Nebraska-Lincoln, USA, [2]Dep. Bot., Kasetsart Univ., Thailand, [3]Bioinnov, and Bio-Based Prod. Intel. Mahidol Univ. Thailand)

10:45 S07-6 A regulatory mechanism of lipid droplet formation in Arabidopsis leaves
Takashi L. Shimada[1,2,3] ([1]Grad. Sch. Hort., Chiba Univ., [2]Plant Mol. Sci. Cent., Chiba Univ., [3]Res. Cent. Space Agri. Hort., Chiba Univ.)

11:05 S07-7 Unraveling stress response and lipid remodeling mechanisms in microalgae for adaptation insight
Yasuyo Yamaoka (Division of Biotechnology, The Catholic University of Korea, Korea)

11:25 S07-8 Exploring algal lipid metabolism for a sustainable bioeconomy
Yonghua Li-Beisson (CEA Cadarache)

Chairperson: Yonghua Li-Beisson

11:45 General discussion and closing remarks

Survival strategies and its molecular basis of plants through switching life histories

Date Mon., March 18, 9:00–12:00 **Venue** Room Z

Organizers: Eriko Sasaki (Kyushu University) / Mie N. Honjo (Kyoto University)

On Earth, plants have evolved with remarkable diversity, adapting to challenging environments by switching life histories, such as reproductive systems between sexual and clonal, employing parasitic and carnivorous strategies, and varying in longevity. However, the evolutionary processes and molecular mechanisms behind these traits remain unknown. In this symposium, we will discuss the survival strategies of plants, from the genome and molecular aspects to ecology.

Chairperson: Mie N. Honjo

9:00 Opening

Chairperson: Eriko Sasaki

9:05 S08-1 Switching life histories in amphibious plants: Survival strategies in riparian environments
Seisuke Kimura[1,2], Shuka Ikematsu[1,2], Tomoaki Sakamoto[1,2] ([1]Faculty of Life Sciences, Kyoto Sangyo University, [2]Center for Plant Sciences, Kyoto Sangyo University)

9:30 S08-2 Exploring the evolutionary factors leading to morphological diversification in the unique aquatic plants
Natsu Katayama (Grad. Sch. Sci., Univ. Tokyo)

9:55 S08-3 Seasonal dynamics of virus-host interaction maintain long-term viral infection in the perennial *Arabidopsis halleri*
Mie N. Honjo, Hiroshi Kudoh (Ctr. Ecol. Res., Kyoto Univ.)

10:20 Break

Chairperson: Mie N. Honjo

10:30 S08-4 Exploring diverse life history strategies envisaged from wild *Oryza* genetic resources
Yutaka Sato, Takanori Yoshikawa (National Institute of Genetics)

10:55 S08-5 How do epigenetic regulations contribute to environmental adaptation under genetic control?
Eriko Sasaki (Dept. Biol., Fac. Sci., Kyushu Univ.)

11:20 S08-6 Inheritance and stability of DNA methylation in *Arabidopsis thaliana*
Dusan Denic (University of Zurich)

Chairperson: Eriko Sasaki

11:45 Closing

Bio-metal Strategies of Living Organisms

Date Tue., March 19, 9:00–11:50 **Venue** Room Y

Co-sponsored by Integrated Bio-metal Science: Research to Explore Dynamics of Metals in Cellular System. Scientific Research on Innovative Areas

Organizers: Shin-ichiro Inoue (Grad. Sch. of Sci., Nagoya Univ.) / Sho Nishida (Fac., Agric., Saga Univ.)

All organisms, including bacteria, animals, and plants, live in different environments and have different strategies for acquiring and utilizing "biometals". As plant researchers, we may not learn much about the diverse strategies. At this symposium, the latest research on biometal science, including studies on plants, bacteria, and animals, will be presented and discussed.

9:00 Opening remarks
Shin-ichiro Inoue

Chairperson: Shin-ichiro Inoue

9:05 S09-1 Adaptive evolution of metal transporters in hyperaccumulator plants
Sho Nishida[1,2] ([1]Faculty of Agriculture, Saga University, [2]United Graduate School of Agricultural Sciences, Kagoshima University)

9:25 S09-2 Analysis of iron accumulation and deposition mechanisms in chitons
Michiko Nemoto (Grad. Sch. Environ. Life Sci., Okayama Univ.)

9:50 S09-3 Understanding phosphate transport and response mechanisms from tracer imaging
Satomi Kanno (IAR., Nagoya univ.)

Chairperson: Sho Nishida

10:10 S09-4 Discovery of stomatal opening by magnesium transport
Shin-ichiro Inoue (Grad. Sch. Sci., Nagoya Univ.)

10:30 S09-5 Differences of the iron acquisition mechanisms of plants and animals at the molecular level
Hitomi Sawai (Grad. Sch. Eng., Nagasaki Univ.)

10:55 S09-6 Boron transport and sensing by a borate transporter AtBOR1
Junpei Takano[1], Keita Muro[1], Mayuki Tanaka[1], Akira Yoshinari[2] ([1]Grad. Sch. Agr. Osaka Metr. Univ., [2]ITbM Nagoya Univ.)

11:15 S09-7 Copper as the keystone of Cu,Zn-superoxide dismutase in health and cellular defense
Yoshiaki Furukawa (Dept. Chem., Keio Univ.)

11:45 Closing remarks
Sho Nishida

Multilayered Regulation of Plastid and Mitochondrial genomes and gene expression

Date Tue., March 19, 13:30–16:30 **Venue** Room Y

Co-sponsored by JSPS core-to-core program "Formation of an international center of excellence for plant organelle research"

Organizers: Shin-ichi Arimura (Univ of Tokyo) / Mizuki Takenaka (Kyoto Univ) / Tomohiko Kazama (Kyushu Univ)

Mitochondrial and plastid genomes encode genes for energy production, CO2 metabolisms, and cytoplasmic male sterility. This symposium highlight the recent development of tools for understanding and applying organellar genomes, and the recent uncovered regulation systems of their genes' expression.

Chairperson: Mizuki Takenaka

13:30 Opening remarks
Shin-ichi Arimura

13:35 S10-1 Targeted gene editing of chloroplast and mitochondrial genomes
Shin-ichi Arimura, Issei Nakazato, Chang Zhou (Grad Sch. Agr & Life Scie, Univ of Tokyo)

13:50 S10-2 Novel ways of controlling organellar gene expression
Ian Small, Farley Kwok van der Giezen, Michael Dennis, Amy Viljoen, Anuradha Pullakhandam, Charles Bond (ARC Centre of Excellence in Plants for Space and/or School of Molecular Sciences, Univ of Western Australia)

14:20 S10-3 Modulating Mitochondrial Gene Expression Using RF Proteins
Catherine Colas des Francs-Small, Lilian Vincis Pereira Sanglard, Fei Yang, Ian Small (ARC Centre of Excellence in Plant Enegy Biology, The University of Western Australia)

14:50 Pause

Chairperson: Shin-ichi Arimura

14:55 S10-4 Plant mitochondria RNA metabolism as a key regulatory step in the biogenesis of the OXPHOS system
Oren Ostersetzer-Biran (Institute of Life Sciences, The Hebrew University of Jerusalem)

15:25 S10-5 Targeted mitochondrial gene editing to reveal cytoplasmic male sterility-causative genes
Tomohiko Kazama (Grad. Sch. Bioresour. Bioenvironment. Sci., Kyushu University)

Chairperson: Tomohiko Kazama

15:45 S10-6 Uncovering the link between RNA editing and polyadenylation, two mysterious modifications of plant mitochondrial mRNA
Akihito Mamiya[1,3], Kayoko Yamamoto[1], Takehito Kobayashi[2], Yusuke Yagi[2], Takahiro Nakamura[2], Hidehiro Fukaki[3], June-Sik Kim[4,5], Issei Nakazato[6], Shin-ichi Arimura[6], Munetaka Sugiyama[1], Takashi Hirayama[5]
([1]Department of Biological Sciences, Graduate School of Science, The University of Tokyo, [2]Department of Bioscience and Biotechnology, Faculty of Agriculture, Kyushu University, [3]Department of Biology, Graduate School of Science, Kobe University, [4]Center for sustainable resource science, RIKEN, [5]Institute of Plant Science and Resources, Okayama University, [6]Graduate School of Agricultural and Life Sciences, The University of Tokyo)

16:05 S10-7 Molecular bases of C-to-U RNA editosome activation in plant organelles
Mizuki Takenaka, Frink Brody, Tenghua Wang (Grad. Sch. Sci., Kyoto Univ.)

16:25 Closing remarks
Mizuki Takenaka

PCP Luncheon Seminar
"PCP's expanding vision for the next four years"

Date Sun., March 17, 12:45–13:45 **Venue** Room X

Speakers: Tetsuya Higashiyama (New Editor-in-Chief), Wataru Sakamoto (Former Editor-in-Chief)

The publishing landscape is changing dramatically and researchers more than ever need to support society journals to promote training, networking, and good scholarly practice. The growth of society journals is also important for their recognition and internationalization, as it is the face of the society as seen both from home and abroad.

At PCP, we aim to increase the number of papers published in the journal, which will support the journal's eventual transition to fully open access publishing in the near future - making your research even more accessible to all. Notably, 2024 marks PCP's 65th anniversary as well as the arrival of a new Editor-in-Chief alongside several other editorial board members, as we look to expand the team to increase the breadth of subject coverage and visibility of PCP on the international stage, and further grow the journal as a unique and attractive place in which to publish your work. In this luncheon seminar, we kickoff by introducing the new editorial board members, and will discuss PCP's expanding vision for the next four years, as well as the current status of PCP and the significance of the journal's growth for the society and its members. By sharing this information with you, we hope you will be part of our success over the next few years and we look forward to welcoming many of you (and at all career stages) to this event!

Seminar outline:

1. Introduction of former and new editorial board members
2. Analysis of questionnaire results and PCP's trends
3. Free publication and other benefits for JSPP members publishing their work in PCP
4. Proposed goals for the next four years

Evident Corporation Luncheon Seminar

Plant cell formation dynamics: Utilizing spinning disk confocal microscopy and FV-OSR

Date Mon., March 18, 12:15–13:15 **Venue** Room H

Speaker: Takema Sasaki, Ph.D. (Department of Biological Science, Graduate School of Science, Nagoya University)

Sponsor: Evident Corporation

Luncheon Seminar
"An Encouragement of Studying/Working Abroad"

Date Mon, March 18, 12:15–13:15 **Venue** Room X

Co-organized by the JSPP International Committee and the United Japanese Researchers Around the World (UJA)

Panelists: Kyoka Kuroiwa (INRAe, France; PhD candidate)
Nozomu Takahashi (NAIST, Japan; Assis. Prof.)
Ayako Tsushima (Osaka Metoropolitan University, Japan; Assis. Prof.)
Hiroki Tsutsui (OIST, Japan; Post-doc)
Hinako Matsuda (Kyoto University, Japan; PhD candidate)
Yoshiharu Mimata (Peking Unviersity, China; Post-doc)

The Japanese Society of Plant Physiologists (JSPP) is committed to enhancing the international research competitiveness and visibility of the JSPP community. Recognizing the pivotal role of researchers with overseas experience, we are aware that despite the growing interest in studying abroad, individuals often hesitate due to a lack of information about the practicalities and lingering uncertainties related to the COVID-19 pandemic. To address these concerns and promote studying abroad as a valuable career option, we emphasize the importance of obtaining firsthand information from individuals with experience studying abroad.

In collaboration with the United Japanese researchers Around the world (UJA), this luncheon seminar features speakers with diverse experiences in graduate and postdoctoral studies abroad in the short and long term. Speakers will join either on-site or online to share their insights through flash talks, followed by a panel discussion, where we will address questions from the audience.

We extend a warm welcome to all individuals, regardless of their specific interests/experience/willingness to take a career path outside of Japan.

Seminar on Gender Equality
"Let's start a company"

Date Tue., March 19, 12:15–13:15 **Venue** Room H

Organizer: JSPP Gender Equality Committee

Speaker: Dr. Jong-Myong Kim (Ac-Planta Inc., CEO / Associate Professor, University of Tokyo)

Panelists: Dr. Rieko Ogura (Yokohama Bio Technology Company, Limited., Managing Director of Research and Development)
Dr. Michitaka Notaguchi (Kyoto University, Professor / GRA&GREEN Inc., Technical Advisor)
Mr. Atsushi Yamamoto (University of Tokyo, Doctoral student / HONDA Motors Co Ltd.)

At this year's luncheon seminar on gender equality, we will propose a possibility of "entrepreneurship" as a career path for researchers. Have you ever considered "starting a company" to apply your discoveries and technologies more directly to society? As fields of research and ways of researchers' life have become more diverse, the border between basic and applied research has become blurred, making it possible to disseminate ideas and technologies to society even while carrying out basic research. In this seminar, we will invite speakers and panelists who have successfully established their own companies through full-time or part-time work, as well as a graduate student who is interested in starting his own company, to share their experiences. Basic research in plant science holds the potential to become a foundation to solve global food, environment, and energy problems. We will discuss entrepreneurship as a means to enhance researchers' careers and as a way to connect the results of basic research to society.

*Lunch will be provided for the first 100 participants. Advance registration is not required.

The 26th Plant Organelle Workshop

Date Sat., March 16, 13:00–18:50 **Venue** Convention Hall, Integrated Research Center of Kobe University

Organizers (*in alphabetical order*)**:** Masanori Izumi (RIKEN), Yoko Ito (Ochanomizu University), Yusuke Kato (Setsunan University), Kensuke Kusumi (Kyushu University), Keiji Nishida (Kobe University), Yoshiki Nishimura (Kyoto University), Junichi Obokata (Setsunan University), Atsushi Takabayashi (Hokkaido University)

Cellular organelles play crucial roles in the development, function, and environmental adaptation of plants. The primary objective of this workshop is to provide an opportunity for researchers from diverse fields to exchange the latest insights and related technologies concerning plant organelles. A mixer is also scheduled. The workshop is open to all and free of charge; however, we recommend advance registration through our website.

https://sites.google.com/view/plant-organelle-workshop

13:00 Opening remarks

Session 1

13:05 Singularity of membrane fission machinery - why bilaterian synapses operate ultrafast
Yuuta Imoto (St. Jude Children's Research Hospital, Department of Developmental Neurobiology, Division of Neuro Cell Biology) (zoom from the US)

13:45 Visualization of cargo transport from trans-Golgi network to plasma membrane and vacuole
Yutaro Shimizu[1], Akihiko Nakano[1], Tomohiro Uemura[2] ([1]RIKEN, [2]Ochanomizu University)

14:25 Break

14:35 Conversion of amyloplast sedimentation into a gravity signaling in Arabidopsis.
Takeshi Nishimura (National Institute for Basic Biology (NIBB), Plant Environmental Responses)

15:15 Light-harvesting strategies in plants growing under very weak light conditions.
Eiji Gotoh (Faculty of Agriculture, Kyushu University)

15:55 Break

Session 2

16:05 Development of transcriptome editing technique based on PPR protein
Takahiro Nakamura (Kyushu University)

16:45 Development and application of base editing technology
Keiji Nishida (Engineering Biology Research Center and Graduate School of Science, Technology and Innovation, Kobe University)

17:25 Break

Keynote lecture

17:40 Horizontal gene transfer and genome evolution -From the time scale of molecules to the evolution-
Junichi Obokata (Setsunan University)

18:40 General discussion

18:50 Closing remarks

Contact address: Yoshiki Nishimura: yoshiki@pmg.bot.kyoto-u.ac.jp
Yusuke Kato: yusuke.kato@setsunan.ac.jp

The 41st Meeting of the Japanese Society for Young Plant Physiologists (in cooperation with The Japanese Society of Photosynthetic Research for Young Researchers)

Date Sat., March 16, 14:30–17:00 **Venue** Room C (hybrid)

Organizers: Minako Isoda (Pref. Univ. of Hiroshima), Takehiro Ito (Tokyo Univ. of Agri. and Tech.), Ko Imaizumi (Kyoto Univ.), Kenya Tanaka (Kobe Univ.), Rikako Hirata (Kyoto Univ.), Senri Yamamoto (Kyoto Univ.)

For more than 40 years, the Japanese Society for Young Plant Physiologists has been working for the development of students and young researchers. This year's meeting is organized jointly with The Japanese Society of Photosynthetic Research for Young Researchers, and is planned as a lecture meeting to discuss the importance of forming research networks among young researchers.

14:30	Opening remarks
14:35	Footwork must be light! Moeko Okada (Niigata Univ.)
15:05	Science is fun when you work together. Yusuke Kobayashi (Ibaraki Univ.)
15:35	Break
15:45	Was it worth the effort? A reflection on 5 years of research networking. Akiko Yoshihara (Osaka Metropolitan Univ.)
16:15	How to get along with D&I Takayuki Shimizu (Nara Women's Univ.)
16:45	General discussion
16:55	Closing remarks

※An onsite social gathering is planned afterwards. If you wish to attend, please check the announcement from the website and SNS account of Japanese Society for Young Plant Physiologists and register in advance.

19th Japan plasmodesmata meeting

Date Sun., March 17, 19:00–21:00 **Venue** Room G

Organizers: Yuji Fujimoto (Rikkyo 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 Mr. Yusuke Ohba (Tsukuba University) 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 slides will be presented in English, but the presentations will be given in Japanese.

Chair Yuji Fujimoto

19:00	Opening remarks
19:05	During the tissue reunion process of *Arabidopsis* incised stem, the functional analysis of plasmodesmata callose binding protein 2 (PDCB2)
19:30	Discussion
19:55	Closing Remarks

Plant Science Presentation Workshop 2024
"Let's Speak, Communicate, and Connect!"

Date Sun., March 17, 19:00–20:30 (Reception: 18:30–) **Venue** Room H

Lecturer: Aska Takeuchi (Alba Edu Inc.)

Organizers: Chihiro Furumizu (Hiroshima Univ.) / Yasunori Ichihashi (RIKEN) / Tomoyuki Furuya (Ritsumeikan Univ.)

Summary:

There are many opportunities to convey one's thoughts to others, such as in research presentations, lectures, teaching, and job hunting.

On the other hand, some of you may not feel comfortable with public speaking and are wondering how to speak in a way that gets across.

In this workshop, you will learn how to make presentations that stick out in an audience's mind.

Join us and learn from the presentation education professional. Let's think together about presentations that move people's hearts and minds.

We also hope that this workshop will inspire new exchanges and research collaboration!

19:00	Opening remarks
19:03	Self introduction—ice breaker
19:11	1. Why speaking skills? What's the goal?
	2. Why we feel uncomfortable speaking in public?
	3. Three steps: Think, Communicate, and Show
	4. How to appeal more to your audience
20:02	Hearing sessions
20:22	Flash presentations
20:27	Closing remarks

This workshop is free and open to all. Please register in advance using the form below. Registration may close early due to the limited number of participants.

Registration form: https://forms.gle/BiCDFBc2nYBVUu7t7

Registration closing date: Fri., March 1

Registration

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

3rd Symposium on Phototropic Prokaryotes

Date Sun., March 17, 19:00–21:00 (Reception: 18:30-) **Venue** Room X

Organizers: Jiro Harada (Kurume Univ. Sch. Med.), Yusuke Tsukatani (JAMSTEC), Chihiro Azai (Chuo 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/w2TdXYtVHjArFQRf9

Deadline: **Fri., March 8**

Chairperson: Chihiro Azai

19:00 Opening remarks
Yusuke Tsukatani

19:05 "Acylated plastoquinone is a novel neutral lipid accumulated in cyanobacteria"
Toshiki Ishikawa[1], Riko Tanikawa[1], Haruna Sakaguchi[2], Shunya Takano[1], Yukako Hihara[1] ([1]Grad. Sch. Sci. Eng., Saitama Univ., [2]Fac. Sci., Saitama Univ.)

19:35 "Kleptoplasty and insight into evolution of algae"
Ryo Onuma (Kobe Univ. Res. Ctr. Inland Seas)

20:05 "Analysis of the regulatory system through supersulfide signaling using purple photosynthetic bacteria as a platform"
Takayuki Shimizu (Res. Group Biol. Sci., Nara Women's Univ.)

20:35 "Discovery of a novel sulfur metabolic pathway involving a nitrogenase-like enzyme of unknown function in *Rhodobacter capsulatus*"
Yoshiki Morimoto (Grad. Sch. Bioagri. Sci., Nagoya Univ.)

20:55 Closing remarks
Jiro Harada

Phytohormones analysis workshop

Date Tue., March 19, 13:30–16:00 **Venue** Room B

Organizer: Masashi Asahina (Dept.Bisci.,Teikyo University/ Adv. Instrum. Anal.Ctr, Teikyo 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.

13:30	Opening remarks Masashi Asahina
13:35	Quantitative plant hormone analysis at Adv. Instrum. Anal.Ctr, Teikyo Univ. Emi Yumoto, Masashi Asahina (Adv. Instrum. Anal.Ctr, Teikyo Univ.)
13:45	Identification of the major jasmonoyl isoleucine receptor in rice. Koji Miyamoto (Dept.Bisci.,Teikyo Univ.)
14:05	Dynamics of endogenous phytohormones in plant regeneration. Mikihisa Umehara (Dept. Appl. Biosci., Toyo Univ.)
14:25	Introduction of RIKEN CSRS's platform for quantitative phytohormone analysis. -Technical development of analysis from small tissues using nano-LC.- Mikiko Kojima, Yumiko Takebayashi (RIKEN, CSRS)
14:45	Comparison of NHP and SA levels during disease response -NHP could be amazing- Masanori Okamoto (RIKEN, CSRS)
15:05	Quantitative plant hormone analysis at IPSR, Okayama Univ. Izumi Mori (IPSR, Okayama Univ.)
15:15	Life-course phytohormone profiling of field crop. Takashi Hirayama (IPSR, Okayama Univ.)
15:35	General discussion
15:55	Closing remarks

General Presentations

Program of Oral Presentations

- Each presentation is allotted a 15-min slot, a talk for 12 min and discussion for 2 min 30 s, followed by a 30 s interval before the next speaker. To keep the session on schedule, please strictly follow the time limits.

- Please don't use the presenter view to avoid screen-sharing troubles.

For online presenters

- Connection test is not offered in this meeting.

- The presenter will participate in the webinar as a panelist. When your turn comes, please show your slides by sharing the screen and turn on the microphone and video in the Zoom webinar.

For chairpersons

- Please select a set of oral presentations for which a chairperson will be responsible by consulting with the other chairpersons of the assigned session beforehand.

- Please enter the webinar via the special link for a panelist, which will be provided by the Organizing Committee in advance.

- Chairpersons are listed at the end of Program of Oral Presentations.

● Day 1, Sun., March 17, AM (9:30–12:30)

Time	Room A	Room B	Room C	Room D
	Photosynthesis	Environmental response A/ Physiological responses	Organelles/Cytoskeleton	New technology
09:30	1aA01 Isolation and chemical identification of triacylglycerol in cyanobacteria: culture condition of its accumulation Naoki Sato[1], Haruhiko Jimbo[1], Toru Yoshitomi[2], Kouji Takano[3], Yozo Okazaki[3,4], Tsubasa Shoji[3,5], Kazuki Saito[3], Hajime Wada[1] ([1]Univ. of Tokyo, [2]National Institute for Materials Science, [3]RIKEN, CSRS, [4]Mie Univ., [5]Toyama Univ.)	1aB01 Physiological analysis of the role of actin polymerization and depolymerization on root hydrotropism in *Arabidopsis thaliana* Kotaro Akita[1], Yutaka Miyazawa[2] ([1]Grad. Sch. Sci and Eng., Yamagata Univ., [2]Fac. Sci., Yamagata Univ)	1aC01 Comparative mitochondrial proteomics of thermogenic male cones from the gymnosperm cycad, *Cycas revoluta* Fumika Matsuoka[1], Momoka Hisamatsu[1], Minami Motogi[1], Toui Mizuno[1], Mitsuhiko Sato[2], Takehito Inaba[1], Yasuko Inaba[1,3] ([1]Fac. Agr., Univ. Miyazaki, [2]Kazusa DNA Res. Inst., [3]Grad. Sch. Life Sci., Tohoku Univ.)	1aD01 Modulation of plasma membrane H^+-ATPase expression in *Arabidopsis thaliana* Ming Ding, Satoru Kinoshita, Yuki Hayashi, Toshinori Kinoshita (Grad. Sch. Sci., Nagoya Univ.)
09:45	1aA02 Photosynthetic responses in the high-oil accumulating diatom, *Fistulifera solaris* Haruka Yamamoto[1], Ginga Shimakawa[1], Tsuyoshi Tanaka[2], Yasuhiko Nishimura[3], Yusuke Matsuda[1] ([1]Dept. Biosci., Sch. Sci. Tech., Kwansei Gakuin Univ., [2]Inst. Engin, Tokyo Univ. Agricul. Technol., [3]Electric Power Development Co., Ltd)	1aB02 E Evaluation of phenotypic diversity and genome-wide association analysis for nutritropism in rice lateral roots Md. Nashir Uddin[1], Daria Górecka[2], Aleksandra Zborowska[2], Kiyoshi Yamazaki[1], Ohmori Yoshihiro[1], Toru Fujiwara[1] ([1]Grad. Sch. Agri. & Life Sci., Tokyo Univ. Yayoi, Bunkyo, Tokyo 113-8657, Japan, [2]Fac. Biotech. & Hort., Krakow Agri. Univ., 31-425 Krakow, Poland)	1aC02 Expression, purification and antibody production of plastid signaling factor GUN1 Roselyn May Ching Yeow[1], Tomohiro Kakizaki[2], Yasuko Ito-Inaba[1,3], Takehito Inaba[1] ([1]Fac. Agr., Univ. Miyazaki, [2]NARO·NIVFS, [3]Grad. Sch. Life Sci., Tohoku Univ.)	1aD02 Genome Editing in plants with CjCas9 and enCjCas9 derived from *Campylobacter jejuni* Naoshi Yamanaka[1], Konoha Shimizu[1], Miyu Takahashi[1], Ryoka Sakamoto[1], Masaki Endo[2], Ryoya Nakagawa[3], Kappei Kobayashi[1], Osamu Nureki[3], Seiichi Toki[2,4,5,6], Hidetaka Kaya[1] ([1]Faculty of Agriculture, Ehime University, [2]Plant Genome Engineering Research Unit, NARO, [3]Department of Biological Sciences, Graduate School of Science, The University of Tokyo, [4]Faculty of Agriculture, Ryukoku University, [5]Graduate School of Nanobioscience, Yokohama City University, [6]Kihara Institute for Biological Research, Yokohama City University)
10:00	1aA03 The function of pyrenoidal β carbonic anhydrases in the marine diatom, *Phaeodactylum tricornutum* Tomoki Yonehara, Nawaly Hermanus, Ginga Shimakawa, Yusuke Matsuda (Dept. Biosci., Sch. Sci. Tech., Kwansei Gakuin Univ.)	1aB03 Genetic framework for growth angle control of lateral branches by *TILLER ANGLE CONTROL1* in Arabidopsis Nozomi Kawamoto, Takeshi Nishimura, Miyo Terao-Morita (National Institute for Basic Biology)	1aC03 The CRL protein is involved in the TOC75-V/OEP80 complex formation in *Arabidopsis* Ryo Yoshiomura[1], Shun Minamikaw[1], Takamasa Suzuki[2], Kotarou Goto[1], David Latrasse[3,4], Sanchari Sicar[3,4], Cécile Raynaud[3,4], Moussa Benhamed[3,4,5], Yasushi Yoshioka[1] ([1]Grad. Sch. Sci., Nagoya Univ., [2]Coll. Biosci. Biotech., Chubu Univ., [3]Inst. Plant Sci. Paris-Saclay, Univ. Paris-Saclay, [4]Inst. Plant Sci. Paris-Saclay, Univ. Paris, [5]Inst. Univ. France)	1aD03 E Targeted A-to-G Base Editing in the organellar genomes of *Arabidopsis thaliana* with Monomeric programmable deaminases Chang Zhou[1], Mirai Okuno[2], Issei Nakazato[1], Nobuhiro Tsutsumi[1], Shin-ichi Arimura[1] ([1]Laboratory of Plant Molecular Genetics, Graduate School of Agricultural and Life Sciences, The University of Tokyo, Tokyo, [2]Division of Microbiology, Department of Infectious Medicine, Kurume University School of Medicine)
10:15	1aA04 Functional analysis of diatom cytoplasm-localized θ-type carbonic anhydrase Atsuki Ohsawa, Kazuya Nagata, Ginga Shimakawa, Yusuke Matsuda (Dept. Biosci., Sch. Sci. Tech., kwansei Gakuin Univ)	1aB04 Calcium wave dynamics in trapping hairs of carnivorous sundew *Drosera rotundifolia* Shoji Segami[1,2], Peng Chen[2], Maki Kondo[1], Shoko Ohi[1], Hiraku Suda[3], Masatsugu Toyota[3], Mitsuyasu Hasebe[1,2] ([1]NIBB, [2]SOKENDAI, [3]Dept. Biochem. Mol. Biol., Saitama Univ.)	1aC04 A mutation of CHLH confers resistance to PPO inhibitors in *Marchantia polymorpha* Rito Kitaoka[1], Satoshi Komaki[1], Yuuki Sakai[1], Hirotaka Kato[1,2], Yuki Kondo[1], Hidehiro Fukaki[1], Kimitsune Ishizaki[1] ([1]Grad. Sch. Sci., Kobe Univ., [2]Grad. Sch. Sci. Eng. Ehime Univ.)	1aD04 Anovel CRISPR-Cas9 system; AalCas9 recognizes the unique PAM sequence and exhibits genome editing activity in plants Reika Hasegawa[1], Akiyoshi Nakamura[2], Shigeo S. Sugano[2], Hiroshi Yamamoto[2], Tsubasa Yano[1], Yoichi Makino[3], Seiichiro Ito[3], Nobutaka Mitsuda[2], Teruhiko Terakawa[1] ([1]Inplanta Innovations Inc., [2]AIST·BPRI, [3]TOPPAN Inc.)
10:30	1aA05 Functional analysis of TpBST, a candidate thylakoid-type bicarbonate transporter from marine diatom Thalassiosira pseudonana Haruto Yamashita, Minori Nigishi, Ryosuke Amano, Ginga Shimakawa, Yusuke Matsuda (Dept. Biosci., Sch. Sci. Tech., Kwansei Gakuin Univ.)	1aB05 Mechanism of touch-induced electrical signaling in *Dionaea muscipula* Hiroki Asakawa[1], Hiraku Suda[1], Shoko Ohi[2], Shoji Segami[2,3], Mitsuyasu Hasebe[2,3], Masatsugu Toyota[1,4,5,6] ([1]Dept. Biochem. Mol. Biol., Saitama Univ., [2]Div. Evol. Biol., NIBB, [3]Sch. Sci., SOKENDAI, [4]SunRiSE, Suntory Fdn. Life Sci., [5]Dept. Bot., UW-Madison, [6]Coll. Plant Sci. Technol., Huazhong Agric. Univ.)	1aC05 Functional relationship between DGDG and SQDG in chloroplast membranes Miho Kuratani[1], Akiko Yoshihara[2], Keiko Kobayashi[3], Noriko Nagata[3], Koichi Kobayashi[2] ([1]Sch. Sci., Osaka Pref. Univ., [2]Grad. Sch. Sci., Osaka Metro. Univ., [3]Fac. Sci., Japan Women's Univ.)	1aD05 Application of multiple sgRNAs boosts efficiency of CRISPR/Cas9-mediated gene targeting in Arabidopsis Daisuke Miki (Chinese Academy of Sciences)

Room E	Room F	Room G	Room H	Room X	Room Y	Room Z	Time
Systems biology	Environmental response B/ Environmental stresses	Primary metabolism	Development/Morphogenesis				
1aE01 Plant genome assemblies and analysis using long-read sequencers for data-driven breeding technology Keita Tamura[1], Hidemasa Bono[1,2] ([1]Genome Editing Innovation Center, Hiroshima Univ., [2]Grad. Sch. Integ. Sci. Life, Hiroshima Univ.)	1aF01 Analysis Of The Relationship Between Cellular Flavin Levels And Environmental Stress Responses In Plants Takamasa Sugii, Takanori Maruta, Takahiro Ishikawa, Takahisa Ogawa (Grad. Sch. Nat. Sci. Technol., Shimane Univ.)	1aG01 Lipases involved in lipid deacylation activated under high-light conditions in *Synechococcus elongatus* PCC 7942 Nobuyuki Takatani[1], Makoto Uenosono[2], Yuya Senoo[3], Kazutaka Ikeda[3], Tatsuo Omata[1], Makiko Aichi[1] ([1]Col. Biosci. and Biotech. Chubu Univ., [2]Grad. Sch. Bioagr. Sci., Nagoya Univ., [3]Dept. Appl. Genomics, Kazusa DNA Res. Inst.)	1aH01 Analysis of dichotomous branching in *Marchantia polymorpha* based on the expression patterns of the stem cell factor Mp*LAXR* Yusei Imai[1], Emi Hainiwa[2], Aya Iwaki[2], Sakiko Ishida[2,3], Takayuki Kohchi[2], Ryuichi Nishihama[1] ([1]Dept. Appl. Biol. Sci., Fac. Sci. Tech., Tokyo Univ. Sci., [2]Grad. Sch. Biostudies, Kyoto Univ., [3]Grad. Sch. Sci. Tech., NAIST)	Symposium S01 Stomatal research frontline —From molecules and cells to individual organisms— (9:30–12:30)	Symposium S02 Interactions between Plants and Atmosphere: from Atom to Ecosystem (9:30–12:30)	Symposium S03 [English] Unveil the enigma of plant actuators: exploring molecular and evolutionary mechanisms and engineering applications (9:30–12:10)	09:30
1aE02 Establishment of the comprehensive analysis platform for *Nicotiana benthamiana* genome and transcriptome Ken-ichi Kurotani[1], Hideki Hirakawa[2], Kenta Shirasawa[2], Koya Tagiri[3], Moe Mori[3], Yasunori Ichihashi[4], Takamasa Suzuki[5], Yasuhiro Tanizawa[6], Yasukazu Nakamura[6], Sachiko Isobe[2], Michitaka Notaguchi[1,7] ([1]Biosci. Biotech. Center, Nagoya Univ., [2]Kazusa DNA Research Inst., [3]Grad. sch. Bioagri. Sci., Nagoya Univ., [4]RIKEN BioResource Research Center, [5]Col. Biosci. Biotech., Chubu Univ., [6]Natl. Inst. Genetics, [7]Dept. Science, Kyoto Univ.)	1aF02 Functional analysis of sulfur deficiency responsive genes in *Glycine max* Aina Ieda, Shinichiro Komaki, Takayuki Tohge, Mutsumi Watanabe (Grad. Sch. Sci., Tech., NAIST)	1aG02 Free fatty acid production via overexpression of lipase in the cyanobacterium *Synechococcus elongatus* PCC 7942 Tsubasa Furushima[1], Taro Kadowaki[1], Yudai Matsuzaki[1], Norifumi Yamamoto[2], Nobuyuki Takatani[3], Makiko Aichi[3], Kazuki Ikeda[4], Tatsuo Omata[3], Yoshitaka Nishiyama[1] ([1]Grad. Sch. Sci. Eng., Saitama Univ., [2]Taisei Corp., [3]Col. Biosci. Biotech., Chubu Univ., [4]Kazusa DNA Res. Inst.)	1aH02 Ⓔ Analysis of gene expression patterns in the stem cell zone in *Marchantia polymorpha* Go Takahashi[1], Ryuichi Nishihama[2], Tomohiro Kiyosue[1], Yuki Hirakawa[1] ([1]Grad. Sch. Sci., Gakushuin Uni., [2]Dept. Appl. Biol. Sci., Fac. Sci. Tech., Tokyo Univ. Sci.)				09:45
1aE03 Stepwise chemical transcriptomics for large-scale identification of chemicals involved in diverse plant physiological functions Hayoung Lee[1], Natsumi Mori-Moriyama[1], Ayato Sato[2], Atsushi J. Nagano[1,3] ([1]Feculty of Agriculture, Ryukoku University, [2]Institute of Transformative BioMolecules (WPI-ITbM), Nagoya University, [3]Institute for Advanced Biosciences (IAB), Keio University)	1aF03 Group C MAP kinases phosphorylate MBD10 to regulate Abscisic Acid-induced leaf senescence in Arabidopsis Yangdan Li[1], Yoshiaki Kamiyama[1], Fuko Minegishi[1], Yuki Tamura[1], Kota Yamashita[1], Sotaro Katagiri[1], Hinano Takase[1], Masahiro Otani[2], Ryo Tojo[2], Gabrielle E. Rupp[4], Suzuki Takamasa[3], Naoto Kawakami[2], Scott C. Peck[4], Taishi Umezawa[1] ([1]Tokyo Univ. Agric. Tech., BASE, [2]Meiji University, School of Agriculture, [3]Chubu University, College of Bioscience and Biotechnology, [4]University of Missouri, Department of Biochemistry)	1aG03 Functional analysis of methylglyoxal synthase (Sll0036) that affects the growth of cyanobacterium *Synechocystis* sp. PCC 6803 Kadeer Aikeranmu[1], Dayarathne Kaushalya[1], Yuuma Ishikawa[2], Atsuko Miyagi[3], Toshiki Ishikawa[1], Masatoshi Yamaguchi[1], Kawai Maki[1] ([1]Grad. Sch. Sci and tech, Univ. saitama, [2]Heinrich-Heine Univ., CEPLAS, [3]Agriculture. Univ. Yamagata)	1aH03 Ⓔ Genetic analysis of PBL in CLE peptide signaling in *Marchantia poylmorpha* Go Takahashi[1], Yoshihito Shimizu[2], Erume Hasegawa[2], Tomohiro Kiyosue[1,2], Yuki Hirakawa[1,2] ([1]Grad. Sch. Sci., Gakushuin University, [2]Dept. Life Sci., Gakushuin University)				10:00
1aE04 Ⓔ Enhancing ATTED-II Database for Diverse Plant Species Research Takeshi Obayashi (Tohoku Univ.)	1aF04 Different roles of SOG1, ANAC044, and ANAC085 in cadmium and arsenic responses of Arabidopsis root tip Shimpei Uraguchi, Yuka Yamamura, Kakeru Sugaya, Masakazu Sato, Yuka Ohshiro, Ryosuke Nakamura, Yasukazu Takanezawa, Masako Kiyono (Sch. Pharm., Kitasato Univ.)	1aG04 Ⓔ Non-specific phospholipase C3 is involved in endoplasmic reticulum stress tolerance in Arabidopsis Hai Anh Ngo[1,2], Yuki Nakamura[1,2,3], Kazue Kanehara[2] ([1]RIKEN Center for Sustainable Resource Science (CSRS), Yokohama, Japan, [2]Institute of Plant and Microbial Biology, Academia Sinica, Taipei, Taiwan, [3]Department of Biological Sciences, Graduate School of Science, The University of Tokyo, Tokyo, Japan)	1aH04 Critical roles of NOX/RBOH-mediated ROS production in the regulation of cell cycle progression and cell division pattern in *Marchantia polymorpha* Yuto Yamashita[1], Yuki Hagiwara[1], Kenji Hashimoto[1], Hidemasa Suzuki[2], Ryuichi Nishihama[1], Kazuyuki Kuchitsu[1] ([1]Dept. Appl. Biol. Sci., Tokyo Univ. of Sci., [2]Grad. Sch. of Life Sci., Tohoku Univ.)				10:15
1aE05 Large Scale RNA-seq Analysis on Transcription Factor Mutants in *Arabidopsis* T-DNA Collections Hiroki Yagi[1], Atsushi J. Nagano[2,3] ([1]Grad. Sch. Nat. Sci., Konan Univ., [2]Fac. Agr., Ryukoku Univ., [3]IAB, Keio Univ.)	1aF05 Functional analysis of novel membrane protein mediating dehydration stress response Haruka Otani[1], Wakana Inoue[1], Takehiro Suzuki[2], Naoshi Dohmae[2], Fuminori Takahashi[3] ([1]Grad. Sch. Fac. Adv. Eng., TUS, [2]CSRS, RIKEN, [3]Fac. Adv. Eng., TUS)	1aG05 Ammonium-dependent interaction between rice ammonium transporter 1;2 and its negative modulator kinase ACTPK1 Toshihiko Hayakawa, Shotaro Hoshikawa (Grad. Sch. Agri. Sci., Tohoku Univ.)	1aH05 Cytokinins specify pluripotent stem cell identity in the moss *Physcomitrium patens* Yuki Hata[1], Juri Ohtsuka[1], Yuji Hiwatashi[2], Satoshi Naramoto[3], Junko Kyozuka[1] ([1]Grad. Sch. Life Sci., Tohoku Univ., [2]Sch. Food Industrial Sci., Miyagi Univ., [3]Fac. Sci., Hokkaido Univ.)				10:30

Ⓔ=Presentation in English

● Day 1, Sun., March 17, AM (9:30–12:30)

Time	Room A	Room B	Room C	Room D
	Photosynthesis	Environmental response A/ Physiological responses	Organelles/Cytoskeleton	New technology
10:45	1aA06 Mapping of subcellular local pH in the marine diatom *Phaeodactylum tricornutum* Ginga Shimakawa, Emi Yashiro, Yusuke Matsuda (Kwansei-Gakuin Univ)	1aB06 An *Arabidopsis* short ORF, *LOHN1*, is involved in the repression of lateral root formation under high-nitrogen conditions Tomoya Sonoda[1], Kazuhiro Ito[1], Chieko Goto[2], Hidehiro Fukaki[2], Kousuke Hanada[3], Koh Iba[1], Kensuke Kusumi[1] ([1]Department of Biology, Faculty of Science, Kyushu University, Fukuoka, Japan, [2]Department of Biology, Faculty of Science, Kobe University, Kobe, Japan, [3]Department of Bioscience and Bioinformatics, Kyusyu Institute of Technology, Iizuka, Fukuoka, Japan)	1aC06 Elucidation for the molecular mechanism to maintain chloroplast homeostasis by a novel BR signaling factor BPG4 Ryo Tachibana[1], Susumu Abe[2,3], Momo Marugami[2,3], Ayumi Yamagami[1], Rino Akema[1], Takao Ohashi[1], Kaisei Nishida[1], Shohei Nosaki[4], Takuya Miyakawa[1], Masaru Tanokura[5], Kim Jong-Myong[3,5,6], Motoaki Seki[3], Takehito Inaba[7], Minami Matsui[3], Kentaro Ifuku[8], Tetsuo Kushiro[2], Tadao Asami[5], Takeshi Nakano[1] ([1]Grad. Sch. Biostudies., Kyoto Univ., [2]Sch. Agri., Meiji Univ., [3]CSRS, RIKEN, [4]Sch. Life and Environmental sci., Tsukuba Univ., [5]Grad. Sch. Agri. Life Sci., Univ. Tokyo, [6]Ac-Planta Inc., [7]Dept. Agri. Univ., Miyazaki Univ., [8]Grad. Sch. Agri., Kyoto Univ.)	1aD06 Development Of Transcriptional Regulation Tools For *AtNCED3* Using CRISPR-Cas Kugo Goto[1], Satoshi Kidokoro[1], Keishi Osakabe[2], Yuriko Osakabe[1] ([1]Sch. of Life Sci. & Tech., Tokyo Tech., [2]Sch. of Tech., Ind. & Soc. Sci., Tokushima Univ.)
11:00	1aA07 Ⓔ Excitation Energy Re-Distribution between PSII and PSI in Marine Diatom *Chaetoceros gracilis* with a Truncated PSI–FCPI Supercomplex Jian Xing, Minoru Kumazawa, Shoko Tsuji, Noriko Ishikawa, Kentaro Ifuku (Grad. Sch. Agri., Kyoto Univ.)	1aB07 Time-course transcriptome analysis of *Arabidopsis thaliana* leaves under high-concentration ammonium sulfate treatment Hiroko Iwanaga[1], Yuki Arai[2], Masayuki Fujiwara[2], Takushi Hachiya[3], Takahiro Hamada[1] ([1]Fac. Life. Sci, Okayama Univ. Sci., [2]YANMAR Holdings Co., Ltd., [3]Int. Cent. Sci. Res., Shimane Univ.)	1aC07 Mechanism of greening adaptation of etiolated seedlings by novel dark-induced genes, BGHs Rino Akema[1], Ryo Tachibana[1], Ayumi Yamagami[1], Ryouichi Tanaka[2], Tadao Asami[3], Takeshi Nakano[1] ([1]Grad. Sch. Biostudies., Kyoto Univ., [2]Inst. Low Temperature Science., Hokkaido Univ., [3]Grad. Sch. Agri. Life Sci., Univ. Tokyo)	1aD07 Fluorescein staining of chloroplast starch granules in living plants Shintaro Ichikawa[1,2], Momoko Sakata[1], Toru Oba[2,3], Yutaka Kodama[1,2] ([1]Ctr. Biosci. Res. Educ., Utsunomiya Univ., [2]Grad. Sch. Reg. Dev. Creat., Utsunomiya Univ., [3]Fac. Eng., Utsunomiya Univ.)
11:15	1aA08 Evolutionary Trajectory of LHCI Proteins in Red-Lineage Algae: Conservation, Diversification, and Neo-Localization Minoru Kumazawa[1], Ryo Nagao[2], Atsushi Takabayashi[3], Kentaro Ifuku[1] ([1]Grad. Sch. Agri., Kyoto Univ., [2]Fac. Agric., Shizuoka Univ., [3]Inst. Low Temp. Sci., Hokkaido Univ.)	1aB08 Nutrient acquisition in a facultative parasitic plant *Phtheirospermum japonicum* Yuto Tokumoto[1], Shoko Inaba[1], Naoyuki Sotta[2], Takehiro Kamiya[2], Junta Yanai[3], Toru Fujiwara[2], Satoko Yoshida[1] ([1]Bio. Sci., NAIST, [2]Grad. Sch. Agr Life. Sci., Univ. Tokyo, [3]Grad. Sch. Life Env. Sci., Univ. Kyoto Pref)	1aC08 CO_2 effect on chloroplast movements in isolated leaf mesophyll cells of *Commelina benghalensis* and epidermal strips of *Marchantia polymorpha* Taichi Sugiyama[1,3], Ichiro Terashima[2,3] ([1]Bio-Resource, Lab. Chem. Life Sci., T. I. Tech., [2]ISAS, Grad. Sch. Agri. Life Sci., Univ. Tokyo, [3]Plant Eco-Phys. Lab., Biol. Sci., Grad. Sch. Sci., Univ. Tokyo)	1aD08 Establishment of an intracellular temperature imaging method for plants using a fluorescent polymeric thermometer for ratiometric sensing Kai Shibatani[1], Hiroki Maruyama[2], Teruyuki Hayashi[3], Seiichi Uchiyama[4], Toshikazu Tsuji[2], Noriko Inada[1] ([1]Grad. Sch. Agri., Osaka Met. Univ., [2]Inst. Kirin Central Res., Kirin HD Co., Ltd, [3]Dept. Nutri., Kohshien Univ., [4]Grad. Sch. Pharma. Sci., Univ. Tokyo)
11:30	1aA09 Excitation-energy quenching with low-energy chlorophylls in photosystem I Seiji Akimoto[1], Hiroto Matsuzaka[1], Miyu Furutani[1], Ryo Nagao[2], Kyoko Matsunaga[3], Tatsuya Tomo[4] ([1]Grad. Sch. Sci., Kobe Univ., [2]Fac. Agric., Shizuoka Univ., [3]Fac. Sci., Tokyo Univ. Sci., [4]Inst. Arts Sci., Tokyo Univ. Sci.)	1aB09 Ammonium in the rhizosphere suppresses the formation of prehaustoria, a host-invading organ of facultative parasitic plant *Phtheirospermum japonicum* Shoko Inaba, Zhang Xiang, Satoko Yoshida (Biol. Sci., NAIST)	1aC09 Ⓔ Novel Chloroplast Division Gene, Conserved Across Plant Lineage, Was Discovered Through CRISPR/Cas9 Genetic Screening In Moss *Physcomitrium patens* Elena Kozgunova[1,2] ([1]Nagoya University, Graduate School of Science, Department of Biological Science, [2]Nagoya University, Institute for Advanced Research)	1aD09 Ⓔ Development of chemically inducible protein heterodimerization (CID) in the plant: an additional molecular tool to build a synthetic biology platform Jekson Robertlee[1], Kotaro Nishiyama[1,2], Yutaro Shimizu[1], Shinya Hagihara[1] ([1]RIKEN RIKEN Center for Sustainable Resource Science (CSRS), [2]School of Agriculture, Meiji University)
11:45	1aA10 Green light induced state transitions in the ancestral green alga *Ostreococcus tauri* Masato Kubota[1], Eunchul Kim[2], Asako Ishii[2], Makiko Kosgi[2], Jun Minagawa[2] ([1]Basic Biology., The Graduate University for Advanced Studies, [2]National Institute for Basic Biology)	1aB10 Iron and zinc affect the activity and degradation of rice HRZ ubiquitin ligases Haruka Shinkawa, Akari Murota, Takanori Kobayashi (Res. Inst. Biores. Biotech., Ishikawa Pref. Univ.)	1aC10 Isolation and functional characterization of plastid peptidoglycan biosynthesis genes from the Norway spruce *Picea abies* Yayoi Sugita[1], Xiaofei Lin[2], Katsuaki Takechi[3], Hiroyoshi Takano[3] ([1]Grad. Sch. Sci., Univ. Kumamoto, [2]College of Life Sci., Univ. Inner Mongolia, [3]Fac of Adv Sci and Tech., Univ. Kumamoto)	1aD10 iChIP, a screen method to isolate transcriptional complexes on a specific promoter in planta, identified novel regulatory factors of ABA biosynthesis Hikaru Sato[1,2], Satoru Fujimoto[3], Miki Fujita[2], Fuminori Takahashi[2], Keiko Kuwata[4], Sachihiro Matsunaga[1,3], Kazuko Yamaguchi-Shinozaki[5,6], Kazuo Shinozaki[2] ([1]Dept. of Integr. Biosci., Univ. Tokyo, [2]RIKEN CSRS, [3]Dept. of Appl. Biol. Sci., Tokyo Univ. of Sci., [4]ITbM, Nagoya Univ., [5]Grad. Sch. Agr. Life Sci., Univ. Tokyo, [6]Res. Inst. Agr. Life Sci., Tokyo Univ. Agr.)

Room E	Room F	Room G	Room H	Room X	Room Y	Room Z	Time
Systems biology	Environmental response B/ Environmental stresses	Primary metabolism	Development/Morphogenesis				
1aE06 Exploration of transcriptional regulatory mechanism of the DREAM complex from ChIP-Seq and RNA-Seq data Hidekazu Iwakawa[1], Rui Yamamoto[1], Yuji Nomoto[1], Takamasa Suzuki[2], Masaki Ito[1] ([1]Grad. Sch. Nat. Sci. Technol., Kanazawa Univ., [2]Col. Biosci. Biotech., Chubu Univ.)	1aF06 The analysis of molecular mechanism for salt sensitivity in Arabidopsis induced by a pyrazole synthesized by catalytic aerobic aminooxygenation Minoru Ueda[1,2], Satoshi Takahashi[1,2], Junko Ishida[1,2], Ayumi Yamagami[3], Takeshi Nakano[3], Florian Pünner[4,5], Mai Akakabe[4,5], Yoshihiro Sohtome[4,5], Mikiko Sodeoka[4,5], Motoaki Seki[1,2,6,7] ([1]Plant Genomic Network Research Team, RIKEN CSRS, [2]Plant Epigenome Regulation Lab., RIKEN CPR, [3]Grad. Sch. Biostudies, Kyoto Univ., [4]Catalysis and Integrated Research Group, RIKEN CSRS, [5]Synthetic Organic Chemistry Laboratory, RIKEN CPR, [6]KIBR, Yokohama City Univ., [7]Grad. Sch. Sci. Eng., Saitama Univ.)	1aG06 Analysis of mechanisms underlying the interplay between nitrate and potassium acquisition in Arabidopsis Kosuke Usuda, Yasuhito Sakuraba, Shuichi Yanagisawa (Agro-Biotech. Res. Center, Grad. Sch. Agri. Life Sci., Univ. Tokyo)	1aH06 Marchantia-derived sulfated peptide MAPPY regulates the branching of thallus Hidefumi Shinohara[1], Yoko Hayashi[2], Kota Yokoi[1], Yoshikatsu Matsubayashi[2] ([1]Dept. Biosci. Biotech. Fukui Pref. Univ., [2]Grad. Sch. Sci. Nagoya Univ.)	Symposium S01 Stomatal research frontline —From molecules and cells to individual organisms— (9:30–12:30)	Symposium S02 Interactions between Plants and Atmosphere: from Atom to Ecosystem (9:30–12:30)	Symposium S03 [English] Unveil the enigma of plant actuators: exploring molecular and evolutionary mechanisms and engineering applications (9:30–12:10)	10:45
1aE07 Ⓔ Characterization of Tomato Fruit Ripening Transcription Factors via Comparative Omics Approach Hwa Eun Kim[1], Shinichiro Komaki[1], Mutsumi Watanabe[1], Alisdair R. Fernie[2], Takayuki Tohge[1] ([1]Grad. Sch. Sci., Tech., NAIST, [2]MPI-MPP)	1aF07 Effect of salt stress on CBL interacting protein kinase 26 Mana Hamada[1], Ryosuke Hori[1], Kohei Nishino[2], Hidetaka Kosako[2], Akira Nozawa[1], Tatsuya Sawasaki[1] ([1]PROS, Ehime University, [2]Fujii Memorial Institute of Medical Sciences, Tokushima University)	1aG07 Exploring QTLs Related to the Adaptation to Nitrogen-Deficient Environments in *Arabidopsis thaliana* Keina Monda[1], Atsushi Mabuchi[1], Juntaro Negi[1], Satoshi Iuchi[2], Masatomo Kobayashi[2], Michitaka Notaguchi[3,4,5], Hiroki Tsutsui[3,6], Mitsutomo Abe[7], Yasuhito Sakuraba[8], Shuichi Yanagisawa[8], Koh Iba[1] ([1]Dept. Biol., Fac. Sci., Kyushu Univ., [2]RIKEN BRC, [3]Grad. Sch. Bioagri. Sci., Nagoya Univ., [4]Biosci. Biotech. Center, Nagoya Univ., [5]Grad. Sch. Sci., Kyoto Univ., [6]OIST, [7]Grad. Sch. Art Sci., Univ. Tokyo, [8]Grad. Sch. Agri. Life Sci., Univ. Tokyo)	1aH07 Transient cytokinin response acts as priming signal to initiate secondary growth Shunji Shimadzu[1,2], Shusei Mori[1], Tomoyuki Furuya[3], Mikiko Kojima[4], Yumiko Takebayashi[4], Kyoko Ohashi-Ito[1], Kimitsune Ishizaki[2], Masashi Asahina[5,6], Hitoshi Sakakibara[4,7], Soichi Inagaki[1], Tetsuji Kakutani[1], Hidehiro Fukaki[2], Hiroo Fukuda[8], Yuki Kondo[2] ([1]Grad. Sch. Sci., Univ. of Tokyo, [2]Grad. Sch. Sci., Kobe Univ., [3]Col. Sch. Sci., Ritsumeikan Univ., [4]CSRS, RIKEN, [5]Dept. Biosci., Teikyo Univ, [6]Adv. Inst. Anal. Center, Teikyo Univ., [7]Grad. Sch. Bioagric. Sci., Nagoya Univ., [8]Akita Prefectural Univ.)				11:00
1aE08 Field transcriptome analysis unveils novel genetic pathways for early heading in spring barley June-Sik Kim[1,2], Jun Ito[3], Yukiko Uehara-Yamaguchi[1], Kotaro Takahagi[3], Asaka Kanatani[1], Minami Shimizu[1], Komaki Inoue[1], Satoshi Okada[2,4], Takakazu Matsuura[2], Koosuke Hattori[5], Yoko Ikeda[2], Daisuke Saisho[2], Hiroyuki Tsuji[3,4], Takashi Hirayama[2], Kazuhiro Sato[2], Keiichi Mochida[1,2,3,6,7] ([1]RIKEN CSRS, [2]IPSR, Okayama Univ., [3]KIBR, Yokohama City Univ., [4]Biosci. Biotech. Ctr., Nagoya Univ., [5]Grad. Sch. Eng., Chubu Univ., [6]Sch. Inform. Data Sci., Nagasaki Univ., [7]RIKEN RCSTI)	1aF08 Studies on cold acclimation of *Allium tuberosum* for application in agriculture Yuto Kasamatsu, Yukio Kawamura (Grad. Sch. Plant., Univ. Iwate)	1aG08 Nitrate inhibits adventitious bud formation from leaves of *Drosera rotundifolia* Shinichiro Ito[1], Juse Okamoto[2], Arisa Yoshioka[2], Kazuki Kawamura[2], Nobuyuki Takatani[2], Tatsuo Omata[2], Makiko Aichi[2] ([1]Grad. Sch. Biosci. Biotech., Chubu Univ., [2]Col. Biosci. Biotech., Chubu Univ.)	1aH08 Identification of stomatal-reducing compound Stomidazolone Ayami Nakagawa[1], Krishna Mohan Sepuru[2,3], Yip Shu Jan[1], Hyemin Seo[2,3], Calvin Coffin[2,3], Yasutomo Segawa[4], Rie Iwasaki[1], Hiroe Kato[1], Stephanie Kim[3], Yusuke Aihara[1,5], Toshinori Kinoshita[1], Kenichiro Itami[1], Soon-ki Han[1,6], Kei Murakami[1,5,7], Keiko Torii[1,2,3] ([1]ITbM, Nagoya University, [2]Howard Hughes Medical Institute, [3]The University of Texas at Austin, [4]Institute for Molecular Science and SOKENDAI, [5]PRESTO, Japan Science and Technology Agency, [6]Institute for Advanced Research, Nagoya University, [7]Department of Chemistry, Kwansei Gakuin University)				11:15
1aE09 Comprehensive analysis of reduction potential of cysteine residues using redox proteomics Kenya Tanaka[1,2,3], Akihiko Kondo[1,3,4], Tomohisa Hasunuma[1,3,4] ([1]EGBRC, Kobe Univ., [2]Grad. Sch. Eng. Sci. RCSEC, Osaka Univ., [3]Grad. Sch. Sci. Technol. Innov., Kobe Univ., [4]CSRS, Riken)	1aF09 Acclimation to the submerged condition by changes in leaf function and structure in the amphibious plant *Hygrophila difformis* Genki Horiguchi[1], Yusuke Mizokami[1], Naoki Hirotsu[2], Ko Noguchi[1] ([1]Sch. Life Sci, Tokyo univ. Pharm. Life Sci., [2]Sch. Life Sci. Toyo univ.)	1aG09 Ⓔ Functional analysis of two GARP-type transcription factors OsHHO3 and OsHHO4 in the regulation of nitrogen-deficiency response in rice Yuying Wu, Mailun Yang, Namie Ohtsuki, Yasuhito Sakuraba, Shuichi Yanagisawa (Agro-Biotech. Res. Center, Grad. Sch. Agr. Life Sci., Univ. Tokyo)	1aH09 Functional analyses of HPY2/AtNSE2 and SMC5/6 complex in the regulation of development Mika Yoshimura, Takashi Ishida (Kumamoto Univ., FAST)				11:30
1aE10 Molecular responses of rice varieties to low-sulfate soil in the Volta River Basin in Ghana Kyonoshin Maruyama[1,2], Yasuhiro Tsujimoto[1], Tetsuya Sakurai[3], Hiroaki Sakai[4], Shingo Sakamoto[5], Nobutaka Mitsuda[5] ([1]JIRCAS, [2]Bio. Sci., Univ. Tsukuba, [3]Multi. Sci. Cluster, Kochi Univ., [4]NAAC., NARO, [5]Bioprod., AIST)	1aF10 Arabidopsis MAP4K1 and MAP4K2 Positively Regulate ABA-induced Stomatal Closure via Ca^{2+} Signaling Kota Yamashita[1], Anzu Oishi[1], Hinano Takase[1], Sotaro Katagiri[1], Yangdan Li[1], Yoshiaki Kamiyama[1], Shota Yamauchi[2], Atsushi Takemiya[2], Izumi Mori[3], Taishi Umezawa[1] ([1]BASE, Tokyo Univ. Agric. Tech., [2]Yamaguchi Univ., [3]Okayama Univ.)	1aG10 Elucidation of the regulatory mechanism underlying nitrogen deficiency-induced miRNA dynamics Yasuhito Sakuraba, Mailun Yang, Shuichi Yanagisawa (Agro-Biotech. Res. Center, Grad. Sch. Agri. Life Sci., Univ. Tokyo)	1aH10 Comparative analysis of three subgroups of BZR/BES transcription factors Tomoyuki Furuya[1], Shohei Nosaki[2,3], Yuki Kondo[4], Masahiro Kasahara[1] ([1]College Sch. Sci., Ritsumeikan Univ., [2]Inst. of Life and Env. Sci., Univ. of Tsukuba, [3]T-PIRC, Univ. of Tsukuba, [4]Grad. Sch. Sci., Kobe Univ.)				11:45

Ⓔ=Presentation in English

● Day 1, Sun., March 17, AM (9:30–12:30)

Time	Room A	Room B	Room C	Room D
	Photosynthesis	Environmental response A/ Physiological responses	Organelles/Cytoskeleton	New technology
12:00	1aA11 Spillover in leaf discs at 77K: Effects of growth light, state transitions, NPQ, *b*-less mutation and thylakoid morphology Ichiro Terashima[1], Kimie Atsuzawa[2], Riichi Oguchi[3], Yasuko Kaneko[4], Masaru Kono[5] ([1]ISAS, Univ. Tokyo, [2]Comprehensive Anal. Center, Saitama Univ., [3]Dept. Biol., Sch. Sci., Osaka Met. Univ., [4]Dept. Nat. Sci., Fac. Educ., Saitama Univ., [5]Dept. Biol. Sci., Fac. Sci., Kanagawa Univ.)	1aB11 mRNA encapsulation responses by the nucleus under high phosphorus fertilization in rice leaves Daisuke Takagi (Setsunan University, Faculty of Agriculture)	1aC11 NOF1 endonuclease mediates the segregation of chloroplast nucleoids Nao Otani[1], Ayano Ikeda[1], Hidehito Hirokado[1], Kota Ishibashi[2], Takashi Yamoano[3], Hideya Fukuzawa[3], Yoshiki Nishimura[4], Yusuke Kobayashi[1] ([1]Sci., Ibaraki Univ., [2]Life Sci., Kyoto Sangyo Univ., [3]GRB, Kyoto Univ., [4]Sci., Kyoto Univ.)	
12:15		1aB12 Evaluation of phosphorus nutrient recycling capacity in aluminum-philic tea plants Keitaro Koike[1], Hiroto Yamashita[1,2,3], Takashi Ikka[1,2,3,4] ([1]The United Graduate School of Agricultural Science, [2]Faculty of Agriculture, Shizuoka Univeraity, [3]Institute for Tea Science, Shizuoka University, [4]Research Institute of Green Science and Technology, Shizuoka University)	1aC12 Chloroplast DSBs Introduced by the BUMPS Method Are Quickly Removed Aine Kawashima, Haruki Kanazawa, Toshiharu Shikanai, Yoshiki Nishimura (Grad. Sci., Kyoto Univ.)	

Room E	Room F	Room G	Room H	Room X	Room Y	Room Z	Time
Systems biology	Environmental response B/ Environmental stresses	Primary metabolism	Development/Morphogenesis				
1aE11 Simulation study of sampling strategies for prediction of field transcriptome Dan Eiju[1], Tarou Maeda[2], Satoshi Ohkubo[7], Makoto Kashima[8], Daisuke Kyougoku[5], Yoichi Hashida[6], Hiroyuki Hiroyuki[9], Shunsuke Adachi[10], Atsushi J. Nagano[2,3,4] ([1]Keio University, Environmental Information, [2]Dept. Env. & Info. Studies., Keio Univ., [3]Res. Inst. Food Agr., Ryukoku Univ., [4]Fac. Agr., Ryukoku Univ., [5]Mus. Nature and Human Activitiesb, [6]Fac. Agr., Takasaki Univ, [7]Fac. Agr., Tohoku Univ, [8]Coll. Sci. Eng., Toho Univ. /, [9]Fac. Agr., Tamakawa Univ, [10]Fac. Agr., Tokyo Univ.)	1aF11 Accumulation of Phosphorylated SnRK2 Substrate 1 Promotes Drought Escape in Arabidopsis Sotaro Katagiri[1], Yoshiaki Kamiyama[1], Kota Yamashita[1], Yuki Aoi[2], Fuminori Takahashi[3], Toshinori Kinoshita[4], Taishi Umezawa[1] ([1]Tokyo Unive. Agric. and Tech., [2]INRAE, [3]Tokyo University of Science, [4]Nagoya Univ.)	1aG11 Analysis of the nitrate response mechanism in *Marchantia polymorpha* Naohiko Ohama[1], Kimitsune Ishizaki[2], Makoto Hayashi[3], Shuichi Yanagisawa[1] ([1]AgTech, Grad. Sch. Agr. Life Sci., Univ. Tokyo, [2]Grad. Sch. Sci. Kobe Univ., [3]RIKEN CSRS)	1aH11 Gene expression analysis at the single-cell level in specific meristems of one-leaf plants *Monophyllaea glabra* Shunji Nakamura, Hiroyuki Koga, Ayaka Kinoshita, Hirokazu Tsukaya (Grad. Sch. Sci., Univ. Tokyo)	Symposium S01 Stomatal research frontline —From molecules and cells to individual organisms— (9:30–12:30)	Symposium S02 Interactions between Plants and Atmosphere: from Atom to Ecosystem (9:30–12:30)	Symposium S03 [English] Unveil the enigma of plant actuators: exploring molecular and evolutionary mechanisms and engineering applications (9:30–12:10)	12:00
1aE12 [Cancelled]	1aF12 Pavement Cell Chloroplasts: Essential To Salt Stress-Induced Anthocyanin Production In Arabidopsis Tomoki Obata, Kota Tachibana, Takanobu Omaru, Koh Iba, Juntaro Negi (Fac. Sci., Kyushu Univ.)	1aG12 Functional analysis of the transcription factor FBH4 mediating the regulation of flowering and metabolism under low nitrogen conditions in Arabidopsis Miho Sanagi[1,2], Kana Nakao[3], Akio Kubo[4], Soichi Inagaki[5], Junpei Takagi[1], Takeo Sato[1] ([1]Fac. Sci., Hokkaido Univ., [2]CRIS, Hokkaido Univ., [3]Sch. Sci., Hokkaido Univ., [4]Grad. Sch. Life Sci., Hokkaido Univ., [5]Grad. Sch. Sci, Univ. Tokyo)	1aH12 Ⓔ A cell-based theory of tip growth and negative curvature formation: case study of *Triadica sebifera* and its generalization Zining Wang[1], Yasuhiro Inoue[2], Atsushi Mochizuki[3], Hirokazu Tsukaya[1] ([1]Grad. Sch. Sci. Univ. Tokyo, [2]Dept. Micro Eng., Kyoto Univ., [3]Inst. Front. Life Med. Sci., Kyoto Univ.)				12:15

Ⓔ=Presentation in English

● Day 1, Sun., March 17, PM (14:00–17:00)

Time	Room A	Room B	Room C	Room D
	Photosynthesis	Environmental response A/ Physiological responses	Organelles/Cytoskeleton	Reproduction
14:00	1pA01 Variety and Reaction Mechsnisms of Far-red Adapted Photosystems I and II in Nine Species of Chlorophyll *f* -Producing Cyanobacteria Shigeru Itoh[1], Syo Kitazaki[2], Tomoki Ono[2], Hisanori Yamakawa[1], Hideaki Miyashita[2] ([1]Grad. Sch. Sci. Physics, Nagoya Univ., [2]Univ. Kyoto, Grad. Sch. Human Environmenta)	1pB01 E Mechanosensitive channel genes of a stem parasitic plant, *Cuscuta campestris*, and their role in haustorium initiation Jihwan Park, Koh Aoki (Grad. Sch. Agric., Osaka Metro. Univ)	1pC01 High-resolution imaging of the CO_2-concentrating organelle “Pyrenoid” during cell division Koujirou Matsuo, Takashi Yamano (Grad. Sch. Biostudies, Kyoto University)	1pD01 Molecular understanding of the determination of female reproductive organ fates in *Physcomitrium patens* Emiko Yoro[1], Ryohei Sato[1], Nobuhiro Akiyoshi[1], Seiya Suzuki[1], Rumiko Kofuji[2], Keiko Sakakibara[1] ([1]Dept. Life Sci., Rikkyo Univ., [2]Coll. Sci. & Engr., Kanazawa Univ.)
14:15	1pA02 Theoretical Analysis of Light-Harvesting Mechanism of Mixture of Multiple Pigments in Acidobacterium *C. thermophilum* Type-I Reaction Center Wataru Shimooka[1], Hirotaka Kitoh[2], Shigeru Itoh[1], Akihiro Kimura[1] ([1]Grad Sch Sci, Nagoya Univ., [2]Fac. Sci. Eng., Kindai Univ.)	1pB02 The characteristics of *Arabidopsis thaliana*, *Lotus corniculatus*, Micro-Tom, *Nicotiana benthamiana*, and *Brachypodiumdistachyon* cultivated using pseudo-solar LED lighting Hajime Furukawa[1], Eibai Matsukawa[2], Tetsuji Iida[2], Ichiro Kijihana[2] ([1]Grad. sch. Agri. Osaka Metropolitan Univ, [2]Nippon Medical & Chemical Instruments Co., Ltd.)	1pC02 Comparative functional analysis of membrane proteins involved in the maintenance and regulation of lipid monolayer membrane organelles Takashi Nakayama[1], Takumi Hiraki[1], Kosuke Miwa[1], Miki Suenaga-Hiromori[1], Fu Kuroiwa[2], Toshiyuki Waki[1], Satoshi Yamashita[3], Haruhiko Yamaguchi[4], Yukino Miyagi[4], Masako Iwai[5], Hiroyuki Ohta[5,6], Yuzuru Tozawa[2], Toru Nakayama[1], Seiji Takahashi[1] ([1]Grad. Sch. Eng., Tohoku Univ., [2]Grad. Sch. Sci. Eng., Saitama Univ., [3]Grad. Sch. Nat. Sci. Tech., Kanazawa Univ., [4]Sumitomo Rubber Industries, Ltd., [5]Phytolipid Technologies Co., Ltd., [6]Sch. Life Sci. Tech., Tokyo Tech)	1pD02 Elucidation Of Regulatory Mechanisms For *Physcomitrium Patens* RKD Transcription Factor Which Determine The Fate Of Female Reproductive Organs Nobuhiro Akiyoshi, Emiko Yoro, Seiya Suzuki, Keiko Sakakibara (Dept. Life Sci., Rikkyo Univ.)
14:30	1pA03 The Analysis of Photosystem I Peripheral Antenna complexes in early-diverged Green Algae Pyramimonas parkeae and Nephroselmis astigmatica Shinsa Kameo[1,2], Atsushi Takabayashi[1,2], Ryouichi Tanaka[1,2] ([1]ILTS, Univ. Hokkaido, [2]Grad. Env. Sci., Univ. Hokkaido)	1pB03 The phenology of transcriptome reveals the physiological status during spring bud-break in tea plants Mahiro Onuki[1], Jumpei Kawaki[2], Atsushi J. Nagano[3,4], Takashi Ikka[5,6,7], Hiroto Yamashita[5,6] ([1]Grad. Sch. Agr., Univ. Shizuoka, [2]Tea Res Cent., Shizuoka Pref, [3]Fac. Agr., Univ. Ryukoku, [4]Inst. Adv. Biosci., Univ. Keio, [5]Fac. Agr., Univ. Shizuoka, [6]Inst. for Tea Sci, Univ. Shizuoka, [7]Res. Inst. of Green Sci. and Tech., Univ. Shizuoka)	1pC03 Functional diversity and conservation of Arabidopsis and tomato myosin XI revealed from intra-cellular comparative analysis Jun Obara[1], Tomoyasu Suzuki[1], Takeshi Haraguchi[2], Kohji Ito[2], Satoko Nonaka[3,4], Motoki Tominaga[1,5] ([1]Grad. Sch. Adv. Sci. Eng., Waseda Univ., [2]Grad. Sch. Sci. Bio., Chiba Univ., [3]T-PIRC, Tsukuba Univ., [4]Ins. Life & Environmtl Sci., Tsukuba Univ., [5]Fac. Educ. Integrated Arts. Sci. Bio., Waseda Univ.)	1pD03 E Chromatin dynamics during fertilization of a liverwort, *Marchantia polymorpha* Tetsuya Hisanaga, Frederic Berger (Gregor Mendel Institute)
14:45	1pA04 The light-dependent increase in the steady state level of chlorophyll fluorescence reflects the energy dissipation mechanism characteristic of cyanobacteria Takako Ogawa[1], Hiroko Takahashi[1], Yoshitaka Nishiyama[1], Yukako Hihara[1], Kintake Sonoike[2] ([1]Sch. Sci. Eng., Saitama Univ., [2]Fac. Educ., Waseda Univ.)	1pB04 E Environmental regulation of shoot and root growth in Poa annua Louis J. Irving (Univ. Tsukuba, Life & Env. Sci)	1pC04 Functional analysis of myosin XI in *Marchantia polymorpha* Shuya Uchida[1], Takehiko Kanazawa[2,3], Jun Obara[1], Yuto Kuroda[1], Takashi Ueda[2,3], Motoki Tominaga[1,4] ([1]Grad. Sch. Adv. Sci., Waseda Univ., [2]Div. Cellular Dynamics, [3]Grad. Inst. for Advanced Studies, SOKENDAI, [4]Fac. Educ. Integrated Arts. Sci. Bio., Waseda Univ.)	1pD04 Fanctional anaysis of a gene encording EF-hand protein, Mp*CAPS*, in the sperm chemotaxis in *Marchantia polymorpha* Mizuki Morita[1], Katsuyuki T. Yamato[2] ([1]Grad. Sch. BOST, Kindai Univ., [2]Fac. BOST, Kindai Univ.)

Room E	Room F	Room G	Room H	Room X	Room Y	Room Z	Time
Plant-organism interaction A	Environmental response B/ Environmental stresses	Primary metabolism/Specialized (secondary) metabolism/Plant hormones/Signaling molecules	Development/Morphogenesis				
1pE01 Ⓔ Evolutionary Trajectory of Pattern Recognition Receptors in Plants Yasuhiro Kadota[1], Bruno Pok Man Ngou[1], Michele Wyler[2], Marc W. Schmid[2], Ken Shirasu[1] ([1]RIKEN CSRS, [2]MWSchmid GmbH)	1pF01 Mechanisms of acclimation induced by freezing and light in *Arabidopsis thaliana* Kenji Sugita[1], Shunsuke Takahashi[2], Matsuo Uemura[1,2], Yukio Kawamura[1,2] ([1]UGAS, Iwate University, [2]Grad. Sch. Arts and Sci., Iwate University)	1pG01 The developmental and metabolome analysis of *Cuscuta* root Mariko Asaoka[1], Hiromitsu Tabeta[2], Momoko Tobinai[1], Toshiya Yokoyama[1], Masami Y. Hirai[2], Nishitani Kazuhiko[1] ([1]Kanagawa Uni. Faculty of Science, [2]RIKEN CNRS)	1pH01 Studies on a gene negatively influencing stemness in *Arabidopsis* Ryuji Tsugeki[1], Yoko Ikeda[2], Hitoshi Mori[3,4], Yuta Aoyagi[5], Hideki Hirakawa[5] ([1]Grad. Sch. Sci., Kyoto Univ., [2]IPSR, Okayama Univ., [3]Grad. Sch. Agric. Sci., Nagoya Univ., [4]iGCORE, Nagoya Univ., [5]Kazusa DNA Res. Inst.)	Symposium S04 [English] Genetic transfer technology for plants and its associated sciences (14:00–17:00)	Symposium S05 Creating new molecules to manipulate plant functions (14:00–17:00)	Symposium S06 Local and systemic signaling for environmental responses in plants (14:00–17:00)	14:00
1pE02 Ⓔ Does RALF–FER module control immunity in the liverwort *Marchantia polymorpha*? Yijia Yan, Katharina Melkonian, Titus Schlüter, Hirofumi Nakagami (Max Planck Institute for Plant Breeding Research)	1pF02 Transcription factor SGR5 mediates the stomatal response to darkness in *Arabidopsis* Moeca Arai[1,2], Keiko Kigoshi[1], Kosuke Moriwaki[1], Kyoko Miyashita[1], Yoshimi Nakano[1], Sumire Fujiwara[1,2] ([1]Bioprod. Res. Inst., AIST, [2]Biol. Grad. Sch. Sci. Tech., Univ. Tsukuba)	1pG02 Exploration for oxalate accumulation factors in rice leaves using GWAS and QTL analysis Atsuko Miyagi[1], Nobuhiro Tanaka[2], Matthew Shenton[2], Kaworu Ebana[3], Satoshi Ohkubo[4,5], Shunsuke Adachi[4], Taiichiro Ookawa[4], Maki Kawai-Yamada[6] ([1]Fac. Agri., Yamagata Univ., [2]Inst. Crop Sci., NARO, [3]Res. Cntr. Genetic Resources, [4]Grad. Sch. Agri., Tokyo Univ. Agri. Tech., [5]Grad. Sch. Life Sci., Tohoku Univ., [6]Grad. Sch. Sci. Eng., Saitama Univ.)	1pH02 Analysis of DNA damage response in the *aberrant meristem behavior1* mutant of *Arabidopsis* Ryoko Muraoka, Akihito Mamiya, Yuki Kondo, Kimitsune Ishizaki, Hidehiro Fukaki (Grad. Sch. Sci., Kobe Univ.)				14:15
1pE03 Analysis of transcription factor CAMTA in chitin signaling of *Physcomitrium patens* Akino Setsu, Teruaki Taji, Yoichi Sakata, Izumi Yotsui (Dept. of Biosci., Tokyo Univ. of Agri.)	1pF03 Ⓔ 1-Butanol treatment enhances drought stress tolerance in *Arabidopsis thaliana* Thi Nhu Quynh Do[1,2], Daisuke Todaka[1], Maho Tanaka[1,3], Satoshi Takahashi[1,3], Junko Ishida[1,3], Kaori Sako[1,4], Atsushi J. Nagano[5,6], Xuan Hoi Pham[2], Motoaki Seki[1,3,7,8] ([1]Plant Genomic Network Research Team, RIKEN Center for Sustainable Resource Science, [2]Agricultural Genetics Institute, Vietnam Academy of Agriculture Sciences, [3]Plant Epigenome Regulation Laboratory, RIKEN Cluster for Pioneering Research, [4]Department of Advanced Bioscience, Faculty of Agriculture, Kindai University, [5]Faculty of Agriculture, Ryukoku University, [6]Institute for Advanced Biosciences, Keio University, [7]Kihara Institute for Biological Research, Yokohama City University, [8]Graduate School of Science and Engineering, Saitama University)	1pG03 The Function of N^2-Acetylornithine Deacetylase as a Cys–Gly Dipeptidase in the Cytosolic Glutathione Degradation Pathway in *Arabidopsis thaliana* Takehiro Ito[1,2], Shunsuke Miyaji[3], Taisuke Kitaiwa[3], Kosuke Nishizono[3], Shin-ichiro Agake[4], Hiroki Harata[5], Minori Umahashi[3], Haruna Aoyama[5], Muneo Sato[2], Jun Inaba[2], Shinya Fushinobu[6,7], Tadashi Yokoyama[8,9], Akiko Maruyama-Nakashita[10], Masami Y. Hirai[2,11], Naoko Ohkama-Ohtsu[4,8] ([1]Unit. Grad. Sch. Agri. Sci., Tokyo Univ. Agri. Tech., [2]RIKEN CSRS, [3]Grad. Sch. Agri., Tokyo Univ. Agri. Tech., [4]GIR, Tokyo Univ. Agri. Tech., [5]Fac. Agri., Tokyo Univ. Agri. Tech., [6]Dept. Biotech., Univ. Tokyo, [7]CRIIM, Univ. Tokyo, [8]Inst. Agri., Tokyo Univ. Agri. Tech., [9]Fac. Food Agri. Sci., Fukushima Univ., [10]Dept. Biosci. Biotech., Kyushu Univ., [11]Grad. Sch. Bioagri. Sci., Nagoya Univ.)	1pH03 Analysis of callus formation and shoot regeneration mechanisms using Arabidopsis *lbd* multiple mutants with defects in lateral root formation Koki Wada[1], Akihito Mamiya[1], Tatsuaki Goh[2], Yuki Kondo[1], Kimitsune Ishizaki[1], Hidehiro Fukaki[1] ([1]Grad. Sch. Sci., Kobe Univ., [2]Grad. Sch. Sci. Tech., NAIST)				14:30
1pE04 The role of auxin signaling in immune responses of the moss *Physcomitrium patens* Miyuri Yoshida, Teruaki Taji, Yoichi Sakata, Izumi Yotsui (Dept. of Biosci., Tokyo Univ. of Agri.)	1pF04 Ⓔ Application of Ethanol Alleviates Heat Damage to Leaf Growth and Yield in Tomato Daisuke Todaka[1], Thi Nhu Quynh Do[1,4], Maho Tanaka[1,2], Yoshinori Utsumi[1], Chikako Utsumi[1], Akihiro Ezoe[1], Satoshi Takahashi[1,2], Junko Ishida[1,2], Miyako Kusano[5,6,7], Makoto Kobayashi[5], Kazuki Saito[5], Atsushi J. Nagano[8,9], Yoshimi Nakano[10], Nobutaka Mitsuda[10], Sumire Fujiwara[10], Motoaki Seki[1,2,3,11] ([1]Plant Genomic Network Research Team, CSRS, RIKEN, [2]Plant Epigenome Regulation Laboratory, CPR, RIKEN, [3]Kihara Institute for Biological Research, YCU, [4]Agricultural Genetics Institute, Pham Van Dong Road, Bac Tu Liem District, [5]Metabolomics Research Group, CSRS, RIKEN, [6]Graduate School of Life and Environmental Sciences, Univ. of Tsukuba, [7]Tsukuba Plant Innovation Research Center, Univ. of Tsukuba, [8]Faculty of Agriculture, Ryukoku Univ., [9]Institute for Advanced Biosciences, Keio Univ., [10]Bioproduction Research Institute, AIST, [11]Graduate School of Science and Engineering, Saitama Univ.)	1pG04 Functional analysis of membrane trafficking factor MIN7/BEN1/BIG5 in plant responses to C/N stress Kaito Endo[1], Hiroki Matsui[2], Miho Sanagi[3,4], Junpei Takagi[3], Takeo Sato[3] ([1]Grad. Sch. Life Sci., Hokkaido Univ., [2]Sch. Sci., Hokkaido Univ., [3]Fac. Sci., Hokkaido Univ., [4]CRIS, Hokkaido Univ.)	1pH04 Identification and investigation of new factors regulating the establishment of vascular stem cells Shota Maeda[1], Shunji Shimadzu[1,2], Akihito Mamiya[1], Tomoyuki Furuya[3], Hidehiro Fukaki[1], Kimitsune Ishizaki[1], Yuki Kondo[1] ([1]Grad. Sch. Sci., Kobe Univ., [2]Grad. Sch. Sci., Univ. of Tokyo, [3]Col. Sch. Sci., Ritsumeikan Univ.)				14:45

Ⓔ=Presentation in English

● Day 1, Sun., March 17, PM (14:00–17:00)

Time	Room A	Room B	Room C	Room D
	Photosynthesis	Environmental response A/ Physiological responses	Organelles/Cytoskeleton	Reproduction
15:00	1pA05 Biochemical Analysis on Functional Diversity of the LexA Transcription Factor in Cyanobacteria Aoi Ando[1], Haruka Kubodera[1], Ayumi Kizawa[2], Yukako Hihara[1] ([1]Sci. Eng., Saitama Univ., [2]Fac. Sci. Eng., Chuo Univ.)	1pB05 Mechanostructural Analysis of Arabidopsis Leaf Movement Based on 3D Reconstruction of X-ray CT Images Maika Hayashi[1], Tadashi Kunieda[1,2], Ryo Kumagai[1], Makito Haruta[3], Yoshito Otake[4], Hirokazu Kato[4], Hiroyuki Shima[5], Taku Demura[1,2] ([1]Div. Biol. Sci., NAIST, [2]CDG, NAIST, [3]Fac. Sci. Eng., Chitose Inst. Sci. Tech., [4]Div. Info. Sci., NAIST, [5]Dept. Env. Sci., Univ. Yamanashi)	1pC05 Analysis of *MYOSIN XI*-expressing regions involved in straightening of inflorescence stems in *Arabidopsis* Satoko Okamura[1], Yuzuki Miyake[2], Yuuna Umemura[1], Hiroki Yagi[2], Koichi Toyokura[3], Ikuko Hara-Nishimura[2], Haruko Ueda[1,2] ([1]Fac. Sci. Engin., Konan Univ., [2]Grad. Sch. Nat. Sci., Konan Univ., [3]Grad. Sch. Integr. Sci. Life, Hiroshima Univ.)	1pD05 MpGEX1 is required for fertilization of the liverwort *Marchantia polymorpha* Shuh-ichi Nishikawa[1], Sakura Eizuka[2], Shohei Yamaoka[3], Naoki Minamino[4], Takashi Ueda[5,6] ([1]Fac. Sci., Niigata Univ., [2]Grad. Sch. Sci. Tech., Niigata Univ, [3]Grad. Sch. Biostudies, Kyoto Univ., [4]Grad. Sch. Sci. Tech., Kumamoto Univ., [5]NIBB, [6]Grad. Inst. for Adv. Stud., SOKENDAI)
15:15	1pA06 Physiological Analysis on Diversity in SOS Response upon UV Treatment in Cyanobacteria Haruka Kubodera[1], Aoi Ando[1], Ayumi Kizawa[2], Yukako Hihara[1] ([1]Grad. Sch. Sci. Eng., Saitama Univ., [2]Fac. Sci. Eng., Chuo Univ.)	1pB06 Phosphoproteomic analysis of CO_2-induced stomatal opening/closing mechanisms Kaito Uchihashi[1], Yoshikatsu Matsubayashi[1], Toshinori Kinoshita[1,2], Yohei Takahashi[2] ([1]Grad. Sch. Sci., Nagoya Univ., [2]ITbM., Nagoya Univ.)	1pC06 Transcriptional regulation of actin polymerization switches cell wall patterns in xylem vessels Saku Kijima[1], Takema Sasaki[2], Yuki Kondo[3], Soichi Inagaki[4], Masatoshi Yamaguchi[5], Yoshihisa Oda[2] ([1]Bioproduct. Res. Inst., AIST, [2]Grad. Sch. Sci., Nagoya Univ., [3]Grad. Sch. Sci., Kobe Univ., [4]Grad. Sch. Sci., Univ. Tokyo, [5]Grad. Sch. Sci. Eng., Saitama Univ.)	1pD06 E Dynamics of MYB98 Regulation: What Does the Discovery of *SaeM* Suggest? Prakash B. Adhikari[1], Nobutaka Mitsuda[3], Xiaoyan Liu[2], Chen Huang[2], Shaowei Zhu[2], Michitaka Notaguchi[1], Ryushiro Kasahara[1] ([1]Biotechnology and Bioscience Resource Center, Nagoya University, Japan, [2]Fujian Agriculture and Forestry Unviersity, Fuzhou, China, [3]National Institute of Advanced Indsutrial Science and Technology (AIST))
15:30	1pA07 Light-responsive proton transport mechanisms of cyanobacterial cell membranes control intracellular pH Akito Machida[1], Akane Echigo[1], Kumiko Kondo[1,2], Toru Hisabori[1,2,3], Shinji Masuda[1] ([1]Dept. Life Sci. & Tech., Tokyo Inst. Tech., [2]Lab. Chem. & Life Sci., IIR, Tokyo Inst. Tech., [3]IRFI, Tokyo Inst. Tech.)	1pB07 Cassava Tuberization Is Controlled by Changes in Daylength Utsumi Yoshinori[1], Chikako Utsumi[1], Maho Tanaka[1,2], Akihiro Ezoe[1], Satoshi Takahashi[1,2], Prat Salomé[3], Motoaki Seki[1,2,4,5] ([1]RIEKN CSRS, [2]RIKEN CPR, [3]CRAG, CSIC-IRTA-UAB-UB, [4]Yokohama City Univ., [5]Saitama Univ.)	1pC07 Molecular mechanisms that drive rapid growth in non-hair root epidermal cells Hirotomo Takatsuka[1,2], Noriko Nagata[3], Masaaki Umeda[4] ([1]School of Biological Science and Technology, College of Science and Engineering, Kanazawa University, [2]PRESTO, JST, [3]Department of Chemical and Biological Sciences, Faculty of Science, Japan Women's University, [4]Graduate School of Science and Technology, Nara Institute of Science and Technology)	1pD07 Discovery of Gate-I and Gate-II, as new plant tissues in developing seeds Prakash B. Adhikari[1], Kohdai Nakajima[2,3], Xiaoyan Liu[4], Michitaka Notaguchi[5], Ryushiro Kasahara[1] ([1]Bioscience and Biotechnology Center, Nagoya University, [2]Graduate school of science, University of Tokyo, [3]Technion, [4]Fujian Agriculture and forestry University, [5]Graduate school of science, Kyoto University)
15:45	1pA08 Significance of the DLDG1-dependent chloroplast pH homeostasis for controlling plastid gene expression Hikaru Tagami, Kasane Suzuki, Shinji Masuda (Dep. Life Sci. & Tech., Tokyo Insti. Tech.)		1pC08 Analysis of organelle dynamics in root hairs Toshiki Amari[1], Noriko Nagata[2], Masaki Ito[1], Hirotomo Takatsuka[1,3] ([1]School of Biological Science and Technology, College of Science and Engineering, Kanazawa University, Kakuma-machi, Kanazawa, Ishikawa 920-1192, Japan, [2]Department of Chemical and Biological Sciences, Faculty of Science, Japan Women's University, Bunkyo-ku, Tokyo 112-8681, Japan, [3]PRESTO, JST)	1pD08 Reverification of gamete fusogen GCS1 in plants-Rearguard GCS1 Kohdai Nakajima[1,2], Prakash B. Adhikari[3], Tetsuya Higashiyama[1], Ryushiro Kasahara[3] ([1]Grad. Sch. Sci., UTokyo, [2]Technion, [3]NUBBC)
16:00	1pA09 Search for cyanobacteria growing in extreme environments Shota Suzuki, Shigeru Kawai, Toshihiko Eki, Yuu Hirose (Toyohashi Tech. Dept. of Appl. Chem. and Life Sci.)		1pC09 Combination of live-cell imaging and mathematical modeling of Arabidopsis zygote reveals the mechanism of polar elongation Hikari Matsumoto[1], Zichen Kang[2], Sakumi Nakagawa[1], Tomonobu Nonoyama[2], Yukitaka Ishimoto[2], Takumi Higaki[3], Satoru Tsugawa[2], Minako Ueda[1] ([1]Grad. Sch. Life Sci., Tohoku Univ., [2]Fac. Sys. Sci., Akita Prefectural Univ., [3]IROAST, Kumamoto Univ.)	1pD09 How are patch-like extracellular structures between the egg cell and the central cell formed? Daichi Susaki[1], Takao Oi[2], Hinako Oshirabe[1], Hidenori Takeuchi[3,4], Shiori Nagahara[5], Naoya Sugi[1], Tetsu Kinoshita[1], Daisuke Maruyama[1] ([1]KIBR, Yokohama City Univ., [2]Grad. Sch. of Bioagri. Sci., Nagoya Univ., [3]WPI-ITbM, Nagoya Univ., [4]Inst. for Adv. Res., Nagoya Univ., [5]Grad. Sch. of Sci., Kyoto Univ.)

Room E	Room F	Room G	Room H	Room X	Room Y	Room Z	Time
Plant-organism interaction A	Environmental response B/ Environmental stresses	Primary metabolism/Specialized (secondary) metabolism/Plant hormones/Signaling molecules	Development/Morphogenesis				
1pE05 Ⓔ Tandem gene duplication generates a paralog that forms an NLR pair to confer resistance to rice blast fungus Yuying Li[2], Qiong Wang[3], Huimin Jia[4], Yoji Kawano[1] ([1]Okayama University, [2]Chinese Academy of Agricultural Sciences, [3]Yangzhou University, [4]Jiangxi Agricultural University)	1pF05 Enhancing Resilience to Prolonged Heat Stress in Brachypodium and Wheat through Mugineic Acid Supplementation Anzu Minami[1,2], Yoshihiko Onda[1], Minami Shimizu[1], Yukiko Uehara-Yamaguchi[1], Tomoko Nozoye[3,4], Motofumi Suzuki[5], Asuka Kanatani[1], Kotaro Takahagi[1], Komaki Inoue[1], Keiichi Mochida[1,2,6] ([1]RIKEN Center for Sustainable Resource Science, [2]Kihara Institute for Biological Research, Yokohama City University, [3]Center for Liberal Arts, Meiji Gakuin University, [4]Graduate School of Agricultural and Life Sciences, The University of Tokyo, [5]Aichi Steel Corporation, [6]School of Information and Data Sciences, Nagasaki University)	1pG05 Identification of genes contributing to low-oxalate-content in spinach Haruto Yamanaka[1], Shoya Ichikawa[1], Kazuhiro Ishibashi[2], Kentaro Sasaki[2], Izumi Yotsui[1], Yoichi Sakata[1], Teruaki Taji[1] ([1]Dept. of Biosci., Tokyo Univ. of Agri., [2]Inst. Agrobio. Sci., NARO)	1pH05 Exploring the mechanisms of root bending response to gravity through quantitative analysis of cellular dynamics Tatsuaki Goh[1], Satoru Tsugawa[2], Yuki Soma[1], Takaaki Yonekura[3], Hikaru Kasatani[1], Keiji Nakajima[1] ([1]Div. Biol. Sci., NAIST, [2]Fac. Sys. Sci. Tech., Akita Pref. Univ., [3]Grad. Sch. Sci., Univ. Tokyo)	Symposium S04 [English] Genetic transfer technology for plants and its associated sciences (14:00–17:00)	Symposium S05 Creating new molecules to manipulate plant functions (14:00–17:00)	Symposium S06 Local and systemic signaling for environmental responses in plants (14:00–17:00)	15:00
1pE06 Ⓔ Transcriptional landscape of rice receptor-like cytoplasmic kinases involved in rice immunity Wanqing Wang (Institute of Plant Science and Resources)	1pF06 Ⓔ How does the sporangium protect the spore from heat? : The role of sporangium in the moss, *Physcomitrium patens* Chang-Hyun Maeng[1], Keita Nakamura[2], Kumi Yoshida[3], Masaki Shimamura[4], Atsushi Kume[5], Yuji Hiwatashi[6], Tomomichi Fujita[7] ([1]Graduate school of Life Science, Hokkaido University, [2]Graduate School of Food, Agricultural and Environmental Sciences, Miyagi University, [3]Faculty of Engineering, Aichi Institute of Technology, [4]Graduate School of Integrated Sciences for Life, Hiroshima University, [5]Faculty of Agriculture, Kyushu University, [6]School of Food Industrial Sciences, Miyagi University, [7]Faculty of Science, Hokkaido University)	1pG06 Ⓔ The significance of *mtf*, *mtc,* and *cnb* genes for 2-methylisoborneol synthesis in *Pseudanabaena foetida* Kaushalya Dayarathne[1], Toshiki Ishikawa[1], Satoru Watanabe[2], Aikeranmu Kadeer[1], Masatoshi Yamaguchi[1], Maki Kawai-Yamada[1] ([1]Graduate School of Science and Engineering, Saitama University, Saitama, Japan, [2]Department of Bioscience, Tokyo University of Agriculture, Tokyo, Japan)	1pH06 Selection of stable auxin response sites controls lateral root spacing in Arabidopsis Shohei Oshiro[1], Tatsuaki Goh[1], Yohei Kondo[2], Takaaki Yonekura[3], Kentaro Iwata[4], Chieko Goto[4], Hidehiro Fukaki[4], Keiji Nakajima[1] ([1]Div. Biol. Sci., NAIST, [2]ExCELLS, Natl. Inst. Nat. Sci., [3]Grad. Sch. Sci., Univ. Tokyo, [4]Grad. Sch. Sci., Kobe Univ.)				15:15
1pE07 Arabidopsis SBT subtilases mediate C-terminal excision of flg22 epitope from bacterial flagellin Sayaka Matsui[1], Saki Noda[1], Keiko Kuwata[2], Mika Nomoto[3], Yasuomi Tada[3], Hidefumi Shinohara[1], Yoshikatsu Matsubayashi[1] ([1]Grad. Sch. Sci., Nagoya Univ., [2]ITbM, Nagoya Univ., [3]Centr. Gene Res., Nagoya Univ.)	1pF07 Why is the color of *Polytricum commune* yellow green in the sun and green in the shade? Hiromitsu Nakajima (Grad. Sch. Sci. Eng., Saitama Univ.)	1pG07 Search for biosynthetic genes of hydrolyzable tannins that detoxify aluminum in *Eucalyptus camaldulensis* Chihiro Oda-Yamamizo[1], Nobutaka Mitsuda[2], Kentaro Ezura[2,3], Tokuko Ujino-Ihara[1], Ko Tahara[1] ([1]FFPRI, [2]AIST, [3]JSPS)	1pH07 Ⓔ Lateral Root Primordium Formation by Extended Auxin Signaling in the Arabidopsis Root System Feiyang Lin[1], Hidehiro Fukaki[2], Masaaki K. Watahiki[1,3] ([1]Grad. Sch. Life Sci., Hokkaido Univ., [2]Grad. Sch. of Sci., Kobe Univ., [3]Fac. Sci, Hokkaido Univ.)				15:30
1pE08 Ⓔ Analysis of SnRK1 functions in sugar responsive modulation of immunity in Arabidopsis Linnan Jie[1], Ayumi Sugisaki[2], Shigetaka Yasuda[3], Kohji Yamada[4], Miho Sanagi[1,5], Mika Nomoto[6], Susumu Uehara[6], Yasuomi Tada[6], Yusuke Saijo[3], Junpei Takagi[1], Takeo Sato[1] ([1]Fac. Sci., Hokkaido Univ., [2]Sch. Sci., Hokkaido Univ., [3]Grad. Sch. Sci. Tech., NAIST, [4]Grad. Sch. Tech. Ind. Soc. Sci., Tokushima Univ., [5]CRIS., Hokkaido Univ., [6]Centr. Gene Res., Nagoya Univ.)	1pF08 Drought response analysis of wild-type strains isolated from Japan with the automated phenotyping system RIPPS Miki Fujita[1], Satoshi Iuchi[2], Hiroshi Masuya[2], Keiichi Mochida[1], Masatomo Kobayashi[2], Kazuo Shinozaki[1] ([1]RIKEN CSRS, [2]RIKEN BRC)	1pG08 The Molecular Evolution of UbiA-type Prenyltransferases Diversifies Citrus Phenol Metabolism Shuhei Matsushita[1], Ryosuke Munakata[1,2], Takashi Akagi[2,3], Tetsuya Matsukawa[4,5], Alain Hehn[6], Kazufumi Yazaki[1] ([1]RISH, Kyoto Univ., [2]JST-PRESTO, [3]Grad Sch Environ Life Sci, Okayama Univ., [4]The Experimental Farm, Kindai Univ., [5]BOST, Kindai Univ., [6]Univ. Lorraine-INRAE)	1pH08 The *fsp1* mutation in *SUR2/CYP83B1* causes reduced sensitivity to the TOLS2 peptide that functions in lateral inhibition of lateral root founder cell formation in *Arabidopsis* Chieko Goto, Nanako Maehara, Yuki Kondo, Kimitsune Ishizaki, Hidehiro Fukaki (Grad. Sch. Sci., Kobe Univ.)				15:45
1pE09 Identification of a novel defense component mediated by sugar signaling Misuzu Yamashita-Yamada[1], Akira Mine[2], Kohji Yamada[1] ([1]Grad. Sch. Tech. Ind. Sco. Sci., Tokushima Univ., [2]Grad. Sch. Agri., Kyoto Univ.)	1pF09 Strigolactone regulates stromule formation and chlorophagy under phosphate starvation Yushi Yoshitake[1,2], Kohki Yoshimoto[1] ([1]Sch. agri., Univ. Meiji, [2]JSPP)	1pG09 Ⓔ Changes in free and bound volatile compounds in fruits of different tomato cultivars harvested through two years Yingtao Li[1], Yusuke Kamiyoshihara[2], Yusuke Aono[1], Denise Tieman[3], Harry Klee[3], Miyako Kusano[4,5,6] ([1]Grad. Sch. of Life and Envi. Sci., Univ. Tsukuba, [2]College of Bioresource Sciences, Nihon University, [3]Department of Horticultural Sciences, University of Florida, [4]Faculty of life and environment science, University of Tsukuba, [5]Tsukuba Plant Innovation Research Center, University of Tsukuba, [6]RIKEN Center for Sustainable Resource Science)	1pH09 Ⓔ DOF-CLE signaling circuit in root vascular patterning Pingping Qian[1,2], Haruka Taito[1], Tatsuo Kakimoto[1] ([1]Grad. Sch. Sci., Osaka Univ., [2]Grad. Sch. Sci., Kobe Univ.)				16:00

Ⓔ=Presentation in English

● Day 1, Sun., March 17, PM (14:00–17:00)

Time	Room A	Room B	Room C	Room D
	Photosynthesis	Environmental response A/ Physiological responses	Organelles/Cytoskeleton	Reproduction
16:15	1pA10 Genomes of the cyanobacterium *Leptolyngbya boryana* cultivated under dark heterotrophic conditions for a long time: Microevolution in the dark and a mutation responsible for the loss of photosynthetic growth ability Mayu Chikada[1], Kazuma Uesaka[1], Mari Banba[1], Kunio Ihara[2], Haruki Yamamoto[1], Yuichi Fujita[1] ([1]Grad. Sch. Bio. Sci., Univ. Nagoya, [2]Center for Gene Research, Univ. Nagoya)		1pC10 Mechanisms behind prospindle assembly and function in land plants Takema Sasaki[1], Kimitsune Ishizaki[2], Hiroyasu Motose[3], Yoshihisa Oda[1] ([1]Grad. Sch. Sci., Nagoya Univ., [2]Grad. Sch. Sci., Kobe Univ., [3]Grad. Sch. Nat. Sci., Okayama Univ.)	1pD10 Cellular and molecular analyses for activation and developmental initiation of zygotes using wheat-rice hybrid zygotes with or without developmental potentials Ayaka Akagi, Tety Maryenti, Kasidit Rattanawong, Aya Satoh, Takashi Okamoto (Dept. Biol. Sci., Tokyo Met. Univ.)
16:30	1pA11 Unique chromatic acclimation in the cyanobacterium *Phormidium* sp. NIES-4144 Toru Nakata[1], Akihiro Kawamoto[2], Mutumi Kubushiro[1], Kaori Ohki[3], Toshihiko Eki[1], Genji Kurisu[2], Yu Hirose[1] ([1]Toyohashi Tech. Dept. of Appl. Chem. and Life Sci., [2]Osaka Univ. Institute for Protein Research, [3]Fukui Pref. Univ. Dept. of Marine Sci. and Tech.)		1pC11 Elucidating the role of MPB2C in cortical microtubule nucleation Yuto Yamazumi[1,2], Noriyoshi Yagi[2], Masayoshi Nakamura[2] ([1]Sch. Sci., Univ. Nagoya, [2]ITbM, Univ. Nagoya)	1pD11 Ⓔ Monitoring the degradation process and elimination pathway of paternal mitochondria during early zygotic development in rice Hanifah Aini[1], Kasidit Rattanawong[1], Mari Tanaka[3], Hiroyuki Tsuji[2,3], Takashi Okamoto[1] ([1]Dept. Biol. Sci., Tokyo. Met. Univ., [2]Biosci. Biotech. Center, Nagoya Univ., [3]Kihara Inst. for Biol. Research., Yokohama City Univ.)
16:45			1pC12 Functional interactions of NIMA-related kinase and microtubule-associated proteins during rhizoid growth of *Marchantia polymorpha* Hiroyasu Motose (Grad. Sch. Environm., Life, Nat. Sci. & Tech., Okayama Uni.)	1pD12 Ⓔ Paternal allele dependent *OsBBMLs* expression initiates zygotic development in rice Nargis Akter[1], Kasidit Rattanawong[1], Aya Satoh[1], Tezuka Takumi[2], Yutaka Sato[2], Takashi Okamoto[1] ([1]Dept. Biol. Sci., Tokyo Met. Univ., [2]Plant Genetics, NIG)

Room E	Room F	Room G	Room H	Room X	Room Y	Room Z	Time
Plant-organism interaction A	Environmental response B/ Environmental stresses	Primary metabolism/Specialized (secondary) metabolism/Plant hormones/Signaling molecules	Development/Morphogenesis				
1pE10 Systemic responses induced by the root colonization of beneficial fungus *Trichoderma* in Arabidopsis Ayae Sakai[1], Hisako Yamagata[1], Keigo Naito[1], Takaya Tominaga[2], Shinsuke Ifuku[3], Hironori Kaminaka[4] ([1]Dept. Agr. Sci., Grad. Sch. Sust. Sci., Tottori Univ., [2]United Grad. Sch. Agr., Tottori Univ., [3]Grad. Sch. Eng., Tottori Univ., [4]Fac. Agr., Tottori Univ.)	1pF10 E Symbiodiniaceae Cells Exhibit High Sensitivity to Low Dose UV-C Alvin Chun Man Kwok, Wayne, Wing Tai Lam, Joseph Tin Yum Wong (Division of Life Science, The Hong Kong University of Science and Technology, Clear Water Bay, Kowloon, Hong Kong)	1pG10 Comparative VOC Profiling in Soil Obtained from Six Soybean Fields through Two Years Suzuka Matsuki[1], Hikari Kuchikata[1], Naoto Nihei[2], Yasunori Ichihashi[3], Miyako Kusano[4,5,6] ([1]Grad. Sch. Life & Env. Sci, Univ. Tsukuba, [2]Fac. Food Agri. Sci., Fukushima Univ., [3]RIKEN BRC, [4]Life & Env. Sci., Univ. Tsukuba, [5]T-PIRC, Univ. Tsukuba, [6]RIKEN CSRS)	1pH10 E Identification and characterization of target genes for an *Arabidopsis* bHLH transcription factor LRL1 in root hairs Shahrzad Haghir, Takashi Aoyama (Dep. Biophysics, Inst. ICR, Kyoto Univ.)	Symposium S04 [English] Genetic transfer technology for plants and its associated sciences (14:00–17:00)	Symposium S05 Creating new molecules to manipulate plant functions (14:00–17:00)	Symposium S06 Local and systemic signaling for environmental responses in plants (14:00–17:00)	16:15
1pE11 E The Binding of Ca^{2+}-Dependent Protein Kinase to the Suppressor of Potato Late Blight Pathogen Proved by Fluorescence Correlation Spectroscopy (FCS) Inhibits the NADPH Oxidase and Active Oxygen Generation in Potato Cell Naotaka Furuichi (AAAS, USA)	1pF11 Molecular Dissection of Ethylene Receptor-Related Histidine Kinases responsible for the regulation of B3-RAF/SnRK2-mediated ABA signaling using the moss *Pyscomitrium patens* Taketo Sasaki, Tsukasa Toriyama, Rahul Sk, Izumi Yotsui, Teruaki Taji, Yoichi Sakata (Dept. of Biosci., Tokyo Univ. of Agri.)	1pG11 Molecular Insights into the Herbicidal Action of Coumarin Derivatives on Seed Germination Kazuma Fukuda[1], Michinari Yoshida[1], Sota Hyakutake[1], Taiga Oishi[1], Mizuho Koga[1], Hyuga Matsuura[1], Chisato Egami[1], Ryusei Ito[1], Kosei Tsukahara[1], Takako Yoshida[2], Noriko Ryuda[2], Yukio Nagano[2], Kazuhide Matsutaka[1] ([1]Saga Prefectural Chienkan High School, [2]Saga University)	1pH11 Development of a micro-chambered hydroponics system, MiCHy, for accessible and versatile microscopic imaging of roots Hiromasa Shikata[1,2,4], Yoshikatsu Sato[2,3], Claus Schwechheimer[4] ([1]Div. Plant Environ. Responses, NIBB, [2]ITbM, Nagoya Univ., [3]Grad. Sch. Sci., Nagoya Univ., [4]Plant Sys. Biol., TUM)				16:30
	1pF12 Functional analyses of ethylene receptor-related histidine kinase family in response to osmotic stress and submergence in the moss *Physcomitrium patens* Marcos Takeshi Miyabe[1], Hiroki Matsumura[1], Tsukasa Toriyama[1], Daisuke Takezawa[2], Izumi Yotsui[1], Teruaki Taji[1], Yoichi Sakata[1] ([1]Dept. of Biosci., Tokyo Univ. of Agri., [2]Grad. Sch. Sci. Eng., Saitama Univ.)		1pH12 Developmental convergent evolution of root phenotypic plasticity in two amphibious plants Tomo Sato[1], Hiroyuki Koga[2], Hirokazu Tsukaya[2] ([1]Fac. of Sci., Univ. Tokyo, [2]Grad. Sch. Sci., Univ. Tokyo)				16:45

E=Presentation in English

● Day 2, Mon., March 18, AM (9:00–12:00)

Time	Room A	Room B	Room C	Room D	Room E
	Photosynthesis	Plant hormones/ Signaling molecules	Organelles/Cytoskeleton/ Membrane trafficking	Reproduction	Plant-organism interaction A
09:00	2aA01 Evaluating the Oxidation Rate of Reduced Ferredoxin in *Arabidopsis thaliana* Independent of Photosynthetic Linear Electron Flow: Plausible Activity of Ferredoxin-Dependent Cyclic Electron Flow around Photosystem I Shu Maekawa[1], Miho Ohnishi[1,3], Shinya Wada[1,3], Kentaro Ifuku[2,3], Chikahiro Miyake[1,3] ([1]Grad. Sch. Agri. Sci., Univ. Kobe, [2]Grad. Sch. Agri. Sci., Univ. Kyoto, [3]CREST/JST)	2aB01 Chemical screening for regulators of intracellular auxin dynamics Tsuyoshi Aoyama[1], Masakazu Nambo[1], Daisuke Kurihara[1,2], Ayato Sato[1], Yuichiro Tsuchiya[1], Yoshikatsu Sato[1,3,4] ([1]ITbM, Nagoya Univ., [2]Inst. Adv. Res., Nagoya Univ., [3]Grad. Sch. Sci., Nagoya Univ., [4]Res. Cen. Net-Zero. Carb. Soc., Nagoya Univ.)	2aC01 An attempt to develop a random mutagenesis technology for forward genetic analysis of plant organelle genomes Nanami Kosaka[1], Yoshiki Harada[1], Issei Nakazato[1], Miki Okuno[2], Takehiko Itoh[3], Nobuhiro Tsutsumi[1], Shin-ichi Arimura[1] ([1]Grad. Sch. Agri. and Life Sci., Univ. Tokyo, [2]Sch. Med., Univ. Kurume, [3]Sch. Life Sci. and Tech., Tokyo Inst. Tech.)	2aD01 Transcriptional regulatory network for male gametogenesis in the liverwort *Marchantia polymorpha* Keisuke Inoue[1,2], Kanta Kotani[1], Sae Anada[1], Asuka Higo[1], Shohei Yamaoka[1], Takashi Araki[1] ([1]Grad. Sch. Biostudies, Univ. Kyoto, [2]Center for Living Systems Information Science (CeLiSIS), Univ. Kyoto)	2aE01 The roles of membrane lipids in the hybrid necrosis in *A.thaliana* Machiko Watari, Yi Tang Lim, Jinge Wang, Eunyoung Chae (National University of Singapore)
09:15	2aA02 Lower electron-sink activity in photosynthesis suppressed ferredoxin-dependent cyclic electron flow around PSI in rice Yuri Ohara, Shinya Wada, Chikahiro Miyake (Grad. Sch. Agri. Sci. Univ. Kobe)	2aB02 Subcellular localization of auxin inactivating enzymes plays a role in auxin homeostasis Tomoaki Kubotsu[1], Kaisei Maruyama[2], Yunde Zhao[3], Hiroyuki Kasahara[2,4], Ken-ichiro Hayashi[1] ([1]Okayama Univ. Sci., [2]Grad. Sch. Agric., TAT, [3]UC San Diego, [4]Riken CSRS)	2aC02 Autophagy is induced during plant grafting for wound healing Ken-ichi Kurotani[1], Ryo Tabata[2], Yaichi Kawakatsu[1], Ryohei Sugita[3,4], Daiki Shinozaki[5,6], Kentaro Okada[1], Koji Okayasu[2], Moe Mori[2], Keitaro Tanoi[3], Kohki Yoshimoto[5], Michitaka Notaguchi[1,2,7,8] ([1]Biosci. and Biotec. center, Nagoya Univ., [2]Grad. Sch. Bioagri., Nagoya Univ., [3]Grad. Sch. Agri. Life Sci., Univ. Tokyo, [4]Isotope Fac. Agri. Edu. and Research, Nagoya Univ., [5]Dep. Life Sci, Sch. Agri., Meiji Univ., [6]Org. Strategic Coordination of Research and Intellectual Properties, Meiji Univ., [7]Inst. Trans. Bio-Molecules, Nagoya Univ., [8]Dep. Botany, Gra. Sch. Sci., Kyoto Univ.)	2aD02 Role of male gamete-specific small RNA pathways on spermatogenesis in *Marchantia polymorpha* Sae Anada[1], Zhao-Jun Pan[2], Bing-Nan Shen[2], Kanta Kotani[1], Asuka Higo[1], Shohei Yamaoka[1], Keisuke Inoue[1], Shih-Shun Lin[2], Takashi Araki[1] ([1]Grad. Bio., Univ. Kyoto, [2]Inst. Biotech., Univ. National Taiwan)	2aE02 What happened in cyst nematode-infected tissues? ~RNAseq analyses focusing on the ploidy change during nematode infection~ Mina Ohtsu[1,2] ([1]Bio. Sci., NAIST, [2]JST Sakigake)
09:30	2aA03 Genetic relationship between PSI cyclic electron transport and thioredoxin system in PSI photoprotection Yuki Okegawa, Wataru Sakamoto (IPSR, Univ. Okayama)	2aB03 The bHLH transcriptional factor MpHYPNOS regulates gemma dormancy in *Marchantia polymorpha* Nami Yoshimura[1], Mikako Yoshikawa[1], Arisa Yasuda[2], Hirotaka Kato[1,3], Yuuki Sakai[1], Tetsuro Mimura[4], Yuki Kondo[1], Hidehiro Fukaki[1], Kimitsune Ishizaki[1] ([1]Grad. Sch. Sci., Kobe Univ., [2]Fac. Sci., Kobe Univ., [3]Grad. Sch. Sci. Eng., Ehime Univ., [4]Fac. Bioenviron. Sci., KUAS)	2aC03 Characterization of chloroplast damage that initiates chlorophagy induction in Arabidopsis leaves Sakuya Nakamura[1], Daisuke Takagi[2], Hiroyuki Ishida[3], Shinya Hagihara[1], Masanori Izumi[1] ([1]CSRS, Riken, [2]Fac. Agri., Setsunan Univ., [3]Grad. Sch. Agri. Sci., Tohoku Univ.)	2aD03 Single-nucleus RNA-seq analysis of a germline cell-like cell induction system in the liverwort *Marchantia polymorpha* Tomoaki Kajiwara[1], Takeru Kumagai[2], Yoshihiro Yoshitake[1], Megumi Iwano[1], Shogo Kawamura[1], Yukiko Yasui[1], Shohei Yamaoka[1], Takayuki Kohchi[1] ([1]Grad. Sch. Biostudies., Kyoto Univ., [2]Fac. Agri., Kyoto Univ.)	2aE03 Turnip mosaic virus improves plant defense against aphids in *Arabidopsis halleri* Miyabi Otsubo, Hiroshi Kudoh, Mie N. Honjo (CER, Kyoto Univ.)
09:45	2aA04 Re-evaluation Of Cyclic Electron Transport Around Photosystem I Through Two *PGR5* Knockout Alleles Ryouhei Kobayashi[1], Hiroshi Yamamoto[1], Kota Ishibashi[1,2], Toshiharu Shikanai[1] ([1]Grad. Sch. Sci., Kyoto Univ., [2]Fucul. Life Sci., Kyoto Sangyo Univ.)	2aB04 Effects of anesthesia on the wound-responsive gene and phytohormone on plants Moca Iwabuchi[1], Sakuya Hirayama[2], Kyomi Shibata[1], Emi Yumoto[3], Koji Miyamoto[1,2], Ken Yokawa[4], Masashi Asahina[1,2,3] ([1]Dept. Biosci., Teikyo Univ., [2]Grad. Sch. Sce. & Eng., TeikyoUniv, [3]Adv. Instrum. Anal., Teikyo Univ., [4]Dept. Eng., Kitami Tech Univ.)	2aC04 Live-cell imaging analysis for autophagy-related division and transport of chloroplast portion in Arabidopsis leaves Masanori Izumi[1,2], Sakuya Nakamura[1], Kohei Otomo[3,4,5,6], Hiroyuki Ishida[7], Jun Hidema[8], Tomomi Nemoto[3,4,5], Shinya Hagihara[1] ([1]CSRS, RIKEN, [2]FRIS, Tohoku Univ., [3]ExCELLs, NINS, [4]RIES, Hokkaido Univ., [5]SOKENDAI, [6]Grad. Sch. Med., Juntendo Univ., [7]Grad. Sch. Agri. Sci., Tohoku Univ., [8]Grad. Sch. Life Sci., Tohoku Univ.)	2aD04 Ⓔ Evolutionarily Conserved CKI1-mediated Two-component Signaling Regulates Female Germline Specification in *Marchantia polymorpha* Haonan Bao[1], Rui Sun[1], Megumi Iwano[1], Yoshihiro Yoshitake[1], Shiori Aki[2], Masaaki Umeda[2], Ryuichi Nishihama[1,3], Shohei Yamaoka[1], Takayuki Kohchi[1] ([1]Grad. Sch. Biostudies, Kyoto Univ., [2]Grad. Sch. Sci. & Tech., NAIST, [3]Dept. Appl. Biol. Sci., Fac. Sci. & Tech., Tokyo Univ. of Sci.)	2aE04 A critical role of trihelix transcription factors in high humidity-mediated suppression of plant immunity Yuka Sakata, Kazuyuki Mise, Yoshitaka Takano, Akira Mine (Grad. Sch. Agr., Kyoto Univ.)

Room F	Room G	Room H	Room X	Room Y	Room Z	Time
Environmental response B/ Environmental stresses	Specialized (secondary) metabolism/Biomembrane/ Ion and solute transport	Development/Morphogenesis	Genome function/Gene regulation			
2aF01 AOD12 plays an important role in osmotolerance of Arabidopsis through the repair of DNA damage induced by osmotic stress Koya Kobayashi[1], Kazuki Kanamori[1], Jun Hidema[2], Toshio Mori[3], Keisuke Tanaka[4], Izumi Yotsui[1], Yoichi Sakata[1], Teruaki Taji[1] ([1]Dept. of Biosci., Tokyo Univ. of Agri., [2]Graduate School of life science, Tohoku University, [3]Medical Genetics Research Center, Nara Medical University, [4]Nodai Genome Cent., Tokyo Univ. of Agri.)	2aG01 Analysis of benzylisoquinoline alkaloid degradation pathway in *Coptis Japonica* culture cells Amika Takamatsu[1], Shunsuke Kasai[1], Ryosuke Sugiyama[1,2], Yasuyuki Yamada[2,3], Mami Yamazaki[1,4] ([1]Grad. Sch. Pharm. Sci., Chiba Univ., [2]JST PRESTO, [3]Kobe Pharm. Univ., [4]PMSC, Chiba Univ.)	2aH01 Regulatory mechanisms of cuticle formation in *Arabidopsis thaliana* seedlings Kenji Nagata[1], Ichiro Maekawa[2], Taku Takahashi[3], Mitsutomo Abe[1,2] ([1]Grad. Sch. Arts and Sci., Univ. Tokyo, [2]Dept. Integr. Sci., Fac. Arts and Sci., Univ. Tokyo, [3]Grad. Sch. Sci., Okayama Univ.)	2aX01 E The Interplay Between DNA Methylation and Lipid Production in Plants Jo-Wei Allison Hsieh[1,2], Kuan-Lin Chen[1], Yu-Chi Liu[1], Chia-Yen Wu[1], Van C. Nguyen[2], Hai Anh Ngo[2], Nguyen M. Linh[2], Kuan-Ting Hsin[1], Yuki Nakamura[2,3], Paoyang Chen[1] ([1]Institute of Plant and Microbial Biology, Academia Sinica, Taipei, Taiwan, [2]RIKEN Center for Sustainable Resource Science, Yokohama, Japan, [3]Graduate School of Science, The University of Tokyo, Japan)	Symposium S07 [English] Plant and Algal Lipids: How they cope with environment by modifying lipids? (9:00–12:00)	Symposium S08 [English] Survival strategies and its molecular basis of plants through switching life histories (9:00–12:00)	09:00
2aF02 Analysis of tomato SAL1-PAP retrograde signaling pathway via genome editing Shinnosuke Kimura, Tomoki Ohtani, Marcos Takeshi Miyabe, Izumi Yotsui, Teruaki Taji, Yoichi Sakata (Dept. of Biosci., Tokyo Univ. of Agri.)	2aG02 E Gene expression and metabolite profiles of Brassica plants in response to abiotic and biotic stresses Jemillie Madonna Samaniego de Leon, Shinichiro Komaki, Mutsumi Watanabe, Takayuki Tohge (Grad. Sch. Sci., Tech., NAIST)	2aH02 Understanding Barley Awn Formation through Histone Modification Koki Nakamura[1], Yuichi Kikuchi[1], Mizuho Shiraga[2], Toshihisa Kotake[3], Hiroshi Hisano[1,2], Shin Taketa[1,2], Yoko Ikeda[1,2] ([1]Grad. sch. Env. Life. Sci., Okayama Univ., [2]IPSR, Okayama Univ., [3]Grad. Sch. Sci. Eng., Saitama Univ.)	2aX02 E Exploration of CpG Methylation in Plant Mitochondrial DNA Yuyang Zhong[1], Miki Okuno[2], Nobuhiro Tsutsumi[1], Shin-ichi Arimura[1] ([1]Grad. Sch. of Agri., Univ. Tokyo, [2]Kurume Univ. Sch. of Med.)			09:15
2aF03 Genetic analysis of *OSMOS* locus contributing to the variation in osmotolerance of *Arabidopsis* Yusuke Murakoshi[1], Kosuke Banba[1], Takahiro Hirano[1], Hirotaka Ariga[2], Keisuke Tanaka[3], Izumi Yotsui[1], Yoichi Sakata[1], Teruaki Taji[1] ([1]Dept. of Biosci., Tokyo Univ. of Agri., [2]Res. Cent. of Gen. Res., NARO, [3]Nodai Genome Cent., Tokyo Univ. of Agri.)	2aG03 E Comparative Analysis on Secondary Metabolism in different tissues of Subspecies of *Oryzasativa* Tzie Choong Isaac Choo, Tomoki Kobayashi, Mutsumi Watanabe, Takayuki Tohge (Grad. Sch. Sci., Tech., NAIST)	2aH03 Functions of the phosphorylated pathway of serine biosynthesis in development of *Marchantia polymorpha* Masami Y. Hirai[1,2], Mengyao Wang[1,2], Hiromitsu Tabeta[1,3,4], Kinuka Ohtaka[1,2,5], Ayuko Kuwahara[1], Ryuichi Nishihama[6,7], Toshiki Ishikawa[8], Kiminori Toyooka[1], Mayuko Sato[1], Mayumi Wakazaki[1], Hiromichi Akashi[1], Hiroshi Tsugawa[1,9], Tsubasa Shoji[1], Yozo Okazaki[1,10], Keisuke Yoshida[11], Ryoichi Sato[1], Ali Ferjani[4], Takayuki Kohchi[6] ([1]RIKEN CSRS, [2]Grad. Sch. Bioagric. Sci., Nagoya Univ., [3]Grad. Sch. Arts & Sci., Univ. Tokyo, [4]Dept. Bio., Tokyo Gakugei Univ., [5]Dept. Chem. & Bio., Japan Women's Univ., [6]Grad. Sch. Biostudies, Kyoto Univ., [7]Dept. Applied Bio. Sci., Tokyo Univ. Sci., [8]Grad. Sch. Sci. & Eng., Saitama Uni., [9]Dept. Bio. & Life Sci., Tokyo Univ. Agri. Tech., [10]Grad. Sch. Bioresource, Mie Univ., [11]Ins. Innovative Research., Tokyo Ins. Tech.)	2aX03 Analysis Of The Feedback Regulation Between Flavonoids And Dicer DCL4 Activity On Bicolor Traits Of Dahlia And Petunia Kazunori Kuriyama[1], Sho Ohno[2], Midori Tabara[3], Toshiyuki Fukuhara[1] ([1]Tokyo Univ. of Agri. and Tech., [2]Kyoto Univ., [3]Ritsumeikan Univ.)			09:30
2aF04 Mitochondrial RNA editing is involved in environmental stress tolerance in Arabidopsis Riho Sawai[1], Koki Misawa[1], Fumiaki Asahi[1], Akiho Yamazaki[1], Mizuki Takenaka[2], Issei Nakazato[3], Shin-ichi Arimura[3], Izumi Yotsui[1], Teruaki Taji[1], Yoichi Sakata[1] ([1]Graduate School of Life Sciences, Tokyo Univ. of Agriculture, [2]Graduate School of Science, Kyoto University, [3]Graduate School of Agricultural and Life Sciences, The University of Tokyo)	2aG04 E Cross-species wide functional analysis of *MYB* transcriptional regulators in the phenylpropanoid pathway Maria Kenosis Emmanuelle Lachica, Shinichiro Komaki, Mutsumi Watanabe, Takayuki Tohge (Nara Institute of Science and Technology)	2aH04 Abscisic acid signaling controls density of primary plasmodesmata in the moss *Physcomitrium patens* Chiyo Jinno[1], Ken Fujisaki[2], Izumi Yotsui[2], Motoki Ouchi[3], Satoshi Naramoto[4], Daisuke Takezawa[3], Yoichi Sakata[2], Tomomichi Fujita[4] ([1]Grad. Sch. Life Sci., Univ. Hokkaido, [2]Dept. Biosci., Tokyo Univ. Agric., [3]Grad. Sch. Sci. Engg., Saitama Univ., [4]Fac. Sci., Hokkaido Univ.)	2aX04 Analysis of AGS2 RNA Helicase Implicated in the Post-transcriptional Regulation of Mitochondria mRNA Haruko Kaita[1,2], June-Sik Kim[2,3], Akihito Mamiya[4,5], Munetaka Sugiyama[5], Keiichi Mochida[3,6], Takashi Hirayama[1,2] ([1]Grad. Sch. Env, Life, Nat, Sci & Tech., Okayama Univ, [2]IPSR., Okayama Univ, [3]CSRS., RIKEN, [4]Grad. Sch. Sci., Kobe Univ, [5]Grad. Sch. Sci., Univ. Tokyo, [6]Sch. Info. & Data Sci., Nagasaki Univ)			09:45

E=Presentation in English

● Day 2, Mon., March 18, AM (9:00–12:00)

Time	Room A	Room B	Room C	Room D	Room E
	Photosynthesis	Plant hormones/ Signaling molecules	Organelles/Cytoskeleton/ Membrane trafficking	Reproduction	Plant-organism interaction A
10:00	2aA05 Functional analysis of the cysteine residue in PGRL1 protein in the green alga *Chlamydomonas reinhardtii* Hiroko Takahashi[1], Atsuko Isu[2], Keisuke Yoshida[2], Ken-ichi Wakabayashi[2,3], Toru Hisabori[4], Yoshitaka Nishiyama[1] ([1]Graduate School of Science and Engineering, Saitama University, [2]Laboratory for Chemistry and Life Science, Institute of Innovative Research, Tokyo Institute of Technology, [3]Faculty of Life Sciences, Kyoto Sangyo University, [4]International Research Frontiers Initiative, Tokyo Institute of Technology)	2aB05 Control of devernalization using small compounds (DeVeRnalizer: DVRs) with common structures Nana Otsuka[1], Hikaru Sawa[1], Ayato Sato[2], Makoto Shirakawa[1], Toshiro Ito[1] ([1]Grad. Sch. Sci and Tech., NAIST, [2]WPI-ITbM, Nagoya Univ.)	2aC05 E Involvement of Plasma Membrane Proteolipid 3 (PMP3) Superfamily Group III-MFP1b in Regulating Cellulosic Cell Wall in Dinoflagellates Fang Zhang[1], Alvin Chun Man Kwok[1], Joseph Tin Yum Wong[1,2] ([1]1Division of Life Science, Hong Kong University of Science and Technology (HKUST), [2]State Key Laboratory of Molecular Neuroscience)	2aD05 E A novel *Arabidopsis thaliana* protein, POTI, plays an important role in maintaining integrity of pollen tubes Natalia Julia Rzepecka[1], Yoko Ito[2], Emi Ito[2], Tomohiro Uemura[1] ([1]Grad. Sch. of Humanities and Sciences, Ochanomizu Univ., [2]Institute for Human Life Science, Ochanomizu Univ.)	2aE05 High humidity-triggered plant abscisic acid inactivation restricts bacterial water acquisition Shigetaka Yasuda[1], Taishi Hirase[1], Haruka Ishizaki[1], Ryuji Suzuki[2], Akihisa Shinozawa[3,4], Yuanjie Weng[5], Izumi Yotsui[3], Masanori Okamoto[5,6], Masatsugu Toyota[2], Yusuke Saijo[1] ([1]Div. Biol. Sci., NAIST, [2]Grad. Sch. Sci. Eng., Saitama Univ., [3]Dep. Biosci., Tokyo Univ. Agric., [4]NGRC, Tokyo Univ. Agric., [5]CBRE, Utsunomiya Univ., [6]CSRS, RIKEN)
10:15	2aA06 Cyclic electron flow around photosystem I involved in the prevention of photoinhibition of photosystem I in C_4*Flaveria bidentis* Asuka Nakamura[1], Takako Ogawa[2], Atsushi Matsumura[1], Yuri Munekage[1] ([1]Grad. Sch. Sci Tech., Univ. Kwansei Gakuin, [2]Grad. Sch. Sci Tech., Univ. Saitama)	2aB06 Drug discovery for designing an INO1 antagonist to decrease phytic acid content in rice Tatsuki Akabane[1], Satoshi Kamino[2], Kazuyoshi Ikeda[3,4], Tomoki Yonezawa[4], Etsuko Katoh[5], Naoki Hirotsu[1] ([1]Grad. Sch. Life Sci., Toyo Univ., [2]CRYO SHIP Inc., [3]RCCS, RIKEN, [4]Fac. of Pharm., Keio Univ., [5]Fac. of Food Nutr. Sci., Toyo Univ.)	2aC06 A novel microtubule structure re-organized during oil body formation in *Marchantia polymorpha* Takehiko Kanazawa[1,2], Takashi Ueda[1] ([1]Dev. of Cellular Dynamics, NIBB, [2]Sch. Life Sci., SOKENDAI)	2aD06 Irradiation of blue light induce pollen tube rupture in various flowering plants Naoya Sugi[1], Daichi Susaki[1], Yoko Mizuta[2], Tetsu Kinoshita[1], Daisuke Maruyama[1] ([1]KIBR, Yokohama City Univ., [2]IAR, WPI-ITbM, Nagoya Univ.)	2aE06 E Spatiotemporal dissection of camalexin functions in plant-bacterial interactions Saki Nakakoji[1], Haruka Tachibana[1], Kaoru Nakagawa[2], Koji Okuda[2], Eriko Betsuyaku[1], Mizuki Iwamoto[3], Shunsuke Masuo[4,5], Shigeyuki Betsuyaku[1] ([1]Fac. Agr., Ryukoku Univ., [2]Shimadzu Corp., [3]Grad. Sch. Life & Env. Sci., Univ. Tsukuba, [4]Fac. Life & Env. Sci., Univ. Tsukuba, [5]Microbiol. Res. Ctr. Sust., Univ. Tsukuba)
10:30	2aA07 Electron and proton transfer reactions at the secondary quinone electron acceptor Q_B in photosystem II monitored by time-resolved infrared spectroscopy Yuki Kato, Honami Ito, Takumi Noguchi (Grad. Sch. Sci, Nagoya Univ.)	2aB07 E Prohydrojasmon Induces Species-Specific Aliphatic Glucosinolate Accumulation and Its Related Gene Expression in *Brassica juncea Var. Cernua* and *Brassica Rapa* Mahina Sharipova (T-LSI, Grad. Sch. Sci. and Tech, Univ. Tsukuba)	2aC07 MAIGO3 mediates capture-and-release of ER exit sites by Golgi stacks in Arabidopsis Junpei Takagi[1], Hideyuki Takahashi[2], Minoru Nagano[3], Kenta C. Moriya[4], Yoichiro Fukao[3], Haruko Ueda[5], Kentaro Tamura[6], Tomoo Shimada[2], Ikuko Hara-Nishimura[5] ([1]Fac. Sci. and Grad. Sch. Life Sci., Hokkaido Univ., [2]Grad. Sch. Sci., Kyoto Univ., [3]Col. Life Sci., Ritsumeikan Univ., [4]CER, Kyoto Univ., [5]Fac. Sci. and Eng., Konan Univ., [6]Dept. Environ. Life Sci., Univ. of Shizuoka)	2aD07 Analysis of pollen tube acceptance and rejection in *Arabidopsis* species Takuya Nagae[1], Sota Fujii[1,2] ([1]Grad. Sch. Agric Life Sci., Univ. Tokyo, [2]SunRiSE)	2aE07 Elucidation of the function of CK-like compounds produced by *fas* operon Mika Yoshino[1], Surjana Alicia[1], Mikiko Kojima[2], Kensuke Kouki[1], Toshio Nishikawa[1], Hitoshi Sakakibara[1,2] ([1]Grad. Sch. Bio. Sci., Nagoya Univ., [2]RIKEN CSRS)
10:45	2aA08 Reduced maximum quantum yield of photosystem II in Arabidopsis *pifi* mutants is associated with chloroplast NDH complex activity Minami Murai[1], Ayaka Kimura[1], Ko Imaizumi[1], Keisuke Yoshida[2], Yufen Che[3], Noriko Ishikawa[1], Toru Hisabori[2,4], Kaori Kohzuma[1], Kentaro Ifuku[1] ([1]Grad. Sch. Agric., Kyoto Univ., [2]CLS, Tokyo Tech, [3]Grad. Sch. Biostudies., Kyoto Univ., [4]IRFI, Tokyo Tech)		2aC08 Analysis of protein-protein interaction regulating pollen tube integrity Mika Tsugane[1], Keita Muro[2], Akira Nozawa[3], Tatsuya Sawazaki[3], Takashi Ueda[1,4], Kazuo Ebine[1,4] ([1]NIBB, [2]Osaka Metropolitan Univ., [3]Ehime Univ., [4]SOKENDAI)	2aD08 Three-dimensional imaging of fertilized eggs and early embryogenesis in rice Moeno Tezuka, Takashi Okamoto, Atsuko Kinoshita (Tokyo Metropolitan Univ.)	2aE08 E Constitutive expression of a phytopathogenic ascomycete-associated gene tends to suppress infection of *Colletotrichum higginsianum* Ryushin Yamaguchi[1], Arisa Kuramoto[1], Koh Aoki[2], Ayako Tsushima[2] ([1]Coll. Life Environ. Sci., Osaka Pref. Univ., [2]Grad. Sch. Agric., Osaka Metro. Univ.)
11:00	2aA09 [Cancelled]		2aC09 Analysis of PICALM and VAMP72 members in Arabidopsis Kazuo Ebine[1,2], Masaru Fujimoto[3], Keita Muro[4], Hidenori Takeuchi[5], Akira Nozawa[6], Anna Tode[7], Tomohiro Uemura[7], Tatsuya Sawasaki[6], Tetsuya Higashiyama[8], Takashi Ueda[1,2] ([1]Div. Cellular Dynamics, NIBB, [2]Grad. Inst. for Adv. Stud., SOKENDAI, [3]Grad. Sch. Agri. and Life Sci., The Univ. Tokyo, [4]Grad. Sch. Agri., Osaka Metropolitan Univ., [5]ITBM, Nagoya Univ., [6]Proteo-Science Center, Ehime Univ., [7]Grad. Sch. of Humanities and Sciences, Ochanomizu Univ., [8]Grad. Sch. Sci., The Univ. Tokyo)	2aD09 Petal abscission is promoted by jasmonic acid-induced autophagy at Arabidopsis petal bases Yuki Furuta, Nobutoshi Yamaguchi, Toshiro Ito (Grad. Sch. Sci and Tech., NAIST)	2aE09 Rewiring of pattern recognition receptor-mediated immunity under phosphate deficiency Natsuki Tsuchida[1], Kota Yamashita[2], Taishi Umezawa[2], Yusuke Saijo[1] ([1]Grad. Sch. Sci and Tech., NAIST, [2]BASE, Tokyo Univ. Agric. Tech.)

Room F	Room G	Room H	Room X	Room Y	Room Z	Time
Environmental response B/ Environmental stresses	Specialized (secondary) metabolism/Biomembrane/ Ion and solute transport	Development/Morphogenesis	Genome function/Gene regulation			
2aF05 Elucidation of mechanisms how Arabidopsis B3-RAF kinases activate subclass III SnRK2 in response to ABA and osmostress Koki Nakayama[1], Naoya Kohara[1], Izumi Yotsui[1], Teruaki Taji[1], Sotaro Katagiri[2], Taishi Umezawa[2], Daisuke Takezawa[3], Yoichi Sakata[1] ([1]Dept. of Biosci., Tokyo Univ. of Agri., [2]BASE, Tokyo University of Agriculture and Technology., [3]Grad. Sch. Sci and Eng., Saitama Univ.)	2aG05 Functional analysis of a putative regulator of soyasaponin biosynthesis in soybean Haruka Morita[1], Misako Kitamura[1], Yuhei Okamoto[1], Keita Tamura[2], Hidemasa Bono[2,3], Toshiya Muranaka[1,4], Hikaru Seki[1,4] ([1]Dept. of Biotechnol., Grad. Sch. of Eng., Osaka Univ., [2]Genome Editing Innovation Center, Hiroshima Univ., [3]Grad. Sch. Integ. Sci. Life, Hiroshima Univ., [4]Institute for Open and Transdisciplinary Research Initiatives, Osaka Univ.)	2aH05 ABA converts stem cell fate by substantiating a tradeoff between cell polarity, growth and cell cycle progression and abiotic stress responses in the moss *Physcomitrium patens* Marcel Beier[1,2], Chiyo Jinno[3], Akihiko Hiroguchi[1], Natsumi Noda[1], Kohei Nakamura[3], Yutaka Suzuki[4], Tomomichi Fujita[1] ([1]Fac. Sci., Hokkaido Univ., [2]Inst. Adv. Higher Edu., Hokkaido Univ., [3]Grad. Sch. Life Sc., Hokkaido Univ., [4]Grad. Sch. Front. Sci., Univ. Tokyo)	2aX05 Involvement of the deadenylases AtCAF1i/k in shoot regeneration Toshihiro Arae[1], Sota Kurachi[2], Kosuke Kawai[2], Riko Imahori[2], Yukako Chiba[2,3], Misato Ohtani[1] ([1]Grad. Sch. Frontier Sci., Univ. Tokyo, [2]Grad. Sch. Life Sci., Hokkaido Univ., [3]Fac. Sci., Hokkaido Univ.)	Symposium S07 [English] Plant and Algal Lipids: How they cope with environment by modifying lipids? (9:00–12:00)	Symposium S08 [English] Survival strategies and its molecular basis of plants through switching life histories (9:00–12:00)	10:00
2aF06 Genetic analyses of short-term heat tolerance in Arabidopsis Mire Yanagihara[1], Mao Ueki[1], Takamasa Suzuki[2], Izumi Yotsui[1], Yoichi Sakata[1], Teruaki Taji[1] ([1]Dept. of Biosci., Tokyo Univ. of Agri., [2]Dept. of Biol. Chem., Chubu Univ.)	2aG06 Screening and biochemical analysis of soybean transporter genes involved in isoflavone secretion into the rhizosphere Hinako Matsuda[1], Ryosuke Munakata[1,2], Masaru Nakayasu[1], Shinichi Yamazaki[3,4], Yuichi Aoki[4], Atsushi J. Nagano[5,6], Kazufumi Yazaki[1], Akifumi Sugiyama[1] ([1]RISH, Kyoto Univ., [2]JST PRESTO, [3]RIKEN BRC, [4]ToMMo, Tohoku Univ., [5]Fac. Agric., Ryukoku Univ., [6]IAB, Keio Univ.)	2aH06 Ⓔ Plant PI-PLC pathway poses novel effect toward vacuole morphology thus affect cell polarity and asymmetrical cell division Haolin Zong[1], Alisa Vyacheslavova[1], Tomomichi Fujita[2] ([1]Doctoral course student/ Grad sch Life Sci., Hokkaido University, Kita10 Nishi8, Kita-ku, Sapporo 060-0810, Japan, [2]Faculty of Science, Hokkaido University, Kita10 Nishi8, Kita-ku, Sapporo 060-0810, 060-0810 Japan)	2aX06 Analysis of AT–AC-type splicing in *drol1* supressors Takamasa Suzuki, Tomoko Niwa, Gaiki Ono, Daisuke Aramaki, Yuuma Ito, Yuriko Inami, Itsuki Inoue (Col. Biosci. Biotech., Chubu Univ.)			10:15
2aF07 Genetic and RNAseq analyses of *sensitive to long term heat1* (*sloh1*) mutant of Arabidopsis Ryo Yamaguchi[1], Akito Hosoi[2], Keisuke Tanaka[2], Izumi Yotsui[1], Yoichi Sakata[1], Teruaki Taji[1] ([1]Dept. of Biosci., Tokyo Univ. of Agri., [2]Nodai Genome Cent., Tokyo Univ. of Agri.)	2aG07 Characterization of polyphenol oxidases coordinately expressed with shikonin production in *Lithospermum erythrorhizon* Kohei Nakanishi[1], Yuki Takano[1], Kyoko Yamamoto[1], Yuki Matsuda[2], Kanako Sasaki[1], Kazuaki Ohara[1], Takuji Ichino[1,3], Kanade Tatsumi[1], Hao Li[1], Ryosuke Munakata[1], Keishi Osakabe[4], Koichiro Shimomura[5], Akifumi Sugiyama[1], Kojiro Takanashi[2], Kazufumi Yazaki[1] ([1]RISH, Kyoto Univ., [2]Grad. Sch. Sci. Tech., Shinshyu Univ., [3]Kobe Pharm. Univ., [4]Fac. Biosci. Bioind., Tokushima Univ., [5]Grad. Sch. Life Sci., Toyo Univ.)	2aH07 Live-imaging of *Marchantia* zygote to understand the evolution of axis formation Yusuke Kimata[1], Akane Fujimori[2], Sohta Nakamura[1], Yosuke Okamura[3], Minako Ueda[1] ([1]Grad. Sch. LifeSci., Tohoku Univ., [2]Fac. Sci., Tohoku Univ., [3]Sch. Eng., Tokai Univ.)	2aX07 Arabidopsis SD5/DROL1 protein, a subunit of U5 snRNP, regulates nutrient response through pre-mRNA splicing and jasmonic acid signaling Kodai Ishibashi[1], Toshihiro Arae[1], Takeshi Yoshizumi[2], Yukio Kurihara[2,3], Takashi Kuromori[2], Zofia Szweykowska-Kulińska[4], Artur Jarmołowski[4], Takashi Hirayama[5], Minami Matsui[2], Misato Ohtani[1,2] ([1]Grad. Sch. Front. Sci., Univ. Tokyo, [2]RIKEN, CSRS, [3]Grad. Sch. Art. Sci., Univ. Tokyo, [4]IBMiB, Adam Mickiewicz Univ., [5]Institute of Plant Science and Resources, Okayama Univ)			10:30
2aF08 Loss-of-function of *SALT* gene improves salt tolerance in *Arabidopsis thaliana* Takuma Kajino[1], Kaori Uchiyama[1], Yoshihiro Hase[3], Tomoaki Horie[4], Hirotaka Ariga[2], Izumi Yotsui[1], Yoichi Sakata[1], Teruaki Taji[1] ([1]Dept. of Biosci., Tokyo Univ. of Agri, [2]Res. Cent. of Gen. Res., NARO, [3]Takasaki Advanced Radiation Research Institute, QST, [4]Div. of Applied Biology, Shinshu Univ.)	2aG08 Shikonin-containing granules secreted from *Lithospermum erythrorhizon* cultured cells are covered with arabinogalactan protein and embedded in pectin matrix Ken Matsuoka[1], Takuji Ichino[2,3], Kohei Nakanishi[2], Kazufumi Yazaki[2] ([1]Fac. Agr., Kyushu Univ., [2]RISH, Kyoto Univ., [3]Kobe Pharm. Univ.)	2aH08 Spontaneous and stress-triggered spatiotemporal Ca^{2+} dynamics in *Marchantia polymorpha* Kazuyuki Kuchitsu, Toru Ikeuchi, Erina Seno, Kenshiro Watanabe, Tomoaki Machino, Kayo Kamiya, Takafumi Hashimoto, Shoko Tsuboyama, Hana Kojima, Yuto Yamashita, Kenji Hashimoto (Dept. Appl. Biol. Sci., Tokyo Univ. of Science)	2aX08 Analysis of a feature that possibly related to translational function in tRNA modification-deficient *Arabidopsis* mutant Yumi Nakai (Dept. of Biochemistry, Osaka Medical and Pharmaceutical University)			10:45
2aF09 Regulation of stomatal closure by TCA cycle metabolites in grapevine Yoshiharu Mimata[1], Ruhai Gong[2], Xuanxuan Pei[1], Wenxiu Ye[1] ([1]IAAS, Peking Univ., [2]College of Horticulture, Shanxi Agricultural Univ.)	2aG09 Identification of critical region required for polar localization and trafficking of a Mn transporter OsNramp5 in rice Noriyuki Konishi, Jian Feng Ma (IPSR Okayama Univ)	2aH09 The Role of Auxin in Cell Polarity Establishment and Organ Morphogenesis in Lateral Root Primordium Formation in *Arabidopsis thaliana* Sanae Kaneta, Tatsuo Kakimoto (Grad. Sch. Sci., Osaka Univ.)	2aX09 Ⓔ The regulating miRNA-RISC loading and post-translational AGO1 regulation in gene silencing suppression Shih-Shun Lin (Institute of Biotechnology, National Taiwan University)			11:00

Ⓔ=Presentation in English

● Day 2, Mon., March 18, AM (9:00–12:00)

Time	Room A	Room B	Room C	Room D	Room E
	Photosynthesis	Plant hormones/ Signaling molecules	Organelles/Cytoskeleton/ Membrane trafficking	Reproduction	Plant-organism interaction A
11:15	2aA10 Photosynthetic Protection Mechanisms against CO_2 Limitation in Submerged *Arabidopsis thaliana* Seedlings Sae Bekki[1], Ai Ohnishi[2], Hajime Wada[2], Koichi Kobayashi[3] ([1]Sch. Sci., Osaka Pref. Univ., [2]Grad. Sch. Arts Sci., Univ. Tokyo, [3]Grad. Sch. Sci., Osaka Met. Univ.)		2aC10 Dynamics of the VAMP72 group in pollen tube elongation with a super-resolution live imaging analysis Anna Tode[1], Emi Ito[3], Yoko Ito[3], Kazuo Ebine[4,5], Takashi Ueda[4,5], Akihiko Nakano[6], Tomohiro Uemura[1,2] ([1]Grad. Sch. Humanities and Sciences, Ochanomizu Univ., [2]Faculty of Core Research, Natural Science Div., Ochanomizu Univ., [3]IHLS., Ochanomizu Univ., [4]Div. Cell. Dynamics, NIBB, [5]Dept. Basic Bio., SOKENDAI, [6]RIKEN RAP)	2aD10 Importance of autophagy for germination ability maintenance in long-term stored seeds Daiki Shinozaki[1,2], Erina Takayama[2], Naoto Kawakami[2], Kohki Yoshimoto[2] ([1]OSRI, Meiji Univ., [2]Dep. Life Sci., Sch. Agri., Meiji Univ.)	2aE10 Control of root microbes by phosphate starvation response regulators in *Arabidopsis thaliana* Haruna Tadai[1], Taiga Ishihara[1], Kentaro Okada[1], Ryo Chigusa[1], Utami Yuniar Devi[1], Miki Fujita[2], Tetsuya Hayashi[3], Cosentino Salvatore[4], Wataru Iwasaki[4], Kei Hiruma[1], Shigetaka Yasuda[1], Yusuke Saijo[1] ([1]Grad. Sch. Sci and Tech., NAIST, [2]CSRS, RIKEN, [3]Sch. Med., Kyushu Univ., [4]Grad. Sch. Frontier Sci., Tokyo Univ.)
11:30	2aA11 Structure of S_2 High-Spin State Manganese Cluster of Photosystem II by Multi-frequency Electron Paramagnetic Resonance (EPR) Spectroscopy Shinya Kosaki[1], Yoshiki Nakajima[2], Jian-Ren Shen[2], Hiroyuki Mino[1] ([1]Grad. Sch. Sci., Nagoya Univ., [2]Res. Inst. Interdiscip. Sci., Okayama Univ.)		2aC11 Analysis of subcellular localization and physiological functions of *Arabidopsis thaliana* VAMP714 Tomoko Eguchi[1], Sae Endo[1], Emi Ito[2], Akihiko Nakano[3], Tomohiro Uemura[1] ([1]Graduate School of Humanities and Sciences, Ochanomizu Univ, [2]Institute for Human Life Innovation, Ochanomizu Univ., [3]Live Cell Super-Resolution Imaging Research Team, RIKEN Center for Advanced Photonics.)	2aD11 Overexpression of *orf320* causes male sterility in tomato Rika Nakajima[1], Kosuke Kuwabara[1], Kenta Shirasawa[2], Tohru Ariizumi[3] ([1]Grad. Life Environ Sci., Univ. Tsukuba, [2]Kazusa DNA Res. Inst., [3]Fac. Life Env. Sci., Univ. Tsukuba)	2aE11 E Interference with host root growth and immunity by root microbiota members and its genetic determinants Jana Hucklenbroich[1], Ryohei Thomas Nakano[1,2] ([1]MPIPZ, [2]Fac. Sci., Hokkaido Univ.)
11:45			2aC12 Functional analysis of Syntaxin 6-like protein in vascular plant (SYLK) Sara Tode[1], Emi Ito[2], Yoko Ito[2], Yutaro Simizu[3], Kei Hiruma[4], Akihiko Nakano[5], Tomohiro Uemura[1,6] ([1]Grad. Sch. Humanities and Sciences, Ochanomizu Univ., [2]IHLS., Ochanomizu Univ., [3]CSRS, RIKEN, [4]Grad. Sch. Arts and Sciences, Univ. Tokyo, [5]RIKEN RAP, [6]Faculty of Core Research, Natural Science Div., Ochanomizu Univ.)	2aD12 Study of SPRI2 controlling interspecies incompatibility in the Brassicaceae Seitaro Ito[1], Eri Yamamoto[1], Surachat Tangpranomkorn[1], Yuka Kimura[1], Yoshinobu Kato[1,2], Maki Niidome[1], Seiji Takayama[1], Sota Fujii[1,3] ([1]Grad. Sch. Agric Life Sci., Univ. Tokyo, [2]Precursory Research for Embryonic Science and Technology, [3]Suntory Rising Stars Encouragement Program in Life Sciences)	

Room F	Room G	Room H	Room X	Room Y	Room Z	Time
Environmental response B/ Environmental stresses	Specialized (secondary) metabolism/Biomembrane/ Ion and solute transport	Development/Morphogenesis	Genome function/Gene regulation			
2aF10 Cytokinin is involved in the exodermal suberization to form a radial oxygen loss barrier in rice (*Oryza sativa*) Katsuhiro Shiono[1], Kana Shimizu[1], Aika Ishikawa[1,2], Masato Ejiri[1], Koretsugu Ogara[3], Takushi Yamamoto[3], Shu Taira[4] ([1]Dept. Biosci. Biotech., Fukui Pref. Univ., [2]Grad. Sch. Life Sci., Tohoku Univ., [3]Shimadzu Corporation, [4]Fact. Food Agr. Sci., Fukushima Univ.)	2aG10 E Interaction of Arabidopsis vacuolar magnesium ion transporter MRS2-1 with calmodulin-like protein CML13 Xiaoyu Yang[1], Motoyuki Hattori[2], Shunsuke Watanabe[3,5], Mitsunori Seo[4,5], Natsuko I. Kobayashi[1], Yuko Kurita[1], Keitaro Tanoi[1] ([1]Graduate School of Agricultural and Life Sciences, The University of Tokyo, [2]School of Life Sciences, Fudan University, [3]IPSiM, Univ Montpellier, CNRS, INRAE, Institut Agro, [4]Tropical Biosphere Research Center, University of the Ryukyus, [5]RIKEN Center for Sustainable Resource Science)	2aH10 The role of asymmetric gene expression in the establishment of biradial symmetry in Arabidopsis embryos Senri Watanabe[1], Ayame Imoto[2], Takasi Isida[1], Mitsuhiro Aida[1] ([1]Grad. Sci. Tec., Univ. Kumamoto, [2]Bio., NAIST)	2aX10 E The PG-box is essential for the formation and enzyme activation of DYW1-containing RNA editosome Tenghua Wang, Mizuki Takenaka (Kyoto University)	Symposium S07 [English] Plant and Algal Lipids: How they cope with environment by modifying lipids? (9:00–12:00)	Symposium S08 [English] Survival strategies and its molecular basis of plants through switching life histories (9:00–12:00)	11:15
2aF11 Analysis of the regulatory mechanism of a Arabidopsis *ELIP2* promoter responsible for the combined stress response to high light and cold Kana Mitai[1], Okechukwu Samson Ezeh[2], Natsuki Hayami[2], Wasei Kodama[1], Satoshi Iuchi[3], Yoshiharu Y. Yamamoto[1,2,4,5] ([1]Grad. Sch. Nat. Sci. Tech., Univ. Gifu, [2]UGSAS., Univ. Gifu, [3]BRC., Riken, [4]Fac. Appl. Biol. Sci., Univ. Gifu, [5]CSRS., Riken)	2aG11 Exploring for interactive factors activating guard-cell-type ALMT proteins Takayuki Sasaki, Izumi Mori (IPSR, Okayama Univ.)	2aH11 Epidermal cell fate determination through regulation of master transcription factors Shinobu Takada[1], Ayaka Yoshida[1], Hiroyuki Iida[1,2] ([1]Dept. Biol. Sci., Grad. Sch. Sci., Osaka Univ, [2]Viikki Plant Science Centre, University of Helsinki)				11:30
	2aG12 Elucidating the regulatory mechanisms of the activity of the sugar transporter SWEET Haruna Tanaka[1,2], Reika Isoda[2], Emi Misiro[2], Wolf B. Frommer[3], Masayoshi Nakamura[2] ([1]Graduate School of Science, Nagoya University, [2]Institute of Transformative Bio-Molecules, Nagoya University, [3]Institute for Molecular Physiology, Heinrich-Heine-University Düsseldorf)					11:45

E=Presentation in English

● Day 3, Tue., March 19, AM (9:00–12:00)

Time	Room A	Room B	Room C	Room D	Room E
	Photosynthesis	Plant hormones/ Signaling molecules	Cell wall	Cell cycle/Cell division	Plant-organism interaction B
09:00	3aA01 Reevaluation of the two-step mechanism for photodamage to photosystem II Shunta Kojima, Yoshitaka Nishiyama (Grad. Sch. Sci. Eng., Saitama Univ.)	3aB01 Detection and Quantitative Analysis of ACC synthase Proteins of Tomato with MRM Method by Mass Spectrometer Hitoshi Mori (Grad. Sch. Bioagr. Sci., and iGCORE, Nagoya Univ.)	3aC01 TPFLA3 plays an important role in Arabidopsis pollen exine structure and fertility Saki Nabeta, Seiya Nishihara, Nozomi Ueki, Sumie Ishiguro (Bio-Agric. Sci., Nagoya Univ.)	3aD01 Stomatal lineage-specific TCX family proteins may form a protein complex for control of cell division during stomatal development Keito Mineta[1], Hidekazu Iwakawa[2], Takumi Nishiuchi[3], Masaki Ito[2] ([1]Graduate School of Natural Science and Technology, Kanazawa University, [2]Faculty of Biological Science and Technology, Kanazawa University, [3]Research Center for Experimental Modeling of Human Disease, Kanazawa University)	3aE01 Mutant collections showing the symptom-like phenotypes in NBRP-Tomato resources Koichi Sugimoto, Yoko Fujimori, Hiroshi Ezura (Univ. Tsukuba, T-PIRC)
09:15	3aA02 E Enhanced tolerance of photosystem II to strong light and high temperature via reinforcement of translational and antioxidation systems in *Synechocystis* sp. PCC 6803 Pornpan Napaumpaiporn[1], Takako Ogawa[1], Kintake Sonoike[2], Yoshitaka Nishiyama[1] ([1]Grad. Sch. Sci. Eng., Saitama Univ, [2]Fac. Edu., Waseda Univ.)	3aB02 Exploring Peptide Signaling: A Study of Environmental Responsiveness Akie Shimotohno (Nagoya University (ITbM))	3aC02 E Measurement of root mechanical properties in an *A. thaliana* GWAS population Marcel Beier[1], Yunshu Wang[2], Yuta Nakagawa[3], Andres Aguilar Ariza[2], Liyu Deng[8], Tomomichi Fujita[4], Shumpei Hayashi[5], Akihiro Isozaki[3], Keisuke Goda[3,6,7], Hirotaka Hida[5], Toru Fujiwara[2] ([1]Inst. Adv. Higher Edu, Hokkaido University, [2]Dep. Appl. Biol. Chem., Grad. Sch. Agri. Life Sci., The University of Tokyo, [3]Dep. Chem, Grad. Sch. Sci, The University of Tokyo, [4]Fac. Sci. Hokkaido University, [5]Dep. Mech. Eng., Grad. Sch. Kobe University, [6]Dep. Bioeng. Samueli Sch Eng. University of California, [7]Inst. Tech. Sci., Wuhan University, [8]Grad. Sch. Life Science, Hokkaido University)	3aD02 The dynamic changes of the nuclear factor ASYMMETRIC LEAVES2 (AS2) protein during cell cycle Michiko Sasabe[1], Keiko Suzuki[1], Kaede Yamagami[1], Sayuri Ando[2], Hidekazu Iwakawa[3], Shoko Kijima[2], Yasunori Machida[4], Chiyoko Machida[2] ([1]Faculty of Agriculture and Life Science, Hirosaki University, [2]Graduate School of Bioscience and Biotechnology, Chubu University, [3]College of Science and Engineering, Kanazawa University, [4]Graduate School of Science, Nagoya University)	3aE02 Long-read metagenome analysis of isoflavone catabolism pathway in soybean rhizosphere Tomohisa Shimasaki[1,2], Sachiko Masuda[3], Arisa Shibata[3], Yui Nose[1], Tomoaki Sato[4], Akifumi Sugiyama[4], Ken Shirasu[3], Yasunori Ichihashi[1] ([1]RIKEN·BRC, [2]Grad. Sch. of Sci. Hokkaido Univ., [3]RIKEN·CSRS, [4]RISH Kyoto Univ.)
09:30	3aA03 Role of Hexadecenoic Acid on the photoinhibition of photosystem II in *Arabidopsis* Kazuki Kurima, Haruhiko Jimbo, Hajime Wada (Grad. Sch. Arts Sci., Univ. Tokyo, Japan)	3aB03 E An Evolutionarily Conserved Long-distance Mobile Peptide Regulates Lignin Biosynthesis and Plant Immunity Ying-Lan Chen (National Cheng Kung University)	3aC03 E *A. thaliana* root adaptation to sucrose supply and osmotic treatments, and future application to moss Liyu Deng[1], Yunshu Wang[2], Yuta Nakagawa[3], Aguilar Ariza Andres[2], Shumpei Hayashi[4], Akihiro Isozaki[3], Keisuke Goda[3,6,7], Hirotaka Hida[5], Toru Fujiwara[2], Tomomichi Fujita[4], Marcel Beier[8] ([1]Grad. Sch. Life Science, Hokkaido University, [2]Dep. Appl. Biol. Chem., Grad. Sch. Agri. Life Sci., The University of Tokyo, [3]Dep. Chem, Grad. Sch. Sci, The University of Tokyo, [4]Fac. Sci. Hokkaido University, [5]Dep. Mech. Eng., Grad. Sch. Kobe University, [6]Dep. Bioeng. Samueli Sch Eng. University of California, [7]Inst. Tech. Sci., Wuhan University, [8]Inst. Adv. Higher Edu, Hokkaido University)	3aD03 ANAC082-Mediated Cell Proliferation Control in Response to Nucleolar Stress in Arabidopsis Iwai Ohbayashi[1,2], Tai-Yin Hsu[1], PoChen Chiang[1], Akitoshi Iwamoto[3], Masahiko Furutani[4], Munetaka Sugiyama[5] ([1]Dept. Life Sci., NCKU, Taiwan, [2]Inst. Trop. Plant Sci. Microb., NCKU, Taiwan, [3]Dept. Biol. Sci., Kanagawa Univ., [4]IROAST, Kumamoto Univ., [5]Dept. Biol. Sci., Grad. Sch. Sci., Univ. Tokyo)	3aE03 Analysis of the root colonization of *Sphingobium* sp. enriched in the tomato rhizosphere by α-tomatine Kyoko Takamatsu[1], Masaru Nakayasu[1], Shinichi Yamazaki[2,3], Yuichi Aoki[2,4], Masaru Kobayashi[5], Kentaro Ifuku[5], Kazufumi Yazaki[1], Akifumi Sugiyama[1] ([1]RISH, Kyoto Univ., [2]ToMMo, Tohoku Univ., [3]RIKEN BRC., [4]GSIS, Tohoku Univ., [5]Grad. Agri., Kyoto Univ.)
09:45	3aA04 Role of a galactolipase in the repair of cyanobacterial PSII Haruhiko Jimbo, Hajime Wada (Grad. Sch. Arts. Sci., Univ. Tokyo)	3aB04 *XYLANASE1*-dependent CLE26 peptide signaling in conferring drought resistance in *Arabidopsis* Satoshi Endo[1], Hiroo Fukuda[1,2] ([1]Fac. Bioenviron. Sci., Kyoto Univ. Adv. Sci., [2]Akita Pref. Univ.)	3aC04 Analysis of a Thin-Layered Mucilage Capsule Mutant in Arabidopsis Tadashi Kunieda[1], George W. Haughn[2], Ikuko Hara-Nishimura[3] ([1]Div. of Biol. Sci., NAIST, [2]Dept. of Bot., UBC, [3]Fac. of Sci. and Eng., Konan Univ.)	3aD04 A Functional Framework of the Kinetochore in Flowering Plants Pettkó-Szandtner Aladár[1], Zoltán Magyar[1], Shinichiro Komaki[2] ([1]BRC. Szeged., Hungary, [2]Grad. Sch. Biol. Sci., NAIST)	3aE04 *Arabidopsis* root exudates induce resilience to growth inhibition triggered by *Bacillus* volatile organic compounds Jun Murata, Shoko Mori, Mika Nobuhara, Hiromi Toyonaga, Tsukiho Osawa, Takehiro Watanabe (Suntory Foundation for Life Sciences)
10:00	3aA05 NPQ7 was involved in stability of photosystem II and thylakoid membrane maintenance in C_4*Flaveria bidentis* Ai Ishizaki[1], Sayaka Koshi[1], Ryouichi Tanaka[2], Atsushi Takabayashi[2], Takao Oi[3], Kentaro Ifuku[4], Yuri Munekage[1] ([1]School Science and Technology, Kwansei Gakuin University, [2]Institute of Low Temperature Science, Hokkaido University, [3]Graduate School of Bioagricultural Sciences, Nagoya University, [4]Division of Applied Life Sciences, Kyoto University)	3aB05 E Gibberellins promote seed conditioning by up-regulating strigolactone receptors in the parasitic plant *Striga hermonthica* Jia Xin Yap, Yuichiro Tsuchiya (ITbM, Nagoya University)	3aC05 Glucomannan accumulation in the vacuole in *Dendrobium catenatum* Aina Kikuchi[1], Naho Nishigaki[1], Kimie Atsuzawa[2], Mao Ono[3], Chuan-Ming Yeh[4], Wen-Chieh Tsai[5], Takeshi Ishimizu[3], Yasuko Kaneko[6], Daisuke Takahashi[1], Toshihisa Kotake[1] ([1]Grad. Sch. Sci. Eng., Saitama Univ., [2]CACS, Saitama Univ., [3]Col. Life Sci., Ritsumeikan Univ., [4]Inst. Mol. Biol., Nat. Chung Hsing Univ., [5]Inst. Trop. Plant Sci. Microbiol., Nat. Cheng Kung Univ., [6]Fac. Edu., Saitama Univ.)	3aD05 Drastic changes in gene-expression profile during the spore germination of *Marchantia polymorpha* Yuuki Sakai[1], Shunji Shimadzu[1,2], Kondo Yuki[1], Fukaki Hidehiro[1], Ishizaki Kimitsune[1] ([1]Grad. Sch. Sci., Kobe Univ., [2]Grad. Sch. Sci., Univ. of Tokyo)	3aE05 A Machine Learning-based Image Analysis Pipeline to Quantify Arabidopsis Root Phenotypes Momoko Takagi[1,2], Manami Okazaki[2], Liu Xinpeng[3], Kei Hiruma[2], Fumio Okura[3], Yosuke Toda[1,4] ([1]ITbM., Nagoya Univ., [2]Grad. Sch. Arts and Sci., Univ. Tokyo, [3]Grad. Sch. Inf. Sci. Technol., Osaka Univ., [4]Phytometrics, Co., Ltd.)

Room F	Room G	Room H	Room X	Room Y	Room Z	Time
Photoreceptors/Photoresponses	Biomembrane/ Ion and solute transport	Development/Morphogenesis	Genome function/Gene regulation			
3aF01 Hypsochromically shifted phyC inhibits hypocotyl elongation at the lower limit of red:far-red light conditions where phyB functions Shizue Yoshihara[1,2], Koji Okajima[3], Satoru Tokutomi[2] ([1]Grad. Sch. Sci., Osaka Metro. Univ., [2]Grad. Sch. Sci., Osaka Pref. Univ., [3]Fuc. Sci. Technol., Keio Univ.)	3aG01 Redundant function of the *Arabidopsis* phosphatidylinositol 4-phosphate 5-kinase genes *PIP5K4–6* is essential for pollen germination Mariko Kato[1], Machiko Watari[1], Tomohiko Tsuge[1], Sheng Zhong[2], Hongya Gu[2], Li-Jia Qu[2], Takashi Fujiwara[1], Takashi Aoyama[1] ([1]Inst. Chem. Res., Kyoto Univ., [2]Peking Univ.)	3aH01 Single-cell transcriptomic analysis to investigate the mechanism of cell fate reprogramming of differentiated cells during shoot regeneration from the epidermis Hatsune Morinaka[1], Dongbo Shi[1,2], Ayako Kawamura[1], Takamasa Suzuki[3], Akira Iwase[1], Tetsuya Higashiyama[4], Munetaka Sugiyama[4], Keiko Sugimoto[1,4] ([1]CSRS, RIKEN, [2]IBB, Univ. Potsdam, [3]Dept. Biol. Chem., Coll. Biosci. Biotech., Chubu Univ., [4]Dept. Biol. Sci., Grad. Sch. Sci., Univ. Tokyo)	3aX01 Reconstruction of the Functional *nif* Gene Cluster by Seven Excision and Two Inversion Events during Heterocyst Development in the Nitrogen-Fixing Cyanobacterium *Calothrix* sp. NIES-4101 Kazuma Uesaka, Mari Banba, Sotaro Tiba, Yuichi Fujita (Univ, Nagoya)	Symposium S09 Bio-metal Strategies of Living Organisms (9:00–11:50)		09:00
3aF02 Isolation and characterization of Arabidopsis mutants impaired in blue light-dependent activation of plasma membrane H^+-ATPase in guard cells Saashia Fuji[1], Shota Yamauchi[1,2], Atsushi Takemiya[1] ([1]Grad. Sch. Sci. Tech. Innov., Yamaguchi Univ., [2]Fac. Sci. Tech., Tokyo Univ. Sci.)	3aG02 AtHKT1 alleviates Na accumulation in companion cells of filaments during reproductive development in saline environments Takeshi Uchiyama[1], Shunya Saito[1], Taro Yamanashi[1], Megumi Kato[1], Tomoko Takagi[2], Noriko Nagata[2], Sho Toyama[3], Misako Miwa[3], Shigeo Matsuyama[3], Hayato Ikeda[4], Hidetoshi Kikunaga[4], Toshimi Suda[4], Masaru Tsujii[1], Yasuhiro Ishimaru[1], Nobuyuki Uozumi[1] ([1]Department of Biomolecular Engineering, Graduate School of Engineering, Tohoku University, [2]Department of Chemical and Biological Sciences, Faculty of Science, Japan Women's University, [3]Quantum Science and Energy Engineering, Graduate School of Engineering, Tohoku University, [4]Research Center for Electron Photon Science, Tohoku University)	3aH02 Ⓔ Analysis of regeneration control by the MAP kinase MpMPK1 in *Marchantia polymorpha* Rika Yanuki, Shota Yamauchi, Ryuichi Nishihama (Dept. Appl. Biol. Sci., Fac. Sci. Tech., Tokyo Univ. Sci.)	3aX02 Ⓔ Molecular mechanisms to control the oxygen paradox in the nitrogen-fixing cyanobacterium *Leptolyngbya boryana*: Genetic analysis in the 50-kb *nif* gene cluster Sara Bakri, Mari Banba, Haruki Yamamoto, Hiroya Kotani, Kazuma Uesaka, Yuichi Fujita (Graduate School of Bioagricultural Sciences, Nagoya University)			09:15
3aF03 Elucidation of the molecular mechanisms of blue light-dependent starch degradation for stomatal opening Hiroki Ikuta[1], Shota Yamauchi[2], Atsushi Takemiya[3] ([1]Fac. Sci., Yamaguchi Univ., [2]Fac. Sci. Tech., Tokyo Univ. Sci., [3]Grad. Sch. Sci. Tech. Innov., Yamaguchi Univ.)	3aG03 Sulfate Transporter SULTR2;1 Adjusts the Bolting Timing by Transporting Sulfate from Rosette Leaves to the Primary Stem Khamsalath Soudthedlath[1], Toshiki Nakamura[1], Jutarou Fukazawa[2], Keishi Osakabe[3], Yuriko Osakabe[4], Akiko Maruyama[1] ([1]Dept. Biosci. Biotech., Kyushu Univ., [2]Grad. Sch. Integ. Sci. Life, Hiroshima Univ., [3]Grad. Sch. Technol, Tokushima Univ., [4]Sch. Life Sci. Technol., Tokyo Inst. Technol.)	3aH03 Analyses of Cellular Dynamics Regulated by WOXs During Arabidopsis Shoot Regeneration Yuki Doll, Momoko Ikeuchi (Div. Bio. Sci., Grad. Sch. Sci. Tech., NAIST)	3aX03 Unraveling the role of a long noncoding RNA in the regulation of NLR-mediated plant Immunity Misaki Chino[1], Takuto Matsunaga[1], Yuta Ueda[1], Tokuji Tsuchiya[2] ([1]Grad. Sch. ALS., Univ. Nihon, [2]Coll. Biores. Sci., Univ. Nihon)			09:30
3aF04 Investigation for novel stomatal opening signaling factors using stomatal opening inhibitors and its derivatives Shogo Kuwayama[1], Koji Takahashi[1], Yuki Hayashi[1], Kohei Fukatsu[1], Maki Hayashi[2], Ayato Sato[3], Toshinori Kinoshita[1,3] ([1]Grad. Sch. Sci., Nagoya Univ., [2]Grad. Sch. Life Sci., Tohoku Univ., [3]ITbM, Nagoya Univ.)	3aG04 Casparian strips prevent apoplastic diffusion of excess B into root steles Keita Muro[1], Jio Kamiyo[2], Junpei Takano[1] ([1]Grad. Sch. Agr., Osaka Metropolitan Univ., [2]Grad. Sch. Life Environ. Sci., Osaka Pref. Univ.)	3aH04 WOX13 Suppresses Pluripotency Acquisition in Callus via Down-regulation of Root Regulator Gene Expression Eri Odaira, Momoko Ikeuchi (NAIST)	3aX04 The Homeologs Involved in MBW-Complex Regulating Anthocyanin Biosynthesis in Perilla Frutescens Moe Furuya[1], Ryosuke Sugiyama[1,2], Fu-ka Kakinoki[1], Mami Yamazaki[1,3] ([1]Grad. Sch. Pharm. Sci., Chiba Univ., [2]JST PRESTO, [3]PMSC, Chiba Univ.)			09:45
3aF05 Intermolecular autophosphorylation of phototropin during the chloroplast avoidance response in *Marchantia polymorpha* Minoru Noguchi[1,2], Yutaka Kodama[1,2] ([1]Ctr. Biosci. Res. Educ., Utsunomiya Univ., [2]Grad. Sch. Reg. Dev. Creat., Utsunomiya Univ.)	3aG05 Dauciform root formation and nutrient profiles of monocot plants found in poor nutrient soils in western Japan Jun Wasaki[1,2,3,4], Genki Masuda[1], Rie Matsuyama[2], Hayato Maruyama[1,5], Takayuki Nakatsubo[1,2,3], Ryusuke Inoue[3], Akihiro Yamamoto[6], Toshihiro Watanabe[5] ([1]Grad. Sch. Biosphere Sci., Hiroshima Univ., [2]Sch. Integr. Arts Sci., Hiroshima Univ., [3]GSISL, Hiroshima Univ., [4]Seto Inland Sea CN Research Center, Hiroshima Univ., [5]Res. Fac. Agric., Hokkaido Univ., [6]Hiroshima Botanical Garden)	3aH05 Ⓔ Brassinosteroid receptor-mediated regulation of tissue regeneration in *Arabidopsis* Ye Zhang[1], Kazuki Suita[1], Naoki Takahashi[2], Masaaki Umeda[1] ([1]Grad. Sch. Sci. & Tech., Nara Institute of Science and Technology, [2]Dep. Life Sci., Sch. Agr., Meiji Univ.)	3aX05 GESENI (GEne Silencing based on ENcoded protein's Intracellular localization) in *Arabidopsis* sperm cells Yukinosuke Ohnishi[1,2], Tomokazu Kawashima[1] ([1]Dept. Plant&Soil Sci., Univ. Kentucky, [2]Dept. Sci., Tokyo Metropolitan Univ.)			10:00

Ⓔ=Presentation in English

● Day 3, Tue., March 19, AM (9:00–12:00)

Time	Room A	Room B	Room C	Room D	Room E
	Photosynthesis	Plant hormones/ Signaling molecules	Cell wall	Cell cycle/Cell division	Plant-organism interaction B
10:15	3aA06 The relation between photosynthetic assimilation and interspecific variations in the rate constants of photo-damage and repair of photosystem II among woody species Shoko Tsuji[1], Masaru Kobayashi[1], Kentaro Ifuku[1], Kouki Hikosaka[2] ([1]Grad. Sch. Agric., Kyoto Univ., [2]Grad. Sch. Life Sci., Tohoku Univ.)	3aB06 Elucidating Arabidopsis root growth mechanisms with an engineered GA-GID1 pair Yuichiro Yagami[1], Ryotaro Yamada[1], Yuuma Ishikawa[2], Shinya Hagihara[3], Masayoshi Nakamura[4] ([1]Grad. Sch. Sci., Univ. Nagoya, [2]HHU Düsseldorf, [3]Center for Sustainable Resource Science, RIKEN, [4]ITbM, Univ. Nagoya)	3aC06 Cell wall changes during cold acclimation and deacclimation may affect both freezing tolerance and growth Tatsuya Kutsuno, Toshihisa Kotake, Daisuke Takahashi (Grad. Sch. Sci. Eng., Saitama Univ.)	3aD06 Live imaging of pollen development and the mechanism of germ cell differentiation by inducing cell division Shiori Nagahara[1,2], Daisuke Maruyama[3], Shohei Yamaoka[4], Yoko Mizuta[2,5] ([1]Grad. Sch. Sci., Kyoto Univ., [2]WPI-ITbM, Nagoya Univ., [3]Kihara Inst. Biol. Res., Yokohama City Univ., [4]Grad. Sch. Biostudies, Kyoto Univ., [5]IAR, Nagoya Univ.)	3aE06 Comparison of infection processes of pathogenic or beneficial strains of *Colletotrichum tofieldiae* into host *Arabidopsis thaliana* roots Takeshi Higa, Masami Nakamura, Kei Hiruma (Grad. Sch. Arts and Sci., Univ. Tokyo)
10:30	3aA07 Comparative Genome Analysis Revealed That A Universal Stress Protein Regulates State Transitions In *Synechocystis* sp. PCC 6803 Tsukasa Fukunaga[1], Takako Ogawa[2,3], Wataru Iwasaki[4], Kintake Sonoike[2] ([1]WIAS, Waseda Univ., [2]Fac. Edu. Int. Arts. Sci., Waseda Univ., [3]Grad. Sch. Sci. Eng., Saitama University, [4]Dep. Int. Bio., Grad. Sch. Fro. Sci., Univ. Tokyo.)	3aB07 Analysis of crosstalk between ABA and GA via DELLA protein Nozomi Okonogi, Yuki Taninaga, Seitaro Nakabayasi, Yohsuke Takahasi, Jutarou Fukazawa (Grad. Sch. Int. Sci., Hiroshima Univ.)	3aC07 The desiccation tolerance exhibited by *Selaginella tamariscina* may be attributable more to the cell wall than to trehalose Takuma Kikuchi[1], Momoka Ohashi[2], Yasuko Kaneko[3], Toshihisa Kotake[1], Daisuke Takahashi[1] ([1]Grad. Sch. Sci. Eng., Saitama Univ., [2]Dept. Biochem. Mol. Bio., Fac. Sci., Saitama Univ., [3]Dept. Nat. Sci., Fac. Edu., Saitama Univ.)	3aD07 Subcellular Localization of Meiosis-Spesific Cyclin SDS in Pollen Mother Cells of Arabidopsis thaliana Yoshitaka Azumi, Tatsuma Fujimura (Faculty of Science, Kanagawa University)	3aE07 E Root Endophyte *Colletotrichum tofieldiae* Recruits Beneficial Bacteria To Roots And Promotes Plant Growth By Facilitating Plant Nitrogen Uptake Under Nitrogen-Limiting Conditions Tan Anh Nhi Nguyen, Masami Nakamura, Koji Tokunaga, Kei Hiruma (Grad. Sch. Art. Sci., Univ. Tokyo)
10:45	3aA08 Phosphatidylglycerol is involved in regulating gene expression in chloroplasts Kousei Noto[1], Koichi Kobayashi[2], Yusuke Kawashima[3], Masaki Ishikawa[3], Sho Fujii[1] ([1]Fac. Agric. Life Sci., Univ. Hirosaki, [2]Fac. Lib. Arts Sci. Global Edu., Univ. Osaka Metro, [3]Kazusa DNA Res. Inst)	3aB08 E EIN3-independent activation of B3-Raf kinase by the EIN2-like Nramp-family protein in regulating the ABA responses in the moss *Physcomitrium patens* Md. Masudul Karim[1,3], Kanata Hirota[1], Miyabe Marcos Takeshi[2], Yoichi Sakata[2], Daisuke Takezawa[1] ([1]Graduate School of Science and Engineering, Saitama University, Saitama, 338-8570, Japan, [2]Department of Bioscience, Tokyo University of Agriculture, 1-1-1 Sakuragaoka, Setagaya-ku, Tokyo 156-8502, Japan, [3]Department of Crop Botany, Bangladesh Agricultural University, Mymensingh-2202, Bangladesh)	3aC08 Identification of transcription factors involved in secondary cell wall formation of xylem cells in *Cryptomeria japonica* Ryosuke Sato[1], Yoshihiko Nanasato[1], Soichiro Nagano[2], Ken-ichi Konagaya[1], Toru Taniguchi[1], Naoki Takata[1] ([1]Forest Bio-Res. Ctr., FFPRI., [2]Forest Tree Breed. Ctr., FFPRI.)	3aD08 E CHH hypermethylation at 24PHAS loci during meiosis in rice male meiocytes Huong Ta[1], Taiji Kawakatsu[2], Atsushi Toyoda[3], Mutsuko Nakano[1], Ken-Ichi Nonomura[1,4] ([1]Plant Cytogenet., NIG, [2]Inst. Crop Sci., NARO, [3]Comparative Genet., NIG, [4]SOKENDAI)	3aE08 Exploring beneficial associations of plants with leaf-inhabiting bacteria that manipulate stomatal movement Rikako Hirata[1], Momoko Takagi[2], Yuniar Devi Utami[3], Kei Hiruma[3], Yosuke Toda[2,4], Akira Mine[1] ([1]Grad. Sch. Agr., Kyoto Univ., [2]ITbM, Nagoya Univ., [3]Grad. Sch. Arts and Sci., Tokyo Univ., [4]Phytometrics Co., Ltd.)
11:00	3aA09 Analysis of the Role of Chloroplast DNA in the Structural Formation of Pyrenoids, the Carbon Fixation Accelerator in Chlamydomonas Haruki Kanazawa, Aine Kawashima, Mari Takusagawa, Toshiharu Shikanai, Yoshiki Nishimura (Grad. Sch. Sci., Univ. Kyoto)	3aB09 E Reactive carbonyl species production mediated by endogenous abscisic acid in methyl jasmonate induced stomatal closure Oumayma Shaiek[1], Toshiyuki Nakamura[1], Yoshimasa Nakamura[1], Jun' ichi Mano[2], Shintaro Munemasa[1], Yoshiyuki Murata[1] ([1]Grad. Sch. of Environ. Life Sci., Okayama Univ., [2]Science Research Center, Yamaguchi University)	3aC09 High time-resolution transcriptome analysis reveals a novel strategy of transcriptional regulation of xylem vessel cell differentiation Atsushi Yamamoto[1], Ryosuke Sano[2], Taku Demura[2,3], Misato Ohtani[1,2,3] ([1]Grad Sch Front Sci, Univ Tokyo, [2]Div Biol Sci, Grad Sch Sci Tech, NAIST, [3]RIKEN CSRS)		3aE09 E Understanding multiple association parasitism dynamics using root hemiparasite *Phtheirospermum japonicum* and host(s) *Arabidopsis thaliana* grown in split-root systems with isotope tracing Clarissa F. Frederica[1], Louis J. Irving[2] ([1]Grad. Sch. Sci. Tech., Univ. of Tsukuba, [2]Fac. Life Environ. Sci., Univ. of Tsukuba)
11:15	3aA10 Phenotypic analysis of the Arabidopsis PsbP-D139N mutant generated by base-substitution genome editing Ko Imaizumi[1], Shin-ichi Arimura[2], Kentaro Ifuku[1] ([1]Grad. Sch. Agric., Kyoto Univ., [2]Grad. Sch. Agric. Life Sci., Univ. Tokyo)	3aB10 Analysis of SA & JA Dose-dependent responses of *Arabidopsis* by large-scale transcriptome Atsuki Tomita[1,2], Taro Maeda[2,3], Natsumi Mori-Moriyama[3], Yasuyuki Nomura[3], Yuko Kurita[4], Makoto Kashima[5], Masaru Tomita[1], Shigeyuki Betsuyaku[6], Atsushi J. Nagano[2,3,6] ([1]Dept. Env. & Info. Studies., Keio Univ., [2]IAB, Keio Univ., [3]Res. Inst. Food Agr., Ryukoku Univ., [4]Fac. Agr., Tokyo Univ., [5]Faculty of Sci., Toho Univ., [6]Fac. Agr., Ryukoku Univ.)	3aC10 E Functional analysis of microRNAs involved in xylem vessel cell differentiation in Arabidopsis Chotiros Phaisomboon[1,2], Tian Tian Tan[3], Ryosuke Sano[3], Taku Demura[3,4], Misato Ohtani[1,3,4] ([1]Grad Sch Front Sci, Univ Tokyo, Japan, [2]Inst Mol Biosci, Mahidol Univ, Thailand, [3]Div Biol Sci, Grad Sch Sci Tech, NAIST, Japan, [4]RIKEN CSRS, Japan)		3aE10 Elucidation of the mechanism of action of haustorium inhibitors using a model parasitic plant, Phtheirospermum japonicum Saori Suga[1], Ryoga Inoue[1], Ayato Sato[2], Takamasa Suzuki[3], Satoko Yoshida[1] ([1]Bioscience., NAIST, [2]ITbM., Univ. Nagoya, [3]Grad. Biological Chemistry., Univ. Chubu)

Room F	Room G	Room H	Room X	Room Y	Room Z	Time
Photoreceptors/Photoresponses	Biomembrane/ Ion and solute transport	Development/Morphogenesis	Genome function/Gene regulation			
3aF06 UVB-induced chloroplast movement and its physiological significance Momo Otake[1], Noriyuki Suetsugu[2], Atsushi Takemiya[3], Eiji Gotoh[4], Masamitsu Wada[5], Jun Hidema[1] ([1]Grad. Sch. Life Sci., Tohoku Univ., [2]Grad. Sch. Arts Sci., Univ. Tokyo, [3]Grad. Sch. Sci. Tech. for innov., Yamaguchi Univ., [4]Fac. Agr., Kyushu Univ., [5]Grad. Sch. Sci., Tokyo Metropolitan Univ.)	3aG06 Producing iron deficiency tolerant poplar by the introduction of iron reductase and nicotianamine synthase genes Hiroshi Masuda[1], Takumi Narita[1], May Sann Aung[1], Keisuke Maeda[2], Shingo Sakamoto[3], Takanori Kobayashi[2], Mikiya Katsuta[1], Atsushi Ogawa[1], Hiroki Rai[1], Takehiko Matsumoto[1], Hiroyuki Hattori[1], Nobutaka Mitsuda[3], Naoko Nishizawa[2] ([1]Akita Pref. Univ., [2]Ishikawa Pref. Univ., [3]Adv. Ind. Sci. Tech (AIST))	3aH06 Microscopic and pharmacological studies of nucleolar development during plant cell dedifferentiation in three different tissue culture systems Ryuu Morikawa[1], Takaaki Yonekura[1], Hatsune Morinaka[2], Shunji Shimadzu[1,3], Yuki Kondo[3], Iwai Ohbayashi[4,5], Munetaka Sugiyama[1] ([1]Dept. Biol. Sci., Grad. Sch. Sci., Univ. Tokyo, [2]CSRS, RIKEN, [3]Dept. Biol., Grad. Sch. Sci., Kobe Univ., [4]Dept. Life Sci., Natl. Cheng Kung Univ., [5]Inst. Trop. Plant Sci. Microbiol., Natl. Cheng Kung Univ.)	3aX06 E SigF1-dependent activation of the *pilA1* promoter and the promoter sequence determinants in a cyanobacterium *Synechococcus elongatus* PCC 7942 Ying Luo[1,2], Yu Hirose[3], Kan Tanaka[2] ([1]Sch. Life. Sci. and Tech., Tokyo Tech, [2]Chem. and Life. Sci., Inst. innov. Res., Tokyo Tech, [3]Dept of Appl. Chem. and Life Sci., Toyohashi Tech)	Symposium S09 Bio-metal Strategies of Living Organisms (9:00–11:50)		10:15
3aF07 Novel function of CDKA in regulation of light responses Sakuta Miyazaki[1], Natsumi Inoue[2], Masaki Ishikawa[3], Mitsuyasu Hasebe[3], Masami Sekine[4], Tomomichi Fujita[2] ([1]Grad Sch Life Sci, Hokkaido Univ., [2]Fac Sci, Hokkaido Univ., [3]Div Evol Biol., NIBB, [4]Fac Bior Envi Sci, Ishikawa Pref Univ.)	3aG07 Autophagy forms Vertical Leaf Nitrogen Gradient in the Rice Plant Population on Paddy Fields contributing to Protein Degradation at Lower Leaves Wataru Kikuchi, Hiroyuki Ishida (Grad. Sch. Agri. Sci., Univ. Tohoku)	3aH07 MpRLF, a cytochrome b_5-like heme binding domain protein, is necessary for proper vegetative and reproductive development in *Marchantia polymorpha* Kentaro Iwata[1], Hinatamaru Fukumura[1], Yuuki Sakai[1], Tomoyuki Furuya[1,2], Yuki Kondo[1], Kimitsune Ishizaki[1], Hidehiro Fukaki[1] ([1]Grad. Sch. Sci., Kobe Univ., [2]Col. Life Sci., Ritsumeikan Univ.)	3aX07 Sliding mechanism by 80S ribosome in the 5' untranslated region Mayuki Tanaka[1], Takeshi Yokoyama[2,3], Hironori Saito[4,5], Naoyuki Sotta[6], Mikako Shirouzu[3], Shintarou Iwasaki[4,5], Takuhiro Ito[3], Toru Fujiwara[6] ([1]Grad. Sch. Agr., Osaka Metropolitan Univ, [2]Grad. Scf. of Life Sci., Tohoku Univ., [3]Riken·BRD, [4]Riken·CPR, [5]Grad. Sch. of Front. Sci., Univ. of Tokyo, [6]Grad. Sch. of Agri. and Life Sci., Univ. of Tokyo)			10:30
3aF08 Subcellular localization analysis of the B4-type Raf-like kinase PRAF in *Marchantia polymorpha* Shota Yamauchi[1], Nodoka Handa[1], Asuka Shintaku[2], Eri Koide[2], Megumi Iwano[2], Takayuki Kohchi[2], Ryuichi Nishihama[1] ([1]Dept. Appl. Biol. Sci., Fac. Sci. and Tech., Tokyo Univ. of Sci., [2]Grad. Sch. Biostudies, Kyoto Univ.)	3aG08 OsbZIP1 regulates phosphorus uptake and nitrogen utilization, contributing to improved yield Nobuhiro Tanaka[1], Saki Yoshida[2], Saiful Islam[2], Kiyoshi Yamazaki[2], Toru Fujiwara[2], Yoshihiro Ohmori[3] ([1]NARO Institute of crop science, [2]Graduate School of Agricultural and Life Sciences, The University of Tokyo, [3]Agricultural Bioinformatics Research Unit, Graduate School of Agricultural and Life Sciences, The University of Tokyo)	3aH08 Regulatory mechanisms and contribution of morphogenesis of plasma membrane H^+-ATPase in the liverwort *Marchantia polymorpha* Miya Mizutani[1,2], Kotaro Nakane[2], Okumura Masaki[2], Tameo Yo[2], Syu Tanaka[2], Shin-ichiro Inoue[2], Toru Fujiwara[3], Takehiro Kamiya[3], Naoyuki Sotta[3], Ryuichi Nishihama[4], Kimitsune Ishizaki[5], Toshinori Kinoshita[1,6] ([1]NAIST·Div. of Bio. Sci., [2]Div. of Biol. Sci., Grad. Sch. of Sci., Nagoya Univ., [3]Dept. Appl. Biol. Chem. Grad. Sch. Agric. Life Sci. Univ. Tokyo, [4]Dept. of Applied Biol. Sci., Fac. of Sci. Tech Tokyo Univ. of Sci., [5]Dept. of Bio., Grad. Sh. Of Sci., Kobe Univ., [6]WPI-ITbM, Nagoya Univ.)	3aX08 E Effect of ribosomal mutations that suppress the phenotype of a thermospermine-requiring mutant on the translation regulation of uORF-containing mRNAs in *Arabidopsis* Tomohiko Toyoshima, Yuichi Nishii, Kouki Mutsuda, Taku Takahashi (Grad. Sch., Univ. Okayama)			10:45
3aF09 AtCFI is essential for maintaining the diversity at the 3' ends of pre-mRNA Xiaojuan Zhang[1], Łukasz Szewc[2], Mateusz Bajczyk[2], David Bielewicz[3], Kei Yura[4,5,6], Miku Odoi[1], Mariko Kato[1], Marta Garcia-León[7], Vicente Rubio[7], Mika Nomoto[8], Yasuomi Tada[8], Tsuyoshi Furumoto[9], Zofia Szweykowska-Kulińska[2], Dorothee Staiger[10], Takashi Aoyama[1], Artur Jarmołowski[2], Tomohiko Tsuge[1] ([1]ICR, Kyoto Univ., [2]Inst. Mol. Biol. Biotech., Adam Mickiewicz Univ., [3]WCAT, [4]Sch. Adv. Sci. Eng., Waseda Univ., [5]Grad. Sch. Humanit. Sci., Ochanomizu Univ., [6]Ctr. Interdiscip. AI and Data Sci., Ochanomizu Univ., [7]CNB-CSIC, [8]Ctr. Gene Res., Nagoya Univ., [9]Sch. Agric., Ryukoku Univ., [10]Biology, Bielefeld Univ.)	3aG09 Development of a method for collection of rice phloem sap by a DIY insect-laser device Naoki Yamaji, Tomonori Shinya, Namiki Mitani-Ueno, Ivan Galis, Jian Feng Ma (IPSR, Okayama Univ.)	3aH09 Comprehensive analysis of a chromatin remodeling factor involved in *de novo* shoot regeneration in plants Ayaka Horie[1], Takuya Sakamoto[2], Hikaru Sato[1], Yayoi Inui[1], Yutaka Suzuki[3], Sachihiro Matsunaga[1] ([1]Dept. Integr. Biosci., Grad. Sch. Front. Sci., Univ. Tokyo, [2]Dept. Sci., Fac. Sci., Kanagawa Univ, [3]Dept. Comput. Biol. Med. Sci., Grad. Sch. Front. Sci., Univ. Tokyo)	3aX09 Thermospermine-insensitive mutations affect mRNA translation of the *SAC51* family genes in *Arabidopsis* Mitsuru Saraumi, Takahiro Tanaka, Taku Takahashi (Grad. Sch. Sci., Univ. Okayama)			11:00
3aF10 Non-enzymatic Production of Bilirubin in Chloroplasts Kazuya Ishikawa[1,2], Xiaonan Xie[1], Atsushi Miyawaki[3], Keiji Numata[4,5], Yutaka Kodama[2,5] ([1]Grad. Sch. Med. Dent. Pharm., Okayama Univ., [2]Ctr. Biosci. Res. Educ., Utsunomiya Univ., [3]CBS, RIKEN, [4]Dept. Eng., Kyoto Univ., [5]CSRS, RIKEN)	3aG10 Functional analysis of Na^+-coupled phosphate transporter of *Chara braunii* Tetsuro Mimura[1,2], Hitomi Fujiwara[2], Naoki Muranishi[2], Miwa Ohnishi[2,3], Tomoaki Nishiyama[4], Satomi Kanno[5], Kimitsune Ishizaki[2], Hidehiro Fukaki[2], Hidetoshi Sakayama[2], Robert Reid[6], Maki Katsuhara[7] ([1]KUAS, Fac Bioenviron Sci, [2]Kobe Univ, Grad Sch Sci, [3]Kyoto Univ, Grad Sch Sci, [4]Kanazawa Univ, ReCEMHD, [5]Nagoya Univ, Inst Adv Res, [6]Fac Sci Eng Tech, Univ Adelaide, [7]Okayama Univ, IPSR)	3aH10 Exploring interacting factors with a histone demethylase LDL3 Nodoka Handa[1], Hikaru Sato[1], Takuya Sakamoto[2], Akira Nozawa[3], Tatsuya Sawasaki[3], Sachihiro Matsunaga[1] ([1]Dept. Integr. Biosci., Grad. Sch. Front. Sci., Univ. Tokyo, [2]Dept. Sci., Fac. Sci., Kanagawa Univ., [3]PROS, Ehime Univ.)	3aX10 E An Inner Dinochromosome Compartment Joseph Tin Yum Wong, Alvin Chun Man Kwok, Kosmo Hing Ting Yan, Chongping Li (Hong Kong University of Science And Technology)			11:15

E=Presentation in English

● Day 3, Tue., March 19, AM (9:00–12:00)

Time	Room A	Room B	Room C	Room D	Room E
	Photosynthesis	Plant hormones/ Signaling molecules	Cell wall	Cell cycle/Cell division	Plant-organism interaction B
11:30	3aA11 Pleiotropic physiological functions of FZL, a thylakoid-localized dynamin-like protein Yu Ogawa[1], Megumi Iwano[2], Akihiro Kawamoto[3], Genji Kurisu[3], Toshiharu Shikanai[4], Wataru Sakamoto[1] ([1]IPSR, Okayama Univ., [2]Grad. Sch. Bio., Kyoto Univ., [3]IPR, Osaka Univ., [4]Grad. Sch. Sci., Kyoto Univ.)	3aB11 Analysis for the novel factor BIL7 regulating transcription factor in BR signaling pathway Kaisei Nishida[1], Yusuke Nakamura[1], Ayumi Yamagami[1], Takehiro Suzuki[2], Takuya Miyakawa[1], Minami Matsui[2], Shozo Fujioka[2], Tadao Asami[3], Takeshi Nakano[1] ([1]Grad. Sch. Sci., Univ. Kyoto, [2]Riken·CSRS, [3]Grad. Sch. Crop., Univ. Tokyo)	3aC11 E Xyloglucan endotransglucosylase/ hydrolase genes may contribute to tissue adhesion during graft healing Mu Xiong[1,2], Ting Zhang[1], Xin Qian[1], Ling Li[1], Zhilong Bie[1], Ken-ichi Kurotani[3], Yuan Huang[1], Michitaka Notaguchi[2,3,4] ([1]Grad. Sch. Hort. For., Univ. Huazhong Agri., [2]Grad. Sch. Bioagri. Sci., Univ. Nagoya, [3]Biosci. Biotech. Center., Univ. Nagoya, [4]Grad. Sch. Sci., Univ. Kyoto)		3aE11 Analysis of Invasion Mechanism of Parasitic Plant, *Phtheirospernum japonicum* Chiharu Ito[1], Songkui Cui[2], Takamasa Suzuki[3], Satoko Yoshida[1] ([1]Bio. sci., NAIST, [2]KIB, [3]Bio. sci. and Biotech., Chubu Univ.)
11:45		3aB12 Functional analysis of a strigolactone receptor D14 of *Fragaria* in vegetative reproduction Rino Yoshida[1], Tomoko Miyaji[2], Taiko Kim Tou[1], Anzu Minami[3,4], Keiichi Mochida[3,4], Tadaomi Furuta[1], Satoshi Kidokoro[1], Keishi Osakabe[2], Yuriko Osakabe[1] ([1]Sch. of Life Sci. & Tech., Tokyo Tech., [2]Grad. Sch. of Tech., Ind. & Soc. Sci., Tokushima Univ., [3]RIKEN CSRS, [4]Kihara Institute for Biological Research, Yokohama City Univ.)	3aC12 E Chemical screening to identify graft promoting molecules in Fabaceae Qianqian Luo[1], Xueyao Shu[1], Ayato Sato[2], Yaichi Kawakatsu[3], Ryoko Morinobe[1], Lalita Jantean[1], Hejin Son[1], Ken-ichi Kurotani[3], Michitaka Notaguchi[1,3,4] ([1]Grad. Sch. Bioagri. Sci., Univ. Nagoya, [2]Inst ITbM., Univ. Nagoya, [3]Biosci Biotech Center., Univ. Nagoya, [4]Grad. Sch. Sci., Univ. Kyoto)		3aE12 Gene expression analysis of light-dependent host recognition in the parasitic plant *Cuscuta campestris* Toshiya Yokoyama[1], Akira Watanabe[2], Mariko Asaoka[2], Kazuhiko Nishitani[2] ([1]Grad. Sch. Sci., Kanagawa Univ., [2]Fac. Sci., Kanagawa Univ.)

Room F	Room G	Room H	Room X	Room Y	Room Z	Time
Photoreceptors/Photoresponses	Biomembrane/ Ion and solute transport	Development/Morphogenesis	Genome function/Gene regulation			
3aF11 Unique eyespot and phototaxis of *Euglena gracilis* revealed by altered carotenoid composition Shun Tamaki[1], Shota Kato[2], Kazunari Ozasa[3], Tomoko Shinomura[4], Keiichi Mochida[1,5,6,7] ([1]RIKEN CSRS, [2]Symbiobe Inc., [3]RIKEN RAP, [4]Dep. Biosci., Fac. Sci. Eng., Teikyo Univ., [5]RIKEN BZP, [6]Yokohama City Univ., [7]Nagasaki Univ.)	3aG11 Critical roles of rhizoids in phosphate uptake in the non-vascular plant *Marchantia polymorpha* Satomi Kanno[1], Hinatamaru Fukumura[2], Haruya Kita[2], Shiori Sato[2], Yuuki Sakai[2], Tetsuro Mimura[2,3], Yuki Kondo[2], Hidehiro Fukaki[2], Kimitsune Ishizaki[2] ([1]Nagoya Univ, Inst. Adv. Res., [2]Grad. Sch. Sci. Kobe University, [3]KUAS, Fac. Bioenviron. Sci.)	3aH11 Ⓔ Analysis of a blue light receptor CRY1 during plant regeneration Min Li[1], Hikaru Sato[1], Takuya Sakamoto[2], Yayoi Inui[1], Kazunari Yamamoto[1], Tomonao Matsushita[3], Sachihiro Matsunaga[1] ([1]Grad. Sch. of Front. Sci., Univ. Tokyo, [2]Grad. Sch. Sci., Univ. Kanagawa, [3]Grad. Sch. Sci., Univ. Kyoto)		Symposium S09 Bio-metal Strategies of Living Organisms (9:00–11:50)		11:30
3aF12 Light- and temperature-dependent regulation of colony cell number in the green microalga *Pediastrum duplex* Akari Masaki[1,2], Tomoko Shinomura[3], Yutaka Kodama[1,2] ([1]Ctr. Biosci. Res. Educ., Utsunomiya Univ., [2]Grad. Sch. Reg. Dev. Creat., Utsunomiya Univ., [3]Fac. Sci. Eng., Teikyo Univ.)	3aG12 Ⓔ Exploring the intercellular plasmodesmal protein transport in *Marchantia polymorpha* Kuan-Ju Lu, Chia-Yun Hsu, Pin-Lun Lin, Chia-Huan Hsu, Hui-Yu Chang (Graduate Institute of Biotechnology, NCHU)	3aH12 Ⓔ HY5 determines the new meristem fate in response to light signals during *de novo* organogenesis Yu Chen[1,2], Yetkin Çaka Ince[2], David S. Favero[2], Ayako Kawamura[2], Takamasa Suzuki[3], Keiko Sugimoto[1,2] ([1]Grad. Sch. Sci., The Univ. of Tokyo, [2]CSRS, RIKEN, [3]Col. Biosci. Biotech., Chubu Univ.)				11:45

Ⓔ=Presentation in English

● Day 3, Tue., March 19, PM (13:30–16:30)

Time	Room A	Room B	Room C	Room D	Room E
	Photosynthesis				Plant-organism interaction B
13:30	3pA01 Arabidopsis *gln2-3* mutant is semi-acclimated to photorespiratory environments for photosynthesis Hayato Sato[1], Shinya Wada[1], Keiki Ishiyama[2], Haruka Kitagawa[1], Takanori Maruta[3], Chikahiro Miyake[1] ([1]Grad. Sch. Agri. Sci., Univ. Kobe, [2]Grad. Sch. Agri. Sci., Univ. Tohoku, [3]Fac. Life Environ. Sci., Univ. Shimane)				3pE01 Elucidating the potential adaptability of algae in fish embryos Yoji Okabe[1], Shoji Oda[1], Kintake Sonoike[2], Yayoi Tsujimoto-Inui[1], Tomoko Matsunaga[1], Shinichiro Maruyama[1], Sachihiro Matsunaga[1] ([1]Grad. Sch. Front. Sci., Univ. Tokyo, [2]Fac. Edu., Waseda Univ.)
13:45	3pA02 CCM expression response of marine diatom under nitrogen deprevation Momoka Amano, Ginga Shimakawa, Yusuke Matsuda (Grad. Sch. Biosci., Kwansei Gakuin Univ.)				3pE02 Environmental response of kleptoplastic sea slug based on comparative omics analysis Taro Maeda[1], Masaru Mori[2], Atsushi J. Nagano[1,3] ([1]IAB, Keio Univ., [2]Fac. Agri., Ryukoku Univ., [3]Inst. Innov. Fut. Soc., Nagoya Univ.)
14:00	3pA03 E Fluorescence transient shape provide information on phytoplankton growth rate, pigment content, and photoacclimation strategy Matthew Brown, Yusuke Matsuda (Kwansei Gakuin University)				3pE03 E Genome-wide association study of rice cultivation related with iron-reducing bacteria abundance in paddy soils Li-Yen Lin[1], Zhihang Feng[1], Hikaru Asano[2], Yoshihiro Ohmori[3], Hirotomo Ohba[4], Yoko Masuda[1,5], Keishi Senoo[1,5], Toru Fujiwara[1] ([1]Grad. Sch. Agr. Life Sci., Univ. Tokyo, [2]Tokyo Coll. Biotech., [3]Agri. Bioinfo. Res. Unit, Grad. Sch. Agr. Life Sci., Univ. Tokyo, [4]Niigata Agr. Res. Inst., [5]Collab. Res. Inst. Innov. Micro., Univ. Tokyo)
14:15	3pA04 The role of the Tyr stacked on the FAD in ferredoxin-NADP$^+$ oxidoreductase: regulation of photosensitivity and stabilization of FAD hydroquinone Daisuke Seo (Grad. Sch. Nat. Sci. Tec., Kanazawa Univ.)				3pE04 Immune receptor and symbiosis regulator-mediated root colonization of a plant growth-promoting bacterium in rice Masahiro Nagayasu[1], Kanako Inoue[1], Shota Kido[1], Masanao Sato[2], Masako Fuji[1], Yushin Suzuki[1], Takumi Murakami[3], Mutsumi Watanabe[1], Takayuki Tohge[1], Yusuke Saijo[1] ([1]Grad. Sch. Sci and Tech., NAIST, [2]Grad Sch Agri., Hokkaido University, [3]Sch. Life Sci. and Tech., Tokyo Tech)
14:30	3pA05 A novel secretion system of chlorophyll intermediates via extracellular vesicles in the cyanobacterium *Leptolyngbya boryana* Kentaro Usui[1], Haruki Yamamoto[1], Takao Oi[1], Mitsutaka Taniguchi[1], Hitoshi Mori[1,2], Yuichi Fujita[1] ([1]Gra. Sch. Bioagr., Univ. Nagoya, [2]Inst. Glyco. Res. Univ. Nagoya)				3pE05 Regulation of nodule development in *Rhizobium* - *Lotus* interaction Yasuyuki Kawaharada (Facul. of Agri., Iwate Univ.)
14:45	3pA06 Assessment of Electron Influx into Photosystem I and Photoinhibition of Photosystem I under Chilling Stress Using a Saturating Light Pulse Ko Takeuchi[1], Shintaro Harimoto[2], Shinya Wada[3], Chikahiro Miyake[3], Kentaro Ifuku[1] ([1]Grad. Sch. Agri., Kyoto Univ., [2]Fac. Agri., Kyoto Univ., [3]Grad. Sch. Agri., Kobe Univ.)				3pE06 E Relationship between the plant cell wall and the symbiotic microbes in the infection process, focusing on *COBRA* genes in *Lotus japonicus* Daniela Romero Montero, Akira Akamatsu, Naoya Takeda (Kwansei Gakuin University)

Room F	Room G	Room H	Room X	Room Y	Room Z	Time
Flowering/Clock		Development/Morphogenesis				
3pF01 Evolution of the photoperiod-dependent growth phase transition mechanisms in land plants Yoshihiro Yoshitake[1], Shogo Kawamura[1], Tomoaki Kajiwara[1], Ryuichi Nishihama[1,2], Shohei Yamaoka[1], Takayuki Kohchi[1] ([1]Grad. Sch. of Biostudies., Kyoto Univ., [2]Dept. Appl. Biol. Sci., Fac. Sci. Tech., Tokyo Univ. Sci.)		3pH01 Genetic Analysis of Leaf Morphology in *Chrysanthemum seticuspe* Koichi Toyokura[1], Yudai Fujita[1], Michiharu Nakano[1,2], Toshiaki Kozuka[1,3], Yuki Aruga[1], Kenji Taniguchi[1], Makoto Kusaba[1] ([1]Grad. Sch. Integr. Sci. Life, Hiroshima Univ., [2]Fac. Agri. Marine Sci., Kochi Univ., [3]COI-NEXT, College Sci. Eng., Kanazawa Univ.)		Symposium S10 [English] Multilayered Regulation of Plastid and Mitochondrial genomes and gene expression (13:30–16:30)		13:30
3pF02 Exploration of genes that link the circadian clock and flower opening of the Japanese morning glory (*Ipomoea nil*) Soya Nakagawa[1,2], Hiroyo Nishide[1], Sachiko Tanaka[1], Atsushi Hoshino[1,2] ([1]NIBB, [2]Sch. Life Sci., SOKENDAI)		3pH02 Arabidopsis HOOKLESS1 controls leaf senescence in a non-cell autonomous manner Takashi Nobusawa, Makoto Kusaba (Grad. Sch. Int. Sci. Life, Hiroshima Univ.)				13:45
3pF03 Ⓔ Decoding Circadian Clock Genes In Chrysanthemums For Heat-Resilient Flowering Kavya Jayanthan[1], SharathKumar Malleshaiah[2,3], Tamotsu Hisamatsu[4], Yohei Higuchi[1] ([1]GSALS, The University of Tokyo, Japan, [2]HPP, Wageningen University and Research, The Netherlands, [3]Deliflor Chrysanthemum B.V, The Netherlands, [4]Institute of Vegetable and Floriculture Science, NARO, Japan)		3pH03 Ⓔ ATML1 Transcription Factor Regulates the Leaf ER Body Formation in Large Pavement Cells Alwine Wilkens[1], Mohamadreza Mirzaei[1,2], Kenji Yamada[1] ([1]Malopolska Cent. Biotec., Jagiellonian Univ., [2]Doct. Sch. Exact Nat. Sci., Jagiellonian Univ.)				14:00
3pF04 Quantitative changes in PRR5/TOC1 protein are important to keep the period length at physiologically relevant temperatures Akari Maeda, Hiromi Matsuo, Tomoaki Muranaka, Norihito Nakamichi (Grad. Sch. Bio-Agric., Nagoya Univ.)		3pH04 Ⓔ Submergence-Induced Epidermal Cell Chloroplasts Differentiation in Rorippa Aquatica Dwi Fajar Sidhiq[1], Shuka Ikematsu[2,3], Seisuke Kimura[2,3] ([1]Grad. Sch. Life Sci., Kyoto Sangyo Univ., [2]Fac. Life Sci., Kyoto Sangyo Univ., [3]Center for Plant Sci., Kyoto Sangyo Univ.)				14:15
3pF05 Ⓔ Circadian and environmental signal integration in a natural population of *Arabidopsis* Haruki Nishio[1,2], Dora L. Cano-Ramirez[3,4], Tomoaki Muranaka[5], Luíza Lane de Barros Dantas[6], Mie N. Honjo[1], Jiro Sugisaka[1], Hiroshi Kudoh[1], Antony N. Dodd[6] ([1]CER, Kyoto Univ., [2]DS Center, Shiga Univ., [3]SL, Univ. Cambridge, [4]Sch. Biol. Sci., Univ. Bristol, [5]Grad. Sch. Bioagri. Sci., Nagoya Univ., [6]Dep. Cell Dev. Biol., John Innes Centre)		3pH05 Effect of environmental conditions on seed germination and seedling growth of *Cuscuta campestris* Koki Nagao[1], Taku Takahashi[1], Ryusuke Yokoyama[2] ([1]Grad. Sch. Sci., Univ. Okayama, [2]Grad. Sch. Sci., Univ. Tohoku)				14:30
3pF06 Formularization of the Non-cell-autonomous Circadian Rhythm Component Generally Found in Time Series of the Bioluminescence Reporter Activity in Duckweed Plants Yu Horikawa[1], Emiri Watanabe[2], Di Luo[1], Shogo Ito[1], Tokitaka Oyama[1] ([1]Grad. Sch. Sci., Kyoto Univ., [2]Grad. Sch. Fron. Sci., Univ. Tokyo)		3pH06 TCP-signaling pathways in the regulation of cell expansion in Arabidopsis thaliana Tomotsugu Koyama[1], Nobutaka Mitsuda[2], Motoaki Seki[3], Koji Takahashi[4,5], Toshinori Kinoshita[4,5], Ayumu Bessho[6], Tadashi Kunieda[6,7], Taku Demura[6,7], Masaru Ohme-Takagi[8] ([1]Suntory Foundation for Life Sciences, [2]AIST, Bioproduction Research Institute, [3]RIKEN, Center for Sustainable Resource Science, [4]Nagoya University, Graduate School of Science, [5]Nagoya University, ITbM, [6]Nara Institute of Science and Technology, Division of Biological Science, [7]Nara Institute of Science and Technology, Center for Digital Green-innovation, [8]Saitama University, Graduate School of Science and Engineering)				14:45

Ⓔ=Presentation in English

● Day 3, Tue., March 19, PM (13:30–16:30)

Time	Room A	Room B	Room C	Room D	Room E
	Photosynthesis				Plant-organism interaction B
15:00	3pA07 Carboxylate ligand formation by post-translational conversion of aliphatic amino acids in the photosynthetic O_2-evolving complex Hatsune Mizue[1], Takehiro Suzuki[2], Takumi Matsubara[1], Tomomi Kitajima-Ihara[1], Minako Hirano[1], Yuichiro Shimada[1], Yuki Kato[1], Naoshi Dohmae[2], Takumi Noguchi[1] ([1]Grad. Sch. Sci., Univ. Nagoya, [2]RIKEN CSRS)				3pE07 The Role of *cis-trans* isomerase Cyclophilin in Rhizobial Infection Takashi Goto[1], Yasuyuki Kawaharada[2], Masayoshi Kawaguchi[1,3] ([1]National Institute for Basic Biology, [2]Iwate University, [3]The Graduate University for Advanced Studies)
15:15	3pA08 Construction of F_X-less Mutant Photosynthetic Reaction Center Complex in the Green Sulfur Bacterium *Chlorobaculum tepidum* Tomomi Inagaki[1], Yukie Kojima[2], Kazuki Terauchi[1], Chihiro Azai[2] ([1]Graduate School of Life Sciences, Ritsumeikan University, [2]Graduate School of Science and Engineering, Chuo University)				3pE08 Role of cysteinyl-tRNA synthetase of *Mesorhizobium loti* in root nodule symbiosis with *Lotus japonicus* Mitsutaka Fukudome[1], Asuka Ikuta[1], Mika Nomura[1], Toshiki Uchiumi[2] ([1]Fac. of Agri. Kagawa Univ., [2]Grad. Sch. of Sci. and Eng. Kagoshima Univ.)
15:30					3pE09 A phylogenetically-inferred genome-wide CRE search found *PUB1* as a target of CYCLOPS Akihiro Yamazaki, Kai Battenberg, Makoto Hayashi (RIKEN)
15:45					3pE10 Expression analysis of sucrose transporter genes in *Lotus japonicus* overnodulation mutants Kensuke Kawade[1], Nao Okuma[2], Masayoshi Kawaguchi[3,4] ([1]Grad. Sch. Sci. Engin., Saitama Univ., [2]RIKEN BRC, [3]Division Symbio. Systems, NIBB, [4]Sch. Life Sci., Grad. Univ. Advance. Stud. (SOKENDAI))
16:00					3pE11 Control of nitrogen metabolism under non-symbiotic conditions by the HAR1 receptor that regulates the number of nodules Nao Okuma[1], Daisuke Sugiura[2], Ichiro Terashima[3], Masayoshi Kawaguchi[4,5] ([1]RIKEN BRC, [2]Grad. Sch. Bioagricultural Sci., Nagoya Univ., [3]Grad. Sch. Sci., Univ. Tokyo, [4]NIBB, [5]SOKENDAI)
16:15					

Room F	Room G	Room H	Room X	Room Y	Room Z	Time
Flowering/Clock		Development/Morphogenesis				
3pF07 Functional analysis of endogenous *cis*-elements involved in the regulation of Arabidopsis *FT* gene expression Natsumi Ono[1], Aoha Miki[2], Mayuka Yamamoto[2], Akito Yoshida[2], Katsuya Negishi[3], Masaki Endo[4], Masaki Kobayashi[5], Kappei Kobayashi[1], Seiichi Toki[4,6,7,8], Mitsutomo Abe[9], Hidetaka Kaya[1] ([1]Grad. Sch. Agri., Ehime Univ., [2]Fac. Agri., Ehime Univ., [3]NIFTS, NARO, [4]NIAS, NARO, [5]Forestry Division, JIRCAS, [6]Fac. Agri., Ryukoku Univ., [7]Grad. Sch. of Nanobioscience, Yokohama City Univ., [8]Kihara Institute for Biological Research, Yokohama City Univ., [9]Grad. Sch. Arts and Sci., The Univ. of Tokyo)		3pH07 Evo-devo study on the evolution of angiosperm leaf with *Amborella trichopoda* and Arabidopsis transcriptome and genome data Hokuto Nakayama, Hirokazu Tsukaya (Grad. Sch. Sci., The Univ. Tokyo)		Symposium S10 [English] Multilayered Regulation of Plastid and Mitochondrial genomes and gene expression (13:30–16:30)		15:00
3pF08 Low temperature represses FT transport at the shoot apical meristem through abscisic acid signaling Yusuke Murata, Mitsutomo Abe (Grad. Sch. Arts and Sci., Univ. Tokyo)		3pH08 Cell fate for the internode is established last among organs in a phytomer in rice Katsutoshi Tsuda[1,2], Akiteru Maeno[1], Ken-Ichi Nonomura[1,2] ([1]National Institute of Genetics, [2]SOKENDAI)				15:15
3pF09 Ⓔ Characteristics of *FLOWERING LOCUS T*-expressing phloem companion cells at single-cell resolution Hiroshi Takagi[1,2], Takato Imaizumi[1,2] ([1]Department of Biology, University of Washington, [2]Center for Gene Research, Nagoya University)		3pH09 Ⓔ Roles of a Conserved Peptide Signaling Module in Thallus Development in the liverwort *Marchantia polymorpha* Chihiro Furumizu[1], Hidefumi Shinohara[2], Mio Sasaki[3], Shinichiro Sawa[4] ([1]N-BARD, Hiroshima Univ., [2]Dept. Biosci. Biotech., Fukui Pref. Univ., [3]Sch. Eng., Hiroshima Univ., [4]IRCAEB, Kumamoto Univ.)				15:30
3pF10 Liquid-liquid phase separation analysis of florigen activation complex to elucidate the flowering regulating mechanism Mayu Enomoto[1], Suai Anzawa[1], Yuka Koizumi[1], Kyoko Furuita[2], Kennchiro Taoka[3,4], Keiji Nishida[4], Akihiko Kondo[4], Takashi Kodama[2], Toshimichi Fujiwara[2], Hiroyuki Tsuji[3,5], Chojiro Kojima[1,2] ([1]Grad. Sci., YNU, [2]IPR, Univ. Osaka, [3]KIBR, YCU, [4]EGBRC, Univ. Kobe, [5]BBC, Univ. Nagoya)		3pH10 *GROM*, the target of GCAM1 regulates sexual reproductive organ development as well as gemma cup formation in *Marchantia polymorpha* Hirotaka Kato[1,2], Yukiko Yasui[1,3], Yuki Kondo[1], Hidehiro Fukaki[1], Tetsuro Mimura[1,4], Kimitsune Ishizaki[1] ([1]Grad. Sch. Sci., Kobe Univ., [2]Grad. Sch. Sci. Eng., Ehime Univ., [3]Grad. Sch. Biostudies, Kyoto Univ., [4]Fac Bioenviron Sci, KUAS)				15:45
		3pH11 Comparative genomic analysis of monoicous and dioicous liverworts to understand the evolution of sex chromosomes Yukiko Yasui[1], Giacomo Potente[2], Eita Shimokawa[1], Yuka Umeya[1], Tomoha Tanaka[1], Shogo Kawamura[1], Katsuyuki T. Yamato[3], Katsushi Yamaguchi[4], Shuji Shigenobu[4], Masaki Shimamura[5], Péter Szövényi[2], Takayuki Kohchi[1] ([1]Grad. Sch. Biostudies, Kyoto Univ., [2]Dept. Systematic and Evolutionary Botany, Univ. Zurich, [3]Fac. Biol. Sci. Technol., Kindai Univ., [4]Trans-Omics Fac., NIBB, [5]Grad. Sch. Integ. Sci. Life, Hiroshima Univ.)				16:00
		3pH12 Analysis of season-specific sexual differentiation mechanisms in a monoicous liverwort *Marchantia quadrata* Tomoha Tanaka[1], Eita Shimokawa[1], Chikako Inoue[1], Masaki Shimamura[2], Takayuki Kohchi[1], Yukiko Yasui[1] ([1]Grad. Sch. Biostudies, Kyoto Univ., [2]Integrated Sciences for Life, Hiroshima Univ.)				16:15

Ⓔ=Presentation in English

List of Chairpersons of Oral Presentations

Day 1 Sun., March 17, AM

1aA01-1aA11	Photosynthesis	Ichiro Terashima Haruhiko Jimbo Ginga Shimakawa
1aB01-1aB12	Environmental response A/Physiological responses	Satoko Yoshida Daisuke Takagi Kensuke Kusumi
1aC01-1aC12	Organelles/Cytoskeleton	Yusuke Kobayashi Yasuko Inaba Takeshi Nakano
1aD01-1aD10	New technology	Hikaru Sato Toshinori Kinoshita Daisuke Miki
1aE01-1aE12	Systems biology	Kenya Tanaka Keita Tamura Hiroki Yagi
1aF01-1aF12	Environmental response B/Environmental stresses	Ko Noguchi Minoru Ueda Takahisa Ogawa
1aG01-1aG12	Primary metabolism	Keina Monda Miho Sanagi Nobuyuki Takatani
1aH01-1aH12	Development/Morphogenesis	Chihiro Furumizu Yuki Hirakawa Hokuto Nakayama

Day 1 Sun., March 17, PM

1pA01-1pA11	Photosynthesis	Shinji Masuda Haruki Yamamoto Yukako Hihara
1pB01-1pB07	Environmental response A/Physiological responses	Yohei Takahashi Koh Aoki
1pC01-1pC12	Organelles/Cytoskeleton	Saku Kijima Masayoshi Nakamura Hirotomo Takatsuka
1pD01-1pD12	Reproduction	Emiko Yoro Ryushiro Kasahara Daichi Susaki
1pE01-1pE11	Plant-organism interaction A	Kohji Yamada Tatsuya Nobori Yoji Kawano
1pF01-1pF12	Environmental response B/Environmental stresses	Kohki Yoshimoto Yoichi Sakata Miki Fujita
1pG01-1pG11	Primary metabolism/Specialized (secondary) metabolism/Plant hormones/Signaling molecules	Ryosuke Munakata Mariko Asaoka Miyako Kusano
1pH01-1pH12	Development/Morphogenesis	Takashi Ishida Hiromasa Shikata Tatsuaki Goh

Day 2 Mon., March 18, AM

2aA01-2aA11	Photosynthesis	Yuki Kato Yuki Okegawa Yuri Munekage
2aB01-2aB07	Plant hormones/Signaling molecules	Masashi Asahina Tsuyoshi Aoyama
2aC01-2aC12	Organelles/Cytoskeleton/Membrane trafficking	Emi Ito Masanori Izumi Junpei Takagi
2aD01-2aD12	Reproduction	Keisuke Inoue Naoya Sugi Atsuko Kinoshita

2aE01-2aE11 Plant-organism interaction A
Shigetaka Yasuda
Ayako Tsushima
Mina Ohtsu

2aF01-2aF11 Environmental response B/Environmental stresses
Katsuhiro Shiono
Yoshiharu Y. Yamamoto
Teruaki Taji

2aG01-2aG12 Specialized (secondary) metabolism/ Biomembrane/Ion and solute transport
Hikaru Seki
Ryosuke Sugiyama
Ken Matsuoka

2aH01-2aH11 Development/Morphogenesis
Hirotaka Kato
Ayami Nakagawa
Yusuke Kimata

2aX01-2aX10 Genome function/Gene regulation
Misato Ohtani
Mizuki Takenaka
Toshiyuki Fukuhara

Day 3 Tue., March 19, AM

3aA01-3aA11 Photosynthesis
Kentaro Ifuku
Yoshitaka Nishiyama
Kintake Sonoike

3aB01-3aB12 Plant hormones/Signaling molecules
Yuichiro Tsuchiya
Ayumi Yamagami
Akie Shimotohno

3aC01-3aC12 Cell wall
Daisuke Takahashi
Tadashi Kunieda
Marcel Beier

3aD01-3aD08 Cell cycle/Cell division
Yuuki Sakai
Michiko Sasabe
Yoko Mizuta

3aE01-3aE12 Plant-organism interaction B
Momoko Takagi
Koichi Sugimoto
Rikako Hirata

3aF01-3aF12 Photoreceptors/Photoresponses
Noriyuki Suetsugu
Atsushi Takemiya
Shizue Yoshihara

3aG01-3aG12 Biomembrane/Ion and solute transport
Jun Wasaki
Naoki Yamaji
Akiko Maruyama

3aH01-3aH12 Development/Morphogenesis
Tomomichi Fujita
Yukiko Yasui
Ryuji Tsugeki

3aX01-3aX10 Genome function/Gene regulation
Taku Takahashi
Yuichi Fujita
Tokuji Tsuchiya

Day 3 Tue., March 19, PM

3pA01-3pA08 Photosynthesis
Atsushi Takabayashi
Daisuke Seo

3pE01-3pE11 Plant-organism interaction B
Yasuyuki Kawaharada
Akihiro Yamazaki
Taro Maeda

3pF01-3pF10 Flowering/Clock
Hiroshi Takagi
Yoshihiro Yoshitake
Haruki Nishio

3pH01-3pH12 Development/Morphogenesis
Tomotsugu Koyama
Shinobu Takada
Miya Mizutani

General Presentations

Program of Poster Presentations

- Poster viewings and discussions will be held on-site. You can also view the posters online.

- During the online poster viewing period (March 14, 9:00 a.m.–March 19, 5:00 p.m.), you may also use the comments box on the abstract page of your poster posted on the ORSAM portal (the web-based abstract submission system). Please respond to questions in the comment box in a timely manner.

- Schedule

	Day 1 (March 17)	Day 2 (March 18)
Presentation No. / place	1P01–1P88 / 3rd floor 1Q01–1Q69 / 5th floor	2P01–2P90 / 3rd floor 2Q01–2Q69 / 5th floor
Mounting	March 17 9:00–12:00	March 18 10:30–12:00
Discussion	March 17 Odd numbers 17:15–18:00 Even numbers 18:00–18:45	March 18 Odd numbers 13:20–14:05 Even numbers 14:05–14:50
Removal	March 18 9:00–10:30	March 18 13:30–16:00

The presenters should be in front of their posters during the discussion time.
Any posters remaining after removal time will be removed by the Meeting Committee.

■ Photosynthesis

1P01 Function of red-shift FCP in Diatom *Phaeodactylum tricornutum* under Irradiation of Different Spectral Lights

Masakazu Toyoshima, Ginga Shimakawa, Yusuke Matsuda (Dept. Biosci., Sch. Biol. Environ. Sci., Kwansei-Gakuin Univ.)

1P02 A light factor-dependent/inhibition growth of *yellow* Chlamydomonas

Okviyoandra Akhyar[1], Soichiro Seki[2], Kazuhiro Yoshida[3], Chiyo Takagi[4], Yasuhiro Kamei[4], Ritsuko Fujii[1,2,3] ([1]Research Center for Artificial Photosynthesis (ReCAP), Osaka Metropolitan University, japan, [2]Graduate School of Science, Osaka City University, Japan, [3]Graduate School of Science, Osaka Metropolitan University, Japan, [4]Spectrography and Bioimaging Facility, National Institute for Basic Biology, Okazaki, Japan)

1P03 Characterization of a deletion mutant of *isiA1* in *Anabaena* sp. PCC 7120

Ryo Nagao[1], Haruya Ogawa[2], Jian-Ren Shen[2], Shigeki Ehira[3] ([1]Faculty of Agriculture, Shizuoka University, [2]RIIS, Okayama University, [3]Department of Biological Sciences, Tokyo Metropolitan University)

1P04 Effect of iron deficient or excess condition on primary photosynthetic processes of green alga, evaluated by global analysis

Nozomi Sakai[1], Miyu Furutani[1], Shimpei Aikawa[2], Seiji Akimoto[1] ([1]Grad. Sch. Sci., Kobe Univ., [2]JIRCAS)

1P05 Purification and characterization of the BciD enzyme for formylation of C7 in bacteriochlorophyll *e*, purified from the green sulfur bacterium *Chlorobaculum limnaeum*

Jiro Harada, Ken Yamamoto (Kurume Univ. Sch. Med.)

1P06 Analysis of the regulatory mechanism of Chl *a*/*d* ratio in the marine cyanobacterium *Acaryochloris marina*

Sorachi Katayama[1], Yuki Tsuzuki[2], Yuichi Fujita[2], Haruki Yamamoto[2] ([1]School of Agricultural Sciences, Nagoya University, [2]Graduate School of Bioagricultural Sciences, Nagoya University)

1P07 Isolation and characterization of photosystem I and photosystem II complexes from cyanobacteria which express a His-tagged CP47

Mayuko Oshiumi[1], Toshiyuki Shinoda[1], Mitsunori Katayama[3], Tatsuya Tomo[4], Naoki Mizusawa[1,2] ([1]Fac. Biosci. Appl. Chem., Hosei Univ., [2]Res. Micro-Nano Tech., Hosei Univ., [3]Coll. Ind. Tech, Nihon Univ., [4]Grad. Sch. Sci., Tokyo Univ. Sci.)

1P08 Development of oligonucleotide probe for single-molecule spectroscopic analysis of *de-novo* synthesized D1 protein

Ibuki Soshino[1], Takumi Hoshi[1], Shen Ye[2], Yutaka Shibata[2] ([1]Fac. Sci., Tohoku Univ., [2]Grad. Sch. Sci., Tohoku Univ.)

1P09 Discovery of a novel thylakoid membrane-bound protein that is involved in the construction of thylakoid membrane and photosystem complex in cyanobacteria

Yoshiki Shirotori[1], Kimie Atsuzawa[2], Egi Tritya Apdila[3], Yasuko Kaneko[2], Koichiro Awai[3], Shigeki Ehira[1] ([1]Graduate school of Science, Tokyo Metropolitan University, [2]Graduate School of Science and Engineering, Saitama University, [3]Graduate School of Science and Technology, Shizuoka University)

1P10 Promoter analysis of the NPQ-related gene *PSBS* in *Arabidopsis thaliana*

Madoka Sakurai[1], Haruka Yamaki[1], Krishna K. Niyogi[2,3,4,5], Yoshitaka Nishiyama[6], Hiroko Takahashi[6] ([1]Department of Molecular Biology and Biochemistry, Saitama University, [2]Howard Hughes Medical Institute, University of California, Berkeley, [3]Department of Plant and Microbial Biology, University of California, Berkeley, [4]Innovative Genomics Institute, University of California, Berkeley, [5]Molecular Biophysics and Integrated Bioimaging Division, Lawrence Berkeley National Laboratory, [6]Graduate School of Science and Engineering, Saitama University)

1P11 Excitation relaxation processes of photosystem in the microsecond region

Miyu Furutani, Seiji Akimoto (Grad. Sch. Sci., Kobe Univ.)

1P12 Investigation of Factors Causing Differences in Chilling Stress Tolerance among Cucumber Cultivars

Shintaro Harimoto[1], Ko Takeuchi[2], Yufen Che[3], Kentaro Ifuku[2] ([1]Fac. Agri., Kyoto Univ., [2]Grad. Sch. Agri., Kyoto Univ., [3]Grad. Sch. Biostudies, Kyoto Univ.)

1P13 Comparison of energy transfer processes between two *Acaryochloris marina* strains in response to different light qualities

Zhe Wang[1], Miyu Furutani[1], Ryo Nagao[2], Yoshifumi Ueno[3], Reona Toyofuku[4], Tatsuya Tomo[3,4], Seiji Akimoto[1] ([1]Grad. Sch. Sci., Kobe Univ., [2]Fac. Agric., Shizuoka Univ., [3]Inst. Arts Sci., Tokyo Univ. Sci., [4]Grad. Sch. Sci., Tokyo Univ. Sci.)

1P14 Conformational changes induced by detachment and reconstruction of extrinsic proteins in photosystem II complex

Yoshiki Nakajima[1], Koji Kato[1], Jian-Ren Shen[1], Ryo Nagao[2] ([1]Res. Inst. Interdiscip. Sci., Univ. Okayama, [2]Grad. Sch. Integr. Sci. Technol., Univ. Shizuoka)

1P15 Comparison of protein composition on thylakoid membranes under iron-sufficient and deficient conditions between two barley cultivars 'Sarab-1' and 'Ehimehadaka-1'

Tomoki Shigematsu, Akihiro Saito, Yusuke Shikanai, Kyoko Higuchi (Grad. Sch. Appl. Biosci., Tokyo Univ. Agri.)

1P16 Characterization of putative PSI-PSII megacomplexes separated by Clear Native-PAGE from Fe-deficient barley leaves
Akihiro Saito, Kai Nakano, Ryoko Yamada, Yusuke Shikanai, Kyoko Higuchi (Facl. Appl. Biosci., Tokyo Univ. Agri.)

1P17 Low-temperature fluorescence emission spectra of PSI were blue-shifted in various barley varieties grown under iron-deficient conditions
Takehiro Kobayashi, Akihiro Saito, Yusuke Shikanai, Kyoko Higuchi (Grad. Sch. Appl. Biosci., Tokyo Univ. Agri.)

1P18 Role of PROTON GRADIENT REGULATION 5 (PGR5) in determining photosynthetic electron transport and CO_2 assimilation rates under a fluctuating light condition in *Arabidopsis thaliana*
Keiichiro Tanigawa[1], Masaru Kono[2], Ichiro Terashima[1], Toshiharu Shikanai[3], Wataru Yamori[1] ([1]Grad. Sch. Agri., Univ. Tokyo, [2]Dept. Sci., Fac. Sci., Kanagawa Univ., [3]Grad. Sch. Sci., Biol. Sci., Kyoto Univ.)

1P19 Effect of lighting regime on the growth rate of the simplex plant *Wolffia globosa*
Reona Abe, Yoshihiro Suzuki (Grad. Sch. Sci., Univ. Kanagawa)

1P20 Cryo-EM structure of *Cyanophora* PSI tetramer
Koji Kato[1], Ryo Nagao[2], Fusamichi Akita[1], Naoyuki Miyazaki[3], Jian-Ren Shen[1] ([1]RIIS, Okayama Univ., [2]Faculty of Agriculture, Shizuoka Univ., [3]TARA, Univ. of Tsukuba)

■ Primary metabolism

1P21 Functional analysis of the homeobox-type transcription factor HB52 in root nitrogen responses in Arabidopsis
Erina Akioka, Yasuhito Sakuraba, Shuichi Yanagisawa (Agro-Biotech. Res. Center, Grad. Sch. Agri. Life Sci., Univ. Tokyo)

1P22 Genetic and biochemical analyses of the SnRK1β3 subunit functions in Arabidopsis
Akio Kubo[1], Miho Sanagi[2,3], Filip Rolland[4], Junpei Takagi[2], Takeo Sato[2] ([1]Grad. Sch. Life Sci., Hokkaido Univ., [2]Fac. Sci., Hokkaido Univ., [3]CRIS, Hokkaido Univ., [4]Biology Department, KU Leuven)

1P23 Rice Seed Germination and Glutamine Metabolism
Soichi Kojima (Grad. Sch. Agr., Tohoku Univ.)

1P24 Evaluation of photobiological hydrogen production activity of genetically engineered heterocyst-forming cyanobacteria under simulated outdoor conditions using an artificial solar irradiation system
Takeshi Sato[1,2], Kento Fukuhara[1], Taichi Yamada[1], Masaharu Kitashima[3], Hidehiro Sakurai[2], Kazuhito Inoue[2,3] ([1]Dept. Biol. Sci., Kanagawa Univ., [2]Res. Inst. Integr. Sci., Kanagawa Univ., [3]Dept. Biochem. Biotech., Kanagawa Univ.)

1P25 The creation of mutant strains that selectively express the vanadium nitrogenase in heterocyst-forming cyanobacteria, and its possible usefulness in photobiological H_2 production
Daisuke Bando[1], Takeshi Sato[1,2], Shoko You[1], Takahiro Matsuda[1], Hidehiro Sakurai[2], Kazuhito Inoue[1,2,3] ([1]Dept. Biol. Sci., Grad. Sch. Sci., Kanagawa Univ., [2]Res. Inst. Integr. Sci., Kanagawa Univ., [3]Dept. Biochem. Biotech., Kanagawa Univ.)

1P26 Efforts for the isolation of the pinitol biosynthetic enzyme genes from Japanese cedar sugi
Tomohiro Igasaki, Tokuko Ujino-Ihara (Molec. Gen. Genet., FFPRI)

1P27 Functional analysis of wax ester synthesis regulation kinase in *Euglena gracilis*
Yui Kuramae[1], Yousuke Komai[1], Takahisa Ogawa[1], Takanori Maruta[1], Shigeru Shigeoka[2], Takahiro Ishikawa[1] ([1]Grad. Sch. Nat. Sci. Technol., Shimane Univ., [2]Exp. Farm, Kindai Univ.)

1P28 Involvement of GARP-type transcription factor HHO6 in the regulation of phosphate deficiency responses in Arabidopsis
Ryoji Saiki, Yasuhito Sakuraba, Syuichi Yanagisawa (Agro-Biotech. Res. Center, Grad. Sch. Agri. Life Sci., Univ. Tokyo)

■ Biomembrane/Ion and solute transport

1P29 Production of High Iron and Zinc *Akitakomatchi* rice by genome editing of *OsVIT1* or *OsYSL9* transporter
Katsumi Takahashi, Aung May Sann, Hiroki Rai, Takehiko Matsumoto, Hiroshi Masuda (Akita Pref. Univ.)

1P30 Breeding of high iron and zinc rice varieties which are suitable to cultivate in Akita, ~The results of F_4 and F_5 generations~
Ai Ito[1], Ryuichi Takahashi[2], Takaki Matsumoto[1], Aung May Sann[1], Katsumi Takahashi[1], Hiroki Rai[1], Takehiko Matsumoto[1], Hiroshi Masuda[1] ([1]Akita Pref. Univ., [2]Akita Pref. Agri. exp. stat.)

1P31 Phosphorylation And Dephosphorylation Regulate Polar Localization Of A Borate Transporter AtBOR1
Rintaro Yoshida[1], Keita Muro[1], Yudai Shimizu[2], Keisuke Ohashi[3], Yuka Ogino[3], Chiaki Hori[4], Koji Kasai[5], Taich Takasuka[3], Toru Fujiwara[5], Junpei Takano[1,2] ([1]Grad. Sch. Agric., Univ. Osaka Metro., [2]Grad. Sch. Life Environ. Sci., Univ. Osaka Pref., [3]Res. Fac. Agric., Univ. Hokkaido, [4]Fac. Eng., Univ. Hokkaido, [5]Grad. Sch. Agric. Life Sci., Univ. Tokyo)

1P32 Functional characterization of the vacuolar membrane phosphate transporter VPT in a non-vascular plant *Marchantia polymorpha*

Masahiro Hayashida[1], Shiori Sato[1], Hinatamaru Fukumura[1], Yuuki Sakai[1], Tetsuro Mimura[2], Yuki Kondo[1], Hidehiro Fukaki[1], Kimitsune Ishizaki[1] ([1]Grad. Sch. Sci., Kobe Univ., [2]KUAS, Fac. Bioenviron. Sci.)

1P33 Analysis of the evolutionary process of membrane transport proteins

Tatsuya Hiei, Kaisei Hayashi, Tatsuo Omata, Yoichi Nakanishi, Sumie Ishiguro, Shin-ichi Maeda (Bio-Agr., Nagoya Univ.)

1P34 Phosphate Transporters upregulated under phosphate-deficient conditions in the diatom *Chaetoceros gracilis*

Nao Tajima[1], Minoru Kumazawa[1], Shoko Tsuji[1], Minenosuke Matsutani[2], Masaru Kobayashi[1], Satoru Watanabe[3], Akio Kuroda[4], Ryuichi Hirota[4], Kentaro Ifuku[1] ([1]Grad. Sch. Agri., Kyoto Univ., [2]NODAI Genome Res. Center, Tokyo Univ. Agri., [3]Grad. Sch. Life Sci., Tokyo Univ. Agri., [4]Grad. Sch. Integ. Sci. Life, Hiroshima Univ.)

1P35 Functional characterization of flavin transporters in plants

Rui Shibata[1], Hikari Kuwata[2], Takanori Maruta[1,2], Takahiro Ishikawa[1,2], Takahisa Ogawa[1,2] ([1]Dept. Life Sci., Fac. Life Environ. Sci., Shimane Univ., [2]Grad. Sch. Nat. Sci. Technol., Shimane Univ.)

1P36 Functional group characteristics of the root cell wall surface of grass plants

Mirei Ogawa[1], Misaki Kawamura[1], Tomoko Hatanaka[1], Noriharu Ae[2], Satoru Hobara[1] ([1]RGU. Environmental Sciences, [2]Ryukoku Univ.)

1P37 Taxonomical distribution of acylplastoquinones in photosynthetic organisms

Ryo Ito, Mizuki Endo, Motohide Aoki, Minori Ookubo, Shoko Fujiwara, Norihiro Sato (Tokyo Uni., Pharm. Life Sci.)

1P38 Sphingolipid profiles in the leaves of several plants of Amaranthaceae by LC-MS/MS

Hirokazu Tokimizu[1], Hiroyuki Imai[1], Toshiki Ishikawa[2] ([1]Biology Dept., Konan Univ., [2]Grad. Sch. Sci. Eng., Saitama Univ.)

■ Membrane trafficking

1P39 Localization analysis of Arabidopsis RABH1b using BY-2 cells

Nao Genda[1], Yoko Ito[3], Emi Ito[3], Tomohiro Uemura[1,2] ([1]Undergrad. Sch. Sci., Biol., Ochanomizu Univ., [2]Grad. Sch. Humanities and Sciences, Ochanomizu Univ., [3]IHLS., Ochanomizu Univ.)

1P40 Functional analysis of *Arabidopsis thaliana* SNARE protein, Novel Plant SNAREs, in pollen tube extension

Hatsune Hayashi[1], Yoko Ito[3], Emi Ito[3], Tomohiro Uemura[1,2,3] ([1]Undergrad. Sch. Sci., Biol., Ochanomizu Univ., [2]Grad. Sch. Humanities and Sciences, Ochanomizu Univ., [3]IHLS., Ochanomizu Univ.)

1P41 Functional analysis of RABH1 GTPase in pathogen response

Haruka Iwashita[1], Chihiro Ohori[2], Yoko Ito[3], Emi Ito[3], Akihiko Nakano[4], Takashi Ueda[5,6], Tomohiro Uemura[1,2] ([1]Faculty of Science, Ochanomizu Univ., [2]Graduate School of Humanities and Sciences, Ochanomizu Univ., [3]Institute for Human Life Innovation, Ochanomizu Univ., [4]Live Cell Super-Resolution Imaging Research Team, RIKEN Center for Advanced Photonics., [5]Division of Cellular Dynamics, National Institute for Basic Biology., [6]The Department of Basic Biology, SOKENDAI.)

1P42 Analysis of Growth Arrest Phenotype of *kam2* Seedlings on Sucrose-free Solid Medium

Chika Hohokawa[1], Hiroki Yagi[2], Shoji Segami[3,4], Atsushi J. Nagano[5,6], Yasuko Koumoto[1], Kentaro Tamura[7], Yoshito Oka[1], Tomonao Matsushita[1], Tomoo Shimada[1] ([1]Grad. Sch. Sci., Kyoto Univ., [2]Grad. Sch. Nat. Sci., Konan Univ., [3]NIBB, [4]Sch. Life Sci. SOKENDAI, [5]Fac. Agri., Ryukoku Univ., [6]IAB, Keio Univ., [7]Dept. Env. Life Sci., Univ. Shizuoka)

1P43 The dynamics of organelles during under the micrografting

Nao Nakamigawa[1], Chika Otake[1], Yoko Ito[2], Emi Ito[2], Tomohiro Uemura[1,2,3] ([1]Undergrad. Sch. Sci., Biol., Ochanomizu Univ., [2]IHLS., Ochanomizu Univ., [3]Grad. Sch. Humanities and Sciences, Ochanomizu Univ.)

■ Organelles/Cytoskeleton

1P44 Transcriptome study in suppression of early senescence in *atg5* autophagy mutant by *dpd1* lacking organellar nuclease

Tsuneaki Takami, Wataru Sakamoto (Inst. Plant Sci. Res., Okayama Univ.)

1P45 Cytosolic heme metabolism by alternative localization of heme oxygenase 1 in plant cells

Yingxi Chen[1], Kohji Nishimura[2], Mutsutomo Tokizawa[3], Yoshiharu Y. Yamamoto[3], Yoshito Oka[4], Tomonao Matsushita[4], Kousuke Hanada[5], Kazumasa Shirai[5], Shoji Mano[6,7], Takayuki Shimizu[1], Tatsuru Masuda[1] ([1]Grad. Sch. Arts Sci., Univ. Tokyo, [2]Fac. Life Envi. Sci., Univ. Shimane, [3]U. Grad. Sch. Agr., Univ. Gifu, [4]Grad. Sch. Sci., Univ. Kyoto, [5]Dept. Biosci. Bioinform., Kyushu Inst. Tech., [6]Dept. Evol. Biol. Biodivers., NIBB, [7]Sch. Life Sci., SOKENDAI)

1P46 Relationship between chloroplast stringent response and plant biomass

Yuto Omata, Takanari Nemoto, Shinji Masuda (Dept. Sci. & Tech., Tokyo Inst. Tech.)

1P47 Phenotypic and Transcriptomic characterization of the rice mutant defective in organelle exonuclease DPD1

Md Faridul Islam[1], Hiroshi Yamatani[2], Tsuneaki Takami[1], Makoto Kusaba[3], Wataru Sakamoto[1] ([1]Institute of Plant Science and Resources, Okayama University, Kurashiki, Japan., [2]Takasaki Advanced Radiation Research Institute, National Institutes for Quantum and Radiological Science and Technology., [3]Graduate School of Integrated Sciences for Life, Hiroshima University.)

1P48 The Roles of Plastid Osmoregulation in Stomatal Movement and Root Gravitropism

Atsushi Togaki, Tikako Tanaka, Kanako Yamasaki, Yoko Ishizaki, Takashi Shiina (Fac. Agric., Setsunan. Univ)

1P49 Characterization of the Role of Chloroplast Localized Mechanosensitive Channel MSL2 in Chloroplast Ca^{2+} Regulation

Honoka Takeuchi, Kanako Yamasaki, Chikako Tanaka, Yoko Ishizaki, Takashi Shiina (Fac. Agric., Setsunan. Univ.)

1P50 Physiological role of RNA editing for *psbE* gene in *Arabidopsis thaliana*

Makoto Yoshitaka[1], Mitsuhiro Matsuo[1], Soichirou Satoh[2], Junichi Obokata[1] ([1]Div. Applied Bio Sci., Fac. Agric., Setsunan. Univ., [2]Div. Applied Life Sci., Grad. Sch. Life Environ. Sci., Kyoto Prefect. univ.)

1P51 Characterization of an Arabidopsis double mutant, which defects both transcription and division systems of chloroplasts

Kyoka Sato, Jingyan Xu, Daiki Hayashi, Tomohide Uno, Kengo Kanamaru (Grad. Sch. Agri., Kobe Univ.)

1P52 Suppressor screen of Arabidopsis *egy1* mutant to understand the EGY1 function in chloroplasts

Yang Hee Kim, Yusuke Kato (Fac. Agric., Setsunan. Univ.)

1P53 Functional analysis of RETICULATA RELATED 3 and 4 in *Arabidopsis thaliana*

Takumi Ito, Hayate Machino, Ryusei Inoue, Kenji Nishimura, Yuri Munekage (Grad. Sch. Sci. Tech., Kwansei Gakuin univ.)

1P54 The kinesin-14 MpKCBP is involved in the retrograde transport of plastids during rhizoid growth of Marchantia polymorpha

Yusaku Yoneda, Hiroyasu Motose (Grad. Sch. Environm., Life, Nat. Sci. & Tech., Okayama Uni.)

1P55 Is phosphatidylglycerol essential for etioplast?

Manato Kawamukai[1], Akiko Yoshihara[2], Keiko Kobayashi[3], Noriko Nagata[3], Koichi Kobayashi[2] ([1]Sch. Sci., Osaka Pref. Univ., [2]Grad. Sch. Sci., Osaka Metro. Univ., [3]Fac. Sci., Japan Women's Univ.)

1P56 Mapping of plant organellar RNA binding proteins by targeted RNA editing

Ziling Weng, Mizuki Takenaka (Kyoto University)

1P57 PCIS1 is a PPR protein co-expressed mitochondrial intron splicing factor necessary for three *nad* gene splicing events

Brody Frink[1], Matthias Burger[2], Maya Yarkoni[3], Sofi Shevtsov-Tal[3], Hagit Zer[3], Shohei Yamaoka[4], Oren Ostersetzer-Biran[3], Mizuki Takenaka[1] ([1]Department of Botany, Graduate School of Science, Kyoto University, [2]Molekulare Botanik, Universität Ulm, [3]Department of Plant and Environmental Sciences, The Alexander Silberman Institute of Life Sciences, The Hebrew University of Jerusalem, [4]Graduate School of Biostudies, Kyoto University)

1P58 Characterization of the plant mitochondrial editosome by TurboID approach

Deborah Schatz, Mizuki Takenaka (Grad. Sch. Sci., Kyoyo Univ.)

1P59 The role of ATG9, a sole transmembrane autophagy related protein, in plant autophagy

Ryoya Tadaki[1], Satoshi Kurosaki[1], Kazuya Inoue[1], Daiki Shinozaki[2], Kohki Yoshimoto[1] ([1]Grad. Sch. Agri., Meiji Univ., [2]OSRI, Meiji Univ.)

1P60 Deep learning-based image restoration for fluorescent 4D imaging of cytoskeletal dynamics in dividing tobacco BY-2 cells

Suzuka Kikuchi[1], Takumi Kotaka[2], Takumi Higaki[1] ([1]Fac. Adv. Sci. and Tech., Kumamoto Univ., [2]Fac. Sci., Kumamoto Univ.)

1P61 NEK6 provides tissue-specific growth anisotropy through its actin-dependent polar localization in *Arabidopsis thaliana*

Yumeko Nomura, Hiroyasu Motose (Dep. Biol., Fac. Sci., Okayama Uni.)

1P62 MpTRAF1 interacts with MpNEK1 to regulate rhizoid growth in *Marchantia polymorpha*

Momoka Mizuta[1], Hikari Mase[2], Hirofumi Nakagami[3], Hiroyasu Motose[1,2] ([1]Dep. Biol., Fac. Sci., Okayama Uni., [2]Grad. Sch. Environm., Life, Nat. Sci. & Tech., Okayama Uni., [3]MPIPBR)

1P63 Analysis of the dynamics of plant cell nuclei under dark conditions

Kota Tsuchida[1], Shingo Takagi[2], Yuki Sakamoto[2] ([1]Dept. Integr. Biosci., Grad. Sch. Front. Sci., Univ. Tokyo, [2]Dept. Biol. Sci., Grad. Sch. Sci., Osaka Univ.)

■ Cell wall

1P64 Maintenance of Methyl Esterified Pectin Level in Pollen Mother Cell Stages is Required for Microspore Development

Kazuya Hasegawa[2], Ai Ichikawa[1], Haruki Takeuchi[1], Atsuko Nakamura[1], Hiroaki Iwai[1] ([1]Inst. Life Env. Sci., Univ. Tsukuba, [2]Shizuoka Pref. Res. Inst. Agric. Forest., Tea Res. Ctr.)

1P65 Generation of *nst/snd* double-, triple-, and quadruple-knockout hybrid aspens using CRISPR-Cas9 system

Naoki Takata (Forest Bio Res. Cent., For. Forest Prod. Res. Inst.)

1P66 Observation of sieve plates in terms of evolution

Mizuho Morita[1], Riichi Oguchi[2], Masako Dannoura[3] ([1]Fac. Agri., Kyoto Univ., [2]Grad. Sci., OMU., [3]Grad. Agri., Kyoto Univ.)

1P67 Accumulation of cell wall-bound *p*-coumaric acid during light-induced increase in the adhesive strength between epidermal and inner tissues in pea epicotyls

Yuma Shimizu[1], Kazuyuki Wakabayashi[1], Kensuke Miyamoto[2], Kouichi Soga[1] ([1]Grad. Sch. Sci., Osaka Metro. Univ., [2]Fac. Liberal Arts, Sci., Global Edu., Osaka Metro. Univ.)

1P68 An attempt to express useful enzymes on the frustule using a marine diatom

Shusuke Sato, Hikari Hayashi, Ginga Shimakawa, Hiroaki Matsui, Yusuke Matsuda (Dept. Biosci., Sch. Sci. Tech., Kwansei Gakuin Univ.)

■ Systems biology

1P69 De novo genome assembly of *Oxalis corniculata* and segregation analysis of leaf color phenotype related to anthocyanin

Hideaki Iimura[1], Mitsuhiko Sato[1], Yuya Fukano[2], Shinji Kikuchi[3], Kenta Shirasawa[1] ([1]Plant Genetics and Genomics, Kazusa DNA Res. Inst., [2]Advanced Horticultural Engineering, Grad. Sch. Hort., Univ. Chiba, [3]Plant Sciences, Grad. Sch. Hort., Univ. Chiba)

1P70 [Cancelled]

1P71 Wolfberry Genome Database (WGDB): integrated genomic datasets for molecular biology study

Wen-Chieh Tsai[1], You-Long Cao[2], You-Yi Chen[3], Yu-You Hsiao[4], Wei-Sheng Wu[5] ([1]Institute of Tropical Plant Sciences and Microbiology, National Cheng Kung University, Tainan City 701, Taiwan, [2]National Wolfberry Engineering Research Center, Ningxia Academy of Agriculture and Forestry Sciences, Yinchuan, 750002, China, [3]Department of Agronomy, National Chiayi University, Chaiyi 600, Taiwan, [4]Orchid Research and Development Center, National Cheng Kung University, Tainan City 701, Taiwan, [5]Department of Electrical Engineering, National Cheng Kung University, Taiwan)

■ New technology

1P72 Plastid targeted forms of restriction endonucleases induce the reorganization of plastid genome architecture by enhancing the rate of its genome rearrangement

Hiroki Sugimoto, Minoru Hirano, Hidenori Tanaka, Tomoko Tanaka, Ritsuko Kitagawa-Yogo, Nobuhiko Muramoto, Norihiro Mitsukawa (Toyota Central R&D Labs, Inc.)

1P73 Development of a User-Friendly System That Facilitates Targeted Knockout/Elimination Using CRISPR/Cas9 for Highly Duplicated Genes in *Arabidopsis* Sexual Reproduction

Hidenori Takeuchi[1,2], Shiori Nagahara[1,3] ([1]ITbM, Nagoya Univ., [2]Inst. Adv. Res., Nagoya Univ., [3]Grad. Sch. Sci., Kyoto Univ.)

1P74 Development of *in planta* genome editing method by transient expression of genome editing enzymes in tomato

Misaki Kobayashi[1], Na Renhu[1], Shu Takahashi[1], Martina Bianca Fuhrmann-Aoyagi[1], Kenji Miura[1,2] ([1]Grad. Sci. Life & Earth Sci., Univ. Tsukuba, [2]Tsukuba-Plant Innovation Research Center)

1P75 High-efficiency precise gene editing using Prime Editing with paired epegRNAs in rice

Ayako Nishizawa-Yokoi[1], Keiko Iida[1], Akiko Mori[1], Seiichi Toki[1,2,3] ([1]Inst. Agrobiol. Sci., NARO, [2]Grad. Sch. Nanobiosci., Yokohama City Univ., [3]Fac. Agric., Ryukoku Univ.)

1P76 Highly Efficient Genome Editing In Rice Using Type I-D CRISPR-Cas

Shota Muromoto[1], Hiromichi Ae[2], Kazuya Marui[2], Naoki Wada[2], Keishi Osakabe[2], Yuriko Osakabe[1] ([1]Sch. of Life Sci. & Tech., Tokyo Tech., [2]Grad. Sch. of Tech., Ind. & Soc. Sci., Tokushima Univ.)

1P77 CRISPR-Cas9-Mediated Modification of *GmPPD* Soybean Genes via Agroinfiltration

Martina Bianca Fuhrmann-Aoyagi[1], Saki Igarashi[1], Na Renhu[1], Misaki Kobayashi[1], Hiroshi Ezura[1,2], Kenji Miura[1,2] ([1]Graduate School of Science and Technology, University of Tsukuba, [2]Tsukuba-Plant Innovation Research Center)

1P78 Is the High Frequency of T-DNA Cleavage in 'Princettia' (*Euphorbia pulcherrima* x *Euphorbia cornastra*) Caused in a Sequence-specific?
Koya Ito[1], Reiko Kogishi[1], Sayaka Shindo[1], Rina Shimo[1], Yukiko Shimbo[1], Maki Ohtsubo[1], Keisuke Matsui[2], Kenichi Suzuki[2], Koichi Tomomatsu[2], Norihiro Ohtsubo[1] ([1]Grad. Sch. Life Environ. Sci., Kyoto Pref. Univ., [2]Suntory Flowers, Ltd.)

1P79 Novel luminescent reporters to visualize gene and protein expression in cyanobacteria
Yoichi Nakanishi, Shin-ichi Maeda, Tatsuo Omata (Grad. Sch. Bioagr. Sci., Nagoya Univ.)

1P80 Establishment of a novel quantitative analysis method for spermatozoid movement patterns of *Marchantia polymorpha*
Naoki Minamino, Takumi Higaki (FAST, Kumamoto Univ.)

1P81 Distribution analysis of galanthamine, a plant alkaloid, by MS imaging
Kaoru Nakagawa[1], Tetsuo Iida[1], Shuichi Shimma[2], Manami Kobayashi[1] ([1]Shimadzu Corp., [2]Grad. Sch. Eng., Osaka Univ.)

1P82 Effect of plasma irradiation to the seeds of *Sorghum bicolor*
Yuki Yanagawa[1,2], Yuko Makita[2,3], Takamasa Okumura[4], Tomoko Kuriyama[2], Masaharu Kawauchi[2], Minami Matsui[2], Kazunori Koga[4] ([1]Grad. Sch. Hort., Chiba Univ., [2]RIKEN CSRS, [3]Eng., Maebashi Inst. Tech., [4]ISEE, Kyushu Univ.)

1P83 Development of new vector series for detection of protein-protein interaction in living plant cells: towards application to novel chemical compound discovery
Shohei Yamaoka, Yuki Tomita, Takashi Araki (Grad. Sch. Biostudies, Kyoto Univ.)

1P84 Development of pENTR-NeCo Vectors for Preparation of Negative Control Constructs in Gateway Cloning
Taiki Kuzuhara[1,2], Kota Monden[1,2], Takushi Hachiya[1,2], Tsuyoshi Nakagawa[1,2] ([1]Interdisciplinary Center for Science Research Shimane University, [2]Graduate school of Natural Science and Technology, Shimane University)

1P85 Development of a rice transformation system capable of various gene constructions
Neo Araya[1], Sae Sato-Shimizu[2], Yutaka Sato[2], Takushi Hachiya[1], Tsuyoshi Nakagawa[1] ([1]Interdisciplinary Center for Science Research, Shimane University, [2]National Institute of Genetics)

1P86 Modification of theophylline-dependent synthetic riboswitch for production of useful substances in cyanobacteria
Miku Fujiwara[1], Mayuko Ohshima[2], Yoichi Nakahira[2] ([1]Grad. Sch. Agr., Ibaraki univ., [2]Coll. Agr., Ibaraki univ.)

1P87 Development of Nitrogen Supply Method for Plants Using a Plasma-generated N_2O_5 from atmospheric air
Taro Yamanashi, Shouki Takeshi, Shota Sasaki, Keisuke Takashima, Toshiro Kaneko, Yasuhiro Ishimaru, Nobuyuki Uozumi (Grad. Sch. Eng., Univ. Tohoku)

1P88 Evaluation of Transient Protein Expression in Japanese Soybean Varieties
Saki Igarashi[1], Martina Bianca Fuhrmann-Aoyagi[2], Na Renhu[2], Misaki Kobayashi[2], Kenji Miura[2,3] ([1]Sch. Lif. Env, Univ. Tsukuba, [2]Grad. Sch. Sci. Tech, Univ. Tsukuba, [3]Tsukuba-Plant Innovation Research Center)

■ Development/Morphogenesis

1Q01 Functional analysis of *Rboh* genes in the moss *Physcomitrium patens*
Takumi Tomoi[1,2], Ikumi Kajikawa[1], Yuka Yoshida[3], Shoki Fujii[1], Yosuke Tamada[1,3,4,5] ([1]Sch. Eng., Utsunomiya Univ., [2]Ctr. Innov. Spt., Utsunomiya Univ., [3]Grad. Sch. Reg. Dev. Creat., Utsunomiya Univ., [4]CORE, Utsunomiya Univ., [5]REAL, Utsunomiya Univ.)

1Q02 Comparison of gene expression atlas obtained from single nucleus RNA-seq analysis and promoter reporter line analysis in Arabidopsis hypocotyl
Linus Lassen[1], Hui Cao[1], Dongbo Shi[1,2,3] ([1]IBB, Uni. Potsdam, Germany, [2]RIKEN CSRS, [3]JST PRESTO)

1Q03 Functional analysis of α-Tubulin in stem cell formation of the moss *Physcomitrium patens*
Towa Sarai[1], Yuki Shimizu[2], Ryoji Odanaka[2], Ikumi Kajikawa[2], Yukiko Kabeya[3], Mitsuyasu Hasebe[3,4], Takumi Tomoi[2,5], Yosuke Tamada[1,2,6,7] ([1]Grad. Sch. Reg. Dev. Creat., Utsunomiya Univ., [2]Sch. Eng., Utsunomiya Univ., [3]Div. Evol. Biol., NIBB, [4]SOKENDAI, [5]Innov. Dept., Ctr. Innov. Spt., Utsunomiya Univ., [6]CORE, Utsunomiya Univ., [7]REAL, Utsunomiya University)

1Q04 Investigation of the mechanism of wound-induced adventitious shoot formation in *Drosera rotundifolia*
Yosuke Sasai[1,2], Shoji Segami[4,5], Hatsune Morinaka[2], Akira Iwase[2,3], Mitsuyasu Hasebe[4,5], Keiko Sugimoto[1,2] ([1]Univ. Tokyo, Dep. Biol. Sci., [2]CSRS, RIKEN, [3]JST PRESTO, [4]NIBB, [5]SOKENDAI)

1Q05 CDK inhibitor-mediated regulation of stemness in *Arabidopsis* root cap
Paktraporn Mekloy, Ye Zhang, Masaaki Umeda (Grad. Sch. Sci. & Tech., Nara Institute of Science and Technology)

1Q06 Sucrose signaling contributes to the maintenance of vascular cambium by inhibiting cell differentiation
Aoi Narutaki[1], Shunji Shimadzu[1,2], Tomoyuki Furuya[3], Hidehiro Fukaki[1], Kimitsune Ishizaki[1], Yuki Kondo[1] ([1]Grad. Sch. Sci., Kobe Univ., [2]Grad. Sch. Sci., Univ. of Tokyo, [3]Col. Sch. Sci., Ritsumeikan Univ.)

1Q07 Functional analysis of the circadian clock-related gene GI in the regulation of vascular cell differentiation

Mayu Sakata[1], Takuma Arano[2], Shunji Shimadzu[1,2], Hidehiro Fukaki[1], Kimitsune Ishizaki[1], Yuki Kondo[1] ([1]Grad. Sch. Sci., Kobe Univ., [2]Grad. Sch. Sci., Univ. of Tokyo)

1Q08 Physiological Role of Upstream ORF-Mediated Post-Transcriptional Regulation of *LONESOME HIGHWAY* in Arabidopsis

Taihei Karino[1], Shunichi Umehara[1], Kaori Kimata[1], Yuta Hiragori[1], Noriya Hayashi[2], Satoshi Naito[1,2], Hitoshi Onouchi[1] ([1]Grad. Sch. Agr. Hokkaido Univ., [2]Grad. Sch. Life Sci. Hokkaido Univ.)

1Q09 Functional estimation of *Marchantia polymorpha* orthologs of the causal genes of rice adaxial-abaxial bipolar leaf mutants

Kaito Chiba[1], Takumi Tezuka[3], Nobuhiro Nagasawa[1], Satoshi Naramoto[2], Namiko Satoh-Nagasawa[1] ([1]Fac. Biores. Sci., Akita Pref, [2]Fac. Sci., Univ. Hokkaido, [3]Sch. life sci., SOKENDAI)

1Q10 N-6 methyladenosine (m6A) is required for DNA damage repair in plants ?

Ryosuke Matsuo, Akihito Mamiya, Kentaro Iwata, Ryoko Muraoka, Yuki Kondo, Kimitsune Ishizaki, Hidehiro Fukaki (Dept. of Biol., Grad. Sch. of Sci., Kobe Univ.)

1Q11 Transcriptome Analysis of Hormone-free Somatic Embryo/Adventitious Shoot Induction in Arabidopsis thaliana

Miho Ikeda[1], Ryo Nishijima[1], Takuya Ikoma[1], Yosuke Takeuchi[2], Nobutaka Mitsuda[3], Jun Nakayama[2], Tsubasa Yamagata[2] ([1]Bioscience and Biotechnology, Fukui Prefectural University, [2]Graduate School of Science and Engineering, Saitama University, [3]Bioproduction Research Institute, AIST)

■ Environmental response A/Physiological responses

1Q12 Screening of EMS mutagenized rice for nutritropism defects

Kiyoshi Yamazaki[1], Yasutaka Miyazaki[2], Takehiro Kamiya[1], Toru Fujiwara[1] ([1]Grad. Sch. Agric. Life Sci., Univ. Tokyo, [2]Tokyo Biotechnol. Coll.)

1Q13 Wild rice introgression lines showed improved response to nitrogen deficiency

Bright Adu, Yoshihiro Ohmori, Toru Fujiwara, Haymarn Soe Myint (Lab of Plant Nutrition, Grad Sch of Agric. Life Sciences, Univ. Tokyo)

1Q14 Improving Nitrogen Use Efficiency: Foliar Urea Uptake and Optimization for Sustainable Agriculture

Raj Kishan Agrahari, Toru Fujiwara, Takehiro Kamiya (Dep. of Applied Bio. Chem., UTokyo, Japan)

1Q15 Effects of N & P availability on shoot : root ratio

Anh Huy Nguyen[1], Louis J. Irving[2] ([1]University of Tsukuba, Degree Programs in Life and Earth Sciences, Graduate School of Science and Technology, [2]University of Tsukuba, Institute of Life and Environmental Sciences)

1Q16 Relationships between cell wall polysaccharides and Al accumulation in tea plants

Mio Asahina[1], Hiroto Yamashita[2,3], Shiori Yonezawa[1], Yuhei Hirono[3,4], Takashi Ikka[2,3,5] ([1]Grad. Sch. Agi., Univ. Shizuoka, [2]Fac. Agr., Univ Shizuoka, [3]Inst. Tea Sci., Univ. Shizuoka, [4]NIFTS, NARO, [5]Res. Inst. Green Sci. Tech., Univ. Shizuoka)

1Q17 Phenotypes of ribosomal protein mutants in response to nitrogen deficiency in *Arabidopsis thaliana*

Shuying Li, Hirofumi Fukuda, Naoyuki Sotta, Dichao Ma, Toru Fujiwara (Dep. Appl Bio Chem., GSALS., Univ. Tokyo)

1Q18 Identification of expressed biomarkers to explain the nitrogen nutritional status in tea plants

Hikaru Asano[1], Yamashita Hiroto[2,3], Atsushi J. Nagano[4,5], Yuhei Hirono[3,6], Takashi Ikka[2,3,7] ([1]Grad. Sch. Agr., Shizuoka Univ., [2]Fac. Agr., Shizuoka Univ., [3]Shizuoka Univ. Res. Inst., [4]Fac. Agr., Ryukoku Univ., [5]Inst. Adv. Biosci., Keio Univ., [6]Inst. Fruit Tree Tea Sci., NARO, [7]Shizuoka Univ. Res. Inst. Green Sci. Tech.)

1Q19 Crosstalk between Sulfur and Phosphorus under Phosphorus Deficiency in Rice

Ikue Yamada, Hayato Maruyama, Toshihiro Watanabe, Takuro Shinano (Grad. Sch. Agr., Univ. Hokkaido)

1Q20 Analysis of the novel stomatal opening compounds

Airi Oh[1], Riku Kimura[1], Yuki Hayashi[1], Ayato Sato[2], Yohei Takahashi[1,2], Toshinori Kinoshita[1,2] ([1]Grad. Sch. Sci. Nagoya Univ., [2]ITbM, Nagoya Univ.)

1Q21 Studies on the Mechanisms of the Autonomous Leaflet Rotation of *Desmodium motorium*

Yukimi Kubo[1], Ryoko Goto[2], Yoko Ishizaki[1], Takashi Shiina[1] ([1]Fac. Agric., Setsunan. Univ., [2]Fac. Life & Env. Sci., Kyoto Pref. Univ.)

1Q22 Effect of atmospheric NO_2 on plant growth under elevated CO_2 condition

Misa Takahashi, Ryota Saito, Atsushi Sakamoto (Grad. Sch. Int. Sci. Life, Hiroshima Univ.)

1Q23 Physiological Responses of Lacquer trees in Traditional Japanese Lacquer Harvesting

Chinatsu Yoshida[1], Hiroshi Suga[2], Yuuta Nishatani[3], Kosuke Yamauchi[4], Takashi Shiina[1], Yoko Ishizaki[1] ([1]Faculty of Agriculture, Setsunan University, [2]Department of Life and Environmental Sciences, Prefectural University of Hiroshima, [3]Division of Forest and Biomaterials Science, Graduate School of Agriculture, Kyoto University, [4]NPO Tamba-Urushi)

■ Environmental response B/Environmental stresses

1Q24 Unveiling Arsenic Tolerance Genes in Rice: A Genome-wide Association Study

Soshi Nakamura, Toru Fujiwara, Takehiro Kamiya (Grad. Sch. Agr., Univ. Tokyo)

1Q25 Searching for QTLs that Determine the Difference in Salt Stress Tolerance between Male and Female Accessions of the Liverwort *Marchantia polymorpha*

Ryosuke Kumano[1], Kimitsune Ishizaki[2], Hideo Matsumura[3], Tomoaki Horie[1] ([1]Grad. Sch. Div. Appl. Biol., Univ. Shinshu, [2]Grad. Sch. Sci., Univ. Kobe, [3]Gene Research Center, Univ. Shinshu)

1Q26 Screening for biuret-tolerant mutants of *Arabidopsis thaliana*

Akihide Takatsuji[1], Ren Kurose[2], Kumiko Ochiai[2], Toru Matoh[2,3], Kentaro Ifuku[2] ([1]Agri, Univ. Kyoto, [2]Grad. Sch. Agri., Univ. Kyoto, [3]KARI)

1Q27 Seasonal changes in tolerance to heat and freezing stress and responsiveness of gene expression in the evergreen herbaceous perennial *Arabidopsis halleri*

Genki Yumoto[1], Shoko Tsuji[2], Mie N. Honjo[1], Hiroshi Kudoh[1] ([1]CER, Kyoto Univ., [2]Grad. Sch. Agric., Kyoto Univ.)

1Q28 Sensitized expression of *LEARNED HEAT MEMORY 1* through histone modification confers thermotolerance in *Arabidopsis thaliana*

Xuejing Wang (Nara Institute of Science and Technology)

1Q29 Functional analysis of growth inhibition by ethanol treatment in plants

Rion Hazama[1], Akihiro Matsui[2], Atsushi J. Nagano[3], Motoaki Seki[2], Kaori Sako[1,2] ([1]Dep. Adv. Biosci., Kindai Univ., [2]CSRS, RIKEN, [3]Fac. Agri., Ryukoku Univ.)

1Q30 Functional analysis of AtTRB3 involved in the salt stress tolerance by low-concentration ethanol

Kouta Urushihara[1], Akihiro Matsui[2], Maho Tanaka[2], Sumire Fujiwara[3], Nobutaka Mitsuda[3], Masaru Takagi[3], Atsushi J. Nagano[4,5], Masahiro Tamoi[1], Motoaki Seki[2], Kaori Sako[1,2] ([1]Kindai Univ., [2]RIKEN, CSRS, [3]AIST, Bioprod. Res. Inst., [4]Fac. Agri., Ryukoku Univ., [5]Inst. Adv. Biosci., Keio Univ.)

1Q31 Analysis for molecular functions of plant progesterone and plant progesterone receptor candidate

Yuka Kinugasa[1], Ayumi Yamagami[1], Rira Daibo[1], Ayaka Uebayashi[2,3], Setsuko Shimada[2], Mayumi Iino[2], Takahito Nomura[4], Masaaki Sakuta[3], Tadao Asami[5], Takao Yokota[6], Takeshi Nakano[1] ([1]Grad. Sch. Biostudies., Univ. Kyoto, [2]CSRS, RIKEN, [3]Grad. Sch. Humanities and Sci., Univ. Ochanomizu, [4]Ctr. Bio., Univ. Utsunomiya, [5]Grad. Sch. Agr., Univ. Tokyo, [6]Dept. Bio., Univ. Teikyo)

1Q32 Identification of an Ion Channel Aquaporin IcAQP and Investigation of its Physiological Functions in Rice

Yunosuke Mito[1], Sen Tran[2,3], Aya Onishi[2], Shuntaro Ono[2], Maki Katsuhara[2], Tomoaki Horie[1] ([1]Grad. Sch., Div. Appl Biol., Shinshu Univ., [2]IPSR, Okayama Univ., [3]Hue Uni. Agri. Forest.)

1Q33 Isolation of the salt stress tolerance genes of Mongolian plant *Chloris virgata*

Hirotaka Ogawa[1], Shintaro Kawabata[1], Byambajav Bolortuya[2], Ganbayar Namuunaa[1], Ayumi Yamagami[1], Bekh-Ochir Davaapurev[2], Komaki Inouse[3], Asaka Kanatani[3], Keiichi Mochida[3], Tadao Asami[4], Javzan Batkhuu[2], Takeshi Nakano[1] ([1]Grad. Sch. Biostudies., Kyoto Univ., [2]National University of Mongolia, [3]CSRS., RIKEN, [4]Grad. Sch. Agri. Life Sci., Univ. Tokyo)

1Q34 Effects on reproductive growth of tomato under Ca-deficient to re-application conditions

Kiei Soyama[1], Clarissa F. Frederica[1], Ayaka Mukai[1], Louis J. Irving[2], Hiroaki Iwai[2] ([1]Grad. Sch. Sci. and Tech., Univ. Tsukuba, [2]Institute of Life and Environ. Sci., Univ. Tsukuba)

1Q35 Study on the *Arabidopsis* shoot growth improvement under 2-D clinostat

Yunshu Wang[1], Marcel Beier[1,2], Yoshihiro Ohmori[3], Motoyuki Ishimori[4], Toru Fujiwara[1] ([1]Dep. Appl. Biol. Chem., Grad. Sch. Agri. Life Sci., The University of Tokyo, [2]Inst. Adv. Higher Edu, Hokkaido University, [3]Agri. Bioinformatics Research Unit, Grad. Sch. Agri. Life Sci., The University of Tokyo, [4]Dep. Agri. Envi. Biology, Grad. Sch. Agri. Life Sci., The University of Tokyo)

1Q36 Analysis of the long-distance transport of Fra a 1.01 belonging to PR-10 family in Strawberry

Masanori Tatei[1], Haruna Uchida[1], Kanako Takebe[1], Ryohei Koyama[1], Misaki Ishibashi[2], Yuichi Uno[1] ([1]Grad. Sch. Agr. Sci., Kobe Univ., [2]Grad. Sch. Agr., Kyoto Univ.)

1Q37 Initial cellular responses and effects on growth of cold atmospheric pressure plasma irradiation in *Marchantia polymorpha*

Shoko Tsuboyama[1], Takamasa Okumura[2], Kazunori Koga[2], Masaharu Shiratani[2], Kazuyuki Kuchitsu[1] ([1]Dept. Appl. Biol. Sci., Tokyo Univ. of Sci., [2]ISEE, Kyushu Univ.)

■ Plant-organism interaction A

1Q38 Comprehensive identification of *Pseudomonas syringae* pv. *tabaci* 6605 type III effectors' targets in *Nicotiana benthamiana*

Kana Kuroe[1], Kanata Akashige[1], Sachi Kashihara[1], Takafumi Nishimura[1], Yoshiteru Noutoshi[1], Mikihiro Yamamoto[1], Kazuhiro Toyoda[1], Hirofumi Nakagami[2], Hidenori Matsui[1] ([1]Okayama University, [2]MPIPZ)

1Q39 Establishment of an assay system toward identifying an attractant against clover cyst nematode, *Heterodera trifolii*

Fairooz Atqiya Labiba[1], Satoko Yoshida[1], Mina Ohtsu[1,2] ([1]Bio. Sci., NAIST, [2]JST Sakigake)

1Q40 Control of root fungal infection under phosphate deficiency in *Arabidopsis thaliana*

Taiga Ishihara, Shigetaka Yasuda, Natsuki Tsuchida, Yusuke Saijo (Grad. Sch. Sci and Tech., NAIST)

1Q41 Preparation of biotinylated oligochitin ligand for characterization of LysM receptors

Wendi Jiang, Shingo Maruyama, Hanae Kaku (Dept. Life Sciences, Sch. Agriculture, Univ. Meiji)

1Q42 Dissection of the cell death pathway mediated by rice NB-LRR type receptor Xa1 that recognizes *Xanthomonas oryzae* TAL effectors

Ayaka Yoshihisa[1], Satomi Yoshimura[1], Motoki Shimizu[2], Masatsugu Toyota[3], Koji Yamaguchi[1], Tsutomu Kawasaki[1] ([1]Grad. Sch. Agr., Univ. Kindai, [2]Iwate. Biotech. Res. Cen, [3]Fac. Sci., Univ. Saitama)

1Q43 Indirect defense in rice: role of silicon in rice volatile production under herbivory stress

Dandy Ahamefula Osibe[1,2], Yuko Hojo[1], Tomonori Shinya[1], Ivan Galis[1] ([1]Inst. Plant Sci. & Res., Okayama Univ., [2]Dept. Plant Sci. & Biotech., Univ. Nigeria Nsukka Nigeria)

1Q44 Toward dissection of defense-related humidity sensing and signaling in *Arabidopsis thaliana*

Arullthevan Rajendram[1], Shigetaka Yasuda[1], Shioriko Ueda[1], Akihisa Shinozawa[2,3], Izumi Yotsui[2], Yusuke Saijo[1] ([1]Grad. Sch. Sci and Tech., NAIST, [2]Dep. Biosci., Tokyo Univ. Agric., [3]NGRC, Tokyo Univ. Agric.)

1Q45 Towards revealing the regulatory mechanism underlying the characteristic *WRKY33* activation pattern in Arabidopsis immunity

Yachi Jinno[1], Keigo Tokunaga[3], Mizuki Iwamoto[2], Eriko Betsuyaku[3], Shigeyuki Betsuyaku[3] ([1]Grad. Sch. Agr., Ryukoku Univ., [2]Grad. Sch. Life & Env. Sci., Univ. Tsukuba, [3]Fac. Agr., Ryukoku Univ.)

1Q46 Semi-automated system for quantitative analysis of insect feeding behavior on leaves

Naoyuki Sotta, Toru Fujiwara (Grad. Sch. Agric. Life Sci. Univ. Tokyo)

1Q47 Analysis of the NPR1 complex involved in SA-responsive immune response

Tomomi Ohata[1], Chiaki Yamaguchi[1], Susumu Uehara[2], Saki Noda[1], Yoshikatsu Matsubayashi[1], Mika Nomoto[1,2], Yasuomi Tada[1,2] ([1]Graduate School of Science, Nagoya University, [2]The Center for Gene Research, Nagoya University)

1Q48 ZIP3 is a novel transcriptional regulator of rice immunity targeted by pathogen effector

Soichiro Toyota, Taiju Nishimura, Tomoki Yamada, Satomi Yoshimura, Tsutomu Kawasaki, Koji Yamaguchi (Grad. Sch. Agr., Univ. Kindai)

■ Plant-organism interaction B

1Q49 Studying Ciliate *Tetrahymena utriculariae* and algae *Micractinium tetrahymenae* and *Chlorella* spp., as a model system to understand the molecular mechanisms of endosymbiosis

Li Wen Chu (Institute of Molecular Biology, Academia Sinica)

1Q50 Mechanisms of growth promotion and withering induction effects of *Pseudomonas* sp. strain Y132 on duckweed

Tomoya Nozaki[1], Shogo Ito[2], Makoto Kashima[3], Tokitaka Oyama[2], Takashi Ano[1], Masahiro Okanami[1] ([1]Grad. Sch. BOST., Univ. Kindai, [2]Grad. Sch. Sci., Univ. Kyoto, [3]Fac. Sci., Univ. Toho)

1Q51 The novel motif of SYMRK/DMI2 plays an important role in AM and RN symbioses

Kana Miyata[1,2], Moe Hosotani[2], Mirei Furuta[2], Yuka Asai[2], Ryo Takaoka[2], Tsubasa Wada[1], Ryota Fujieda[1], Hanae Kaku[2] ([1]Life Sci., Toyo Univ., [2]Sch. Agri., Meiji Univ.)

1Q52 The role of PB1 domain of NIN transcription factor

Momona Noda[1], Momoyo Ito[1], Takuya Suzaki[1,2] ([1]Fac. Life. Sci., Univ. Tsukuba, [2]T-PIRC, Univ. Tsukuba)

1Q53 The Function of NRT3.1 in the Nitrate Response in *Lotus japonicus*

Michi Ochiai[1], Momona Noda[1], Momoyo Ito[1], Takuya Suzaki[1,2] ([1]Fac. Life. Sci., Univ. Tsukuba, [2]T-PIRC, Univ. Tsukuba)

1Q54 Functional analysis of *PINK4* gene and regulation of rhizobial symbiosis after the establishment of endosymbiosis in *Lotus japonicus*

Haruka Arashida[1,2], Tomomi Nakagawa[1], Shun Hashimoto[2], Masaru Bamba[2], Mustamin Yusdar[2], Hisayuki Mitsui[2], Kazuhiko Saeki[1], Masayoshi Kawaguchi[1], Shusei Sato[2] ([1]NIBB, [2]Grad. Sch. of Life Sci. Tohoku univ.)

1Q55 Understanding the tripartite beneficial relationship between plant, fungus and bacteria

Koji Tokunaga, Utami Yuniar Devi, Nhi Nguyen Tan Anh, Kei Hiruma (Grad. Sch. Art. Sci., Univ. Tokyo)

1Q56 Comprehensive exploration of interactions between rice and rhizosphere microbiota using multi-omics analysis

Shinichi Yamazaki[1], Toshio Yomamoto[2], Makoto Hayashi[3], Yasunori Ichihashi[1] ([1]RIKEN, BRC, [2]NARO, [3]RIKEN, CSRS)

1Q57 A synthetic community of root-inhabiting bacteria promoting seedling growth in paddy rice

Yushin Suzuki[1], Shota Kido[1], Masahiro Nagayasu[1], Yukari Hayashi[1], Takumi Murakami[2], Satoshi Hattori[3], Kanako Inoue[1], Yusuke Saijo[1] ([1]Grad. Sch. Sci and Tech., NAIST, [2]Sch. Life Sci. and Tech., Tokyo Tech, [3]Fac. Agr., Yamagata Univ)

1Q58 Cellular dynamics of root invasion and infection by mutualistic bacteria in rice

Yudai Takeguchi, Kanako Inoue, Masaki Nishimura, Masahiro Nagayasu, Yushin Suzuki, Yukari Hayashi, Shota Kido, Yusuke Saijo (Grad. Sch. Sci and Tech., NAIST)

1Q59 Search For Transcription Factor Genes Required For The Root Nodule Symbiosis Via Gene Regulatory Network Inference

Tsuneo Hakoyama, Kai Battenberg, Makoto Hayashi (Riken CSRS)

1Q60 Genetic studies in a novel root-inhabiting growth-promoting bacterium of rice

Yukari Hayashi, Yushin Suzuki, Yudai Takeguchi, Masako Fuji, Kanako Inoue, Yusuke Saijo (Grad. Sch. Sci and Tech., NAIST)

1Q61 The lateral haustoria of root hemi-parasitic plant *Striga hermonthica* (Orobanchaceae)

Xin Li, Satoko Yoshida (Bio. Sci., NAIST)

1Q62 Towards establishment of *Agrobacterium*-mediated transformation system for the insect gall-forming plant *Rhus chinensis*

Ayaka Nuruki[1], Hiroto Fujii[2], Norihiro Ohtsubo[2] ([1]Sch. Life Environ. Sci., Kyoto Pref. Univ., [2]Grad. Sch. Life Environ. Sci., Kyoto Pref. Univ.)

1Q63 Exploration of Phosphorus Concentration Dependent Regulatory Mechanisms of Beneficial Relationships between *Arabidopsis thaliana* and *Colletotrichum tofieldiae* with a Focus on Plant Immunity and Nutrient Exchange

Daisuke Watanabe[1], Ryohei Sugita[2], Masaki Okumura[3], Ai Kaiho-Soma[4], Keitaro Tanoi[4], Kei Hiruma[1] ([1]Grad. Sch. of Arts and Sci., Univ. Tokyo, [2]Radioisotope, Nagoya Univ., [3]Kihara Inst. Biol. Res., Yokohama City Univ., [4]Grad. Sch. of Agri. and Life Sci., Univ. Tokyo)

1Q64 Beneficial interactions with plant growth-promoting bacteria via the common symbiosis regulator CCaMK in paddy rice

Shota Kido[1], Masako Fuji[1], Minenosuke Matsutani[2], Kanako Inoue[1], Asahi Adachi[1], Miki Yokote[1], Yusuke Saijo[1] ([1]NAIST, [2]Tokyo Univ. Agr.)

1Q65 Evolutionary roles of immune gene contraction in parasitic plant lineages

Takaya Tominaga, Satoko Yoshida (Grad. Sch. Sci. and Tech., NAIST)

1Q66 Evaluation of the Effects of a Plant Growth-Promoting Bacterium, *Pseudomonas fulva* Ps6, on the Gene Expression Profile of Duckweed, *Lemna japonica* during Co-culturing

Yugo Tsuda[1], Nanami Kitayama[1], Maki Ohtsubo[1], Shogo Ito[1], Masaaki Morikawa[2], Tokitaka Oyama[1] ([1]Grad. Sch. Sci., Kyoto Univ., [2]Grad. Sch. Env. Sci., Hokkaido Univ.)

1Q67 Latent and persistent infection with a novel virus on pepper (*Capsicum annuum*)

Midori Tabara[1], Toshiyuki Fukuhara[2], Atsushi Takeda[1,3] ([1]R-GIRO, Ritsumeikan Univ., [2]Grad. Agri., Tokyo Univ. Agri. Tech., [3]Grad. Life Sci., Ritsumeikan Univ.)

■ Bioresources

1Q68 Variation of acyl-CoA:diacylglycerol acyltransferase 1 in plant species

Tomoko Hatanaka, Daisuke Sasayama, Hirosi Fukayama, Tetsushi Azuma (Kobe University)

1Q69 Update of Exp-Plant, the RIKEN BRC catalog database of Arabidopsis mutant lines

Satoshi Iuchi, Masatomo Kobayashi (RIKEN Bioresource Research Center Experimental Plant Division)

■ Photosynthesis

2P01 Exploring the Interplay of Redox Regulation with Electron Transport Efficiency during the Photosynthetic Induction Phase

Keisuke Yoshida[1], Toru Hisabori[1,2] ([1]CLS, Tokyo Tech, [2]IRFI, Tokyo Tech)

2P02 The possible role of chloroplast/plastid in cone thermogenesis of the gymnosperm cycad, *Cycas revoluta*

Momoka Hisamatsu[1], Fumika Matsuoka[1], Minami Motogi[1], Toui Mizuno[1], Mitsuhiko Sato[2], Takehito Inaba[1], Yasuko Inaba[1,3] ([1]Fac. Agr., Univ. Miyazaki, [2]Kazusa DNA Res. Inst., [3]Grad. Sch. Life Sci., Tohoku Univ.)

2P03 Imaging analysis of phloem paths and unloading destinations of photosynthates in soybeans using radioisotope-labeled carbons and fluorescent marker

Ai Soma, Yuko Kurita, Natsuko I. Kobayashi, Keitaro Tanoi, Tomoko M. Nakanishi (Graduate School of Agricultural and Life Sciences, The University of Tokyo)

2P04 Identification of a mitochondrial pyruvate transporter in *Panicum miliaceum*

Ayumi Sato[1], Susumu Mitsuyama[2], Shin Kore-eda[3] ([1]Dept. Biochem. Mol. Biol., Saitama Univ., [2]Grad. Sch. Agric. Life Sci., Univ. Tokyo, [3]Grad. Sch. Sci. and Eng., Saitama Univ.)

2P05 Occurrence and function of Rhesus factors in marine diatoms

Hiroaki Matsui (Grad. Life Sci., KG Univ.)

2P06 The effect of sulfide on the regulation of photosynthetic apparatus during chloroplast biogenesis in *Arabidopsis thaliana*

Takayuki Shimizu[1], Zurina Osuman[2], Tatsuru Masuda[2] ([1]Div. Nat. Sci., Nara Women's Univ., [2]Grad. Sch. Art Sci., Univ. Tokyo)

2P07 Site-directed mutagenesis, purification and structural analysis of VIPP1, an ESCRT-III super family protein involved in thylakoid membrane remodeling

Sarah Wanjiru Gachie, Sakamoto Wataru (Institute of Plant Sciences and Resources, Okayama University, Japan)

2P08 Functional analysis of Trx-like protein CDSP32 in chloroplast redox regulation

Minh Chau Tran[1,2], Keisuke Yoshida[1,2] ([1]CLS, IIR, Tokyo Tech, [2]School of Life Science and Technology, Tokyo Tech)

2P09 Characterization of the proteins interacting with VIPP1 involved in thylakoid membrane remodeling in Arabidopsis chloroplasts

Di Li[1], Shin-ichiro Ozawa[1], Michael Hippler[2], Wataru Sakamoto[1] ([1]Graduate School of Environmental and Life Science, Okayama University, [2]Institute of Plant Biology and Biotechnology, University of Münster)

2P10 Characterization of phosphatidylglycerol-less mutant in a cyanobacterium *Synechocystis* sp. PCC 6803

Megumi Haga, Tatsunori Hiyoshi, Rinsei Negishi, Norihiro Sato (Tokyo Uni. of phar. & life sci.)

2P11 Exploration of Chlorophyll *d* Biosynthetic Enzymes in The Marine Cyanobacterium *Acaryochloris*

Takahiro Arase[1], Hitoshi Mori[1,2], Yuichi Fujita[1], Haruki Yamamoto[1] ([1]Grad. Sch. Bioagr., Univ. Nagoya, [2]Inst. Glyco. Res., Univ. Nagoya)

2P12 Reaction of xanthophylls and it's role in photoprotection

Joshua Ikechukwu Egede (Alfa university college, Subang Jaya)

2P13 A novel nitrogenase-like enzyme involved in the sulfonate degradation reaction to utilize isethionate as a sulfur source in the photosynthetic bacterium *Rhodobacter capsulatus*

Yoshiki Morimoto, Kazuma Uesaka, Yuichi Fujita, Haruki Yamamoto (Grad. Sch. Bioagr. Sci., Nagoya Univ.)

2P14 Excitation energy transfer dynamics among antenna pigments in the *ΔpshX*-reaction center of heliobacteria

Risa Kojima[1], Masatoshi Kida[2], Kevin E. Redding[3], Daisuke Kosumi[4], Hirozo Oh-oka[5] ([1]Col. Life Sci., Ritsumeikan Univ., [2]Grad. Sch. Sci. & Tech., Kumamoto Univ., [3]Sch. Mol. Sci., Arizona State Univ., [4]IINa, Kumamoto Univ., [5]CELAS, Osaka Univ.)

■ Specialized (secondary) metabolism

2P15 Functional analysis of transcription factors whose expression is induced by $CuCl_2$ treatment in pea (*Pisum sativum* L.)

Kai Uchida[1], Masami Y. Hirai[1,2] ([1]RIKEN CSRS, [2]Grad. Sch. Bioagr. Sci., Nagoya Univ.)

2P16 Study on biosynthetic mechanism of *cis*-type phenylpropenes in *Acorus calamus*

Takao Koeduka[1], Kouki Aono[1], Shiro Suzuki[2], Bunta Watanabe[3], Ulziibat Bolortuya[4], Atsushi Okazawa[5] ([1]Yamaguchi Univ., [2]Gifu Univ., [3]Jikei Univ. Sch. of Med., [4]Mongolian Acad. of Sci., [5]Osaka Metro. Univ.)

2P17 Identification of an *S*-oxygenase for the biosynthesis of marasmin in traditional medicinal plant *Tulbaghia violacea*

Naoko Yoshimoto[1,2], Jichen Wang[1], Hideyuki Suzuki[3], Nanako Nakashima[4], Mariko Kitajima[1,2], Hiromitsu Takayama[1,2], Kazuki Saito[1,2], Mami Yamazaki[1,2] ([1]Grad. Sch. Pharm. Sci., Chiba Univ., [2]Plant Mol. Sci. Cent., Chiba Univ., [3]Kazusa DNA Res. Inst., [4]Grad. Sch. Sci. Technol., Kumamoto Univ.)

2P18 Comparative Analysis of Shikonin and Alkannin Acyltransferases in Boraginaceae Plants

Haruka Oshikiri[1], Hao Li[2], Misaki Manabe[1], Hirobumi Yamamoto[3], Kazufumi Yazaki[2], Kojiro Takanashi[1,4] ([1]Grad. Sch. Sci. & Tech., Shinshu Univ., [2]RISH, Kyoto Univ., [3]Fac. Life Sci., Toyo Univ., [4]Fac. Sci., Shinshu Univ.)

2P19 Analysis of high-order glycosyltransferases involved in phenylethanoid glycosides biosynthesis in sesame cultured cells

Yushiro Fuji[1,2], Hiroshi Matsufuji[2], Masami Y. Hirai[1] ([1]RIKEN CSRS, [2]Grad. Sch. Bio. Sci., Univ. Nihon)

2P20 Analysis of biosynthesis mechanism of hatching factors for potato cyst nematodes

Ryota Akiyama[1], Kosuke Shimizu[1], Atsuhiko Kushida[2], Keiji Tanino[3], Yukihiro Sugimoto[1], Masaharu Mizutani[1] ([1]Grad. Sch. Agri., Univ. Kobe, [2]HARC/NARO, [3]Grad. Sch. Sci., Univ. Hokkaido)

2P21 A feedback mechanism of polyamine biosynthesis via translational regulation by non-AUG-initiated upstream ORFs and an RNA secondary structure in Arabidopsis

Yuta Hiragori[1], Miharu Yasumuro[2], Taihei Karino[1], Atsushi Kaido[1], Yasuko Sakihama[1], Yuya Goto[1], Yui Yamashita[1], Satoshi Naito[1], Hitoshi Onouchi[1] ([1]Grad. Sch. Agr. Hokkaido Univ., [2]Sch. Agr. Hokkaido Univ.)

2P22 Metabolomic analysis of tissue-specificity of specialized metabolites in *Pueraria lobata*

Zhixuan Huang[1], Aoi Shimeno[2], Isao Takenaka[2], Sadahiro Hamasaki[2], Shinichiro Komaki[1], Mutsumi Watanabe[1], Takayuki Tohge[1] ([1]Grad. Sch. Sci., Tech., NAIST, [2]Bull. Nara Agr. Res. Cen.)

2P23 Cross-cultivar metabolomic comparison of Japanese tea for construction of polyphenolic biosynthetic pathway

Uta Ando[1], Aoi Shimeno[2], Isao Takenaka[2], Sadahiro Hamasaki[2], Mutsumi Watanabe[1], Takayuki Tohge[1] ([1]Grad. Sch. Sci., Tech., NAIST, [2]Bull. Nara Agr. Res. Cen.)

2P24 Exploration of the Marchantins biosynthetic pathway genes in *M. polymorpha*

Miki Mizuta[1], Tamao Inoue[1], Kimitsune Ishizaki[2], Kojiro Takanashi[3], Masaharu Mizutani[1] ([1]Grad. Sch. Agri., Univ. Kobe, [2]Grad. Sch. Sci., Univ. Kobe, [3]Grad. Sch. Sci. and Tech., Univ. Shinshu)

2P25 Analysis of production of Arabidopsis thaliana accession-specific flavonoids

Tomoka Ueda, Shinichiro Komaki, Mutsumi Watanabe, Takayuki Tohge (Grad. Sch. Sci., Tech., NAIST)

2P26 Expression analysis of ABCC transporters and MATE transporters in *Gentiana triflora*

Nobukazu Shitan[1], Erina Obari[1], Takuji Ichino[1], Yukina Fukushima[1], Wakako Masuda[1], Yukino Muraoka[1], Yasuyuki Yamada[1], Keisuke Tasaki[2], Takuya Teshima[3], Keiichiro Nemoto[3], Masahiro Nishihara[3,4] ([1]Kobe Pharm. Univ., [2]Tokyo Univ. Agriculture, [3]Iwate Biotechnol. Res. Center, [4]Fukui Pref. Univ.)

2P27 The localization of alkaloids in *Amsonia elliptica* leaf tissue

Kotaro Yamamoto[1], Tetsuya Mori[2], Setsuho Tanaka[3], Mai Uzaki[2], Noriko Takeda-Kamiya[2], Kiminori Toyooka[2], Masami Y. Hirai[2] ([1]Sch. Sci., Yokohama City Univ., [2]RIKEN CSRS, [3]HUMANIX Co., Ltd.)

2P28 Establishment of a hairy root transformation system in *Eucalyptus camaldulensis*

Ko Tahara, Mitsuru Nishiguchi, Chihiro Oda-Yamamizo (Forestry and Forest Products Research Institute)

2P29 Investigation for novel genes driving cellular metabolic differentiation in *Catharanthus roseus*

Mai Uzaki[1], Kotaro Yamamoto[2], Tetsuro Mimura[3], Masami Y. Hirai[1,4] ([1]RIKEN CSRS, [2]Sch. Sci., Yokohama City Univ., [3]Fac. Bioenviromental Sci., KUAS, [4]Grad. Sch. Agricul. Sci., Nagoya Univ.)

2P30 The effect of nitrogen deficiency on quinolizidine alkaloid metabolism in Lupinus callus

Natsumi Hara[1], Ryosuke Sugiyama[1,2], Mami Yamazaki[1,3] ([1]Grad. Sch. Pharm. Sci., Chiba Univ., [2]JST PRESTO, [3]PMSC, Chiba Univ.)

2P31 Cross-species metabolomic analysis of polyphenol metabolic response under UV-B exposure among Solanaceae species

Lalida Sangpong[1], Nodoka Shinya[1], Carla Calumpang[1], Federico Scossa[2], Alisdair R. Fernie[2], Shinichiro Komaki[1], Mutsumi Watanabe[1], Takayuki Tohge[1] ([1]Grad. Sch. Sci., Tech., NAIST, [2]MPI-MP)

■ Cell cycle/Cell division

2P32 MYB3R transcriptional activators are indispensable for cytokinesis and completing plant life cycle in *Arabidopsisthaliana*

Rihoko Senga[1], Yuji Nomoto[1], Takamasa Suzuki[2], Masaki Ito[1] ([1]Sch. Biol. Sci. & Tech., Kanazawa Univ., [2]Dept. Biol. Chem., Chubu Univ.)

2P33 Formation of centromeric heterochromatin ensures proper DNA replication and genome maintenance

Moo Kar Yee[1], Hirotomo Takatsuka[2], Nanase Kato[1], Shiori Aki[1], Masaaki Umeda[1] ([1]Grad. Sch. Sci. Technol., NAIST, [2]Sch. Biol. Sci. Technol., Kanazawa Univ.)

■ Reproduction

2P34 Defect of pollen maturation and germination in the mutant of Arabidopsis deadenylases

Kenta Yoshihira[1], Yoshiki Omuro[2], Kazuki Motomura[3,4], Taku Tokunaka[2], Mitsunaga Hamashima[1], Toshihiro Arae[5], Yukako Chiba[1,2] ([1]Sch. Sci., Univ. Hokkaido, [2]Grad. Sch. Life Sci., Univ. Hokkaido, [3]Coll. Life Sci., Univ. Ritsumeikan, [4]JST PRESTO, [5]Grad. Sch. Front. Sci., Univ. Tokyo)

2P35 DNA methylation profiling in Arabidopsis egg cells

Hiroki Tsutsui[1], Marc W. Schmid[2], Ueli Grossniklaus[1] ([1]University of Zurich, [2]MWSchmid GmbH)

2P36 Molecular study on the factor related to self-incompatibility expression in Arabidopsis

Zhen Zhang[1], Sota Fujii[1,2], Seiji Takayama[1] ([1]The University of Tokyo, Graduate School of Agricultural and Life Sciences, Japan, [2]Suntory Rising Stars Encouragement Program in Life Science)

2P37 Functional analysis of K^+ channel homolog genes, Mp*BK1,* Mp*BK2a*, and Mp*BK2b*, in the sperm chemotaxis in the liverwort *Marchantia polymorpha*

Genta Aoki[1], Katsuyuki T. Yamato[2] ([1]Grad. Sch. BOST, Kindai Univ., [2]Fac. BOST, Kindai Univ.)

2P38 Plasma membrane H^+-ATPase in female papilla cells is involved in the control of pollen hydration in Brassicaceae

Maki Hayashi[1], Kazuki Fukushima[1], Hiromi Masuko-Suzuki[1], Toshinori Kinoshita[2,3], Shin-ichiro Inoue[2], Seiji Takayama[4], Yoshinobu Takada[1], Masao Watanabe[1] ([1]Grad. Sch. Life Sci., Tohoku Univ., [2]Grad. Sch. Sci., Nagoya Univ., [3]ITbM, Nagoya Univ., [4]Grad. Sch. Agric. Life Sci., Univ. Tokyo)

2P39 Establishment of novel Arabidopsis thaliana sperm cells isolation system

Mizuka Kobashi[1], Naoya Sugi[1], Daichi Susaki[1], Kazuki Motomura[2,3], Kazuo Ebine[4,5], Tetsu Kinoshita[1], Daisuke Maruyama[1] ([1]KIBR, Yokohama City Univ., [2]Col. of Life Sci., Ritsumeikan Univ., [3]PRESTO, JST, [4]Div. Cellular Dynamics, NIBB, [5]Grad. Inst. for Adv. Stud., SOKENDAI)

2P40 Histological analysis of amyloid formation in EC1 peptides, sperm-cell-activating factors expressed in egg cell

Hinako Oshirabe[1], Shiori Nagahara[2], Yumi Goto[3], Takao Oi[4], Hidenori Takeuchi[5,6], Kiminori Toyooka[3], Tetsu Kinoshita[1], Daichi Susaki[1], Daisuke Maruyama[1] ([1]KIBR, Yokohama City Univ., [2]Grad. Sch. Sci., Kyoto Univ., [3]CSRS, RIKEN, [4]Grad. Sch. Bioagric. Sci., Nagoya Univ., [5]ITbM, Nagoya Univ., [6]Inst. Adv. Res., Nagoya Univ.)

2P41 *RE* genes regulate embryo size in rice

Ken-ichro Hibara[1,2], Hiromi Kobayashi[2], Nobuhiro Nagasawa[3,4], Hajime Sakai[4,8], Takumi Tezuka[5,6], Nhung Ta Kim[6,7], Yutaka Sato[5,6], Yasuo Nagato[2] ([1]Kibi Intl. Univ., [2]Grad. Sch. Agric. Life Sci., U. Tokyo, [3]Fac. BioSci., Akita Pref. U., [4]DuPont, [5]SOKENDAI Department of Advanced Science, [6]NIG, [7]Vietnam Japan University, Vietnam National University, [8]NAPIGEN, Inc.)

2P42 Comparative analysis of the development of *Ginkgo biloba* female gametophyte in the cultivars cultured in Sobue, Inazawa, Japan

Hidenobu Uchida[1,2], Hongqiao Lu[1], Tatsuya Shibutani[3], Masami Kobayashi[3], Hirofumi Yamashita[4], Kazuhito Inoue[2,5] ([1]Dept. Food Business, Nagoya Bunri Univ., [2]Res. Inst. Integ. Sci., Kanagawa Univ., [3]Dept. Mat. Sci., Univ. Tsukuba, [4]Dept. Inf. Env. Sci., Kyoto Pref. Univ., [5]Dept. Biochem. Biotechnol., Kanagawa Univ.)

2P43 Arabidopsis *TTL* gene is required for the splicing of AT–AC-type introns and embryogenesis

Tomoko Niwa[1], Junshin Miyamoto[2], Daisuke Kurihara[3,4], Mine Morimoto[1], Takamasa Suzuki[1] ([1]Col. Biosci. Biotech., Chubu Univ., [2]Grad. Sch. Biosci. Biotech., Chubu Univ., [3]ITbM, Nagoya Univ., [4]Inst. Adv. Res., Nagoya Univ.)

2P44 Involvement of Plastid-Localized Trx-Like Proteins in Embryogenesis in *Arabidopsis thaliana*

Yuka Fukushi[1,2], Yokochi Yuichi[1,2], Toru Hisabori[1,2,3], Keisuke Yoshida[1,2] ([1]CLS, IIR, Tokyo Tech, [2]School of Life Science and Technology, Tokyo Tech, [3]IRFI, Tokyo Tech)

2P45 Identification of the causal mutation at *qSH3* involved in a loss of seed shattering and its role in rice domestication

Ryo Ishikawa, Than Myint Htun, Koji Numaguchi, Yumi Oka, Miki Ogasawara, Shohei Sugiyama, Natsumi Takama, Chhourn Orn, Chizuru Inoue, Takashige Ishii (Grad. Sch. Agr. Sci., Kobe Univ.)

■ Plant hormones/Signaling molecules

2P46 Identification of a novel functional amino acid inducing lateral root formation in a wide range of dicotyledonous plants

Hiromitsu Tabeta[1], Masami Y. Hirai[1,2] ([1]RIKEN CSRS, [2]Dep. of App. Bio., Grad. Sch. of Bioagri. Sci., Nagoya Univ.)

2P47 Involvement of an Arabidopsis SWEET protein in the salt stress responses

Yuri Kanno[1], Mitsunori Seo[1,2] ([1]RIKEN CSRS, [2]TBRC, Univ. of the Ryukyus)

2P48 A Novel Peptide Involved in The Regulation of Cambium Stem Cells during Secondary Growth in Arabidopsis

Hui Cao, Dongbo Shi (Inst. Biochemistry. Biol., Univ. Potsdam)

2P49 Analysis of strigolactone biosynthesis in the root parasitic plant *Orobanche minor*

Mayu Kawabuchi[1], Yoshinori Fukasawa[1], Xiaonan Xie[1], Yoshiya Seto[2], Takahito Nomura[1] ([1]Ctr. Biosci. Res. Edu., Utsunomiya Univ., [2]Sch. Agri., Meiji Univ.)

2P50 SMAX1 is a Signaling Hub That Integrates Karrikin- and Ethylene-mediated Regulation of Seedling Photomorphogenesis in *Arabidopsis thaliana*

Satoshi Ogawa[1,2], Caroline Gutjahr[3], David C. Nelson[2] ([1]RIKEN Center for Sustainable Resource Science, [2]Dept. of Botany and Plant Sciences, Univ. of California, Riverside, [3]Max-Planck Inst. for Molecular Plant Physiology)

2P51 Genetic analysis for fairy compound low-sensitive Arabidopsis mutant lines

Masanori Okamoto[1,2,3], Yuki Tanaka[2,4], Jae-Hoon Choi[5], Takahito Nomura[2], Tomohiro Suzuki[2], Hirokazu Kawagishi[5] ([1]RIKEN, CSRS, [2]Ctr. of Bio. & Edu. Res., Utsunomiya Univ., [3]Kihara Inst. Biol. Res., Yokohama City Univ., [4]Fac. of Food & Agri. Sci., Fukushima Univ., [5]Fac. of Agri., Shizuoka Univ.)

2P52 A Functional Analysis of CLE46 Peptide Signaling

Tatsuya Ito[1], Hiroo Fukuda[2,3], Satoshi Endo[3] ([1]Grad. Sch. Bioenviron., Kyoto Univ. Adv. Sci., [2]Akita Pref. Univ., [3]Fac. Bioenviron., Kyoto Univ. Adv. Sci.)

2P53 Analysis of a strigolactone-related compound identified from the xylem sap in Arabidopsis

Yuya Watanabe[1], Takaya Kisugi[2], Taiga Tatsumi[3], Ryota Noda[2], Kohki Akiyama[3,4], Kiyoshi Mashiguchi[1,2], Shinjiro Yamaguchi[1,2] ([1]ICR, Kyoto Univ., [2]Grad. Sch. Life Sci., Tohoku Univ., [3]Grad. Sch. Life Environ., Osaka Pref. Univ., [4]Grad. Sch. Agri., Osaka Metropolitan Univ.)

2P54 Biochemical studies on byosynthesis and metabolism of fairy chemicals in plants

Marika Torigoe[1], Jae-Hoon Choi[1,2,3,4,5,6], Hideo Dohra[4,5,6], Jing Wu[1,6], Hirofumi Hirai[1,2,3,4,5,6], Hirokazu Kawagishi[1,6] ([1]Fac. Agr., Shizuoka Univ., [2]Fac. Glob. Int. Sci. Inno., Shizuoka Univ., [3]Grad. Sch. of Inte. Sci. and Tech., Shizuoka Univ., [4]Grad. Sch. of Integr., Shizuoka Univ., [5]Res. Inst. Green Sci. Tech., Shizuoka Univ., [6]Mushroom Sci. Tech., Shizuoka Univ.)

2P55 Biochemical studies on biosynthetic pathway of fairy chemicals in rice

Futa Morii[1], Jae-Hoon Choi[1,2,3,4,5], Taisei Miyoshi[2], David C. Nelson[6], Hideo Dohra[3,4], Takahito Nomura[7], Hirofumi Hirai[1,2,3,4,5], Hirokazu Kawagishi[1,4] ([1]Fac. Agr., Shizuoka Univ., [2]Grad. Sch. of Inte. Sci. and Tech., Shizuoka Univ., [3]Res. Inst. Green Sci., Shizuoka. Univ., [4]Res. Inst, Mushroom Sci. Tech., Shizuoka Univ., [5]Fac. Glob Int. Sci. Inno., Shizuoka Univ., [6]Bot. Plant Sci., UCR, [7]C-Bio, Utsunomiya Univ.)

2P56 Effect of glycosylation on the function of the rice DELLA protein SLR1

Hideki Yoshida, Shunsuke Nishio, Makoto Matsuoka (IFeS, Fukushima Univ.)

2P57 Analysis of ethylene production and action in germinating rice seeds

Shigeto Morita[1,2], Mizuki Ojio[1], Ayaka Takabatake[1], Yuzuki Tani[1], Akihiro Itai[1], Takehiro Masumura[1,2] ([1]Grad. Sch. Life Environ. Sci., Kyoto Pref. Univ., [2]Kyoto Pref. Agr., Forest. Fish. Technol. Center)

2P58 Characterization of novel Anti-Auxin compounds AAs

Yuko Maki[1], Hiroshi Soejima[1], Takeo Sato[2], Masaaki K. Watahiki[2], Keiji Tanino[2], Junji Yam[2] ([1]Snow Brand Seed Co., Ltd., [2]Fac. Sci., Hokkaido Univ.)

2P59 Biochemical analysis about regulatory mechanism of chloroplast by a novel BR signaling factor BPG4

Takao Ohashi, Ryo Tachibana, Ayumi Yamagami, Takuya Miyakawa, Takeshi Nakano (Grad. Sch. Bio., Univ. Kyoto)

2P60 Expression and Physiological Functions of Two Transcription Factors ERF105 and ERF104 in *Arabidopsis*

Jingyan Xu, Kyoka Sato, Tomohide Uno, Daiki Hayashi, Kengo Kanamaru (Grad. Sch. Agri., Kobe Univ.)

2P61 Exploring metabolic enzymes for gibberellins in the bryophyte *Marchantia polymorpha*

Yoko Kamata[1], Yoshihiro Yoshitake[2], Maiko Okabe[2], Kiyoshi Mashiguchi[3], Konoka Shimada[2], Rui Sun[2], Shogo Kawamura[2], Kaori Suzuki[2], Eita Shimokawa[2], Yukiko Yasui[2], Shinjiro Yamaguchi[3], Takayuki Kohchi[2] ([1]Fac. Agric., Kyoto. Univ., [2]Grad. Sch. Biostudies., Kyoto. Univ., [3]Inst. Chem. Res., Kyoto. Univ.)

2P62 Exploration of gibberellin-related bioactive molecules in the liverwort *Marchantia polymorpha*

Maiko Okabe[1], Rui Sun[1], Yoshihiro Yoshitake[1], Shogo Kawamura[1], Kaori Suzuki[1], Eita Shimokawa[1], Yukiko Yasui[1], Shohei Yamaoka[1], Toshiaki Ishida[2], Kiyoshi Mashiguchi[2], Shinjiro Yamaguchi[2], Takayuki Kohchi[1] ([1]Grad. Sch. Biostudies, Kyoto Univ., [2]Inst. Chem. Res., Kyoto Univ.)

2P63 Functional analysis of peptide hormones generated by alternative promoter selection

Ryotaro Mitsuboshi[1], Haruaki Kobayashi[1], Kazumasa Shirai[2], Kousuke Hanada[2], Tomoo Shimada[1], Yoshito Oka[1], Tomonao Matsushita[1] ([1]Grad. Sch. Sci., Univ. Kyoto, [2]Grad. Sch. Comput. Sci. Sys. Eng., Kyushu Inst. Tech)

2P64 Analysis of physiological functions of BIL7, a novel brassinosteroid signaling factor, in rice

Ayano Nishimoto[1], Ayumi Yamagami[1], Noriko Ishikawa[2], Masakazu Kashihara[2], Ganbayar Namuunaa[1], Bardorj Bujin[1], Masaki Mori[3], Tadao Asami[4], Takeshi Nakano[1] ([1]Grad. Sch. Biostudies., Univ. Kyoto, [2]Japan Tobacco Inc., Plant Innovation Center, [3]NARO, [4]Grad. Sch. Agri. Life Sci., Univ. Tokyo)

2P65 Spatial regulation of strigolactone production and exudation in *Marchantia paleacea*

Akiyoshi Yoda, Kyoichi Kodama, Junko Kyozuka (Grad. Sch. of Life Sci., Tohoku Univ.)

2P66 Auxin-induced Elongation Growth and Activation of PM H^+-ATPase in the Excised Hypocotyls

Koji Takahashi[1,2], Toshinori Kinoshita[1,2] ([1]Grad. Sch. Sci., Nagoya Univ., [2]ITbM, Nagoya Univ.)

2P67 Analysis of the molecular mechanism for novel plant growth promoter PPG, and screenings of natural PPG analogues

Sakurako Katsuta[1], Shun Takeno[2,3], Shota Tanaka[2,3], Keiya Kaga[1,6], Kazuma Ohata[1], Ayumi Yamagami[1], Takuya Miyakawa[1], Shoji Segami[4], Yasumitsu Kondo[2], Naoshi Dohmae[2], Tetsuo Kushiro[3], Masayoshi Maeshima[4], Tadao Asami[5], Masaru Takagi[6], Hiroyuki Osada[2], Takeshi Nakano[1] ([1]Grad. Sch. Bio., Univ. Kyoto, [2]RIKEN·CSRS, [3]Grad. Sch. Agr., Univ. Meiji, [4]Grad. Sch. Agr., Univ. Nagoya, [5]Grad. Sch. Agr., Univ. Tokyo, [6]Grad. Sch. S&E., Univ. Saitama)

2P68 Analysis of stomatal aperture regulation mechanism using K^+ channel modulating compounds

Kanane Sato[1], Shunya Saito[1], Kohsuke Endo[1], Kyota Suzuki[1], Tomoki Shimada[1], Taishin Kakei[1], Haruka Taketa[1], Masaru Kono[2], Mieko Arisawa[3], Yuki Hayashi[4], Toshinori Kinoshita[4], Matteo Grenzi[5], Alex Costa[5], Shintaro Munemasa[6], Yoshiyuki Murata[6], Khurram Bashir[7], Motoaki Seki[7], Masaru Tsujii[1], Yasuhiro Ishimaru[1], Nobuyuki Uozumi[1] ([1]Grad. Sch. Eng., Tohoku Univ., [2]Grad. Sch. Sci., Univ. Tokyo, [3]Grad. Sch. Bioresour. Bioenv. Sci, Kyushu Univ., [4]Grad. Sch. Sci., Nagoya Univ., [5]Dept. Biosci., Univ. Milan, [6]Grad. Sch. Env. Life Sci., Okayama Univ., [7]CSRS, RIKEN)

■ Genome function/Gene regulation

2P69 Genetic and transcriptomic characterization of newborn genes that emerged during *Arabidopsis thaliana* lineage diversification

Yusei Shigematsu[1], Shoma Morita[1], Takuya Nakagawa[2], Soichirou Satoh[1,2] ([1]Grad. Life Env. Sci., Kyoto Pref. Univ., [2]Fac. Life Env. Sci., Kyoto Pref. Univ.)

2P70 Exploring the Genetic Basis of High Soil Temperature Tolerance in Wild Rice Introgression Line: Unveiling Promising Gene Candidates for Crop Improvement

Mel Anthony Talavera[1], Sachiko Funayama-Noguchi[1], Akifumi Shimizu[2], Yoshihiro Ohmori[3], Toru Fujiwara[1] ([1]Department of Applied Biological Chemistry, Graduate School of Agricultural and Life Sciences, The University of Tokyo, Yayoi, Bunkyo-ku, Tokyo, 113-8657 Japan, [2]School of Environmental Science, The University of Shiga Prefecture, Hassaka-cho, Hikone-City, Shiga 522-8533 Japan, [3]Agricultural Bioinformatics Research Unit, Graduate School of Agricultural and Life Sciences, The University of Tokyo, Yayoi, Bunkyo-ku, Tokyo, 113-8657 Japan)

2P71 Application of restriction enzyme-inducible plants that can reproducibly evoke genome-wide DNA double-strand breaks

Kohei Kawaguchi[1], Mei Kazama[1], Takayuki Hata[2], Mitsuhiro Matsuo[3], Junichi Obokata[3], Soichirou Satoh[1] ([1]Grad. Sch. Life Env. Sci., Kyoto Pref. Univ., [2]Grad. Sch. Med., Hirosaki Univ., [3]Fac. Agri., Setsunan Univ.)

2P72 Functional analysis of cohesin in the formation of chromosomal higher-order structure in *Cyanidioschyzonmerolae*

Takuya Sakamomto[1], Minami Nakayama[2], Daniel Slane[3], Shunnosuke Mori[3], Ryota Aoki[3], Yayoi Inui[3], Tomoko Matsunaga[3], Yamato Yoshida[4], Takamasa Suzuki[5], Kan Tanaka[6], Sachihiro Matsunaga[3] ([1]Fac. Sci., Kanagawa Univ., [2]Fac. Sci. Tech., Tokyo Univ. Sci., [3]Grad. Sch. Fro. Sci., Univ. Tokyo, [4]Grad. Sch. Sci., Univ. Tokyo, [5]Col. Biosci. Biotech., Chubu Univ., [6]Inst. Innov. Res., Tokyo Inst. Tech.)

2P73 Identification And Characterization Of Two Arabidopsis NAC Transcription Factors That Regulate Phosphate Starvation-induced Membrane Lipid Remodeling

Jiratorn Meethonganantamas[1], Kai-Lun Yeh[2], Nobutaka Mitsuda[3], You-Yi Chen[1], Wen-Chieh Tsai[1], Sumire Fujiwara[3], Masaru Ohme-Takagi[1,3], Chuan-Ming Yeh[2,3,4] ([1]Institute of Tropical Plant Sciences and Microbiology, National Cheng Kung University, Tainan, Taiwan, [2]Institute of Molecular Biology, National Chung Hsing University, Taichung, Taiwan, [3]Bioproduction Research Institute, National Institute of Advanced Industrial Science and Technology (AIST), Tsukuba, Ibaraki, Japan, [4]Advanced Plant and Food Crop Biotechnology Center, National Chung Hsing University, Taichung, Taiwan)

2P74 Sequence-specific DNA binding activity of a dinoflagellate cold shock domain containing protein from *Breviolum minutum*
Rei Tanaka, Shizue Yoshihara (Sch. Sci., Osaka Pref. Univ.)

2P75 Stage-specific isoflavones synthesis genes expression profile of soybean growing on various soils
Hidefumi Hamasaki[1], Yukio Kurihara[1], Tomoko Kuriyama[1], Yuko Makita[1,2], Masaharu Kawauchi[1], Takashi Kenjyo[3], Katsuhiro Kojima[3], Toyoaki Anai[4], Haruko Takeyama[5], Minami Matsui[1,6] ([1]Yokohama Riken Inst.·CSRS, [2]Maebashi Institute of Tech., [3]ASAHI AGRIA CO., [4]Kyusyu Univ., [5]Waseda Univ., [6]Yokohama City Univ.)

2P76 NtcA is involved in the CnfR-dependent transcriptional activation of the *nif* gene cluster in the cyanobacterium *Leptolyngbya boryana*
Takeshi Hada[1], Mari Banba[1], Madoka Adachi[1], Tsend-Ayush Badbold[2], Hana Sugihara[2], Ryoma Tsujimoto[1], Haruki Yamamoto[1], Yuichi Fujita[1] ([1]Grad. Sch. Bio., Univ. Nagoya, [2]Agr., Univ. Nagoya)

2P77 The Loss of *Arabidopsis thaliana* Actin Depolymerizing Factors alters the expression of *NLR* type R genes upon Pathogen infection
Tomoko Matsumoto, Noriko Inada (Osaka Metropolitan Univ., Grad. Schl. of Agri.)

2P78 Comparative TSS-seq Analysis of Arabidopsis Four Accessions
Kazuki Sugekawa[1], Ezeh Okechukwu Samson[2], Yoshiharu Y. Yamamoto[1,2,3] ([1]Fac Appl Biol Sci., Univ. GIfu, [2]UGSAS., Univ. Gifu, [3]CSRS., Riken)

2P79 Searching of promoter working in *Euglena gracilis* and analysis of gene expression under the dark-light condition
Yayoi Inui[1], Takuto Ito[1], Chihana Toyokawa[2], Kohei Atsuji[2], Toshinao Nomura[3], June-Sik Kim[3,4], Keiichi Mochida[3], Kengo Suzuki[2,3], Sachihiro Matsunaga[1] ([1]Dept. of Integr. Biosci., Grad. Sch. of Front. Sci., Univ. of Tokyo, [2]Euglena Co., Ltd., [3]RIKEN CSRS., [4]IPSR, Okayama Univ.)

2P80 Elucidation of the Regulatory Mechanism of the Expression of Crassulacean Acid Metabolism (CAM) related genes
Yuri Kondo, Ryoma Sato, Sakae Agarie, Kazuyuki Saito (kondo, yuri)

2P81 Insights into the functional significance of EML family proteins in gene regulation and development
Saho Okada[1], Yuta Tokiwa[1], Tokuji Tsuchiya[2] ([1]Grad. Sch. ALS., Univ. Nihon, [2]Coll. Biores. Sci., Univ. Nihon)

2P82 Knock-in of epitope-tag sequence into the *Dicer-like* genes with CRISPR-Cas9 in the unicellular green alga *Chlamydomonas*
Hayato Goda (Sci. Technol., Univ. Kochi)

2P83 Identification and functional analysis of the proteins constituting the *Chlamydomonas* miRISC
Nao Yoshinaga (Sci. Technol., Univ. Kochi)

2P84 Interaction between Cucumber Mosaic Virus 2b and the N-terminal Region of Arabidopsis Dicer-Like1
Ryosuke Kigami, Shinya Tokuda, Tomo Ikuta, Nozomu Koizumi, Yuji Iwata (Grad. Sch. Agri., Osaka Metro. Univ.)

2P85 An attempt to prepare 20 aminoacyl-tRNA synthetases from wheat toward reconstitution of the translation system
Haruyuki Furukawa[1], Yuto Nagashio[1], Kensuke Tsutsumi[1], Kazuki Goto[1], Takumi Nishioka[1], Takumi Kondo[1], Ryunosuke Watanabe[2], Ryohei Kato[1], Chie Tomikawa[1], Kazuyuki Takai[1] ([1]Grad. Sci. Sci. and Eng., Ehime Univ., [2]Dept. Eng.)

2P86 Effects of overexpression of ribosomal proteins RACK1 and uL22 in Arabidopsis and tobacco
Rin Kitazawa[1], Kei Kondo[1], Hitoshi Onouchi[1], Yui Yamashita[1], Satoshi Naito[1,2] ([1]Grad. Sch. Agr., Univ. Hokkaido, [2]Grad. Sch. Life Sci., Univ. Hokkaido)

2P87 Newly suggested relationship between N-terminal methionine excision and response to light
Kazuki Oda[1], Shiori Muraoka[1], Takamasa Suzuki[2], Muneo Sato[3], Masami Y. Hirai[3], Sora Fukui[1], Taichi Takasuka[1], Hitoshi Onouchi[1], Yui Yamashita[1], Satoshi Naito[1] ([1]Grad. Schl. Agr., Hokkaido Univ., [2]College of Bioscience and Biotechnology, Chubu Univ., [3]RIKEN CSRS)

2P88 The transposition of a heat-activated retrotransposon *ONSEN* resulted in changes in the hypocotyl elongation
Ryu Hasegawa (Grad. Sch. LifeSci., Univ. Hokkaido)

2P89 Effect of a mutation in the ribosomal protein (uL13x) gene on growth under different Ca conditions in *Arabidopsis thaliana*
Arpna Kumari, Hirofumi Fukuda, Naoyuki Sotta, Dichao Ma, Toru Fujiwara (Department of Applied Biological Chemistry, The University of Tokyo, Japan)

2P90 Physiological roles of two allantoin synthase variants, produced by alternative splicing and differing in subcellular localization
Yuta Takeuchi, Hiroshi Shimada, Atsushi Sakamoto (Grad. Sch. Integr. Sci. Life, Hiroshima Univ.)

■ Development/Morphogenesis

2Q01 Reinvestigation of Arabidopsis root circumnutation using 4D live-imaging of hydroponically cultivated roots
Takaaki Yonekura[1], Tatsuaki Goh[2], Munetaka Sugiyama[1], Keiji Nakajima[2] ([1]Grad. Sch. Sci., Univ. Tokyo, [2]Div. Biol. Sci., NAIST)

2Q02 Role of VND1 in xylem differentiation of Arabidopsis roots

Kyoko Ohashi-Ito[1], Kuninori Iwamoto[1], Hiroo Fukuda[2] ([1]Grad. Sch. Sci., Uni. Tokyo, [2]Akita Pref. Univ.)

2Q03 Study on cytokinin signaling that is involved in root secondary growth of *A. thaliana*

Kotomi Yamamoto, Shoya Takahashi, Miyu Imamura, Kazuma Uesaka, Takafumi Yamashino (Grad. Sch. of Bioagr. Sci., Nagoya Univ.)

2Q04 Analysis of the Arabidopsis *INDETERMINATE DOMAIN 4* gene involved in the regulation of early root growth by sugar

Rhoichi Shiroma[1], Akiko Kozaki[1,2,3] ([1]Grad Sch of Sci Tech., Shizuoka Univ., [2]Fac of Sci., Shizuoka Univ., [3]Grad Sch of int Sci and Tech., Shizuoka Univ.)

2Q05 Screening and analysis of new *Arabidopsis* mutants showing abnormal root morphogenesis

Souta Oguri, Kentaro Iwata, Akihito Mamiya, Yuki Kondo, Kimitsune Ishizaki, Hidehiro Fukaki (Grad. Sch. Sci., Univ. Kobe)

2Q06 Analysis of *bird feather* mutants showing abnormal branching pattern of root system in *Arabidopsis*

Tsumiki Isa, Kentaro Iwata, Akihito Mamiya, Yuki Kondo, Kimitsune Ishizaki, Hidehiro Fukaki (Grad. Sch. Sci., Kobe Univ.)

2Q07 Toward the production of Eustoma (*Eustomagrandiflorum*) with novel petal texture

Reiko Ishida[1], Ami Tanigami[1], Yuriko Ikeda[1], Tsubasa Yano[2], Yukiko Shimbo[1], Maki Ohtsubo[1], Hirotaka Adachi[3], Noriko Ohnuma[3], Kazuyoshi Fujita[4], Kimitoshi Sakaguchi[3], Takashi Kasai[3], Teruhiko Terakawa[2], Seiji Takeda[1], Norihiro Ohtsubo[1] ([1]Grad. Sch. Life Enviro. Sci., Kyoto Pref. Univ., [2]Inplanta Innovations Inc., [3]Miyoshi & Co., Ltd., [4]Miyoshi Agri Tech Co., Ltd.)

2Q08 Role of Phytochrome in Inflorescence Stem Elongation

Takuto Kudo, Mayu Nakagawa (Ishinomaki Senshu Univ.)

2Q09 Heterosis in Intraspecific Hybrid of *Arabidopsis thaliana* during Early Development

Putri Wijayanti[1], Yuko Wada[1], Kazuaki Utsugi[1], Ryuma Maeda[1], Arei Isaka[1], Yuya Tanaka[1], Tatsuya Nunohira[1], Yuki Hane[1], Seiji Takayama[2], Toshiro Ito[1] ([1]Graduate School of Science and Technology, Nara Institute of Science and Technology, [2]Graduate School of Agriculture and Life Science, Tokyo University)

2Q10 Analysis of sugar signal pathway regulating vascular cell differentiation

Yoshiki Yoshida[1], Aoi Narutaki[1], Shunji Shimadzu[1,2], Kimitsune Ishizaki[1], Hidehiro Fukaki[1], Yuki Kondo[1] ([1]Grad. Sch. Sci., Kobe Univ., [2]Grad. Sch. Sci., Univ. of Tokyo)

2Q11 Histological and gene expression analyses on hyperosmotic stress-induced somatic embryogenesis in Japanese honewort (*Cryptotaenia japonica*)

Sana Takahashi, Mugito Kato, Hajime Shiota (Grad. Sch. Nanobioscience, Yokohama City Univ.)

2Q12 Mechanism of adventitious bud formation on leaf in *Heloniopsis orientalis*

Yui Kuroda[1], Tomoaki Sakamoto[2,3], Shuka Ikematsu[2,3], Seisuke Kimura[2,3] ([1]Grad. Sch. Life Sci., Kyoto Sangyo Univ., [2]Fac. Life Sci., Kyoto Sangyo Univ., [3]Center for Plant Sci., Kyoto Sangyo Univ.)

2Q13 Impact of ectopic expression of Mp*SETA*, a bHLH transcription factor gene that regulates setal formation, on thallus development in *Marchantia polymorpha*

Kenta C. Moriya[1,2], Hiromichi Kono[1], Yoshito Oka[1], Tomonao Matsushita[1], Hiroshi Kudoh[2], Justin Goodrich[3], Tomoo Shimada[1] ([1]Grad. Sch. Sci., Kyoto Univ., [2]CER, Kyoto Univ., [3]Inst. Mol. Plant Sci., Univ. Edinburgh)

2Q14 Co-option of Stomatal Transcription Factors for the Differentiation of Idioblast Myrosin Cells in Arabidopsis

Tatsuyoshi Nakanishi[1], Makoto Shirakawa[1,2], Tomoki Oguro[1], Shigeo S. Sugano[3], Shohei Yamaoka[4], Mayu Sagara[1], Mai Tanida[1], Kyoko Sunuma[1], Takuya Iwami[1], Keita Horiuchi[1], Kie Kumaishi[5], Soma Yoshida[6], Mutsumi Watanabe[1], Takayuki Tohge[1], Takamasa Suzuki[7], Yasunori Ichihashi[2,5], Atsushi Takemiya[6], Nobutoshi Yamaguchi[1], Takayuki Kohchi[4], Toshiro Ito[1] ([1]Graduate School of Science and Technology, Nara Institute of Science and Technology, [2]Precursory Research for Embryonic Science and Technology, JST, [3]Bioproduction Research Institute, National Institute of Advanced Industrial Science and Technology, [4]Graduate School of Biostudies, Kyoto University, [5]RIKEN BioResource Research Center, [6]Graduate School of Sciences and Technology for Innovation, Yamaguchi University, [7]Department of Biological Chemistry, College of Bioscience and Biotechnology, Chubu University)

2Q15 A homeodomain-leucine zipper protein MpC4HDG regulates growth of thalli and rhizoids in *Marchantia polymorpha*

Tatsuya Sakamoto[1], Shogo Isoyama[2], Taku Takahashi[1,2], Hiroyasu Motose[1,2] ([1]Dep. Biol., Fac. Sci., Okayama Uni., [2]Grad. Sch. Environm., Life, Nat. Sci. & Tech., Okayama Uni.)

2Q16 Molecular mechanisms regulating sporophyte development in hornworts - Analyses of TALE transcription factors

Kazune Ezaki[1,2], Péter Szövényi[2], Keiko Sakakibara[1] ([1]College of Science, Rikkyo University, [2]Dept. of Systematic and Evolutionary Botany, University of Zurich)

2Q17 Observation of changes in the inner structure of rice seeds during imbibition using X-ray micro-CT: Analysis of time-lapse images

Rin Aramaki[1], Tomonori Nakai[1], Kentaro Uesugi[2], Makoto Hoshino[2], Daisuke Tamaoki[3], Ichirou Karahara[3], Yoshinobu Mineyuki[1], Daisuke Yamauchi[1] ([1]Grad. Sch. of Science, Univ. of Hyogo, [2]JASRI, [3]Grad. Sch. of Science and Engineering, Univ. of Toyama)

2Q18 Analysis of effects of mechanical forces on the floral development in *Arabidopsis thaliana*

Akitoshi Iwamoto, Wakana Inoue, Kaho Nagakura (Dep. Biol. Sci., Fac. Sci., Kanagawa Univ.)

■ Photoreceptors/Photoresponses

2Q19 Live-cell imaging of plant nucleus using phytochrome-derived autofluorescence

Akira Yoshinari[1,2], Reika Isoda[2], Noriyoshi Yagi[2], Wolf B. Frommer[2,3,4], Masayoshi Nakamura[2] ([1]ITbM, Nagoya Univ., [2]IAR, Nagoya Univ., [3]HHU, [4]MPI)

2Q20 Exploration of novel stomatal opening factors using phototropin double mutants

Taku Sakakibara[1], Shogo Kuwayama[1], Toshinori Kinoshita[1,2] ([1]Grad. Sch. Sci., Univ. Nagoya, [2]Institute of Transformative Bio-Molcule, Univ. Nagoya)

2Q21 Detailed analysis of chloroplast movement in mutants deficient in JAC1, WEB1 and PMI2 proteins

Yuki Inoue[1], Noriyuki Suetsugu[2] ([1]Coll. Arts, Sci., Univ. Tokyo, [2]Grad. Sch. Arts, Sci., Univ. Tokyo)

2Q22 The clock genes, *PRR*, modulate phototoropin-mediated responses in *A. thaliana*

Akane Kubota[1], Gian C Maliwat[1], Tomohiro Asami[1], Ayane Kaneko[2], Yuki Inoue[3], Nozomu Takahashi[1,4], Noriyuki Suetsugu[3], Tatsuya Sakai[2], Norihito Nakamichi[5], Motomu Endo[1] ([1]Dev. of Bioscience, NAIST, [2]Grad. Sch. of Science and Technology, Niigata Univ., [3]Grad. Sch. of Arts and Sciences, The Univ. of Tokyo, [4]JST, PRESTO, [5]Grad. Sch. of Bioagricultural Science, Nagoya Univ.)

2Q23 Adaptation mechanism to light environment via plasmid shuffling in *Acaryochloris marina* MBIC 11017

Keita Miyake[1], Tomonori Kashimoto[3], Chikahiro Matsumoto[3], Ryosuke Hasama[5], Mayuko Sato[4], Kiminori Toyooka[4], Yu Kanesaki[6], Wataru Iwasaki[2], Rei Narikawa[5] ([1]Grad, Sch, Arts Sci., Univ. Tokyo, [2]Grad, Sch, Frontier Sci., Univ. Tokyo, [3]Dep, Bio Sci, Faculty Sci., Shizuoka Univ, [4]RIKEN., CSRS, [5]Dep, Bio Sci, Grad, Sch, Sci., Tokyo Metropolitan Univ, [6]Res, Inst, Green Sci, Tech., Shizuoka Univ)

■ Flowering/Clock

2Q24 Analysis of Flowering regulation by RABH1 GTPase

Asaki Sato[1], Yoko Ito[2], Emi Ito[2], Tomohiro Uemura[1,3] ([1]Undergrad. Sch. Sci., Biol. Ochanomizu Univ., [2]IHLS., Ochanomizu Univ., [3]Grad. Sch. Humanities and Sciences, Ochanomizu Univ.)

2Q25 The Role of CONSTANS in Controlling Short-day Photoperiodic Flowering in *Solanum galapagense*, a Wild Tomato Species Endemic to the Galapagos Islands

Chieri Kubo[1], Chiharu Ito[2], Ami Kato[2], Ryosuke Hayama[1,2] ([1]Grad. Sch. NS., Univ. ICU, [2]Dep. NS., Univ. ICU)

2Q26 Function of Second Messenger Cyclic di-GMP in *Synechococcus elongatus* PCC 7942

Chihiro Yamaguchi[1], Robert Kanaly[1], Eri Nisizaki[1], Kei-ichi Yamashita[1], Yamato Sasho[1], Mei Harada[1], Momoe Hirai[1], Masaki Tsukamoto[2], Setsuyuki Aoki[2], Yoichi Nakahira[3], Yoshihiko Huruike[4], Shuji Akiyama[4], Mingxu Fang[5], Susan Golden[5] ([1]Grad. Sch. Sci., Univ. Yokohama City, [2]Grad. Sch. Info., Univ. Nagoya, [3]Col. Agric., Univ. Ibaraki, [4]Research Center of Integrative Molecular Systems (CIMoS), Institute for Molecular Science, [5]Univ. California, San Diego)

2Q27 Mechanism for cyanobacterial circadian clock by two ATPase domains in KaiC

Kumiko Ito-Miwa[1,2], Tomoaki Muranaka[3], Kazuki Terauchi[4], Takao Kondo[1,2] ([1]Grad. Sch. Sci., Nagoya Univ., [2]IAR, Nagoya Univ., [3]Grad. Sch. Bioagr., Nagoya Univ., [4]Grad. Sch. Life Sci., Univ. Ritsumei.)

2Q28 *TOC1* controls circadian rhythms and reduces leaf necrosis during bacterial infection in *Solanum galapagense*

Ayaka Atsuchi, Takaaki Enomoto, Yumi Hirama, Ryosuke Hayama (International Christian University, College of Liberal Arts)

2Q29 Long-Distance Circadian Communication Initiated By Plant Leaves

Nozomu Takahashi[1,2], Motomu Endo[1] ([1]Div. Bio. Sci, NAIST, [2]JST PRESTO)

2Q30 The Analysis of Homologous Clock Genes in The Marine Cyanobacterium *Prochlorococcus*

Taisuke Enomoto, Kento Yoshida, Yuta Ito, Shinsuke Kutsuna (Yokohama City University)

2Q31 The exploration of new post-translational regulation of cyanobacterial clock protein

Keiko Imai[1], Kumiko Ito-Miwa[2,3], Hikari Yoshitane[4], Yoshitaka Fukada[4], Takao Kondo[2,3] ([1]Biology, Kansai Med. Univ., [2]Grad. Sch. Sci., Nagoya Univ., [3]IAR, Nagoya Univ., [4]Tokyo Metropolitan Institute of Medical Science)

■ Environmental response B/Environmental stresses

2Q32 Dehydration properties of dormant buds of a cold hardy interspecific hybrid grape variety under subfreezing temperatures

Jun Kasuga, Shiori Sakahara (Obihiro Univ.)

2Q33 H3K27me3-mediated regulatory unit for prolonged cold stress in *Arabidopsis*

Hanako Shimizu[1], Haruki Nishio[1,2], Hiroshi Kudoh[1] ([1]CER, Kyoto Univ., [2]DS center, Shiga Univ.)

2Q34 Identification of novel ultraviolet-absorbing compounds in an edible cyanobacterium *Aphanothece sacrum*

Yoshie Uchida[1], Takashi Maoka[2], Tanapat Palaga[3], Masaki Honda[4], Chisato Tode[5], Motoyuki Shimizu[6], Rungaroon Waditee-Sirisattha[3], Hakuto Kageyama[1,4] ([1]Grad. Sch. Environ. Hum. Sci., Meijo Univ., [2]Res. Ins. Prod. Dev., Div. Food Func. Chem., [3]Fac. Sci. Chulalongkorn Univ., [4]Fac. Sci. Tec., Meijo Univ., [5]Instrumen. Anal. Cent., Kobe Pharmaceutical Univ., [6]Fac. Agric., Meijo Univ.)

2Q35 Characterization of an Arabidopsis MYB transcription factor that regulate sucrose- and phosphate starvation-induced anthocyanin biosynthesis

Hsien-Chen Chiou[1], Ruei Chang[1], Yu-Min Lin[1], Mei-Juan Zheng[1], Sumire Fujiwara[2], Nobutaka Mitsuda[2], Masaru Ohme-Takagi[2,3], Chuan-Ming Yeh[1,2,4] ([1]Institute of Molecular Biology, National Chung Hsing University, Taiwan, [2]Bioproduction Research Institute, National Institute of Advanced Industrial Science and Technology (AIST), Japan, [3]Institute of Tropical Plant Sciences and Microbiology, National Cheng Kung University, Taiwan, [4]Advanced Plant and Food Crop Biotechnology Center, National Chung Hsing University, Taiwan)

2Q36 Induction of ROS by Sr in *Arabidopsis thaliana*

Takeshi Nagata, Masaki Arai, Ryota Kawasaki, Yoshiyuki Okada, Sayo Kokubu (Setsunan University)

2Q37 Effects of 1,4-naphthoquinone derivatives on low temperature and abscisic acid signaling

Kohei Kitawaki[1], Yasuko Ito-Inaba[1,2], Takehito Inaba[1] ([1]Fac. Agr., Univ. Miyazaki, [2]Grad. Sch. Life Sci., Tohoku Univ.)

2Q38 Toxic Mechanism of SO_2 in Plants

Mahdi Mozhgani[1], Lia Ooi[1,2], Izumi Mori[1] ([1]IPSR, Okayama Univ., [2]Frontier Technology & New Value Innovation Department, Hayashibara Co. Ltd.)

2Q39 Analysis of the regulatory mechanism of Arabidopsis CAMTA transcription factors in response to rapid temperature decrease

Kazuya Yumikura[1], Shizuki Hashimoto[1], Fuminori Takahashi[2,3], Junya Mizoi[1], Kazuo Shinozaki[3], Kazuko Yamaguchi-Shinozaki[1,4], Satoshi Kidokoro[1,5] ([1]Grad. Sch. Agr. Life Sci., Univ. Tokyo, [2]Faculty of Advanced engineering, Tokyo Univ. Sci., [3]Center for Sustainable Resource Science, RIKEN, [4]Inst. Agr. Life Sci., Tokyo Univ. Agr., [5]Sch. of Life Sci. and Tech., Tokyo Tech.)

2Q40 The Impact of Phosphorus Supply on the Temperature Response of Hydroponically Cultivated *Lotus japonicus*

Lydia Ratna Bunthara[1], ZePeng Sheng[1], Jun Wasaki[1,2] ([1]Grad. Sch. Integr. Sci. Life, Hiroshima Univ., [2]Seto Inland Sea CN Research Center, Hiroshima Univ.)

2Q41 Functional analysis of Arabidopsis *NADK2* gene in response to water stress

Akiyoshi Kawaoka[1], Ryosuke Hashimoto[2], Satoshi Kidokoro[1], Kohji Yamada[2], Keishi Osakabe[2], Yuriko Osakabe[1] ([1]Sch. of Life Sci. & Tech., Tokyo Tech., [2]Grad. Sch. of Tech., Ind. & Soc. Sci., Tokushima Univ.)

2Q42 Functional analysis of SDP1 and SDP1L in Arabidopsis during nutrient deficiency

Yuya Mochida, Hiroyuki Ohta, Mie Shimojima (Sch. Life Sci. and Tech., Tokyo Tech)

2Q43 Role of a bHLH transcription factor in *Marchantia polymorpha* under abiotic stress conditions

Zhenxin Zhou[1], Shinsuke Shimizu[1], Koichi Hori[1], Kimitsune Ishizaki[2], Hiroyuki Ohta[1], Mie Shimojima[1] ([1]Sch. Life Sci. and Tech., Tokyo Tech, [2]Grad. Sch. of Sci., Kobe Univ)

2Q44 Analysis of the regulatory mechanism of acidic glycolipid GlcADG synthesis in *Marchantia polymorpha*

Yasutoki Kinoshita, Shinsuke Sekine, Koichi Hori, Hiroyuki Ohta, Mie Shimojima (Sch. Life Sci. and Tech., Tokyo Tech.)

2Q45 Evolution of molecular desiccation gene for osmostress signaling using non-HK5 mutation lines by NGS in the *Physcomitrium patens*

Rahul Sk[1,2], Akihisa Shinozawa[2], Marcos Takeshi Miyabe[2], Daisuke Takezawa[3], Shunsuke Yajima[1,2], Izumi Yotsui[2], Teruaki Taji[2], Yoichi Sakata[2] ([1]NODAI Genome Research Center, [2]Dept. of Biosci., Tokyo Univ. of Agri., [3]Grad. Sch. of Sci. and Eng. Saitama Univ.)

2Q46 Analysis of the role of mitochondrial RNA editing in heavy metal stress responses in Arabidopsis using mitoTALECD

Akiho Yamazaki[1], Koki Misawa[1], Riho Sawai[1], Fumiaki Asahi[1], Mizuki Takenaka[2], Issei Nakazato[3], Shin-ichi Arimura[3], Izumi Yotsui[1], Teruaki Taji[1], Yoichi Sakata[1] ([1]Graduate School of Life Sciences, Tokyo Univ. of Agriculture, [2]Graduate School of Science, Kyoto University, [3]Graduate School of Agricultural and Life Sciences, The University of Tokyo)

2Q47 Functional analysis of B3-Raf like kinase family in tomato

Thuong Nguyen, Shinnosuke Kimura, Izumi Yotsui, Teruaki Taji, Yoichi Sakata (Dept. of Biosci., Tokyo Univ. of Agri.)

2Q48 Optimum water depth for suppressing weed growth with minimizing rice growth inhibition under different temperature conditions

Iwasa Marina, Shunsuke Adachi, Taiichiro Ookawa (Grad. Sch. Agr., Tokyo Univ. Agr. and Tech.)

2Q49 Structural change of chromatin around CREs during the induction of apple bud dormancy using deep learning with a small dataset

Takanori Saito (Grad. Sch. Hort., Chiba Univ.)

2Q50 AtSnRK2.8, a subclass II SnRK2 of *Arabidopsis* is involved in regulating stomatal behavior in poplars

Borislav Horvat[1], Yuhei Shikakura[1], Misato Ohtani[2,3], Taku Demura[3,4], Akira Kikuchi[1,5], Kazuo Watanabe N.[1,5], Taichi Oguchi[1,5] ([1]Life & Env. Sci., Univ. Tsukuba, [2]Grad. Sch. Front. Sci., Univ. Tokyo, [3]CSRS, RIKEN, [4]CDG, Nara Inst. Sci. Tech., [5]T-PRIC, Univ. Tsukuba)

2Q51 Change in covering gain of *Zoysia* spp. under salt stress conditions

Akihiro Yamamoto[1], Nanami Saito[1], Koki Fuji[1], Masatsugu Hashiguchi[2], Yuichi Saeki[1], Ryo Akashi[1] ([1]Fac. Agric., Univ. Miyazaki, [2]Fac. Reg. Innov., Univ. Miyazaki)

2Q52 Cytosolic ascorbate peroxidase 1 is required for glutathione oxidation and cell death in catalase-deficient mutants

Satsuki Sato, Kana Kikuraku, Gen Mitomi, Takahiro Ishikawa, Takanori Maruta (Life Environ. Sci., Shimane Univ.)

2Q53 Molecular Mechanism Of Ascorbate Degradation And Its Association With Senescence Signaling

Tamami Hamada, Takahiro Ishikawa, Takanori Maruta (Grad. Sch. Nat. Sci. Technol., Shimane Univ.)

2Q54 Functional analysis of the enzyme involved in the metabolism of an ascorbate degradation product, L-threonate, in Arabidopsis

Kojiro Yamamoto, Takahiro Ishikawa, Takanori Maruta (Grad. Sch. Nat. Sci. Technol., Shimane Univ.)

2Q55 Negative regulation of chitosan-induced stomatal closure by glutathione in *Arabidopsis thaliana*

Israt Jahan, Toshiyuki Nakamura, Nakamura Yoshimasa, Munemasa Shintaro, Murata Yoshiyuki (Grad. Sch. Environ. Life Sci.)

2Q56 Identification of novel proteins required for hydrogen peroxide-induced cell death in Arabidopsis catalase-deficient mutants

Nanami Fujimoto[1], Kana Ishibashi[1], Takanori Maruta[1,2], Amna Mhamdi[2], Frank Van Breusegem[2] ([1]Life Environ. Sci., Shimane Univ., [2]Plant Systems Biol., VIB-Ghent Univ.)

2Q57 Light priming alleviates the cell death response of ascorbate-deficient mutants to high-light stress

Tadashi Sasaki, Takumi Iwagami, Takahiro Ishikawa, Takanori Maruta (Grad. Sch. Nat. Sci. Technol., Shimane Univ.)

2Q58 Acclimation to P-starvation in *Chlorella kessleri*: lipid remodeling and internal-P sources

Sorao Motegi, Yukari Iijima, Eriko Kimura, Shoko Fujiwara, Norihiro Sato (Tokyo Univ. of Pharm. & Life Sci.)

2Q59 Protein expression analysis of GDP-L-galactose phosphorylase, a rate-limiting enzyme for ascorbate biosynthesis, in response to light

Yasuhiro Tanaka[1], Takanori Maruta[1,2], Takahisa Ogawa[1,2], Takahiro Ishikawa[1,2] ([1]United Grad. Sch. Agr. Sci., Tottori Univ., [2]Grad. Sch. Nat. Sci. Technol., Shimane Univ.)

2Q60 BGLU18, an Arabidopsis enzyme required for quick ABA production, contributes to early transcriptomic responses to drought stress

Yutong Song[1], Tayebeh Abedi[1], Yuma Mitsuzono[2], Hiroshi Shimada[1,2], Atsushi Sakamoto[1,2] ([1]Grad. Sch. Integr. Sci. Life, Hiroshima Univ., [2]Sch. Sci., Hiroshima Univ.)

2Q61 Interspecific Comparison of Metabolite Variability in Rice under Low Temperature Stress

Nobutoki Igarashi, Tomoki Kobayashi, Takafumi Shimizu, Shinichiro Komaki, Mutsumi Watanabe, Takayuki Tohge (Grad. Sch. Sci., Tech., NAIST)

2Q62 *E. coli* GppA homolog in Arabidopsis dephosphorylates guanosine pentaphosphate

Takanari Nemoto, Masataka Inazu, Shinji Masuda (Dep. Life Sci. Tech., Tokyo Tech)

2Q63 The Functional Plasticity of Cuticular Wax in the Amphibious Plant *Rorippa aquatica* Facilitating Gas Exchange in Submerged Conditions

Shuka Ikematsu[1], Tatsuki Tujino[1], Keita Minai[1], Tomoaki Sakamoto[1], Takashi Nobusawa[2], Seisuke Kimura[1] ([1]Life Sci., Kyoto Sangyo Univ., [2]Grad. Sch. Integr. Sci., Hiroshima Univ.)

2Q64 Identification Of Novel Factors Involved In DNA Damage Responses In *Arabidopsis*

Toshiki Wada, Mihiro Nakajima, Huka Hozumi, Naoki Takahashi (Sch. Agr., Meiji. Univ)

2Q65 Proteomic Analysis to Understand the Promotive Effects of Titanium-Oxide Nanoparticles on Soybean Growth under Salt Stress

Pwint Phoo Wai[1], Hisateru Yamaguchi[2], Keisuke Hitachi[3], Kunihiro Tsuchida[3], Setsuko Komatsu[1] ([1]Dept. App. Sci. Eng., Grad. Sch. Eng., Fukui Univ. Tech., [2]Dept. Med. Tech., Yokkaichi Nurs. Med. Care Univ., [3]Cent. Medical Sci., Fujita Health Univ.)

2Q66 Proteomic analysis of Arabidopsis root tips after osmotic pressure release

Mayumi Nakayama[1], Nahoko Higashitani[1], Shinichi Sato[2] ([1]Grad. Sch. Life Sci., Tohoku Univ., [2]Frontier Research Institute for Interdisciplinary Sciences, Tohoku Univ.)

■ Science education

2Q67 Academic harassment as a technique for organized research misconduct

Emiko Harada (The University of Shiga Prefecture)

2Q68 Design, Print, Discover! - Using Computer-aided Design, 3D Printing, and Programming to Build Experimental Design Skills and Investigate EuglenaMovement in Response to Different Stimuli

Chizuru Honda[2], Suzuka Iguchi[2], Andy Crofts[1,3] ([1]Akita International University, Department of International Liberal Arts (Faculty member), [2]Akita International University, Department of International Liberal Arts (Undergraduate student), [3]Akita Prefectural University, Department of Biological Production, (Visiting Researcher))

■ Systems biology

2Q69 Arabidopsis abscisic acid receptor complexes regulate the central kinases in energy and stress signaling

Takuya Yoshida[1,2,3,4], Julia Mergner[5,6], Zhenyu Yang[1], Jinghui Liu[1], Bernhard Kuster[6], Alisdair R. Fernie[2], Erwin Grill[1] ([1]Lehrstuhl für Botanik, Technische Universität München, [2]Max-Planck-Institut für Molekulare Pflanzenphysiologie, [3]Trans-Omics Facility, National Institute for Basic Biology, [4]Basic Biology Program, SOKENDAI, [5]Bavarian Center for Biomolecular Mass Spectrometry at Klinikum rechts der Isar (BayBioMS@MRI), Technical University of Munich, [6]Chair of Proteomics and Bioanalytics, Technical University of Munich)