The 67th Annual Meeting of the Japanese Society of Plant Physiologists

https://jspp.org/annualmeeting/67/en_index.html

Date: March 13th (Fri) through March 15th (Sun), 2026

Venue: Meiji University Surugadai Campus

1-1 Kanda-Surugadai, Chiyoda-ku, Tokyo 101-8301
https://www.meiji.ac.jp/cip/english/about/campus/index.html

Online participation: https://jspp.org/annualmeeting/67/en_index.html

Banquet: Meiji University (Academy Common 2nd floor) and The University of Tokyo (Hongo campus, Chuo dining hall)

Organizing Committee

Chairperson: Toru Fujiwara
Director of On-site Operations: Naoto Kawakami
Secretary: Takehiro Kamiya
General Affairs: Ryo Tabata
Accounting: Junya Mizoi
Coordination with JTPB2026: Misato Ohtani
Program: Hirokazu Tsukaya
Venue: Naoki Takahashi
Hybrid: Yoshiya Seto
Public relations: Kei Hiruma
Banquet: Yasuhito Sakuraba
Nursery: Kyoko Ito-Ohashi
Members: Hanae Kaku, Tetsuo Kushiro, Hirokazu Tanaka, Kohki Yoshimoto (Meiji Univ.), Emi Ito, Yoko Ito, Tomohiro Uemura (Ochanomizu Univ.), Yuriko Osakabe, Mie Shimojima (Institute of Science Tokyo), Kyoko Higuchi (Tokyo Univ. of Agriculture), Naoko Ohtsu (Tokyo Univ. of Agriculture and Technology), Keiko Sakakibara (Rikkyo Univ.), Mitsutomo Abe, Toshihiro Arae, Shin-Ichi Arimura, Sota Fujii, Takeshi Higa, Tetsuya Higashiyama, Soichi Inagaki, Takehiro Ito, Takeshi Izawa, Natsu Katayama, Yoshinobu Kato, Natsuko I. Kobayashi, Yuko Kurita, Kenji Nagata, Hokuto Nakayama, Issei Nakazato, Satohiro Okuda, Daiki Shinozaki, Noriyuki Suetsugu, Momoko Takagi, Hideki Takanashi, Asuka Yamaguchi, Wataru Yamori, Shuichi Yanagisawa, Takaaki Yonekura (Univ. Tokyo)

Conference Secretariat

c/o Nakanishi Printing Co., Ltd.
Shimodachiuri-Ogawa, Kamigyo-ku, Kyoto 602-8048, Japan
E-mail: jspp2026@nacos.com

Meeting Information

Program

1. General Information

1-1. Important Notice

1) Hybrid meeting

- The Annual Meeting will be held in a hybrid style: poster presenter must be on-site at Meiji University Surugadai Campus; oral presentations and symposia are presented on-site or online remotely. Presentations can be viewed on-site or remotely. Online participants are requested to log in to the web abstracts (ORSAM portal) on the Annual Meeting website. After logging in, you can attend sessions, including oral presentations, symposia, luncheon seminars and some related meetings. You can also view posters and chat with presenters online.
- Awards ceremony and award lectures will be given on-site but will not be delivered online.
- For the latest information on the Annual Meeting, please visit the Annual Meeting website (https://jspp.org/annualmeeting/67/en_index.html).

2) Program

A simple program booklet will be sent to participants who have paid the registration fee. Participants residing overseas are requested to come to the on-site reception desk in the annual meeting to receive your program booklet locally.

3) 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.

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

- The deadline for registration and payment of the registration fee is February 2nd (Mon), 2026. 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 account information of 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.

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

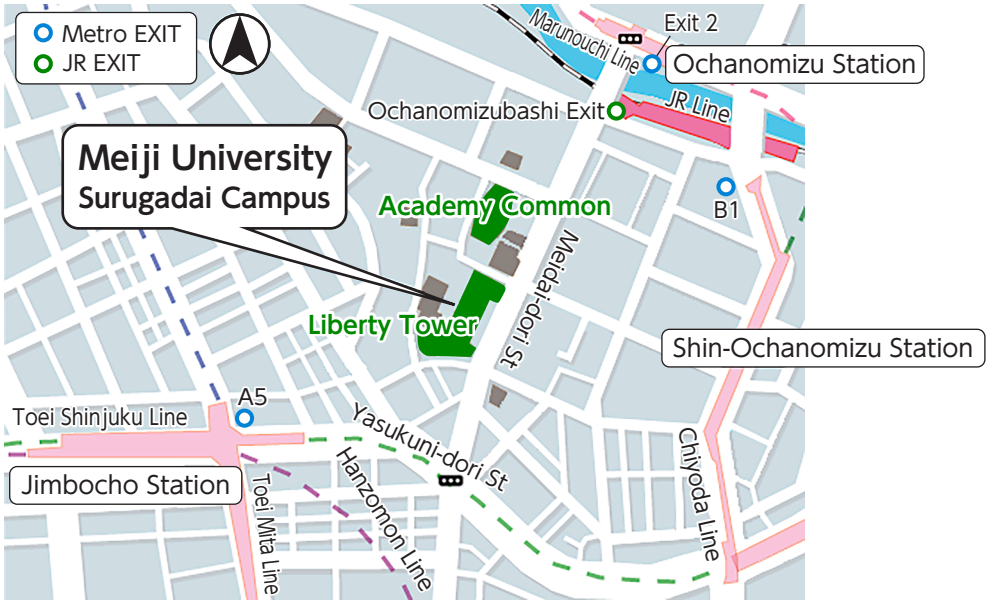
Some of the oral presentations and symposia will be presented remotely. Online presentations are only allowed for presenters who have registered as such at the time of registration of presentation. If you did not register at the time of abstract submission, you must present on-site.

6) 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.
- PCP Poster Award
  - The awardees will be selected based on poster presentations by student applicants, with the evaluation conducted primarily by PCP editors, including those visiting Japan.
  - The titles submitted for the PCP Poster Award are indicated by adding P to their presentation numbers in the poster presentation program. Additionally, a special mark is placed on the number cards of the posters to signify their submission for the award.
  - The judges will visit the applicant's poster during their presentation time. During the evaluation, the presentation and Q&A must be conducted in English.
  - The awardees and the prizes will be announced at the award ceremony.

Venue and Access (Meiji University Surugadai Campus)

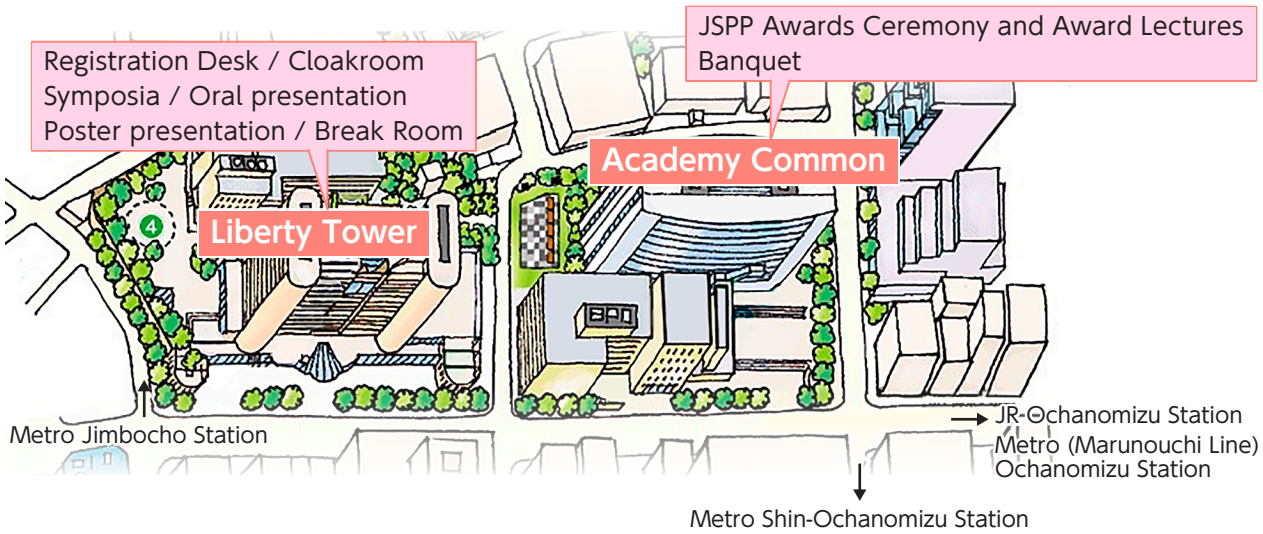
Meiji University Surugadai Campus (Liberty Tower, Academy Common)



By Train (Nearest Stations)

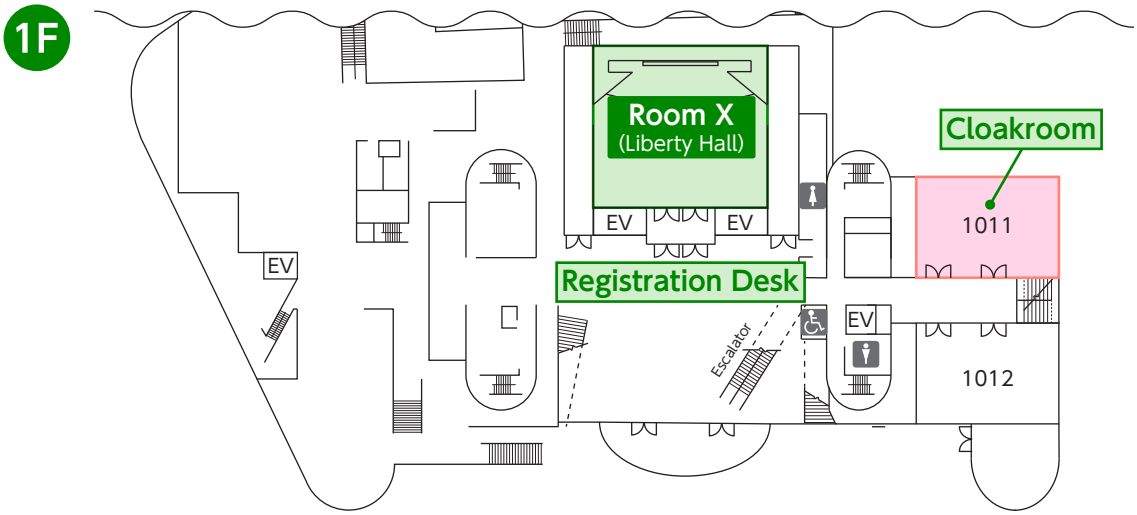
JR Chuo Line / Sobu Line 3-minute walk from Ochanomizu Station (Ochanomizubashi Exit)
Tokyo Metro Marunouchi Line 3-minute walk from Ochanomizu Station (Exit 2)
Tokyo Metro Chiyoda Line 5-minute walk from Shin-Ochanomizu Station (Exit B1)
Toei Mita Line / Toei Shinjuku Line / Tokyo Metro Hanzomon Line 5-minute walk from Jimbocho Station (Exit A5)

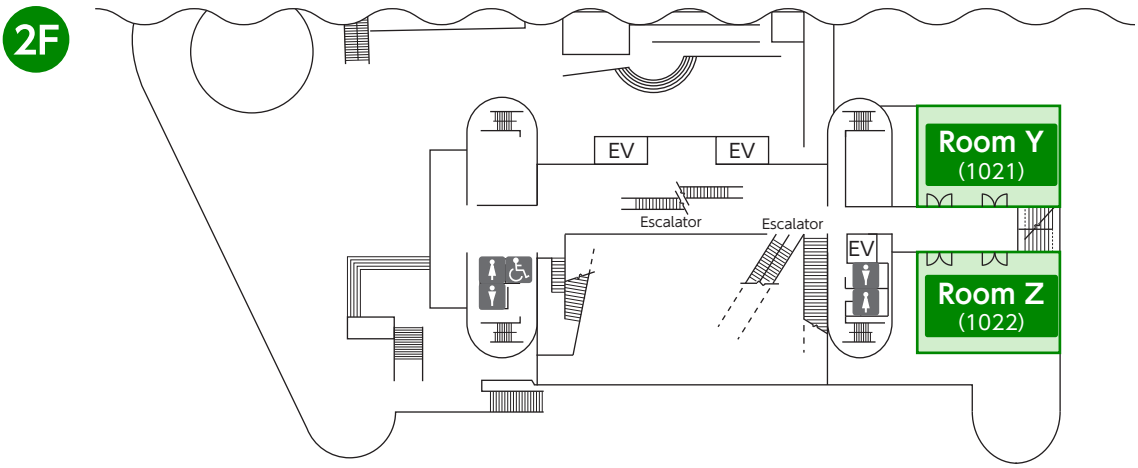
Campus Map (Meiji University Surugadai Campus)

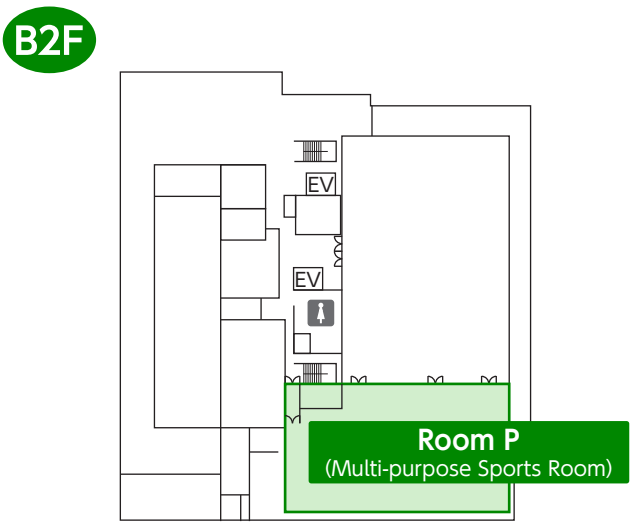


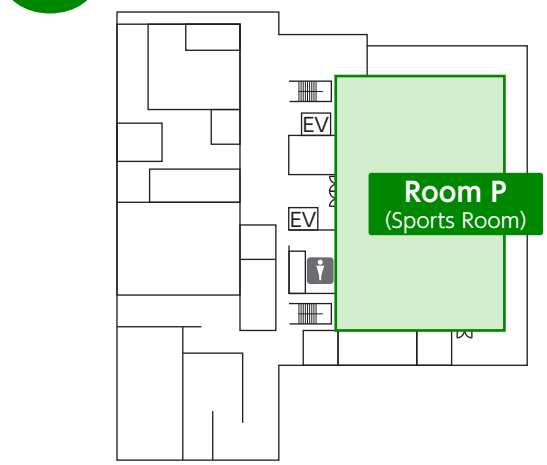
Conference Room (Meiji University Surugadai Campus)

Liberty Tower









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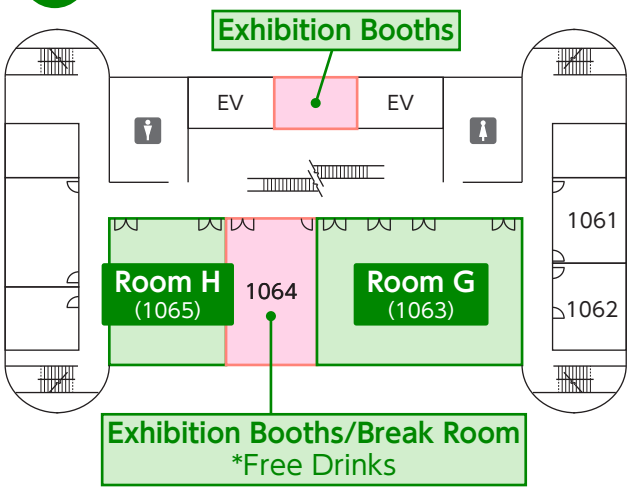

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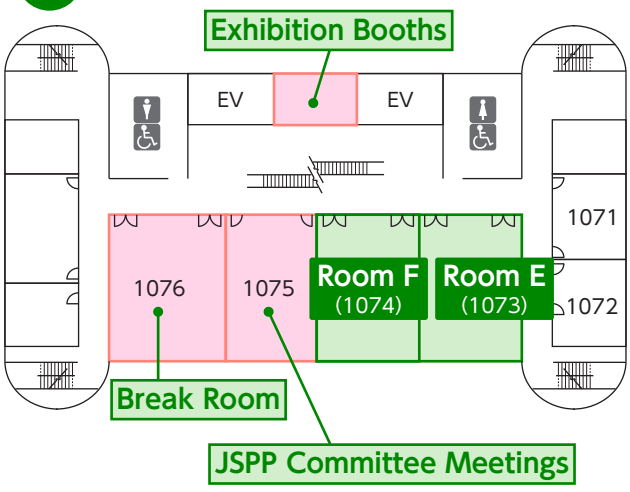

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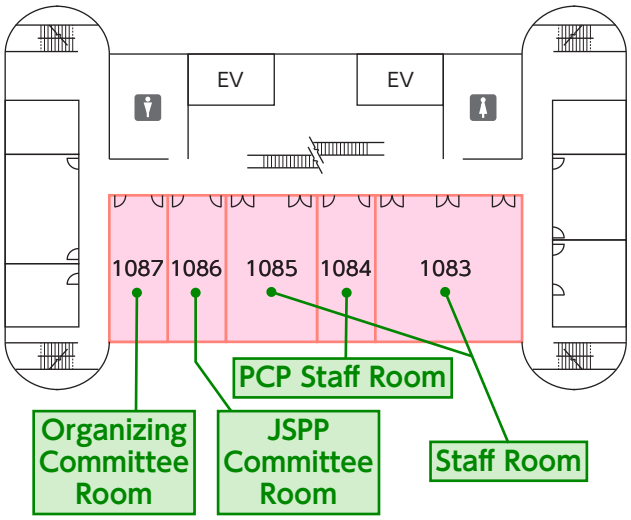

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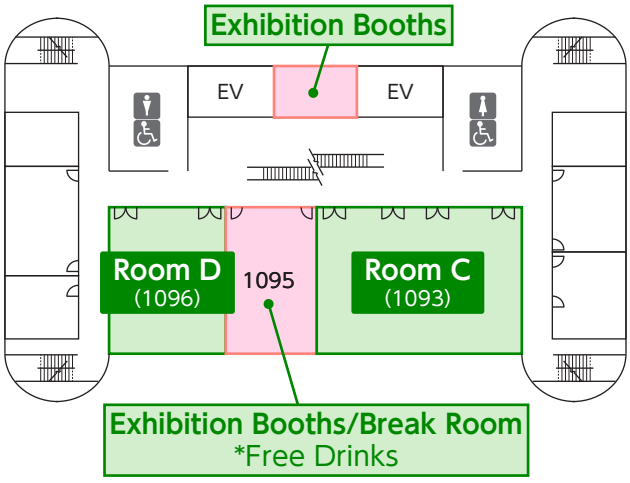

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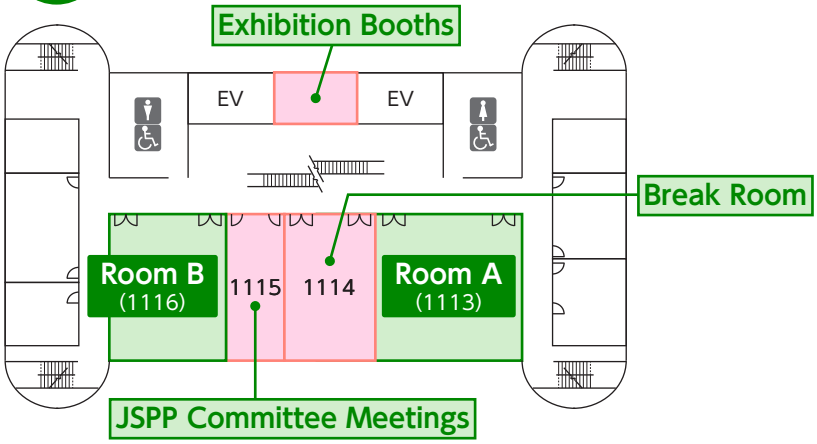
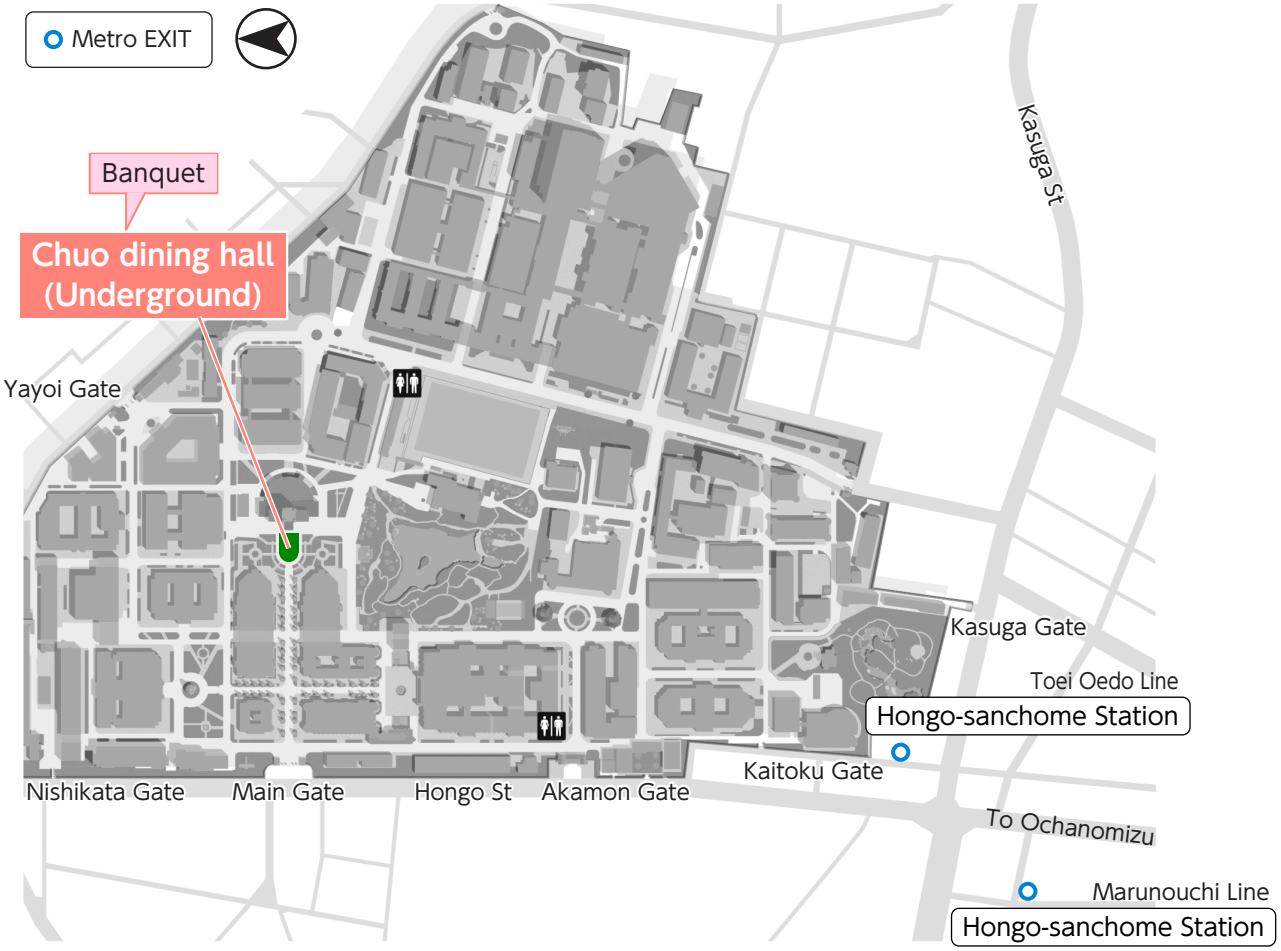


Venue and Access (The University of Tokyo Hongo Campus)

The University of Tokyo, Hongo Campus



By Train (Nearest Stations)

Tokyo Metro Marunouchi Line 8-minute walk from Hongo-sanchome Station (Exit 2)
Toei Oedo Line 6-minute walk from Hongo-sanchome Station (Exit 3 / 4 / 5)

1-3. Registration of Participants

1) Participants will receive a name tag, a receipt, and a program. The password for logging into the ORSAM portal site will be sent to registered participants in early March. For participants coming from overseas, we will send the name tag and receipt by email. Please print them in advance and bring them to the venue. The program booklet will be handed out at the on-site reception desk in the annual meeting.
2) Those who have not pre-registered (i.e., have not paid the participation fee) are required to complete the registration process at the On-site Registration Desk at the venue. Payment must be made in cash only. As congestion is expected just before the start of the first day's sessions, please allow sufficient time for registration.

	On-site registration fee (including fee for online access to the Abstract Book)	Banquet fee
JSPP, TSPB, ASPB member	14,000yen (tax free)	8,000yen (tax included)
JSPP, TSPB, ASPB student member	8,000yen (tax free)	5,000yen (tax included)
Non-member	16,000yen (tax included)	9,000yen (tax included)

Those who have not pre-registered for the banquet and wish to participate must pay the banquet fee at the On-site Registration Desk. You can only participate at the University of Tokyo (Hongo Campus, Chuo dining hall). On-site registration will not be accepted for the banquet held at the Meiji University venue.
Payment can be made by 12:00 PM on March 14 (Day 2).

3) Regardless of membership status, undergraduate students, as well as accompanying teachers and students from middle and high schools, can participate free of charge. Those who have completed pre-registration should present their identification at the General Information Desk at the venue to receive their name tag. Those who have not pre-registered should complete the registration process at the On-site Registration Desk. Free participants will not receive a PDF version of the abstract book or a printed program booklet. However, the program can be downloaded at the annual meeting website.
4) 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. When preparing figures and tables for your presentation, please consider Color Universal Design.

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 90 cm (width) × 210 cm (height from the floor). Pushpins for mounting your poster are provided by the Meeting Committee.

- Schedule

Presentation No. / place	1P001–1P196 / Sports Room (B3F) 1P197–1P260 / Multi-purpose Sports Room (B2F)	2P001–2P196 / Sports Room (B3F) 2P197–2P268 / Multi-purpose Sports Room (B2F)
Mounting	March 13 9:00–12:30	March 14 10:30–12:00
Discussion	March 13 Odd numbers 17:30–18:15 Even numbers 18:15–19:00	March 15 Odd numbers 11:00–11:45 Even numbers 11:45–12:30
Removal	March 14 9:00–10:30	March 15 15:00–16:30

- 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 provide your poster in 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 meeting in a comfortable environment.
- The PDF file upload through the abstract submission system should be done between February 20 and 27. Uploading instructions will be provided to presenters. Please note that PDF files can only be viewed, not downloaded by participants.
- Please make sure the file is in PDF format. Other formats will not be accepted.
- During the online poster viewing period (March 10, 9:00 a.m. - March 15), participants can 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 [see also section 1-6]

- 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 at the venue will join the Zoom meeting by connecting to the wireless LAN (WLAN) with their eduroam accounts (or guest accounts) and sharing their slides on the screen. The Zoom screen received by the host PC will be projected on the screen at the venue. Thus, presenters will not directly connect their computers to a projector via a VGA nor HDMI cable. Please bring your slides (ppt or PDF files) saved on a USB flash drive as a backup.
- Presenters are requested to login Zoom meeting with the URL that will be available on the web abstracts (ORSAM portal).

- Presenters are requested to log in to the Zoom meeting before the previous presenter finishes his/her presentation and to wait at the next presenter's seat 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.
- On-site presenters must make sure that the computer can connect to WLAN (eduroam) and log in to Zoom before the session begins. If you encounter any connection issues, please notify the staff before the session starts.
- Please set the Zoom meeting with the video camera on and MICROPHONE OFF and use the microphone at the venue for your presentation. Your voice and questions from the venue will be distributed to online participants via the host PC. Microphone "on" on your computer may cause audio feedback.
- Laser pointers cannot be used. Presenters are requested to use the pointer function of the presentation program, so that online audience can see the pointer.
- Please deactivate "Screen Sharing" after your presentation as soon as possible.

Online presentations

- Online (remote) presentations are only allowed for presenters who have registered as such.
- 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 open 15 minutes before each session begins. Please use this time to check your setup if needed.
- 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 turn on the microphone and camera, "share screen" your presentation file, and start your presentation.
- Please deactivate "Screen Sharing" after your presentation as soon as possible.

Questions and comments

- During the Q&A session, please follow the chairperson's instructions. On-site participants should use the microphones provided at the venue. Online participants should use the "Raise Hand" feature in Zoom and wait to be called. Please lower your hand once the Q&A ends.
- The comments box on the abstract page of the web abstracts (ORSAM portal) can also be used for Q&A. Presenters are requested to reply to the questions and comments using "Reply" function 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

- Session chairs must arrive at the venue at least 15 minutes before the session starts and inform the venue staff (host PC operator & timekeeper) of their name.
- During their assigned presentations, session chairs should manage the session from the chairperson's seat, using the host PC for reference and the microphone provided at the seat. Online participants' "Raise Hand" actions and mute settings should be monitored on the host PC. To prevent audio issues, please refrain from entering Zoom meeting on 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

- Wireless LAN service (Wi-Fi 5) through an eduroam account is available at the meeting venue. Please obtain an eduroam account at your own institution in advance, ensure your PC's operating system is up-to-date, and test the connection before coming to the venue. The OS requirements and connection precautions are on the website (https://www.eduroam.jp/en).
- Guest accounts will be provided for those who cannot obtain an eduroam account at their institutions. Please ask at the registration desk.
- Please refrain from connecting to eduroam at the oral session room, except for giving presentation. If necessary, please connect to eduroam in the area outside the session rooms to avoid interfering the presentation.

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 fabrication, falsification, 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

- No boxed lunches will be sold on the day of the event. On Friday, March 13, and Saturday, March 14, you may use the student cafeteria on the 17th floor of the Liberty Tower, Meiji University Surugadai Campus (Open 11:30 AM – 2:00 PM). Please note that the cafeteria will be closed on Sunday, March 15. There are restaurants and convenience stores near the venue; please use those instead.
- Eating and drinking are prohibited in the presentation halls. Please eat lunch in the break areas (Room 1064, 6th Floor, Liberty Tower; Room 1076, 7th Floor, Liberty Tower; Room 1095, 9th Floor, Liberty Tower; Room 1114, 11th Floor, Liberty Tower). Dispose of your lunch trash in the designated trash bins.

1-13. Cloakroom

The cloakroom will be located near the main entrance. The cloakroom will be open during the following hours. Please be sure to pick up your baggage before the end of the day.

March 13th (Fri): 8:30–19:15

March 14th (Sat): 8:30–15:30

March 15th (Sun): 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 professional caregivers from an external service. Those who have registered to use the room will receive an e-mail with details about the terms of use. The registration has been closed at an earlier deadline.

1-15. Contact Information

Send any questions to the Annual Meeting Committee by e-mail to jspp2026@nacos.com or visit the registration desk.

2. Contents of the Annual Meeting

2-1. Banquet

Date: March 14 (Sat.)

Place and Time: Meiji University, Surugadai Campus (6:00 pm-) and The University of Tokyo, Hongo campus, Chuo dining hall (6:15 pm-)

There will be no opening remarks, so please begin at the scheduled time. The banquet is expected to end at 20:00, and we kindly ask all participants to leave the venue by then.

Those who wish to attend the banquet without prior registration are requested to pay the banquet fee at the registration desk by 12:00 p.m. on the day of the banquet (March 14). You can only participate at the University of Tokyo (Hongo Campus, Chuo dining hall). On-site registration will not be accepted for the banquet held at the Meiji University venue. If the number of applicants reaches the maximum number, registration will be closed at that time. Please note that changes to the venue cannot be made after payment.

2-2. JSPP Awards Ceremony and Award Lectures

Date and time: March 14th (Sat) 15:00–17:30

Venue: Academy Hall (Academy Common 3rd floor, Meiji University Surugadai Campus)

Please see the program p. 18 for details.

2-3. Symposia

Twelve symposia will be held at the Annual Meeting. For the contents and purpose of each symposium, please see the program p. 19–30 for details.

Day 1, March 13th (Fri) 9:30–12:30

- **S01** Frontiers in Developing Climate-Resilient and Socially Accepted Plants (Room X)
- **S02** Unlocking New Frontiers in Plant Physiology with Mass Spectrometry (Room Y)
- **S03** Advances in Engineering and Regulation of Plastids and Photosynthesis (Room Z)

Day 1, March 13th (Fri) 14:00–17:00

- **S04** Priming and Memory of Plants in Facing Environmental Changes (Room X)
- **S05** Advances in Cellular and Molecular Signaling in Response to Internal and External Stimuli from Algae to Plants (Room Y)
- **S06** Underlying molecular antagonisms as drivers of plant diversification and ecological adaption (Room Z)

Day 2, March 14th (Sat) 9:00–12:00

- **S07** Frontiers in Plant Science Revealed by Space Environments: From Molecular Mechanisms to Future Horizons (Room X)
- **S08** Nuclear Architecture as a Scaffold: Structural Views on Gene Regulation and Cellular Function in Plants and Beyond (Room Y)
- **S09** Asymmetries in plant structure and signaling (Room Z)

Day 3, March 15th (Sun) 9:00–11:00

- **S10** ASPB-JSPP Joint Symposium – Plant resilience and plasticity powered by dynamic cellular responses (Room X)

Day 3, March 15th (Sun) 14:00–17:00

- **S11** Next-Trend of Plant Biology in Japan and Taiwan (Room X)
- **S12** Recent Advances in the Regulation of Photosynthetic Electron Transport and the Roles of Alternative Electron Flow (Room Y)

2-4. Luncheon Seminars

Luncheon seminar tickets marked with an asterisk (*) will be distributed near the reception desk starting at 8:30 a.m. on the day of the event. Please see the meeting website or the program p. 31–37 for details.

- **Leica Microsystems***

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

  Venue: C

  Organizer: Leica Microsystems

- **NTT R&D***

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

  Venue: G

  Organizer: NTT R&D

♦ **PCP Luncheon Seminar "The importance of society journal publishing and the benefits of PCP"***

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

Venue: Z

Organizer: PCP Editors Committee

Sponsor: Oxford University Press

♦ **EVIDENT Luncheon Seminar***

Date and time: March 14th (Sat) 12:00–13:00

Venue: G

Organizer: EVIDENT Luncheon Seminar

♦ **JSPP Luncheon Seminar "Let's Talk Together about Careers and PhD Studies"**

Date and time: March 14th (Sat) 12:15–13:05

Venue: Academy Common 2nd floor

Organizer: JSPP Gender Equality Committee

♦ **Advanced Bioimaging Support (ABiS)***

Date and time: March 15th (Sun) 12:30–13:30

Venue: C

Organizer: Advanced Bioimaging Support (ABiS)

♦ **JSPP Luncheon Seminar "Why Study/Work Abroad? - Voices of Experience"***

Date and time: March 15th (Sun) 12:30–13:30

Venue: Z

Organizer: JSPP International Committee / UJA (United Japanese Researchers Around the World)

2-5. Satellite Meetings

Please see the outline on the program p. 38–43 for details.

♦ **The 28th Plant Organelle Workshop**

Date and time: March 12th (Thu) (The day before the Meeting), 13:00–19:00

Venue: Room X

Representative Organizer: Yoshiki Nishimura (Waseda Univ.)

♦ **Phytohormones analysis workshop**

Date and time: March 12th (Thu) (The day before the Meeting), 13:30–16:30

Venue: Room Y

Representative Organizer: Masashi Asahina (Teikyo Univ.)

♦ **5th Symposium on Phototropic Prokaryotes**

Date and time: March 12th (Thu) (The day before the Meeting), 14:00–18:00

Venue: Z

Representative Organizer: Jiro Harada (Kurume Univ. Sch. Med.)

♦ **23rd Japan plasmodesmata meeting**

Date and time: Day 1, March 13th (Fri), 18:30-20:30

Venue: Room Y

Representative Organizer: Yusuke Ohba (Teikyo University)

♦ **Plant Science Presentation Workshop 2026 “Communicating Your Research Clearly with Graphical Abstracts”**

Date and time: Day 1 March 13th (Fri) , 19:00–20:45

Venue: Z

Representative Organizer: Chihiro Furumizu (Shimane Univ.)

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

Date and time: Day 3, March 15th (Sun), 16:40–18:40

Venue: Room Z

Representative Organizer: Yuta Hino (Nagoya Univ.)

2-6. JSPP Committee Meetings

Date and time: March 12th (Thu.) (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, Fri., March 13

in hybrid style (both on-site and online)

＊= on-site only

	9	10	11	12	13	14	15	16	17	18	19
A		Photosynthesis				Photosynthesis					
B		Primary metabolism				Primary metabolism					
C		Specialized (secondary) metabolism			Luncheon Seminar＊ Leica Microsystems K.K.	Plant-organism interaction A					
D		Genome function / gene regulation				Genome function / gene regulation					
E		Development / Morphogenesis				Development / Morphogenesis					
F		New technology				New technology Bioresources					
G		Environmental response A / Physiological responses			Luncheon Seminar＊ NTT R&D	Environmental response A / Physiological responses					
H		Environmental response B / Environmental stresses				Environmental response B / Environmental stresses					
P		Poster presentation＊									
		Poster Mounting 1P001 ～ 1P260								Questions and answers 1P001 ～ 1P260	
										Odd numbers	Even numbers
X		Symposium S01 Frontiers in Developing Climate-Resilient and Socially Accepted Plants				Symposium S04 Priming and Memory of Plants in Facing Environmental Changes					
Y		Symposium S02 Unlocking New Frontiers in Plant Physiology with Mass Spectrometry				Symposium S05 Advances in Cellular and Molecular Signaling in Response to Internal and External Stimuli from Algae to Plants					
Z		Symposium S03 Advances in Engineering and Regulation of Plastids and Photosynthesis			Luncheon Seminar＊ PCP	Symposium S06 Underlying molecular antagonisms as drivers of plant diversification and ecological adaption					
Other											

Time table Day 2, Sat., March 14

in hybrid style (both on-site and online)

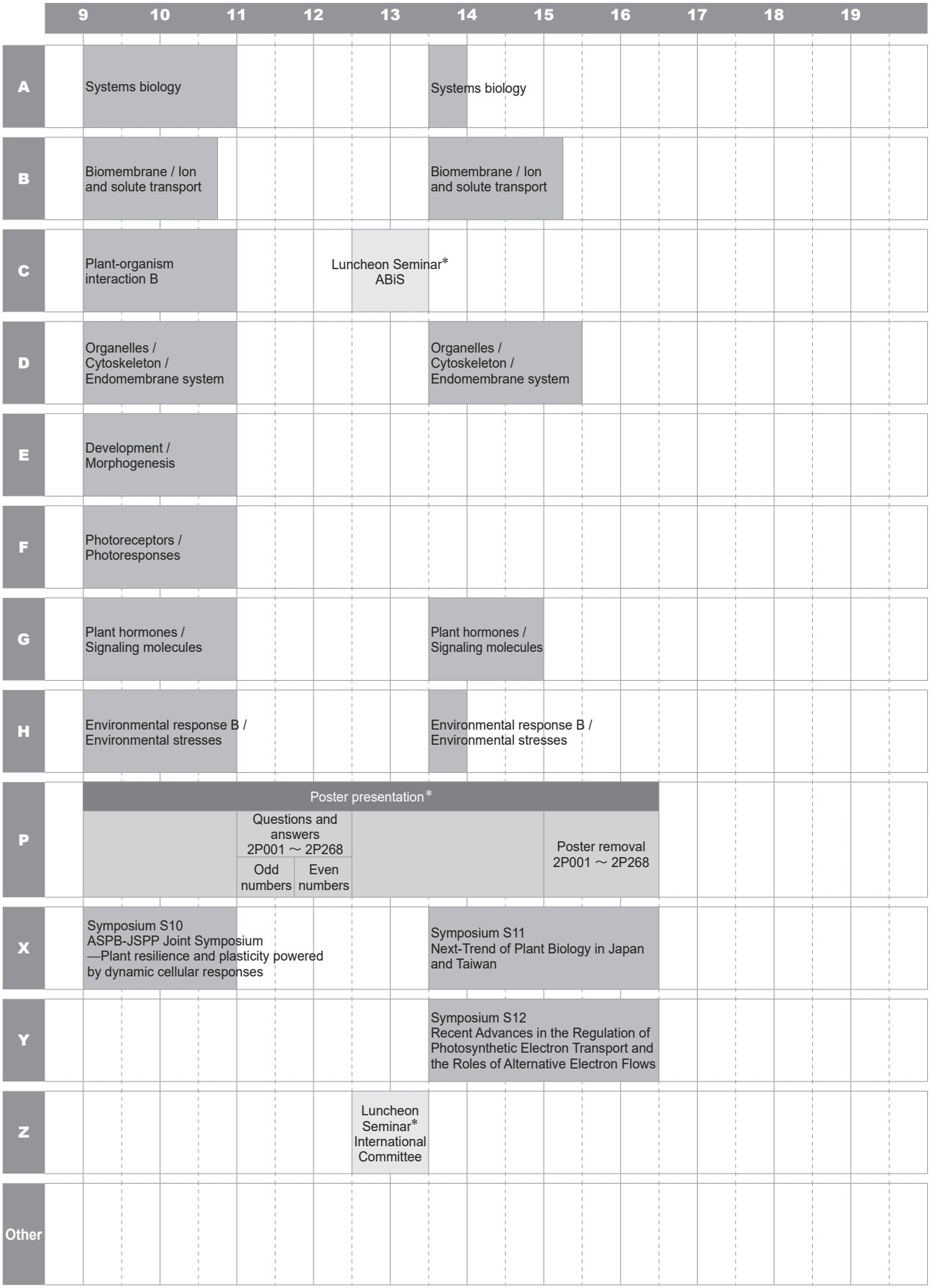
＊= on-site only

	9	10	11	12	13	14	15	16	17	18	19
A	Photosynthesis					Photosynthesis					
B	Cell wall					Cell wall					
C	Plant-organism interaction A					Plant-organism interaction B					
D	Organelles / Cytoskeleton / Endomembrane system					Organelles / Cytoskeleton / Endomembrane system					
E	Development / Morphogenesis					Development / Morphogenesis					
F	Reproduction					Reproduction					
G	Environmental response A / Physiological responses			Luncheon Seminar＊ Evident Corporation		Plant hormones / Signaling molecules					
H	Environmental response B / Environmental stresses					Environmental response B / Environmental stresses					
P	Poster presentation＊										
	Poster removal 1P001 ～ 1P260		Poster Mounting 2P001 ～ 2P268								
X	Symposium S07 Frontiers in Plant Science Revealed by Space Environments: From Molecular Mechanisms to Future Horizons										
Y	Symposium S08 Nuclear Architecture as a Scaffold: Structural Views on Gene Regulation and Cellular Function in Plants and Beyond										
Z	Symposium S09 Asymmetries in plant structure and signaling										
Other				Luncheon Seminar on Gender Equality＊ Academy Common 2F			JSPP Awards: Ceremony and Lectures Academy Common 3F			Banquet＊ Meiji University 18:00 ～ 20:00 The University of Tokyo 18:15 ～ 20:00	

Time table Day 3, Sun., March 15

in hybrid style (both on-site and online)

＊= on-site only



JSPP Award, JSPP Young Investigator Awards, PCP Best Paper Award, PCP Top Cited Regular Paper Award, PCP Top Cited Review Paper Award, JSPP Honorary Membership Award, PCP Poster Awards, MIRAI 2030 Logo Design Awards, and MIRAI 2030 Fellow Award

Date Sat., March 14, 15:00–17:30 **Venue** Academy Hall

15:00	Reports on Selection Process	Chairpersons of Award Committee
15:09	JSPP Award, JSPP Young Investigator Awards, PCP Best Paper Award, PCP Top Cited Regular Paper Award, PCP Top Cited Review Paper Award	JSPP President
15:22	Honorary Membership Award Kazuo Shinozaki (RIKEN Honorary Scientist and Science Advisor)	JSPP President
15:37	PCP Poster Awards	JSPP Editor-in-Chief
15:46	MIRAI 2030 Logo Design Awards, MIRAI 2030 Fellow Award	Former JSPP President

Award Lectures

Language: Japanese

15:59	A01	JSPP Award “Elucidation of plant growth and environmental adaptation mechanisms through the identification of novel peptide hormones” Yoshikatsu Matsubayashi (Graduate School of Science, Nagoya University)
16:17	A02	JSPP Young Investigator Award “Molecular mechanisms regulating vegetative reproduction in plants” Aino Komatsu (Graduate School of Life Sciences, Tohoku University)
16:26	A03	JSPP Young Investigator Award “The Differentiation and Evolution of Plant Idioblasts” Makoto Shirakawa (Institute of Plant and Microbial Biology, Academia Sinica)
16:35	A04	JSPP Young Investigator Award “Research on environmental sensing and signal transduction in stomata” Yohei Takahashi (WPI-ITbM, Nagoya University; Graduate School of Science, Nagoya University)
16:44	A05	JSPP Young Investigator Award “Dissecting plant-microbe interactions with new sequencing and imaging technologies” Tatsuya Nobori (The Sainsbury Laboratory)
16:53	A06	JSPP Young Investigator Award “Studies on Plant Reproduction Focusing on Pollen Development and Function” Yoko Mizuta (WPI-ITbM, Nagoya University)
17:02	A07	PCP Best Paper Award Kenshiro Watanabe, Kenji Hashimoto, Kota Hasegawa, Hiroki Shindo, Yushin Tsuruda, Kamila Kupisz, Mateusz Koselski, Piotr Wasko, Kazimierz Trebacz, Kazuyuki Kuchitsu “Rapid Propagation of Ca^{2+} Waves and Electrical Signals in the Liverwort *Marchantia polymorpha*” Plant Cell Physiol. 65 (4): 660-670 (2024) Kazuyuki Kuchitsu (Department of Applied Biological Science, Tokyo University of Science) , et al.

17:11	Awards Ceremony and Award Lectures Closing
17:12	Address by the Society President
17:22	Address by the Chairperson of the Tokyo Annual Meeting Committee
17:26	Address by the Incoming Chairperson of the Kyoto Annual Meeting Committee

Frontiers in Developing Climate-Resilient and Socially Accepted Plants

Date Fri., March 13, 9:30-12:30 **Venue** Room X

Jointly organized: Japan Science and Technology Agency (JST)

Organizers: Motoaki Seki (RIKEN CSRS) / Atsushi Takemiya (Grad. Sch. Sci. Tech. Innov., Yamaguchi Univ.)

This symposium is organized through the collaboration of two JST ASPIRE/NSF Global Centers projects dedicated to enhancing plant resilience and advancing the plant bioeconomy. By sharing recent progress from these international initiatives, the symposium aims to promote global collaboration, strengthen research networks, and support the training of early-career researchers. Through these efforts, it seeks to advance the development of climate-resilient, socially accepted crops.

9:30 Opening Remarks
Motoaki Seki (RIKEN CSRS)

Chairperson: Atsushi Takemiya

9:37 S01-1 Accelerating Functional Discovery of Plant-Derived Small Molecules for Enhancing Agricultural Resilience
Seung Rhee[1,2,3,4], Miriam Goodman[5], Emily Fryer[5] ([1]Plant Resilience Institute, Michigan State University, USA, [2]Department of Biochemistry and Molecular Biology, Michigan State University, USA, [3]Department of Plant Biology, Michigan State University, USA, [4]Department of Plant, Soil, and Microbial Sciences, Michigan State University, USA, [5]Department of Molecular and Cellular Physiology, Stanford University, USA)

10:03 S01-2 Manipulating stomatal responses to improve water use efficiency
Tracy Lawson (University of Illinois)

10:29 S01-3 Enhancing plant resilience by chemical, epigenetic and genome regulations
Motoaki Seki[1,2,3] ([1]RIKEN CSRS, [2]KIBR, Yokohama City Univ., [3]Graduate Sch. Sci. Eng., Saitama Univ.)

Chairperson: Motoaki Seki

10:55 S01-4 Molecular basis of stomatal opening for improved plant water use efficiency
Atsushi Takemiya (Grad. Sch. Sci. Tech. Innov., Yamaguchi Univ.)

11:21 S01-5 Stomatal mechanisms: Molecular insights driving plant resilience and productivity
Toshinori Kinoshita (ITbM, Nagoya University)

11:47 S01-6 Molecular insights into ABA signaling: implications for plant stress resilience
Taishi Umezawa (AIS, Tokyo Univ. Agric. Tech.)

12:13 Closing Remarks
Atsushi Takemiya (Grad. Sch. Sci. Tech. Innov., Yamaguchi Univ.)

Unlocking New Frontiers in Plant Physiology with Mass Spectrometry

Date Fri., March 13, 9:30-12:30 **Venue** Room Y

Organizer: Kanako Bessho-Uehara (Tohoku University)

Recent mass spectrometry (MS) innovations are opening new frontiers in plant physiology. MS allows multifaceted analyses, from proteomics and metabolomics to PTM dynamics, imaging, and single-cell studies. This symposium features leading researchers using cutting-edge MS to discover novel plant systems. We aim to share the view of MS not just as a tool, but as a powerful "engine of discovery" shaping plant science.

9:30 Opening Remarks
Kanako Bessho-Uehara (Tohoku University)

Chairperson: Kanako Bessho-Uehara

9:35 S02-1 High-throughput, in-depth plant phosphoproteomics and N-glycoproteomics
Chin-Wen Chen, Ting-An Chen, Pei-Yi Lin, Chuan-Chih Hsu (Institute of Plant and Microbial Biology, Academia Sinica)

10:00 S02-2 Exploration of Phospho-Switches regulating growth and environmental responses in *Arabidopsis* using ^{15}N metabolic labeling–based phosphoproteomics
Yuri Ohkubo, Natsuki Tada, Yuki Kato, Saki Noda, Yoshikatsu Matsubayashi (Grad. Sch. Sci., Nagoya University)

Chairperson: Yuri Ohkubo

10:25 S02-3 Phosphoproteomic insights into brassinosteroid-regulated sugar metabolism
Kanako Bessho-Uehara[1], Hongliang Zhang[2], Yalikunjiang Aizezi[2], Ajeet Chaudhary[2], Cao Son Trinh[2], Shou-Ling Xu[2], Zhi-Yong Wang[2] ([1]Tohoku University, [2]Carnegie Institution)

Chairperson: Kanako Bessho-Uehara

10:50 S02-4 Activity-based high-throughput screening and MS-based proteomics for identifying site-specific proteases in plants
Sayaka Matsui[1], Yoshikatsu Matsubayashi[2], Yuki Hirakawa[1] ([1]Grad. Sch. Integr. Sci. Life, Hiroshima Univ., [2]Grad. Sch. Sci., Nagoya Univ.)

11:15 S02-5 Search for signaling factors in the self-incompatibility of Brassicaceae plants using BioID
Maki Hayashi (Grad. Sch. Life Sci., Tohoku Univ.)

11:40 S02-6 MS imaging and live single-cell MS analyses revealed spatially organized transcellular alkaloid metabolism
Kotaro Yamamoto (Sch. Sci. Yokohama City Univ.)

12:05 Closing Remarks
Kanako Bessho-Uehara (Tohoku University)

Advances in Engineering and Regulation of Plastids and Photosynthesis

Date Fri., March 13, 9:30-12:30 **Venue** Room Z

Co-sponsored by Grants-in-Aid for Transformative Research Areas (A), [Cytoplasmic Genome Regulation] & [Photosynthetic Ubiquity], and, JSPS Core-to-Core program [Plant Organelle Research]

Organizers: Wataru Yamori (The University of Tokyo) / Mizuki Takenaka (Kyoto University) / Hsou-min Li (Academia Sinica) / Wataru Sakamoto (Okayama University) / Shin-ichi Arimura (The University of Tokyo)

From chloroplast genome editing to Rubisco engineering and photosynthetic regulation, this symposium presents cutting-edge advances in plastid and photosynthesis research. By integrating molecular, structural, imaging, and synthetic biology approaches, it explores new strategies to engineer photosynthesis for future crop improvement.

Chairperson: Mizuki Takenaka

9:30 S03-1 Targeted Base Editing for the Chloroplast Genome
Shin-ichi Arimura, Issei Nakazato (Graduate School of Agricultural and Life Sciences, The University of Tokyo, Japan)

9:50 S03-2 Taming Plastids for Biotechnology and Synthetic Biology
Ralph Bock (Max Planck Institute of Molecular Plant Physiology, Germany)

10:20 S03-3 Real-Time Monitoring of Plant Physiological Dynamics with Hyperspectral Imaging
Kaori Kohzuma (Graduate School of Agriculture, Kyoto University, Japan)

10:40 Break

Chairperson: Wataru Sakamoto

10:45 S03-4 Rewriting Rubisco's evolutionary script for the next generation in crop CO_2 fixation
Spencer Whitney (Research School of Biology, The Australian National University, Australia)

11:15 S03-5 Next-Generation Strategies for Boosting Photosynthesis through Rubisco Engineering and Chemical Screening
Wataru Yamori (Graduate School of Agricultural and Life Sciences, The University of Tokyo, Japan)

11:35 S03-6 Protein import into chloroplasts
Hsou-min Li (Institute of Molecular Biology, Academia Sinica, Taiwan)

12:05 S03-7 Structural Insights into the pH-Dependent Functional Regulation of the Cytochrome b_6f Complex
Genji Kurisu (Institute for Protein Research, Osaka University, Japan)

PCP sponsored symposium

Priming and Memory of Plants in Facing Environmental Changes

Date Fri., March 13, 14:00-17:00 **Venue** Room X

Organizers: Nobutoshi Yamaguchi (NAIST) / Yee-yung Charng (Academia Sinica)

This symposium focuses on plant stress memory and priming, a key research area highlighted in recent and upcoming special issues of Plant and Cell Physiology (PCP) on environmental responses and stress adaptation. Editors of PCP associated with these topics and special issues will come together to present their research, exploring how chromatin-based regulation, transcriptional reprogramming, and persistent physiological and metabolic changes underlie memory of heat, cold, and other abiotic and biotic stresses. Attendees will gain cutting-edge insights into how prior stress experiences shape subsequent responses, learn about the related PCP special issues, and have an opportunity to connect with editors working at the forefront of plant stress memory research.

Chairperson: Nobutoshi Yamaguchi

14:00 Opening Remarks by OUP
Miki Matoba (Oxford Univ. Press)

14:03 PCP's Upcoming special issue
Liliana Costa (Oxford Univ. Press)

14:10 S04-1 Regulatory Circuits for Maintaining Plant Stress Memories
Yee-yung Charng (Agricultural Biotechnology Research Center, Academia Sinica, Taiwan)

14:40 S04-2 Epigenetic Regulation of Cold Stress Response and Memory in *Arabidopsis*
Munissa Sadykova, Hidetoshi Saze (Plant Epigenetics Unit, OIST)

15:00 S04-3 How do plants remember a stressful day? – Interplay of transcription factors and chromatin to regulate heat stress memory
Isabel Baurle (Institute of Biochemistry and Biology, University of Potsdam, Potsdam, Germany)

15:30 Break

Chairperson: Yee-yung Charng

15:40 S04-4 Decoding Ethanol-Activated Stress Tolerance Pathways and Their Persistence
Kaori Sako[1,2], Daisuke Todaka[2], Motoaki Seki[2] ([1]Dep. Adv. Bio., Kindai Univ., [2]CSRS, RIKEN)

15:55 S04-5 Proteins for Chromatin Organization Contribute to Heat Stress Memory
Yilang Li[1], Hikaru Sato[1], Yuki Hayashi[2], Toshinori Kinoshita[2], Nobutoshi Yamaguchi[3], Takuya Sakamoto[4], Sachihiro Matsunaga[1] ([1]Grad. Sch. Frontier Sci., Univ. Tokyo, [2]Grad. Sch. Sci., Nagoya Univ., [3]Grad. Sch. Biological Sci., NAIST, [4]Grad. Sch. Sci., Kanagawa Univ.)

16:10 S04-6 [Cancelled]

16:40 S04-7 Transcription Factor and Epigenetic Regulator-Mediated Heat Stress Memory in Plants
Nobutoshi Yamaguchi (NAIST)

16:55 Closing Remarks
Yee-yung Charng (Academia Sinica)

Advances in Cellular and Molecular Signaling in Response to Internal and External Stimuli from Algae to Plants

Date Fri., March 13, 14:00-17:00 **Venue** Room Y

Organizers: Yasuyo Yamaoka (The Catholic University of Korea) / Kuan-Ju Lu (National Chung Hsing University)

This symposium aims to promote international collaboration among leading researchers from Taiwan, Korea, and Japan by exploring the frontiers of regulatory mechanisms in plant and algal biology. It will highlight recent advances in understanding how plants and algae modulate their cellular and molecular signaling in response to environmental stimuli, developmental programs, and how they adopt to evolutionary pressures. By discussing diverse types of molecular regulatory mechanisms in a broad spectrum of algae and plant species, the symposium will provide an intellectually stimulating and interdisciplinary platform.

14:00 Opening Remarks
Kuan-Ju Lu (National Chung Hsing University), Yasuyo Yamaoka (The Catholic University of Korea)

Chairperson: Kuan-Ju Lu

14:05 S05-1 Cosmopolitan microalgae: genomic biology and regulation of key players in global carbon cycling
Chuan Ku (Institute of Plant and Microbial Biology, Academia Sinica, Taipei, Taiwan)

14:25 S05-2 How cells die matters in microalgae through IRE1-dependent lipid remodeling
Yasuyo Yamaoka (Dept. of Biotechnology, The Catholic University of Korea)

14:45 S05-3 Heat Shock Transcription Factor B1 Orchestrates Transcriptional Network for Land Plant Adaptation
Ting-Ying Wu (Institute of Plant and Microbial Biology, Academia Sinica)

15:05 S05-4 An acidophilic fungus promotes prey digestion in a carnivorous plant
Isheng Jason Tsai (Biodiversity Research Center, Academia Sinica Taiwan)

Chairperson: Yasuyo Yamaoka

15:25 S05-5 Plasticity and Evolution of Xylem Cell Identity Revealed by Single-Cell and Spatial Multi-Omics
Jo-Wei Allison Hsieh[1,2], Te-Lun Mai[2], Ying-Lan Chen[3,4], Ying-Chung Jimmy Lin[5] ([1]Genome Center, University of California, Davis, Davis, CA, USA, [2]Department of Life Science, National Taiwan University, Taipei, Taiwan, [3]Department of Biotechnology and Bioindustry Sciences, National Cheng Kung University, Tainan, Taiwan, [4]Graduate Program in Translational Agricultural Sciences, National Cheng Kung University and Academia Sinica, Tainan, Taiwan, [5]Department of Life Science and Institute of Plant Biology, National Taiwan University, Taipei, Taiwan)

15:45 S05-6 Ribosome as a Signalling Hub: rRNA Modification Modulates Signal Perception Sensitivity in Xylem Differentiation
Donghwi Ko (Sainsbury Laboratory, University of Cambridge, UK)

16:05 S05-7 Molecular Mechanisms of Epidermal Reprogramming Triggered by Wounding in Arabidopsis
Jung-Min Lee[1], Woo-Taek Jeon[1], Minsoo Han[1], Min-Soo Choi[1], Myung Kwon[1], Kyungyoon Kim[2], Sujeong Je[3], Hoon Jung[2], Geon Heo[1], Youngsung Joo[1], Yasuyo Yamaoka[3], Yuree Lee[1] ([1]School of Biological Sciences, Seoul National University, Republic of Korea, [2]Research Institute of Basic Sciences, Seoul National University, Republic of Korea, [3]Department of Biotechnology, The Catholic University of Korea, Republic of Korea)

16:25 S05-8 A role of phospholipid-binding in regulating the function of Arabidopsis Phosphatidylethanolamine-Binding Proteins (PEBP)
Yuki Nakamura[1,2,5,6], Ying-Chen Lin[2,3,4], Yu-chi Liu[2], Artik Elisa Angkawijaya[1] ([1]RIKEN Center for Sustainable Resource Sciences (CSRS), [2]Institute of Plant and Microbial Biology, Academia Sinica, [3]Molecular and Biological Agricultural Sciences Program, Taiwan International Graduate Program, Academia Sinica and National Chung Hsing University, [4]Graduate Institute of Biotechnology, National Chung Hsing University, [5]Department of Biological Sciences, Graduate School of Science, The University of Tokyo, [6]Biotechnology Center, National Chung Hsing University)

16:45 Closing Remarks
Yasuyo Yamaoka (The Catholic University of Korea), Kuan-Ju Lu (National Chung Hsing University)

Underlying molecular antagonisms as drivers of plant diversification and ecological adaption

Date Fri., March 13, 14:00-17:00 **Venue** Room Z

Organizers: Sota Fujii (Univ Tokyo, Grad Sch Agric Life Sci) / Reina Komiya (RIKEN)

Plants have internalized molecular antagonisms that maintain and expand diversity, such as factors controlling hybridization during reproduction, host genome and transposable elements, and mechanisms governing intercellular developmental regulation. This symposium will highlight cross-scale research that extends molecular-level processes to an integrated understanding of plant adaptation to ecosystems.

14:00 opening remarks
Sota Fujii (Univ Tokyo, Grad Sch Agric Life Sci)

Chairperson: Reina Komiya

14:05 S06-1 The molecular basis of floral adaptations to promote outbreeding
Michael Lenhard (University of Potsdam, Germany)

14:35 S06-2 Molecular evolution of mechanisms involved in antagonistic pollen-pistil interactions in plants
Sota Fujii[1,2] ([1]Univ Tokyo, Gra Sch Agric Life Sci, [2]Suntory SunRiSE)

15:00 S06-3 Epigenetic basis of parental genomic antagonism underlying endosperm-based hybridization barriers
Kaoru Tonosaki (Kihara Inst. Biol. Res., Yokohama City Univ.)

15:25 break

Chairperson: Sota Fujii

15:35 S06-4 Environmental Response–Dependent RNA Regulatory System in Rice Reproduction
Reina Komiya (RIKEN • CSRS)

16:00 S06-5 Molecular antagonisms promoting diversity of the epigenome in natural *Arabidopsis thaliana* populations
Eriko Sasaki (Dept. Biol., Kyushu Univ.)

16:25 S06-6 Transposon-Mediated Environmental Regulation: Catalyst for Adaptive Responses?
Leandro Quadrana (Institute of Plant Science Paris-Saclay (IPS2), Gif-sur-Yvette, France)

16:55 closing remarks
Reina Komiya (RIKEN)

Frontiers in Plant Science Revealed by Space Environments: From Molecular Mechanisms to Future Horizons

Date Sat., March 14, 9:00-12:00 **Venue** Room X

Co-organized by Research Center for Space Agriculture and Horticulture, Chiba University

Organizers: Tomomichi Fujita (Hokkaido University) / Jun Hidema (Chiba University)

This symposium highlights recent plant experiments on the International Space Station and other microgravity platforms by Japanese PIs in our society, revealing hidden plant functions in gravity sensing, combined stress responses, and cell division. Four Japanese PIs and two international collaborators from Australia, who are planning new missions, will present and discuss future directions for space-based plant research.

Chairperson: Jun Hidema

9:00 Introduction
Jun Hidema (Chiba University)

9:05 S07-1 Plant space biology and its application to space farming
Hideyuki Takahashi (Research Center for Space Agriculture and Horticulture, Graduate School of Horticulture, Chiba University)

9:30 S07-2 Moss in space: How do they respond, grow, and how much can they tolerate?
Tomomichi Fujita[1], Yuko T. Hanba[2], Hiroyuki Kamachi[3], Yusuke Onoda[4], Ichirou Karahara[3], Yuji Hiwatashi[5], Atsushi Kume[6] ([1]Grad. Sch. Sci., Hokkaido Univ., [2]Dept. Applied Biol., Kyoto Inst. Tech., [3]Fac. Sci., Univ. Toyama, [4]Grad. Sch. Agr., Kyoto Univ., [5]Sch. Food ind. Sci., Miyagi Univ., [6]Fac. Agri., Kyushu Univ.)

9:55 S07-3 Space Experiment Plant UV-B: Combined Stress Response to Microgravity and Ultraviolet-B Radiation
Xi Chen[2], Kaoru Yoshiyama[2], Genji Kamada[3], Haruo Kasahara[4], Toru Shimazu[5], Kana Kuriyama[6], Kazumi Koga[7], Tomokazu Yamazaki[7], Noriko Matsuzaki[7], Akira Higashibata[7], Jun Hidema[1] ([1]RC for Space Agri. and Horti., Chiba Univ., [2]Grad. Sch. Life Sci., Tohoku Univ., [3]AES, [4]JAMSS, [5]Space Life Sci. International LLC, [6]Japan Space Forum, [7]JAXA)

10:20 Break

Chairperson: Tomomichi Fujita

10:30 S07-4 Plant Cell Division space experiment - Elucidation of the effects of the microgravity environment on plant cell division -
Daisuke Tamaoki[1], Mayuka Naruse[2], Mizuki Yamada[2], Naoya Taguchi[2], Micahl Rivkintsuji[3], Hiroki Yasuhara[4], Shizuka Koshimizu[5], Takumi Nishiuchi[6], Ichirou Karahara[1], Kouichi Soga[7] ([1]Fac. Sci., Univ. Toyama, [2]Grad. Sch. Sci. Eng., Univ. Toyama, [3]Dept. Biol., Fac. Sci., Univ. Toyama, [4]Fac. Chem. Mater. Bioeng., Kansai Univ., [5]NIG, [6]ReCEMHD, Kanazawa Univ., [7]Grad. Sch. Sci., OMU)

10:55 S07-5 Zero waste plants for controlled environments in Space and on Earth
Kim Johnson[1], Mathew Lewsey[1], Michelle Watt[2] ([1]La Trobe University, School of Agriculture Biomedicine and Environment, [2]University of Melbourne)

11:25 S07-6 From Suborbital Spaceflight to the Moon: Plant Cell Wall Remodelling in Response to Altered Gravity
Mortimer Jenny[1,2,6], Jens Hauslage[2,3], Sebastian Feles[3], Tommy Zheng Gong[1,2], Mathew Lewsey[1,4,6], Matthew Gilliham[1,2], Alison Gill[1,2,6], Bryony Hodge[1,2,6], Christine Chamberlain[1,5,6] ([1]ARC Centre of Excellence in Plants for Space (P4S), [2]Adelaide University, SA 5064, Australia, [3]Aeromedical FabLab, Institute of Aerospace Medicine, German Aerospace Center (DLR), [4]La Trobe University, Victoria, Australia, [5]Space Lab Technology, Colorado, USA, [6]Luna Effects on Agricultural Flora (LEAF) consortium)

11:55 Discussion
Tomomichi Fujita (Hokkaido University)

Nuclear Architecture as a Scaffold: Structural Views on Gene Regulation and Cellular Function in Plants and Beyond

Date Sat., March 14, 9:00-12:00 **Venue** Room Y

Organizers: Takuya Sakamoto (Kanagawa University) / Noriko Inada (Osaka Metropolitan University)

Gene expression is regulated not only by DNA, transcription factors, and chromatin modifications but also by nuclear structures acting as scaffolds that support and spatially coordinate nuclear events. Nuclear temperature has emerged as another key regulator. This symposium presents new insights into how these factors are integrated to shape gene expression and cellular functions in plants and animals.

Chairperson: Takuya Sakamoto

9:00 Opening remarks
Takuya Sakamoto (Kanagawa University)

9:05 S08-1 Regulation of Plant Chromatin Organization by Actin and Actin-binding Proteins
Noriko Inada[1], Tomoko Matsumoto[1], Fumiya Nakano[1], Yayoi Inui[2], Kota Higashi[3], Shizue Yoshihara[3], Sachihiro Matsunaga[2] ([1]Grad. Sch. Agri., Osaka Metropol. Univ., [2]Grad. Sch. Front. Sci., Univ. of Tokyo, [3]Grad. Sch. Sci., Osaka Metropol. Univ.)

9:30 S08-2 From Plants to Cancer: Rapid Cell Division Is Regulated at the Nuclear Pore
Yangnan Gu (Univ. California, Berkeley, USA)

10:00 S08-3 Rapid changes in transcriptional activity and chromatin structure during pollen tube growth
Mio K. Shibuta (Fac. of Sci., Yamagata Univ.)

Chairperson: Noriko Inada

10:30 S08-4 Thermal signaling in the nucleus: A mechanism of cellular function driven by spontaneous heat production
Kohki Okabe (Grad. Sch. Pharm. Sci., Univ. Tokyo)

11:00 S08-5 Exploring the functional implications of centromere arrangements in Arabidopsis
Takuya Sakamoto (Fac. Sci., Kanagawa Univ.)

11:20 S08-6 Chromosomal Organisation of Plant Biosynthetic Gene Clusters
Hans-Wilhelm Nuetzmann (Dep. Biosci., Univ. Exeter, UK)

11:50 Closing remarks
Noriko Inada (Osaka Metropolitan University)

Asymmetries in plant structure and signaling

Date Sat., March 14, 9:00-12:00 **Venue** Room Z

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

Organizers: Makoto Shirakawa (IPMB, Academia Sinica) / Mika Nomoto (Centr. Gene Res., Nagoya Univ.)

In the JST PRESTO program "Plant Molecules," plant-derived compounds and their related genes are collectively defined as "plant molecules." The program promotes interdisciplinary research to elucidate their functions in organisms and ecosystems and to develop technologies for their control. This symposium will highlight the dynamics of plant molecules in living systems, with a focus on asymmetry in plant structure and signaling.

Chairperson: Mika Nomoto

9:00 Opening remarks

9:10 S09-1 How Minor Shifts in Transcription Factor Networks Generate Cell Fate Asymmetry
Makoto Shirakawa[1,2] ([1]Institute of Plant and Microbial Biology, Academia Sinica, [2]JST PRESTO)

9:40 S09-2 Molecular Basis of the Regulatory System Governing Cell Polarity in Plants
Akira Yoshinari[1,2] ([1]WPI-ITbM, Nagoya Univ., [2]JST PRESTO)

10:10 S09-3 Evolutionary origins and diversification of polar auxin transport in plants
Satoshi Naramoto[1,2] ([1]Fac. Sci., Hokkaido Univ., [2]JST PRESTO)

10:40 Break time

Chairperson: Makoto Shirakawa

10:50 S09-4 Mechanistic Analysis of Symmetric Calcium Wave Triggered by Asymmetric Trichome Bending
Mika Nomoto[1,2,3], Yu Saito[2], Mafuyu Kawashima[2], Tomoko Suzuki[1,4], Masamitsu Ishibashi[5], Hiroshi Mori[2], Kiminori Toyooka[6], Sumire Sugiyama[1], Noriko Nagata[4], Mayuko Sato[6], Yasuko Kaneko[7], Makoto Tokunaga[8], Eiji Goto[5], Takeo Matsumoto[9], Masato Hoshino[10], Yasuomi Tada[1,2] ([1]Centr. Gene Res., Nagoya Univ., [2]Grad. Sch. Sci., Nagoya Univ., [3]JST PRESTO, [4]Div. Sci., Japan Wmn's Univ., [5]Grad. of Agr., Kyushu Univ., [6]RIKEN Centr. Sust. Res. Sci., [7]Div. Edu., Saitama Univ., [8]Comp. Anal. Centr. Sci., Saitama Univ., [9]Grad. Sch. Eng., Nagoya Univ., [10]JASRI)

11:20 S09-5 C/N/S circulatory system underlying catabolic recycling of specialized metabolites
Ryosuke Sugiyama[1,2,3,4] ([1]Grad. Sch. Pharm. Sci., Chiba Univ., [2]PMSC, Chiba Univ., [3]RIKEN CSRS, [4]JST PRESTO)

11:50 General discussion & Closing remarks

ASPB-JSPP Joint Symposium—Plant resilience and plasticity powered by dynamic cellular responses

Date Sun., March 15, 9:00-11:00 **Venue** Room X

Co-organized by the JSPP International Committee and the ASPB International Committee

Organizers: Ryohei Thomas Nakano (Hokkaido Univ.) / Momoko Ikeuchi (NAIST) / Keiko Torii (Univ. Texas Austin/ HHMI/ITbM)

Remarkable plasticity of plant cells enables drastic morphological and physiological changes that lay the groundwork for plant resilience, while its underlying mechanisms remain poorly characterized. In this symposium, outstanding international speakers will present their cutting-edge research on dynamic cellular behaviors observed during reproduction, embryonic and post-embryonic development, and regeneration.

Chairperson: Ryohei Thomas Nakano

9:00 Opening Remark
Ryohei Thomas Nakano (Hokkaido Univ.)

9:02 S10-1 Cell fate determination and tissue organization in leaf development
Kimmy Ho (Institute of Plant and Microbial Biology, Academia Sinica)

9:25 S10-2 Multicellular Dynamics of WUS-Expressing Cells During *De Novo* Shoot Regeneration in Arabidopsis
Yuki Doll, Momoko Ikeuchi (Div. Bio. Sci., Grad. Sch. Sci. Tech., NAIST)

9:42 S10-3 Barrier Integrity Is Monitored By Gas Diffusion In *Arabidopsis* Mature Roots
Hiroyuki Iida[1], Isidro Abreu[2], Jennifer López Ortiz[1], Lucas León Peralta Ogorek[1,3], Vinay Shukla[2], Meeri Mäkelä[1], Munan Lyu[1], Alexey Shapiguzov[1,4], Francesco Licausi[2], Ari Pekka Mähönen[1] ([1]FBES., University of Helsinki, [2]Dept of Bio., University of Oxford, [3]Sch of Biosci., University of Nottingham, [4]Luke)

Chairperson: Momoko Ikeuchi

9:59 S10-4 A novel actin isoform regulates seed size by controlling nuclear movement in Arabidopsis coenocytic endosperm
Tomokazu Kawashima (Department of Plant and Soil Sciences, University of Kentucky, Kentucky USA)

10:16 S10-5 Emergence of Robust Axis Formation from Stochastic Cell Behaviors in Rice Embryogenesis
Atsuko Kinoshita (Tokyo Metropolitan Univ.)

10:33 S10-6 The Distributive Germline: A developmental strategy to restrict the spread of new mutations
Brad Nelms (University of Georgia, USA)

10:58 Closing Remarks
Kent D. Chapman (University of North Texas, ASPB President)

Next-Trend of Plant Biology in Japan and Taiwan

Date Sun., March 15, 13:30-16:30 **Venue** Room X

Organizers: Katsutoshi Tsuda (Nagoya University) / Misato Ohtani (The University of Tokyo) / Ying-Chung Jimmy Lin (National Taiwan University) / Su-Chiung Fang (Academia Sinica)

This Japan–Taiwan joint symposium showcases emerging, innovative plant biology research led by young scientists in both countries. By focusing on challenging and unique approaches across diverse fields, it provides a platform to exchange novel ideas and build new collaborations. We expect it will strengthen the network of next-generation plant biologists and open new opportunities for long-term collaboration.

13:30 Opening remarks
Katsutoshi Tsuda (Nagoya University)

Chairperson: Ying-Chung Jimmy Lin

13:35 S11-1 Semi-*in vivo* analysis of motile sperm–archegonial cell interactions and fertilization-related factors in *Cycas revoluta*
Yukiho Toyama[1], Satohiro Okuda[1], Takamasa Suzuki[2], Keiko Kano[3], Emi Mishiro-Sato[3], Shinya Sato[3], Yasuko Ito-Inaba[4], Tetsuya Higashiyama[1] ([1]Dept. of Biol. Sci., Grad. Sch. Sci., Univ. Tokyo, [2]Coll. Biosci. Biotechnol., Chubu Univ., [3]Mol. Struct. Cent., WPI-ITbM, Nagoya Univ., [4]Fac. Agric., Univ. of Miyazaki)

13:55 S11-2 The phytocytokine CAPE9 and its receptor CAPER1 function on plant systemic stomatal immunity
Chi-Hsin Chang, Kai-Tan Cheng, Fan-Wei Lin, Yet-Ran Chen (Agricultural Biotechnology Research Center, Academia Sinica)

14:15 S11-3 Diverse mechanisms of stomatal manipulation by phyllosphere bacteria
Rikako Hirata (Grad. Sch. Agr., Kyoto Univ.)

14:35 S11-4 Evolutionarily Conserved Eukaryotic Initiation Factor-Gated Translation Initiation Drives Plant Stress Response
Jhen-Cheng Fang[1], Li An Ly[1], Wei Xiong Henry Eo[2], Chung-Yuan Lin[1], Chun-Jui Li[1], Zhuan Yi Neoh[1], Yu-Sen Wang[3], Chin-Mei Lee[3], Ting-Ying Wu[2], Ming-Jung Liu[1,4] ([1]Biotechnology Center in Southern Taiwan, Academia Sinica, Tainan, Taiwan, [2]Institute of Plant and Microbial Biology, Academia Sinica, Taipei, Taiwan, [3]Department of Life Science, National Taiwan University, Taipei, Taiwan, [4]Agricultural Biotechnology Research Center, Academia Sinica, Taipei, Taiwan)

14:55 Break

Chairperson: Katsutoshi Tsuda

15:05 S11-5 Translation mechanism regulated by SPA kinases in photomorphogenesis and heat stress response
Hui-Hsien Chang, Mei-Chun Cheng (Department of Biochemical Science & Technology, National Taiwan University)

15:25 S11-6 Live-imaging and modeling of the leaf primordium of rice
Yoshiki Tokuyama (Res. Fac. Agr. Hokkaido U.)

15:45 S11-7 Genetic architecture and molecular biology of heterostyly in common buckwheat
Ryoma Takeshima (Department of Biochemistry and Molecular Biology, Saitama University)

16:05 S11-8 Multiplex Genetic Engineering Improves *Agrobacterium*-mediated Plant Transformation and CRISPR-based Genome Editing
Teng-Kuei Huang, Tsen-Hsi Liao, Mao-Sen Liu, Yi-Chieh Wang, Si-Chong Wang, Chih-Hang Wu, Chih-Horng Kuo, Erh-Min Lai (Institute of Plant and Microbial Biology, Academia Sinica)

16:25 Closing remarks
Ying-Chung Jimmy Lin (National Taiwan University)

Recent Advances in the Regulation of Photosynthetic Electron Transport and the Roles of Alternative Electron Flows

Date Sun., March 15, 13:30-16:30 **Venue** Room Y

Organizers: Chikahiro Miyake (Kobe University) / Ginga Shimakawa (Kobe University) / Kaori Kozuma (Kyoto University)

Efficient CO_2 assimilation in plants requires coordinated light and dark reactions. Under fluctuating environments, stomatal closure limits CO_2, causing over-reduction of the electron transport chain, excess electrons on ferredoxin, and ROS formation. To avoid oxidative stress, plants activate alternative electron pathways such as PSI-cyclic flow via FQR and NDH, PTOX, and mitochondrial O_2 reduction. This symposium presents recent advances on their molecular mechanisms and physiological roles.

13:30 Opening Remarks
Chikahiro Miyake (Kobe University)

Chairperson: Kaori Kozuma

13:40 S12-1 New insights into the role of cyclic electron transfer in photosynthesis
Matt Johnson (Plants, Photosynthesis & Soil, School of Biosciences, University of Sheffield, Sheffield, S10 2TN, United Kingdom.)

14:10 S12-2 Redox regulation of photosynthetic electron transport
Anja Krieger-Liszkay (Institute for Integrative Biology of the Cell (I2BC), CEA, CNRS, Université Paris-Saclay, 91198 Gif-sur-Yvette cedex, France)

Chairperson: Ginga Shimakawa

14:40 S12-3 When PSI-Cyclic Electron Transport Peaks: Growth Light Intensity Defines Its Kinetic Mode
Hayato Satoh[1], Arisa Ueda[1], Guy Hanke[2], Ko Takeuchi[3], Kentaro Ifuku[3], Ginga Shimakawa[1], Kenichi Morigaki[1], Yuji Suzuki[4], Amane Makino[5,6], Chikahiro Miyake[1] ([1]Grad. Agri. Sci., Kobe Univ., [2]Sch. Biochem. Chem., QMUL, [3]Grad. Agri., Kyoto Univ., [4]Iwate Univ., Fac. Agri., [5]Grad. Agri. Sci., Tohoku Univ., [6]Inst. Excel. Higher Edu., Tohoku Univ.)

15:05 S12-4 NDH-PSI Supercomplex Ensures Proper Redox State of Plastquinone Pool in Thylakoid Membranes
Kaori Kohzuma, Kentaro Ifuku (Grad. Sch. Agri., Kyoto Univ.)

Chairperson: Chikahiro Miyake

15:30 S12-5 Is photosynthesis just about fixing CO_2?
Ginga Shimakawa (Kobe University)

15:55 S12-6 Roles of the mitochondrial respiratory chain in photosynthetic induction
Ko Noguchi[1], Tatsuhisa Konishi[1], Yusuke Mizokami[1], Kintake Sonoike[2] ([1]Sch Life Sci, Tokyo Univ Pharm Life Sci, [2]Fac Edu Integr Art Sci, Waseda Univ)

16:20 Closing Remarks
Kentaro Ifuku (Kyoto Univ.)

Leica Microsystems K.K.

Date Fri. March 13 12:45-13:45 **Venue** Room C

Dr. Mina OHTSU (Faculty of Advanced Life Science, Hokkaido University)
Seeing the Unseen: Microscopic approaches to plant–microbe interactions

Plants survive through interactions with a wide range of organisms in their environment, including microorganisms. Despite significant advances achieved through molecular and genetic approaches, microscopic visualization of plant–microbe interactions at cellular and histological levels remains essential for elucidating the underlying mechanisms. This talk presents microscopic analyses of plant–microbe interactions and microbe-induced alterations in plant tissues, highlighting both the complexity and diversity of these interactions.

Nobuhide Tsurumaki (Leica Microsystems K.K.)
New Imaging Enabled by Mica — Visualizing “Spatiotemporal Correlation” in one system through simultaneous 4-color fluorescence acquisition

Mica enables one-click switching between camera-based widefield and confocal imaging in a single system and, with FluoSync, performs simultaneous 4-color fluorescence acquisition. By eliminating the temporal delays and spatial misalignment inherent in sequential imaging, and by suppressing crosstalk, true spatiotemporal correlations can be visualized. In this presentation, we will overview Mica’s key technological innovations and introduce a practical, high-throughput workflow that dramatically reduces setup steps without compromising data quality. We will also demonstrate end-to-end operation—from rapid sample overview to high-resolution acquisition—using real experimental datasets.

NTT, Inc. (NTT R&D)

"Restoring the Global Environment and Building a Sustainable Society ~ The Challenge of NTT Space Environment and Energy Laboratories Harnessing Photosynthetic Organisms ~"

Date Fri., March 13, 12:45–13:45 **Venue** Room G

Speakers: Sousuke Imamura, Kazuma Sakoda, Ken Okamoto, Hidenori Iwashita

Innovating with Biology for a Future Where Food and Environment Are in Harmony

NTT R&D, as the core research organization of the NTT Group, is advancing innovative technologies to restore the global environment and realize a sustainable society. The Space Environment and Energy Laboratories, established in 2020, focuses on biological approaches to harmonize food systems and environmental sustainability. Global warming, driven by rising greenhouse gas concentrations, threatens ecosystems worldwide. Our research aims to control biological functions and redirect material cycles to enhance greenhouse gas absorption and reduce emissions across marine and terrestrial environments. In parallel, we are developing breeding technologies to improve the functionality of algae and crops, dramatically increasing their industrial value while contributing to food security. This seminar will present our attempts and future directions.

For more details, please visit our website:

– Space Environment and Energy Laboratories: https://www.rd.ntt/e/se/

– Recruitment Information: https://www.ntt-labs.jp/saiyo/e/

PCP Luncheon Seminar:

The importance of society journal publishing and the benefits of PCP

Date Fri., March 13, 12:45–13:45 **Venue** Room Z

Speakers: Liliana Costa (Managing Editor), Jenny Mortimer (Reviews Editor), Kenichi Tsuda (Senior Editor), Misato Ohtani (Senior Editor), Tetsuya Higashiyama (Editor-In-Chief); Hitoshi Sakakibara (Deputy President of JSPP)

This seminar aims to foster an understanding of the important role played by society journals for the plant science community, with a special focus on *Plant & Cell Physiology (PCP)*. As the official journal of the Japanese Society of Plant Physiologists (JSPP), *PCP's* principal aim is to support the work and international career development of its members, but also to promote plant science world-wide. In this session, we will demonstrate the many benefits of supporting PCP as your society journal—such as its awards and relatively low publication fees and waivers—and explain how the success of PCP is directly correlated with the future growth and expansion of the JSPP.

We will also bring news of the latest developments from PCP, including how we aim to broaden the journal's scope further to embrace more researchers from other established and emerging fields, while continuing to strengthen the fields in which we excel. To this end, we will discuss the various internal activities overseen by the many research leaders on our international editorial board, and of the special issues that reinforce ties with other international societies and plant scientist consortia. By reflecting on these strengths, we hope to raise awareness among Society members and work with you towards strengthening the future growth and development of PCP, the JSPP, and the broader plant science community.

Seminar Overview:
1. Short presentations from speakers
2. Q&A Discussion

Evident Corporation Luncheon Seminar

Date Sat., March 14, 12:00–13:00 **Venue** Room G

Live-cell imaging of early embryogenesis in plants

Minako Ueda, Ph.D., Graduate School of Life Sciences, Tohoku University

In many plants, fertilization initiates plant body formation. For a long time, it was difficult to observe real-time dynamics of zygotes and embryos because they are hidden deep within thick maternal tissues. However, advances in multiphoton excitation microscopy and high-sensitivity detectors, which are suitable for deep imaging, have made it feasible to perform high-resolution live imaging of spatiotemporal dynamics during early embryogenesis.

In this seminar, I will present live-imaging data from *Arabidopsis thaliana* (angiosperm), *Marchantia polymorpha* (liverwort), and *Ceratopteris richardii* (fern), introducing technical optimizations for imaging, along with quantitative analysis of the obtained datasets to detect subtle but important changes, to highlight the utility of live-cell analysis.

1) Kimata et al. *PNAS*, 113(49), 14157-14162., 2016
2) Kimata et al. *PNAS*, 116(6), 2338-2343., 2019
3) Tanaka et al. *Current Biology*, 34(20) 4639-4649., 2024
4) Hanaki et al. *Plant Methods*, 21(1):149., 2025

Evolved Confocal Imaging to Accelerate Research: The Challenge for High Speed, High Efficiency, and High Image Quality

Takahisa Nidaira, Evident Corporation

Confocal and Multiphoton Laser Scanning Microscope FLUOVIEW FV5000

EVIDENT

Seminar on Gender Equality

“Let’s Talk Together about Careers and PhD Pathways”

Date Sat., March 14, 12:15–13:05

Venue Second Floor, Academy Common Building
(Same at the social gathering at Meiji Univ)

Organizer: JSPP Gender Equality Committee

Moderator: Kotaro Yamamoto (Yokohama City Univ./JSPP Gender Equality Committee)

Speaker: Fumiyo Kaneko (Japan Society for the Promotion of Science)

This seminar provides an open forum to discuss concerns and challenges related to pursuing a PhD and sustaining a research career across diverse positions and life stages. We will explore how institutional frameworks and cultural norms can support work–life balance. The program includes an overview of gender ratio trends from the JSPP Gender Equality Questionnaire and a presentation by JSPS (Japan Society for the Promotion of Science) on support programs for early-career researchers. In the second half, participants will join small-group discussions based on themes from recent surveys, building a new community space to share experiences and address career-related issues. We warmly welcome participation from all members of the society, including students, early-career to senior researchers, advisors, and mentors.

https://forms.office.com/r/PtU6ysfXcv

Advanced Bioimaging Support Platform (ABiS) Luncheon Seminar

Overcoming Challenges in Bioimaging: Practical Strategies for Using ABiS Support

Date Sun., March 15, 12:30–13:30 **Venue** Room C

Chair: Megumi Maruyama (Specially Appointed Associate Professor, National Institute for Physiological Sciences)

Speaker: Shoji Mano (Associate Professor, National Institute for Basic Biology)
Title: What's ABiS?

In life science research, imaging technologies that visualize everything from molecules, cells, and tissues to whole organisms have become indispensable analytical methods. However, with the increasing sophistication and cost of recent equipment, as well as the complexity of image analysis techniques, it is becoming difficult for individual researchers to adopt and maintain cutting-edge technologies on their own. Against this background, the Advanced Bioimaging Support Platform (ABiS) was established as a collaborative network of Japanese universities and research institutions, with the National Institute for Physiological Sciences (NIPS) and the National Institute for Basic Biology (NIBB) serving as its core nodes. This platform strongly promotes KAKENHI-funded projects by providing imaging support for state-of-the-art light microscopy, electron microscopy, and magnetic resonance imaging (MRI), as well as assistance with advanced image analysis techniques. In this presentation, we will introduce ABiS's support activities and how to utilize our services.

Speaker: Yoshitaka Kimori (Professor, Gunma University)
Title: Image Analysis Support Based on Image-Data Science

Images acquired using imaging devices such as microscopes are raw data (unstructured data) obtained by directly imaging the sample containing the subject of analysis. Although image data are represented as a set of pixel values, these pixel values rarely correspond directly to biological meaning. For example, we can recognize various organelles and intracellular structures from microscope images of cells. However, no intrinsic pixel values exist that uniquely represent "mitochondria" or "actin filaments." Pixel values within the region constituting a mitochondrion typically appear in regions outside the mitochondrion, such as noise or background structures. Thus, a gap known as the semantic gap exists between the representation of image data (pixel values) and human recognition and the image interpretation. Many challenges addressed in image analysis support aim to extract biologically meaningful information from image data. Therefore, bridging this gap is key to successfully conduct support activities. In this presentation, I will reflect on my previous support activities and focus on approaches to bridge gaps, specifically those based on image-data science. Additionally, I will explain the current state and future development of support activities utilizing artificial-intelligence technologies, including deep learning.

Speaker: Kagayaki Kato (Assistant Professor, National Institute for Basic Biology)
Title: Practical Methods for Measuring Biological Image Data

In recent years, advances in microscopy technologies have made it routine to acquire high-resolution, multidimensional (3D/4D) image data in biological research. At the same time, how such image data should be quantitatively analyzed and translated into biological insight remains a major challenge for many researchers. Image analysis is the process of extracting pixel-based and morphological information from acquired images and transforming them into numerical values that can be used as objective metrics for comparison and evaluation. However, in biological research, the wide diversity of observation targets and imaging modalities often requires analysis methods themselves to be implemented and customized to suit individual experimental systems. In this presentation, I will present analysis examples based on image data acquired across a wide range of spatial scales, from cells to tissues and whole organisms, using diverse biological model systems. Through these examples, we will engage in practical discussions on what kinds of quantitative information can be obtained through image analysis and how such measurements contribute to biological interpretation. In addition, the seminar will address the importance of constructing analysis pipelines for the stable processing and reuse of large-scale image datasets, as well as the design of data management and storage systems, and will introduce practical techniques for achieving efficient and reproducible image analysis.

Luncheon Seminar

"Why Study/Work Abroad?—Voices of Experience"

Date Sun., March 15, 12:30–13:30 **Venue** Room Z

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

Panelists: Munenori Kitagawa (College of Horticulture & Forestry Sciences, Huazhong Agricultural University; Professor)
Makoto Shirakawa (Academia Sinica, Institute of Plant and Microbial Biology; Assistant Research Fellow)
Satoyo Oya (Max Planck Institute for Biology; Post-doc)
Hiromu Nakao (The University of Tokyo; PhD student)
Ren Ujimatsu (The University of Tokyo; PhD student)

The Japanese Society of Plant Physiologists (JSPP) is committed to enhancing the international research competitiveness and visibility of the JSPP community. Recognizing the value of overseas experience for researchers, we acknowledge that, despite the growing interest in studying and working abroad, many hesitate to do so due to a lack of practical information, uncertainties from the COVID-19 pandemic, and global economic instability. We aim to address these concerns by highlighting the importance of firsthand insights from researchers with international experience, promoting studying/working abroad as a viable and valuable career opportunity.

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.

The 28th Plant Organelle Workshop
Grant-in-Aid for Transformative Research Areas (A)
Cytoplasmic Genome Regulation JOINT SYMPOSIUM

Date Thu., March 12, 13:00–19:00 **Venue** Liberty Hall (room#1013), Liberty Tower, Meiji University

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

13:00 Opening remarks

Session1

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

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

14:15 Break

Session 2

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

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

15:40 Break

Session 3

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

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

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

17:40 Break

Keynote lecture

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

18:55 General discussion

19:00 Closing remarks

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

Contact address:
Yoshiki Nishimura: ynishimura@waseda.jp
Yusuke Kato: yusuke.kato@setsunan.ac.jp

Phytohormones analysis workshop

Date Thu., March 12, 13:30–16:30 **Venue** Room Y

Organizers: Masashi Asahina (Teikyo Univ.), Izumi Mori (IPSR, Okayama Univ.)

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

13:30 Opening remarks
Masashi Asahina (Teikyo Univ.)

13:35 Quantitative plant hormone analysis at Adv. Instrum. Anal.Ctr, Teikyo Univ.
Emi Yumoto (Adv. Instrum. Anal.Ctr, Teikyo Univ.)

13:50 Establishing a Bitterness-Reduction Method for YUZU-Based Processed Products.
Agric. Environ. Club-Food Sci. Group (Dept. Food Sci., Tochigi Agric. High Sch.)

14:05 Quantitative plant hormone analysis at IPSR, Okayama University–Renewal of the LC-MS system
Takakazu Matsuura (IPSR, Okayama Univ.)

14:20 Characteristics of dormancy and phytohormones related to dormancy in dominant tree species of a subtropical evergreen broadleaf forest
Shoma Hiejima[1], Rico Hachisuka[1], Takakazu Matsuura[2], Izumi C. Mori[2], Shin Ugawa[1] ([1]Fac. Agr., Kagoshima Univ., [2]IPSR, Okayama Univ.)

14:40 Regulation of auxin levels and responsiveness sustaining indeterminate growth and vegetative propagation in *Marchantia polymorpha*
Ryuichi Nishihama (Dept. Appl. Biol. Sci., Fac. Sci. Tech., Tokyo Univ. Sci.)

15:00 Mechanisms of Auxin Homeostasis Mediated by Organelle-Specific Localization of Auxin Metabolites
Ken-ichiro Hayashi (Dept. Biosci, Okayama Univ. Sci.)

15:20 Introduction to the RIKEN CSRS Advanced Plant Hormone Analysis Platform.
Masanori Okamoto[1], Mikiko Kojima[1], Yumiko Takebayashi[1], Mitsunori Seo[2], Hitoshi Sakakibara[3], Masami Hirai[1] ([1]RIKEN CSRS, [2]Tropical Biosphere Res Center, Univ Ryukyus, [3]Grad. Sch. BioagriSci., Nagoya Univ.)

15:40 Detection and quantification of proteins related plant hormones using MRM method with LC/MS/MS
Hitoshi Mori[1,2] (1Grad. Sch. Bioagric. Sci., Nagoya Univ. 2Grad. Sch. Food Agric. Sci., Fukushima Univ.)

16:00 Closing remarks
Izumi Mori (IPSR, Okayama Univ.)

5th Symposium on Phototropic Prokaryotes

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

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

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

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

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

Chairperson: Yusuke Tsukatani

14:00 Opening remarks (Jiro Harada)

14:05 "Structure–function relationships of light-harvesting protein complexes in algae"
Keisuke Kawakami (RIKEN SPring-8 Center)

14:35 "Light-harvesting strategies of photosynthetic antenna systems revealed at the single-molecule level"
Toru Kondo (National Institute for Basic Biology, The Graduate University for Advanced Studies SOKENDAI, Exploratory Research Center on Life and Living Systems)

15:05 "Analysis of uphill excitation energy transfer in the far-red light-harvesting antenna protein complex in a green alga, *Prasiola crispa*"
Makiko Kosugi[1,2], Yutaka Shibata[3], Keisuke Saito[4,5], Yusuke Yoneda[2,6], Hikaru Kuramochi[2,6,7], Hiroshi Ishikita[4,5], and Jun Minagawa[1,2] ([1]National Institute for Basic Biology, [2]Graduate Institute for Advanced Studies, SOKENDAI, [3]Graduate School of Science, Tohoku University, [4]Department of Applied Chemistry, The University of Tokyo, [5]Research Center for Advanced Science and Technology, The University of Tokyo, [6]Reserch Center of Integrative Molecular Systems, Institute for Molecular Science, [7]Graduate School of Engineering Science, The University of Osaka)

15:35 Break

Chairperson: Chihiro Azai

15:55 "Analysis of the secretion and transport mechanisms of photosynthetic pigments via extracellular vesicles in the cyanobacterium *Leptolyngbya boryana*"
Kentaro Usui[1], Haruki Yamamoto[1], Hitoshi Mori[1, 2], Takao Oi[1], Mitsutaka Taniguchi[1], and Yuichi Fujita[1] ([1]Graduate School of Bioagricultural Science, Nagoya University, [2]Institute for Glyco-core Research, Nagoya University)

16:25 "Cultivation of the previously uncultured bacterial phylum *Vulcanimicrobiota*: phylogeny, ecology, and photosynthesis"
Shuhei Yabe (Holobiont Resilience Research Team, Center for Sustainable Resource Science (CSRS), RIKEN, Japan)

16:55 "The path to "nitroplast": Evolutionary modes elucidated by endosymbionts in diatoms and haptophytes"
Takuro Nakayama (Center for Computational Sciences, University of Tsukuba)

17:25 Closing remarks (Jiro Harada)

23rd Japan plasmodesmata meeting

Date Fri., March 13, 18:30–20:30 **Venue** Room Y

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

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

Chair: Yusuke Ohba

18:30 Opening remarks

18:35 Search for novel factors involved in primary PD biogenesis using *Physcomitrium patens*

19:15 Discussion

19:55 Closing Remarks

Plant Science Presentation Workshop 2026

“Communicating Your Research Clearly with Graphical Abstracts”

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

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

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

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

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

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

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

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

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

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

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

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

Date Sun., March 15, 16:40–18:40 **Venue** Room Z (Room1022, Liberty Tower, Meiji University)

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

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

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

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

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.

- The Presenter View, a display mode that allows presenters to see notes and upcoming slides, can often cause screen-sharing failures. Please avoid using it whenever possible.

For online presenters

- Connection test is not offered in this meeting.

- 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.

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

● Day 1, Fri., March 13, AM (9:30–12:30)

Time	Room A	Room B	Room C	Room D
	Photosynthesis	Primary metabolism	Specialized (secondary) metabolism	Genome function / gene regulation
09:30	1aA-01 Siphonein enables an effective photoprotective triplet quenching mechanism in green algal light-harvesting complexes Ritsuko Fujii[1,2], Alessandro Agostini[3], Soichiro Seki[2,4], Andrea Calcinoni[3], Lopa Paul[3], Agostino Migliore[3], Donatella Carbonera[3] ([1]ReCAP, Osaka Metropolitan Univ., [2]Grad. Sch. Sci., Osaka Metropolitan Univ., [3]Dept. Chem. Sci., Univ. Padova, [4]IPR, Univ. Osaka)	1aB-01 Effects of light intensity and light/dark periods on oxalate synthesis pathways in leaves of oxalate-rich plant Atsuko Miyagi[1], Wakana Sakuma[2], Hideki Murayama[1] ([1]Fac. of Agri., Yamagata Univ., [2]Grad. Sch. of Agri., Yamagata Univ.)	1aC-01 Investigation of Phenylacyl-flavonoid Biosynthesis in *Raphanus spp.* Yanghee Kim, Sayuri Yasukawa, Yuting Liu, Shinichiro Komaki, Mutsumi Watanabe, Takayuki Tohge (Grad. Sch. of Sci. & Tech., NAIST)	1aD-01 Developing a Versatile DNA Methylation Editing System in Arabidopsis Shunya Hirata[1], Yoko Ikeda[2], Kappei Kobayashi[3], Taisuke Nishimura[4], Hidetaka Kaya[3] ([1]UGAS, Ehime University, [2]IPSR, Okayama University, [3]Graduate School of Agriculture, Ehime University, [4]Graduate School of Engineering, Nagaoka University of Technology)
09:45	1aA-02 Analysis of the phycobilisome linker CpeC involved in cyanobacterial adaptation to diverse light environments Takako Ogawa[1], Shigeru Kawai[2], Yuu Hirose[2], Yukako Hihara[1] ([1]Saitama Univ., [2]Toyohashi Tech.)	1aB-02 Nitrogen fixation by the newly isolated unicellular cyanobacterium *Synechocystis* sp. LKSZ1 Leonardo Ken Okumura[1], Mari Banba[2], Kazuma Uesaka[2], Yuichi Fujita[2], Shinji Masuda[1] ([1]LST, Science Tokyo, [2]Grad. Sch. Bioagri. Sci. Univ. Nagoya)	1aC-02 Differential regulation of biliverdin export among organelles during heme metabolism Mone Shibata[1,2], Keiji Yoshida[1,2], Yutaka Kodama[1,2] ([1]Ctr. Biosci. Res. Educ., Utsunomiya Univ, [2]Grad. Sch. Reg. Dev. Creat., Utsunomiya Univ.)	1aD-02 Spatial chromatin analysis of epigenomic state transition in the rice shoot apical meristem using ATAC-see Yurika Morishita[1], Ryosuke Takata[2], Aya Yoshida[2], Asuka Higo[2], Yusuke Miyanari[3], Akihito Harada[4], Hiroyuki Tsuji[2,5] ([1]Grad. Sch. Bioagric. Sci., Nagoya Univ., [2]Kihara Inst. Biol. Res., Yokohama City Univ., [3]NanoLSI. Kanazawa Univ., [4]Grad. Sch. Med. Sci., [5]Biosci. Biotechnol. Center, Nagoya Univ.)
10:00	1aA-03 E A peripheral antenna required for non-photochemical quenching and Lhcx1 abundance in the diatom *Chaetoceros gracilis* Jian Xing[1], Minoru Kumazawa[1,2], Kentaro Ifuku[1] ([1]Grad. Sch. Agri., Kyoto Univ., [2]Inst. Low Temp. Sci., Hokkaido Univ.)	1aB-03 Effects of inorganic nitrogen nutrition on adventitious bud formation from leaves of three *Drosera* species Juse Okamoto[1], Taketo Ishikawa[2], Shin-ichiro Ito[1], Mayu Inayoshi[2], Motoki Sato[2], Koichi Hasegawa[2], Arisa Yoshioka[2], Nobuyuki Takatani[2], Tatsuo Omata[2], Makiko Aichi[2] ([1]Grad. Sch. Biosci. Biotech., Chubu Univ, [2]Col. Biosci. Biotech., Chubu Univ)	1aC-03 Subcellular distribution and homeostasis of flavin mononucleotide in plants Shintaro Ichikawa[1,2], Yutaka Kodama[1,2] ([1]Ctr. Biosci. Res. Educ., Utsunomiya Univ., [2]Grad. Sch. Reg. Dev. Creat., Utsunomiya Univ.)	1aD-03 Changes in chromatin accessibility during the floral transition in the shoot apical meristem of rice Eri Funayama[1,2], Aoi Hosaka[3], Hiroko Akashi[2], Yurika Morishita[1], Kaho Yamaguchi[2], Aya Yoshida[2], Haruna Kida[2], Hideki Yoshida[2], Jun Ito[2], Taiji Kawakatsu[4], Hiroyuki Tsuji[5] ([1]Grad. Sch. Bioagric. Sci., Nagoya Univ., [2]Kihara Inst. Biol. Res., Yokohama City Univ., [3]Nihon BioData Co., [4]RIKEN BRC, [5]Biosci. Biotechnol. Center, Nagoya Univ.)
10:15	1aA-04 Excitation energy landscape of 5 type-I reaction centers Akihiro Kimura[1], Hirotaka Kitoh[2], Shigeru Itoh[1] ([1]Grad. Sch. Sci., Nagoya Univ., [2]Dep. Eng. Mat., Kindai Univ.)	1aB-04 GS1;2-Dependent Allometric Plasticity and Population-Level Responses in Rice Amane Takayama, Soichi Kojima (Graduate School of Agricultural Science, Tohoku University)	1aC-04 E Identification of a novel vacuolar transporter involving indole glucosinolates accumulation in Arabidopsis Kaichiro Endo[1], Anna Piasecka[2], Pawel Bednarek[2], Kenji Yamada[1] ([1]Malopolska Centre of Biotechnology, Jagiellonian University, Krakow, Poland, [2]Institute of Bioorganic Chemistry, Polish Academy of Sciences, Poznan, Poland)	1aD-04 Expression regulome of the germline differentiation factor Mp*BONOBO* in the liverwort *Marchantia polymorpha* Yoshihiro Yoshitake[1], Kenta Tanaka[1], Haruki Okamoto[1], Ryuichi Nishihama[2], Shohei Yamaoka[1], Takayuki Kohchi[1] ([1]Grad. Sch. Biostudies, Kyoto Univ., [2]Dept. Appl. Biol. Sci., Fac. Sci. Tech., Tokyo Univ. Sci.)
10:30	1aA-05 Theoretical Analysis of Quinone/Chl Bindings to Plant/Bacterial Type-I,-II Reaction Centers; PSI is Unique! Ayumu Takagi[1], Kotaro Tateoka[1], Natuya Kashida[2], Akihiro Kimura[3], Shigeru Itoh[3], Hirotaka Kitoh[1,2] ([1]Grad Sch, Kindai Univ., [2]Dep Engi Mat Kindai Univ, [3]Dept Physics, Nagoya Univ)	1aB-05 Functional analysis of HOMEOBOX PROTEIN52 transcription factor involved in root nitrogen responses in Arabidopsis Hinako Akaike, Erina Akioka, Yasuhito Sakuraba, Shuichi Yanagisawa (Agro-Biotech. Res. Center, Grad. Sch. Agri. Life Sci., Univ. Tokyo)	1aC-05 Platform of BVOC identification using *Arabidopsis thaliana* Kanako Sekimoto[1,2], Ryusuke Sugiyama[1,3], Daisuke Fukuyama[2], Yukiko Ro[3], Mika Nomoto[1,4], Yasuomi Tada[4], Yusuke Aihara[1,5] ([1]JST-PRESTO, [2]Grad. Sch. Sci., Yokohama City Univ., [3]Grad. Sch. Sci., Yokohama City Univ., [4]Centr. Gene Res., Nagoya Univ., [5]Grad. Sch. Sci., Kobe Univ.)	1aD-05 E Essential Contributions of GmDDM1 to Epigenetic Stability and Seed Development in Soybean Ahsen Gers[1], Kana Shiraishi[1], Kaoru Tonosaki[2], Satoru Okamoto[1], Akito Kaga[3], Ryota Kuroda[1], Jun-ichi Matsuoka[1,4], Atsushi Toyoda[5], Taiji Kawakatsu[6], Chiho Maruko[1], Kazuki Takahashi[1], Keiichi Okazaki[1], Moeko Okada[1], Eigo Fukai[1] ([1]Grad. Sch. Sci. Tech., Niigata Univ., [2]Kihara Inst. Biol. Res., Yokohama City Univ., [3]Inst. Crop Sci. (NICS), NARO, [4]Cent. Reg. Agr. Res. Cent., NARO, [5]Adv. Gen. Cent., NIG, [6]Exp. Plant Div., RIKEN BRC)
10:45	1aA-06 E Roles of carotenoid glycosides in the protection of photosystem II from photoinhibition in the cyanobacterium *Synechocystis* sp. PCC 6803 Rattanaporn Songserm[1], Shinichi Takaichi[2], Haruhiko Jimbo[1], Yoshitaka Nishiyama[1] ([1]Grad. Sch. Sci. Eng., Saitama Univ., [2]Dept. Mol. Microbiol., Tokyo Univ. Agr.)	1aB-06 The role of HASTY protein in miRNA dynamics during nutrient deficiency in Arabidopsis Asuka Torii, Mailun Yang, Yasuhito Sakuraba, Shuichi Yanagisawa (Agro-Biotech. Res. Center, Grad. Sch. Agri. Life Sci., Univ. Tokyo)	1aC-06 Integrated Omics Analysis of Cultivated Soybean Soil under Environmental Stress Conditions Suzuka Matsuki[1], Yu Kobayashi[2], Yui Nose[3], Yasunori Ichihashi[3], Daichi Nakatani[4], Fumie Kabashima[4], Miyako Kusano[3,5,6] ([1]Grad. Sch. Life & Earth. Sci., Univ. Tsukuba, [2]Under Grad. Sch. Life & Env. Sci., Univ. Tsukuba, [3]RIKEN CSRS, [4]LECO Japan Co., [5]Life and Env. Sci., Univ. Tsukuba, [6]T-PIRC, Univ. Tsukuba)	1aD-06 E Epigenetic defense priming by *Lr24* modulates post-transcriptional regulation in wheat during leaf rust pathogenesis Uzma Afreen, Kunal Mukhopadhyay, Manish Kumar (Department of Bioengineering and Biotechnology, Birla Institute of Technology, Mesra, Ranchi-835215, Jharkhand, India)

Room E	Room F	Room G	Room H	Room X	Room Y	Room Z	Time
Development / Morphogenesis	New technology	Environmental response A / Physiological responses	Environmental response B / Environmental stresses				
1aE-01 Functional validation of candidate genes associated with heterosis in *Arabidopsis thaliana* Ryuma Maeda[1], Yuko Wada[1], Wijayanti Putri[1], Kazuaki Utsugi[1], Seiji Takayama[2], Toshiro Ito[1] ([1]NAIST, [2]Grad. Sch. of Agri. Life Sci. Tokyo Univ.)	1aF-01 Development of a heterologous expression-based platform for functional analysis of GLRs Chiaki Tatsumi[1], Emi Sato-Ebine[1], Hiraku Suda[1], Masatsugu Toyota[1,2,3] ([1]Dept. Biochem. Mol. Biol., Saitama Univ, [2]SunRiSE, Suntory Fdn. Life Sci., [3]Coll. Plant Sci. Technol., Huazhong Agric. Univ.)	1aG-01 Fragment screening and fragment growing toward INO1 antagonists for reducing phytic acid content in crops Tatsuki Akabane[1,2], Satoshi Kamino[3], Tomoki Okamura[2], Kazuyoshi Ikeda[1,4], Tomoki Yonezawa[4,5], Yugo Shimizu[1], Seiji Nagasaka[2], Etsuko Katoh[6], Naoki Hirotsu[2] ([1]R-CCS, RIKEN, [2]Grad. Sch. Life Sci., Toyo Univ., [3]CRYO SHIP Inc., [4]Fac. Pharm., Keio Univ., [5]Lifematics Inc., [6]Grad. Sch. Food Nutr. Sci., Toyo Univ.)	1aH-01 B4-RAF Kinases are involved in SnRK2-independet osmostress response in *Physcomitrium patens* Maho Mizuno, Izumi Yotsui, Teruaki Taji, Yoichi Sakata (Dept. of Biosci., Tokyo Univ. of Agri.)	Symposium S01 Frontiers in Developing Climate-Resilient and Socially Accepted Plants (9:30-12:30)	Symposium S02 Unlocking New Frontiers in Plant Physiology with Mass Spectrometry (9:30–12:30)	Symposium S03 Advances in Engineering and Regulation of Plastids and Photosynthesis (9:30–12:30)	09:30
1aE-02 Ⓔ Molecular landscape of wound-induced callus: Illuminating stem cell reformation and function through spatial omics Akira Iwase[1], Minne Max[1], Kotaro Torii[1,2], Hatsune Morinaka[1], Tetsuya Mori[1], Ayako Kawamura[1], Arika Takebayashi[1], Masami Y. Hirai[1], Keiko Sugimoto[1] ([1]RIKEN CSRS, [2]RIKEN TRIP-AGRIS)	1aF-02 Development of a rhizosphere imaging method: Capturing rhizosphere microorganisms with biological cross-sectional polishing SEM (bioCP-SEM) Kiminori Toyooka, Yuko Saito, Satomi Kojima, Yumi Goto, Mayuko Sato (RIKEN CSRS)	1aG-02 Novel Functions of Peptide Molecules in Environmental Stress Adaptation Akie Shimotohno, Yujuan Du (Nagoya University)	1aH-02 Genetic analysis of the Osmo-sensitive locus in *Arabidopsis thaliana* accessions Yusuke Murakoshi[1], Kosuke Banba[1], Takahiro Hirano[1], Goro Masuda[3], 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 Research Center)				09:45
1aE-03 Ⓔ Morphological and Phenological Characterization of Flowering Traits in French Marigold (*Tagetes patula* L.) Dewi Sukma[1], Muhamad Aksan Raditya[1], Syarifah Iis Aisyah[1], Krisantini Krisantini[1], Muhamad Syukur[1], Ming-Tsair Chan[2] ([1]Department of Agronomy and Horticulture, Faculty of Agriculture, IPB University, Indonesia, [2]Academia Sinica Biotechnology Center in Southern Taiwan, Agricultural Biotechnology Research Center, Taiwan)	1aF-03 Ⓔ Block-face serial fluorescence microscopy for plant tissue imaging at a cellular level Dongbo Shi (RIKEN CSRS)	1aG-03 Chelation-based iron uptake enhances prolonged heat tolerance in Wheat and *Brachypodium* Anzu Minami[1,2], Yoshihiko Onda[1], Minami Shimizu[1], Yukiko Uehara-Yamaguchi[1], Tomoko Nozoye[3,4], Motofumi Suzuki[5], Keitaro Tanoi[4], Keiichi Mochida[1,2,6] ([1]RIKEN, CSRS, [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)	1aH-03 Isolation of *acquired osmotolerance-defective* (*aod*) mutants in the Arabidopsis *acqos* background Kenta Tamaki[1], Goro Masuda[2], Izumi Yotsui[1], Yoichi Sakata[1], Teruaki Taji[1] ([1]Dept. of Biosci., Tokyo Univ. of Agri, [2]NODAI Genome Research Center)				10:00
1aE-04 Surgical manipulation of barley inflorescence meristem Mari Tanaka[1], Hiroko Akashi[1], Hiroyuki Tsuji[1,2] ([1]Kihara Inst. Biol. Res., Yokohama City Univ., [2]Bioisci. Biotechnol. Center, Nagoya Univ.)	1aF-04 Development of highly efficient and precise genome editing system using TiD-X in rice Shota Muromoto[1], Mumu Kato[1], Miyu Asari[1], Naoki Wada[2], Keishi Osakabe[2], Yuriko Osakabe[1] ([1]生命理工, [2]社会産業理工)	1aG-04 Ⓔ L-DOPA promotes cadmium tolerance and triggers iron deficiency genes in Arabidopsis thaliana Ching-Yuan Chang, En-Jung Hsieh, Louis Grillet (National Taiwan University, Department of Agricultural Chemistry)	1aH-04 Membrane trafficking factor PEN1 regulates root growth under osmotic stress conditions in *Arabidopsis thaliana* Miho Kikuchi[1], Hiroto Yoshida[2], Haruka Otani[2], Fuminori Takahashi[1,2] ([1]Fac. Adv. Eng., TUS, [2]Grad. Sch. Fac. Adv. Eng., TUS)				10:15
1aE-05 Development of PHYTOMap for rice shoot apical meristem Koki Iwama[1], Yurika Morishita[1], Hiroyuki Tsuji[2,3] ([1]Grad. Sch. Bioagric. Sci., Nagoya Univ., [2]Kihara Inst. Biol. Res., Yokohama City Univ., [3]Biosci. Biotechnol. Center, Nagoya Univ.)	1aF-05 Efficient targeted random mutagenesis of the chloroplast-encoded *petA* gene in *Arabidopsis thaliana* Issei Nakazato, Wataru Yamori, Yoshiko Tamura, Reiko Masuda, Shin-ichi Arimura (Grad. Sch. Agri. Life Sci., Univ. Tokyo)	1aG-05 Magnesium enhances the growth-regulatory function of oxidized glutathione in rice and other plant species Satoshi Mochizuki, Ken'ichi Ogawa (RIBS Okayama)	1aH-05 Role of two-component signaling pathway in environmental stress responses of *Physcomitrium patens* Ryota Waku, Taketo Sasaki, Izumi Yotsui, Teruaki Taji, Yoichi Sakata (Dept. Bioscience, Tokyo Univ. of Agriculture)				10:30
1aE-06 Development of Expansion microscopy for intracellular imaging in the rice shoot apical meristem Yukichi Ishida[1], Yurika Morishita[2], Koki Iwama[2], Hiroyuki Tsuji[3,4] ([1]Sch. Agric., Nagoya Univ., [2]Grad. Sch. Bioagric. Sci., Nagoya Univ., [3]Biosci. Biotechnol. Center, Nagoya Univ., [4]Kihara Inst. Biol. Res., Yokohama City Univ.)	1aF-06 Precise knock-in of stress-responsive cis-regulatory elements using gene targeting for improving abiotic stress tolerance in plant Daisuke Miki (Shenzhen University of Advanced Technology)	1aG-06 Exogenous GSSG Enhances Phosphate Acquisition Efficiency and Plant Growth Ken'ichi Ogawa, Satoshi Mochizuki, Kenji Henmi (Research Institute Biological Sciences, OKAYAMA (RIBS OKAYAMA))	1aH-06 Analysis of salt-spray stress response in Arabidopsis Yoichi Chiba[1], Yusuke Murakoshi[1], Akito Hosoi[2], Izumi Yotsui[1], Yoichi Sakata[1], Teruaki Taji[1] ([1]Dept. of Biosci., Tokyo Univ. of Agri, [2]NODAI Genome Research Center)				10:45

Ⓔ=Presentation in English

● Day 1, Fri., March 13, AM (9:30–12:30)

Time	Room A	Room B	Room C	Room D
	Photosynthesis	Primary metabolism	Specialized (secondary) metabolism	Genome function / gene regulation
11:00	1aA-07 Insights into the structural evolution of the Phycobilisome from primitive red alga *Cyanidioschyzon merolae* Yuya Fujita[1,2], Soichiro Seki[1], Akihiro Kawamoto[1,2], Shigeru Kawai[3], Yuu Hirose[3], Genji Kurisu[1,2] ([1]UOsaka, Institute for Protein Research (IPR), Japan, [2]UOsaka, Grad. Sch. Eng., Japan, [3]Toyohashi Univ. of Tech., Grad. Sch. Eng., Japan)	1aB-07 Exploration of Key Genes Underlying Traits for Overcoming Low-Nitrogen Environments in an *Arabidopsis thaliana* Natural Accession Keina Monda[1], Satoshi Iuchi[2], Masatomo Kobayashi[2], Hiroko Matsunaga[3], Haruko Takeyama[3,4,5], Juntaro Negi[1], Yasuhito Sakuraba[6], Shuichi Yanagisawa[6], Koh Iba[1] ([1]Dept. Biol., Fac. Sci., Kyushu Univ., [2]RIKEN BRC, [3]Res. Org. Nano Life Innov., Waseda Univ., [4]Grad. Sch. Adv. Sci. Eng., Waseda Univ., [5]Inst. Adv. Res. Biosyst. Dynam., Waseda Res. Inst. Sci. Eng., Waseda Univ., [6]Grad. Sch. Agri. Life Sci., Univ. Tokyo)		1aD-07 The Regulation of Histone Modification by ACTIN DEPLYMERIZING FACTOR in *Arabidopsis thaliana* Fumiya Nakano[1], Yayoi Inui[2], Kouta Higashi[3], Shizue Yoshihara[3], Sachihiro Matsunaga[2], Noriko Inada[1] ([1]Grad. Sch. Agr., Univ. Osaka. Met, [2]Grad. Sch. Fro. Sci., Univ. Tokyo, [3]Grad. Sch. Sci., Univ. Osaka. Met)
11:15	1aA-08 Microspectroscopic analysis of photosynthetic proteins preserved in Kaiike-kerogen Risa Kojima[1], Tomohiro Ishikawa[2], Ryosuke Saito[3], Toru Kondo[1,4] ([1]NIBB, [2]Dept. of Life Sci. and Tech., Science Tokyo, [3]Dept. of Earth Sci., Yamaguchi Univ., [4]ExCELLS)	1aB-08 LBD-type transcription factors integrate local nitrogen status to optimize nitrogen uptake and metabolism at the systemic level Takatoshi Kiba[1], Hana Takahashi[2], Yukino Sada[2], Kota Monden[3], Hitoshi Sakakibara[2] ([1]IPSR, Okayama Univ., [2]Grad. Sch. Bioagr. Sci, Nagoya Univ., [3]Grad. Sch. Nat. Sci. Tech, Shimane Univ.)		1aD-08 Analysis of novel transcriptional regulators for regulation of ABA biosynthesis through osmotic-stress inducible liquid-liquid phase separation 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.)
11:30	1aA-09 High-light acclimation of photosynthetic apparatus in cyanobacteria from extreme environments Shigeru Kawai[1], Keisuke Takamune[1], Takumi Murakami[2], Takahiro Segawa[3], Nozomu Takeuchi[4], Yuu Hirose[1] ([1]Grad. Sch. Tech., Toyohashi Univ. of Tech., [2]Sch. Life Sci. and Tech., Inst. Sci. Tokyo, [3]Sch. Med., Univ. Yamanashi, [4]Sch. Sci., Univ. Chiba)	1aB-09 Functional analysis of the transcription factor FBH4 and its target genes in regulating low-nitrogen responsive gene expression in Arabidopsis Miho Sanagi[1], Madoka Ogura[2], Tomoka Tachibana[2], Soichi Inagaki[3], Junpei Takagi[1], Takeo Sato[1] ([1]Fac. Sci., Hokkaido Univ., [2]Grad. Sch. Life Sci., Hokkaido Univ., [3]Grad. Sch. Sci, Univ. Tokyo)		1aD-09 E H3K9 acetylation dynamics orchestrate early anti-herbivore defence in Arabidopsis Ahmed Yusuf[1,2], Kota Wakaya[2], Takuya Sakamoto[3], Takuya Uemura[2], Koudai Okamura[2], Abdelaziz Ramadan[2], Akira Nozawa[4], Takamasa Suzuki[5], Yayoi Inui[6], Sachihiro Matsunaga[6], Tatsuya Sawasaki[4], Gen-ichiro Arimura[2] ([1]RIKEN - CSRS - Cambial Stem Cell System ECL Research Unit, [2]Department of Biological Science and Technology, Faculty of Advanced Engineering, Tokyo University of Science, Tokyo, Japan, [3]Department of Science, Faculty of Science, Kanagawa University, Yokohama, Japan, [4]Proteo-Science Center, Ehime University, Matsuyama, Japan, [5]College of Bioscience and Biotechnology, Chubu University, Kasugai, Japan, [6]Department of Integrated Biosciences, Graduate School of Frontier Sciences, The University of Tokyo, Kashiwa, Japan)
11:45	1aA-10 Structural and functional characterization of far-red excitons in the LHC from the Eustigmatophyceae alga *Trachydiscus minutus* Soichiro Seki[1], Lorenzo Cupellini[2], David Bina[3,4], Elena Betti[2], Petra Urajová[5], Hideaki Tanaka[1], Tomoko Miyata[6,7], Keiichi Namba[6,7], Genji Kurisu[1,7,8], Tomáš Polívka[3], Radek Litvin[3,4], Ritsuko Fujii[9,10] ([1]IPR, UOsaka, [2]Dipartimento di Chimica e Chimica Industriale, Univ. of Pisa, [3]Faculty of Science, Univ. of South Bohemia in České Budějovice, [4]Czech Academy of Sciences, Biology Centre, Institute of Plant Molecular Biology, [5]Centre Algatech, Institute of Microbiology, Czech Academy of Sciences, [6]Grad. Sch. Front. Biosc., UOsaka, [7]JEOL YOKOGUSHI Res. Alliance Lab., UOsaka, [8]OTRI, UOsaka, [9]Grad. Sch. Sci., Osaka Metropol. Univ., [10]Res. Cent. Artificial Photosynth., Osaka Metropol. Univ.)	1aB-10 Molecular Mechanisms Suppressing Plant Immunity under Limited-Sugar Available Conditions Saki Ejima[1], Linnan Jie[2,3], Miho Sanagi[2], Shigetaka Yasuda[4], Kohji Yamada[5], Ayumi Sugisaki[1], Junpei Takagi[2], Mika Nomoto[6], Xiu-Fung Xin[3], Yasuomi Tada[6], Yusuke Saijo[4], Takeo Sato[2] ([1]Grad. Sch. Life Sci., Hokkaido Univ., [2]Fac. Sci., Hokkaido Univ., [3]Inst. Plant Physiol. Ecol., CAS, [4]Grad. Sch. Sci. Tech., NAIST, [5]Grad. Sch. Tec., Tokushima Univ., [6]Center for Gene Res., Nagoya Univ.)		1aD-10 Crosstalk Between DNA Methylation and Histone Modification in *Marchantia* Riko Kunou[1], Olivier Mathieu[2], Yoko Ikeda[1] ([1]IPSR, Okayama Univ., [2]Universite Clermont Auvergne)

Room E	Room F	Room G	Room H	Room X	Room Y	Room Z	Time
Development / Morphogenesis	New technology	Environmental response A / Physiological responses	Environmental response B / Environmental stresses				
1aE-07 The earliest developmental changes in rice shoot apical meristem during the transition Moe Honda[1], Mari Tanaka[1], Wakana Tanaka[2], Hiroyuki Tsuji[1,3] ([1]Kihara Inst. Biol. Res., Yokohama City Univ., [2]Grad. Sch. Integr. Sci. Life, Hiroshima Univ., [3]Biosci. Biotechnol. Center, Nagoya Univ.)	1aF-07 Gene delivery into plant mitochondria using peptide-modified single-walled carbon nanotubes Masaki Odahara[1], Simon Law[2], Maai Mori[2], Keiji Numata[1,2] ([1]Dept. Eng., Kyoto Univ., [2]CSRS, RIKEN)	1aG-07 Ⓔ Molecular mechanisms underlying foliar urea uptake in Arabidopsis: Insights from transporter mutants and GWAS Raj Kishan Agrahari, Toru Fujiwara, Takehiro Kamiya (Graduate School of Agricultural and Life Sciences, The University of Tokyo)	1aH-07 Roles of SAL1-PAP Retrograde Signaling Pathway in the moss *Physcomitrium patens* Yosuke Oba, Marcos Takeshi Miyabe, Tomoki Otani, Kojiro Kawata, Shinsaku Ito, Izumi Yotsui, Teruaki Taji, Yoichi Sakata (Dept. Biosci, Tokyo Univ. of Agri)	Symposium S01 Frontiers in Developing Climate-Resilient and Socially Accepted Plants (9:30-12:30)	Symposium S02 Unlocking New Frontiers in Plant Physiology with Mass Spectrometry (9:30–12:30)	Symposium S03 Advances in Engineering and Regulation of Plastids and Photosynthesis (9:30–12:30)	11:00
1aE-08 Functional Analysis of CLAVATA2 (CLV2) in Floral Transition in *Arabidopsis* Chisato Oketani, Takashi Okamoto, Atsuko Kinoshita (Tokyo Metropolitan Univ.)	1aF-08 Ⓔ Automated plant genetic engineering Matthew Hudson (University of Illinois at Urbana-Champaign)	1aG-08 Investigation of calcium distribution in abscission zones and fruit development Yusaku Noda, Yong-Gen Yin, Kazuyuki Enomoto, Naoto Yamada, Naoki Kawachi (QST・Takasaki Institute for Advanced Quantum Science)	1aH-08 Genomic and physiological mechanisms underlying salinity adaptation in quinoa Yasufumi Kobayashi[1], Yasunari Fujita[1,2] ([1]JIRCAS, [2]Grad. Sch. Life Environ. Sci., Univ. Tsukuba)				11:15
1aE-09 Comparative Analysis of CCAAT1 *cis*-element Function in *FT* Transcriptional Regulation Among Arabidopsis Accessions Aoha Miki[1], Natsumi Ono[1], Satoru Harada[2], Katsuya Negishi[3], Masaki Endo[4], Kappei Kobayashi[1], Seiichi Toki[4,5,6,7], Mitsutomo Abe[8], Hidetaka Kaya[1] ([1]Grad. Sch. Agri., Ehime Univ., [2]Fac. Agri., Ehime Univ., [3]NIFTS, NARO, [4]NIAS, NARO, [5]Fac. Agri., Ryukoku Univ., [6]Grad. Sch. of Nanobioscience, [7]Kihara Institute for Biological Research, Yokohama City Univ., [8]Grad. Sch. Arts and Sci., The Univ. of Tokyo)	1aF-09 Advancement of cassava molecular breeding towards the contribution to carbon neutrality Tomoyuki Takeda[1], Yoshinori Utsumi[1,2], Maho Tanaka[1], Chikako Utsumi[1], Akira Iwase[3], Arika Takebayashi[3], Yoshie Okamoto[1], Kenji Miura[4], Keiko Sugimoto[3], Motoaki Seki[1,5,6] ([1]Plant Genomic Network Research Team, RIKEN CSRS, Japan, [2]Faculty of Life Science and Biotechnology, Fukuyama Univ., Japan, [3]Cell Function Research Team, RIKEN CSRS, Japan, [4]Tsukuba-Plant Innovation Research Center, Univ. of Tsukuba, Japan, [5]Kihara Institute for Biological Research, Yokohama City Univ., Japan, [6]Graduate School of Science and Engineering, Saitama Univ., Japan)	1aG-09 Ca^{2+} Signaling and Establishment of Auxin Maxima in Bend-Induced Lateral Root Formation in *Arabidopsis thaliana* Hazumi Akaogi[1], Sorato Yoshida[1], Yuta Takano[1], Jun Mitomo[2], Kazuo Ebine[1], Masatsugu Toyota[1,3,4] ([1]Dept. Biochem. Mol. Biol., Saitama Univ., [2]Dept. Biochem. Mol. Biol., Faculty of Science, Saitama Univ., [3]SunRiSE, Suntory Fdn. Life Sci., [4]Coll. Plant Sci. Technol., Huazhong Agric. Univ.)	1aH-09 Analyses of Cation Calcium exchanger genes in salt tolerance of Arabidopsis Tamami Koyama[1], Yuko Nagashima[1], Hirotaka Ariga[2], Kohji Nishimura[3], Tomoaki Horie[4], Izumi Yotsui[1], Yoichi Sakata[1], Teruaki Taji[1] ([1]Dept. of Biosci., Tokyo Univ. of Agri, [2]Research Center of Genetic resources, NARO, [3]Faculty of Life and Environmental Science, Shimane University, [4]Faculty of Textile Science and Technology, Shinshu University)				11:30
1aE-10 Elucidation of regulatory mechanism of FLOWERING LOCUS T (FT) transport using mutant FT protein in *Arabidopsis* Aki Namekata[1], Kozakai Minami[2], Mitsutomo Abe[1] ([1]Grad. Sch. Art and Sci., The Univ. of Tokyo, [2]Grad. Sch. Sci., The Univ. of Tokyo)	1aF-10 Ⓔ A tightly regulated copper-inducible transient gene expression system in *Nicotiana benthamiana* incorporating a suicide exon and Cre recombinase Bing-Jen Chiang (Institute of Plant and Microbial Biology, Academia Sinica)	1aG-10 Analysis of calcium dependent touch sensing and signaling mechanism in *Arabidopsis* Taira Fukui[1], Takuya Uemura[2], Hiroki Asakawa[1], Kazuo Ebine[1], Masatsugu Toyota[1,3,4] ([1]Dept. Biochem. Mol. Biol., Saitama Univ., [2]Dept. Biol. Sci. Technol., Tokyo Univ. Sci., [3]SunRiSE, Suntory Fdn. Life Sci., [4]Coll. Plant Sci. Technol., Huazhong Agric. Univ.)	1aH-10 Disruption of the *SALT* gene enhances salt tolerance of Arabidopsis thaliana accession Lch-0 Takuma Kajino[1], Kaori Uchiyama[1], Yusaku Noda[2], Kohji Nishimura[3], Noriyuki Konishi[4], Yoshihiro Hase[2], Tomoaki Horie[5], Naoto Yamada[2], Hirotaka Ariga[6], Jian Feng Ma[4], Izumi Yotsui[1], Yoichi Sakata[1], Teruaki Taji[1] ([1]Dept. of Biosci., Tokyo Univ. of Agri, [2]Takasaki Institute for Advanced Quantum Science, QST, [3]Dept. of Life science, Fac. of Life and environmental science, Shimane Univ., [4]Research Core for Plant Stress Sci., Institute of Plant Sci. and Resources, Okayama Univ., [5]Div. of Applied Bio., Faculty of Textile Science, Shinshu Univ., [6]Research center of genetics resource, NARO)				11:45

Ⓔ=Presentation in English

● Day 1, Fri., March 13, AM (9:30–12:30)

Time	Room A	Room B	Room C	Room D
	Photosynthesis	Primary metabolism	Specialized (secondary) metabolism	Genome function / gene regulation
12:00	1aA-11 E Exploring Chlorophyll-Dependent Thylakoid Membrane Biogenesis and Remodeling in The Cyanobacterium *Leptolyngbya Boryana* Ji Won Kim, Kentaro Usui, Haruki Yamamoto, Yuichi Fujita (Graduate School of Bioagricultural Sciences, Nagoya University)	1aB-11 Roles of an ARF-GEF MIN7/BEN1/BIG5 and its interactor HLB1 in the modulation of membrane trafficking in response to C/N stress Kaito Endo[1], Hiroki Matsui[2], Juna Eda[2], Miho Sanagi[3], Junpei Takagi[3], Takeo Sato[3] ([1]Grad. Sch. Life Sci., Hokkaido Univ., [2]Sch. Sci., Hokkaido Univ., [3]Fac. Sci., Hokkaido Univ.)		1aD-11 E Genome-wide R-loop redistribution in response to pre-mRNA splicing defects in Arabidopsis Youheng Wang[1], Asuka Hirao[2], Mai Mukai[2], Seira Nakatsuka[1], Nobuhiro Akiyoshi[1], Misato Ohtani[1,2,3] ([1]Grad Sch Front Sci, Univ Tokyo, [2]Grad Sch Sci Technol, NAIST, [3]RIKEN, CSRS)
12:15	1aA-12 Analysis of the Ancestral-Type Phycobiliprotein AplA in Cyanobacteria Gakuto Nakatsuji[1], Runa Tamagawa[2], Shigeru Kawai[1], Yuu Hirose[1,2] ([1]Toyohashi Tech. Dept. of Appl. Chem. and Life Sci., [2]Toyohashi Tech. Grad. Sch. Eng., Dept. of Appl. Chem. & Life Sci.)	1aB-12 Sugar drives chloroplast phosphatidylglycerol biosynthesis to sustain chlorophyll synthesis under nitrogen stress Yushi Yoshitake[1], Keigo Okazaki[2], Hiroyuki Ohta[2,3], Mie Shimojima[2], Yoichiro Fukao[1] ([1]Sch. Life Sci., Ritsumeikan univ., [2]Sch. Life Sci. Tech., Inst. Sci. Tokyo, [3]Phytolipid technologies)		1aD-12 E ABA-Responsive MYB Transcription Factors Regulate Expression of Allergenic Fra Protein During Leaf Development in Strawberry Chonprakun Thagun[1], Yoshinori Fukasawa[1], Tomohiro Suzuki[1], Takahito Nomura[1], Masanori Okamoto[1], Yutaka Kodama[1,2] ([1]C-Bio, Utsunomiya Univ., [2]Grad. Sch. Regional Dev. Creativity, Utsunomiya Univ.)

Room E	Room F	Room G	Room H	Room X	Room Y	Room Z	Time
Development / Morphogenesis	New technology	Environmental response A / Physiological responses	Environmental response B / Environmental stresses				
1aE-11 Functional Analysis of the Flowering Regulatory Roles of *FT*-like Genes *NbFT1–3* in *Nicotiana benthamiana* Nariyuki Furukawa[1], Ken-ichi Kurotani[2], Kappei Kobayashi[1], Michitaka Notaguchi[2], Hidetaka Kaya[1] ([1]Ehime Univ., Grad. Sch. of Agri., [2]Kyoto Univ., Grad. Sch. of Science)	1aF-11 DR genes expression controlling system for circumventing the morphological abnormality of transgenic plants Shohei Koyama[1], Tomoko Igawa[1,2,3] ([1]Grad. Sch. Hort., Chiba Univ., [2]Plant Mol. Sci. Center, Chiba Univ., [3]Res. Center Space Agri. Hort., Grad. Sch. Hort., Chiba Univ.)	1aG-11 3D segmentation of rhizoids of *Physcomitrium patens* using machine learning and analysis of microgravity effects Naoki Yagihara[1], Takahisa Wakabayashi[2], Ryohei Yamaura[1], Daisuke Tamaoki[3], Hiroyuki Kamachi[3], Daisuke Yamauchi[4], Yoshinobu Mineyuki[4], Makoto Hoshino[5], Kentaro Uesugi[5], Toru Shimazu[6], Haruo Kasahara[7], Motoshi Kamada[8], Tomomi Suzuki[9], Yuji Hiwatashi[10], Yuko T. Hanba[11], Atsushi Kume[12], Tomomichi Fujita[13], Ichirou Karahara[3] ([1]Grad. Sch. Sci. Eng., Univ. Toyama, [2]Fac. Sci., Univ. Toyama, [3]Fac. Sci., Acad. Assemb., Univ. Toyama, [4]Grad. Sch. Sci., Univ. Hyogo, [5]JASRI, SPring-8, [6]Japan Space Forum, [7]JAMSS, [8]AES, [9]JAXA, [10]Sch. Food Ind. Sci., Miyagi Univ., [11]Dept. Applied Biol., Kyoto Inst. Technol., [12]Fac. Agric., Kyushu Univ., [13]Fac. Sci., Hokkaido Univ.)	1aH-11 [Cancelled]	Symposium S01 Frontiers in Developing Climate-Resilient and Socially Accepted Plants (9:30-12:30)	Symposium S02 Unlocking New Frontiers in Plant Physiology with Mass Spectrometry (9:30–12:30)	Symposium S03 Advances in Engineering and Regulation of Plastids and Photosynthesis (9:30–12:30)	12:00
1aE-12 Function and tissue specific expression analysis of tomato lipocalins Shoko Kokubo[1], Miku Tomiyasu[2], Mahiro Matsui[2], Chikako Fukazawa[3], Reiko Motohashi[1,2,3] ([1]GSST., Univ. Shizuoka, [2]Grad. Sch. Agr., Univ. Shizuoka, [3]Agr., Univ. Shizuoka)	1aF-12 A Versatile Agroinfiltration Platform for Transient Protein Expression Across Medicinal and Phylogenetically Diverse Plants Tsubasa Shoji[1], Jung-Bum Lee[2], Kenji Miura[3] ([1]Inst. Natural Med., Univ. Toyama, [2]Grad. Sch. Med. Pharm., Univ. Toyama, [3]Fac. Life Envir. Sci., Univ. Tsukuba)	1aG-12 Exploring the evolutionary process of plant gravitropism by utilizing the basal land plant, *Physcomitrium patens* Kentaro Wakayama[1], Kanta Suemitsu[1], Tomomichi Fujita[2], Satoshi Naramoto[2,3] ([1]Grad. Sch. Life Sci., Univ. Hokkaido, [2]Grad. Fac. Sci., Univ. Hokkaido, [3]JST PRESTO)	1aH-12 Analysis of posttranslational regulations of CCA1 in response to cold stress Satoshi Kidokoro[1], Naoki Okawa[2], Fuminori Takahashi[3,4], Junya Mizoi[2], Yuriko Osakabe[1], Kazuo Shinozaki[4], Kazuko Yamaguchi-Shinozaki[2,5] ([1]Sch. of Life Sci. and Tech., Science Tokyo, [2]Grad. Sch. Agr. Life Sci., Univ. Tokyo, [3]Faculty of Advanced engineering, Tokyo Univ. of Science, [4]Center for Sustainable Resource Science, RIKEN,, [5]Inst. Agr. Life Sci., Tokyo Univ. Agr.)				12:15

Ⓔ=Presentation in English

● Day 1, Fri., March 13, PM (14:00–17:00)

Time	Room A	Room B	Room C	Room D
	Photosynthesis	Primary metabolism	Plant-organism interaction A	Genome function / gene regulation
14:00	1pA-01 Does the Reddest Fluorescence of Undecamer Far-Red Light Antenna Pc-frLHC in *Prasiola crispa* come from only one Subunit? Rin Taniguchi[1,2], Makiko Kosugi[3,4], Jun Minagawa[3,4], Shen Ye[1], Yutaka Shibata[1] ([1]Grad. Sch. Sci., Tohoku Univ., [2]DIARE, [3]National Institute for Basic Biology, [4]Grad. Inst. Adv. Stud., SOKENDAI)	1pB-01 Reevaluation of the fatty acid repertoire in *Synechocystis* sp. PCC 6803 Naoki Sato[1], Haruhiko Jimbo[2], Yoshitaka Nishiyama[2] ([1]Grad. Sch. Arts Sci., Univ. Tokyo, [2]Grad. Sch. Sci. Eng., Saitama Univ.)	1pC-01 E Decoding Plant Immune Recognition by Systematic Discovery of PAMP–PRR Interactions Yasuhiro Kadota[1], Bruno Pok Man Ngou[1], Michele Wyler[2], Marc W Schmid[2], Takehiro Suzuki[1], Markus Albert[3], Naoshi Dohmae[1], Ken Shirasu[1,4] ([1]RIKEN, CSRS, Yokohama, Japan, [2]MWSchmid GmbH, Glarus, Switzerland, [3]University Erlangen-Nuremberg, Erlangen, Germany, [4]Grad. Sch. Sci., Univ. Tokyo, Tokyo, Japan)	1pD-01 Genomic Characterization of Natsukirari Reveals Candidate Genes for High-Temperature Ripening Tolerance in Rice Kyonoshin Maruyama[1,2], Asako Kobayashi[3], Fumihiro Nakaoka[3], Hiroaki Sakai[4], Tetsuya Sakurai[5] ([1]Biol. Resources Post-harvest Div., JIRCAS., [2]Life & Env. Sci., Univ. Tsukuba, [3]Fukui Agr. Exp. Stn, [4]NARO, [5]Multi. Sci. Cluster, Kochi Univ.)
14:15	1pA-02 Suppression of Chilling-Induced PSI Photoinhibition by the PSI-NDH Supercomplex Ko Takeuchi[1], Shintaro Harimoto[1], Hayato Satoh[2], Chikahiro Miyake[2], Kentaro Ifuku[1] ([1]Grad. Sch. Agri., Univ. Kyoto, [2]Grad. Sch. Agri., Univ. Kobe)	1pB-02 Metabolic engineering of free fatty acid production in the cyanobacterium *Synechococcus elongatus* PCC 7942 Kotoha Nishimoto[1], Tsubasa Furushima[1], Taro Kadowaki[1], Haruhiko Jimbo[1], Norifumi Yamamoto[2], Nobuyuki Takatani[3], Makiko Aichi[3], Kazutaka 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.)	1pC-02 E Phylogenomics and structure-guided engineering of immune receptors in plants Ngou Bruno Pok Man[1], Michele Wyler[2], Marc W Schmid[2], Takehiro Suzuki[1], Markus Albert[3], Naoshi Dohmae[1], Yasuhiro Kadota[1], Ken Shirasu[1,4] ([1]RIKEN, CSRS, Yokohama, Japan, [2]MWSchmid GmbH, Glarus, Switzerland, [3]University Erlangen-Nuremberg, Erlangen, Germany, [4]Grad. Sch. Sci., Univ. Tokyo, Tokyo, Japan)	1pD-02 Two Distal *Cis*-Regulatory Elements Determining Expression Pattern of a Rice Floral Repressor *Ghd7* Takumi Kawauchi[1], Yuko Ogo[2], Hironori Itoh[3], Manaki Mimura[1], Takeshi Izawa[1] ([1]Grad. Sch. Agr. Life Sci., Univ. Tokyo, [2]NIVFS, [3]NICS)
14:30	1pA-03 NON-PHOTOCHEMICAL QUENCHING7 was involved in the accumulation of core subunits of photosystem II in C_4*Flaveria bidentis* Yuri Munekage[1], Ai Ishizaki[1], Sayaka Koshi[1], Sota Kintaka[1], Kota Ishibashi[1], Atsushi Takabayashi[2], Ryouichi Tanaka[2], Takao Oi[3], Kentaro Ifuku[4] ([1]Sch. Biol. Env. Sci., Kwansei Gakuin Univ., [2]Inst Low Temp Sci, Hokkaido Univ., [3]Sch. Eng. Sci., Kochi Univ. Tech., [4]Grad. Sch. Agri., Kyoto Univ.)	1pB-03 Enhanced cell growth and lipid production through sustained high photosynthetic activity in *Nannochloropsis oceanica* Unto Kaku[1], Haruhiko Jimbo[1], Shinichiro Maeda[2], Kumiko Okazaki[3], Atsushi Sakamoto[3], Masako Iwai[4], Hiroyuki Ohta[4], Yoshitaka Nishiyama[1] ([1]Grad. Sch. Sci. Eng., Saitama Univ., [2]Mazda Motor Corp., [3]Grad. Sch. Integr. Sci. Life, Hiroshima Univ., [4]Phytolipid Technologies Co. Ltd.)	1pC-03 E Effector-triggered defense mechanisms restricting bacterial water-soaking under high humidity Shigetaka Yasuda[1], Arullthevan Rajendram[1], Taiga Ishihara[1], Rahul Sk[2,3], Akihisa Shinozawa[2], Yusuke Saijo[1] ([1]Grad. Sch. Sci. Tech., NAIST, [2]Dep. Biosci., Tokyo Univ. Agric., [3]NGRC, Tokyo Univ. Agric.)	1pD-03 E An Investigation of Multiple Transcription Initiation Sites of *atp9* in *Arabidopsis thaliana* Jingxiu Ji[1], Akihito Mamiya[1], Chang Zhou[2], Sachi Takenaka[1], Issei Nakazato[2], Shin-ichi Arimura[2], Mizuki Takenaka[1] ([1]Grad. Sch. Sci., Kyoto Univ., [2]Grad. Sch. Agric., Univ. Tokyo)
14:45	1pA-04 Construction of an artificial light-harvesting system that transfers UV-excited mTurquoise2 fluorescence to PSII Mizuki Ikeda[1], Souta Ishiyama[2], Yoshifumi Ueno[3], Tatsuya Tomo[2,3] ([1]Fac. Sci., Tokyo Univ. Sci., [2]Grad. Sci., Tokyo Univ. Sci., [3]Inst. Arts Sci., Tokyo Univ. Sci.)	1pB-04 Effects of Knockouts of Chrysolaminarin Biosynthesis Pathway Genes on Lipid Accumulation in *Nannochloropsis oceanica* Yasuhiro Furuhashi[1], Hiroki Murakami[2], Shinya Kaneko[3], Yasunori Aizawa[3], Hiroyuki Ohta[1,3,4], Nozomu Sakurai[1] ([1]Dept. Frontier Res. & Dev., Kazusa DNA Res. Inst., [2]Fac. Glob. Interdiscip. Sci. & Innov., Shizuoka Univ., [3]Sch. Life Sci. & Technol., Inst. Sci. Tokyo, [4]Phytolipid Technologies Co., Ltd)	1pC-04 E Differential modulation of pattern-recognition receptor signaling preserves plant immunity under phosphate deficiency Natsuki Tsuchida[1], Maxmilyand Leiwakabessy[1], Kota Yamashita[2], Taishi Umezawa[2], Yusuke Saijo[1] ([1]Grad. Sch. Sci and Tech., NAIST, [2]BASE, Tokyo Univ. Agric. Tech.)	1pD-04 Molecular Mechanisms Underlying Secondary Plasmodesmata Formation Between a Parasitic Plant and Its Host Koh Aoki, Kyo Morinaga, Akihiro Niwa (Grad. Sch. Agric., Osaka Metro. Univ.)
15:00	1pA-05 Artificial photosynthetic system constructed from reduced graphene oxide and photosynthetic protein complexes Hiroto Ishii[1], Shunsuke Sone[1], Shota Tanaka[1], Yoshifumi Ueno[2], Tatsuya Tomo[1,2] ([1]Grad. Sch. Sci., Tokyo Univ. Sci., [2]Inst. Arts Sci., Tokyo Univ. Sci.)	1pB-05 E Investigating the role of LDGTS in *Nannochloropsis oceanica* stress response Arif Agung Wibowo[1], Hiroki Murakami[2], Yasuhiro Furuhashi[1], Hiroyuki Ohta[3,4], Nozomu Sakurai[1] ([1]Department of Frontier Research and Development, Kazusa DNA Research Institute, 2-6-7 Kazusa-kamatari, Kisarazu 292-0818, Chiba, Japan, [2]Faculty of Global Interdisciplinary Science and Innovation, Shizuoka University, 836 Ohya, Suruga-ku, Shizuoka 422-8529, Shizuoka, Japan, [3]School of Life Science and Technology, Tokyo Institute of Technology, 4259-B-65 Nagatsuta-cho, Midori-ku, Yokohama 226-8501, Kanagawa, Japan, [4]Phytolipid Technologies Co., Ltd. 4259-3 Nagatsuta-cho, Midori-ku, Yokohama 226-8510, Kanagawa, Japan)	1pC-05 E Mechanism for Phytocytokine-induced Defense Sensitization during Phosphate Starvation in Natural Variation of *Arabidopsis thaliana* Maxmilyand Leiwakabessy, Natsuki Tsuchida, Yusuke Saijo (Nara Institute of Science and Technology)	1pD-05 Chromosome-scale Genome Assemblies of Allopolyploid *Cuscuta* Species Uncover Genomic Signatures of Parasitic Lifestyle and Polyploid Evolution Tenta Segawa[1], Masaki Takagawa[2], Ryusuke Yokoyama[2], Kyoko Sato[3], Takehiko Itoh[4], Eiichiro Ono[1] ([1]Res. Inst. Suntory Global Innovation Center Ltd., [2]Grad. Sch. Life Sci., Tohoku Univ., [3]Fac. Sci., Acad. Assem., Univ. Toyama, [4]Science Tokyo)

Room E	Room F	Room G	Room H	Room X	Room Y	Room Z	Time
Development / Morphogenesis	New technology	Environmental response A / Physiological responses	Environmental response B / Environmental stresses				
1pE-01 Ⓔ Dissection of the differentiation programs of two distinct idioblast types through the FAMA–WSB–SCAP1 network Yuta Horiuchi[1], Hikari Kitani[2], Nobutoshi Yamaguchi[2], Toshiro Ito[2], Makoto Shirakawa[1] ([1]Institute of Plant and Microbial Biology, Academia Sinica, [2]Nara Institute of Science and Technology)	1pF-01 Efficient genetic transformation by Agrobacterium-stipule base inoculation in peach (*Prunus persica* L. Batsch) Katsunori Tamura[1], Yosuke Fukamatsu[1], Yujiro Unoki[2], Kenji Oda[1] ([1]Okayama Prefectural Technology Center for Agriculture, Forestry and Fisheries, Research Institute for Biological Sciences, [2]Okayama Prefectural Technology Center for Agriculture, Forestry and Fisheries, Agricultural Research Institute)	1pG-01 Analysis of blue light and actin filament-dependent chloroplast movement in *Petalonia fascia* Tsunami Hiyama[1], Kazuhiro Kogame[2], Masahiro Kasahara[3], Fumio Takahashi[4], Shinya Yoshikawa[1] ([1]Grad. Sch. Biosci. Biotech., Fukui Pref. Univ, [2]Dep. Sci., Hokkaido. Univ, [3]Dep. Life Sci., Ritsumeikan. Univ, [4]Dep. Pharmaceutical Sci., Toho. Univ)	1pH-01 Role of Phytochrome in *Physcomitrium patens* under Low Temperatures Rin Ishikawa[1], Seiya Inoue[1], Tatsunosuke Yamada[1], Hikaru Sugimori[1], Nana Eto[1], Airi Naka[1], Yuzuki Baba[1], Tomoe Jinno[1], Akihisa Shinozawa[1], Daisuke Takezawa[2], Izumi Yotsui[1], Teruaki Taji[1], Yoichi Sakata[1] ([1]Dept. Bioscience, Tokyo Univ. of Agriculture, [2]Graduate School of Science and Engineering, Saitama University)	Symposium S04 Priming and Memory of Plants in Facing Environmental Changes (14:00-17:00)	Symposium S05 Advances in Cellular and Molecular Signaling in Response to Internal and External Stimuli from Algae to Plants (14:00-17:00)	Symposium S06 Underlying molecular antagonisms as drivers of plant diversification and ecological adaption (14:00-17:00)	14:00
1pE-02 Analysis of the expression pattern of the auxin-responsive transcription factor FbDOF1A in C_4*Flaveria bidentis* Kaishu Fujiki, Tomoyo Ono, Ken Okudono, Yukimi Taniguchi, Yuri Munekage (Graduate School of Science Technology., Kwansei Gakuin Univ.)	1pF-02 Ⓔ Ethics of GM Biofuels Tommi Lehtonen (University of Vaasa)	1pG-02 Analysis of blue light-signaling pathway in guard cell by phosphoproteomics Taku Sakakibara[1], Kyomi Taki[1], Kyohei Kato[1], Kohei Fukatsu[1], Yuki Hayashi[1], Yoshikatsu Matsubayashi[1], Toshinori Kinoshita[1,2] ([1]Grad. Sch. Sci., Univ. Nagoya, [2]WPI-ITbM, Univ. Nagoya)	1pH-02 Phytochrome-mediated cold response involves SnRK2 in the moss Physcomitrium patens Seiya Inoue[1], Rin Ishikawa[1], Tatsunosuke Yamada[1], Hikaru Sugimori[1], Nana Eto[1], Airi Naka[1], Akihisa Shinozawa[1], Daisuke Takezawa[2], Izumi Yotsui[1], Teruaki Taji[1], Yoichi Sakata[1] ([1]Dept. of Biosci., Tokyo Univ. of Agri., [2]Graduate School of Science and Engineering, Saitama University)				14:15
1pE-03 Analysis of Auxin Involvement in Rice Early Embryogenesis *in vitro* Haruka Kumakura[1], Moeko Sato[2], Hiroyuki Tsuji[2,3], Satoshi Naramoto[4], Takashi Okamoto[1], Atsuko Kinoshita[1] ([1]Tokyo Metropolitan University, [2]Kihara Institute for Biological Research, Yokohama City University, [3]Bioscience and Biotechnology Center, Nagoya University, [4]Faculty of Science, Hokkaido University)	1pF-03 Ⓔ Stakeholder Tensions in an Emerging Field: The case of GM Biofuels Jouni K Juntunen[1], Mehedi Hasan[2], Roji Karki[2] ([1]University of Vaasa, School of Technology and Innovations, [2]Wärtsilä Oyj)	1pG-03 Analysis of PP2C.D involvement in stomatal movements under environmental stimuli Kosuke Murakami[1], Yuki Hayashi[1], Yohei Takahashi[1,2], Daichi Kinoshita[1], Miya Mizutani[3], Yoshikatsu Matsubayashi[1], Toshinori Kinoshita[1,2] ([1]Grad. Sch. Sci., Univ. Nagoya, [2]WPI-ITbM, Univ. Nagoya, [3]Div. Biol. Sci., NAIST)	1pH-03 Effects of 1,4-naphthoquinone derivatives on the acquisition of cold- and ABA-mediated freezing tolerance in Arabidopsis Sena Inayoshi[1], Kohei Kitawaki[1], Yasuko Ito-Inaba[1,2], Takehito Inaba[1] ([1]Fac. of Agr., Univ. of Miyazaki, [2]Grad. Sch. Life Sci., Tohoku Univ.)				14:30
	Bioresources						
1pE-04 Mechanisms and Functions of PIN-Mediated Auxin Transport in the Moss *Physcomitrium patens* Kanta Suemitsu[1], Tomomichi Fujita[2], Satoshi Naramto[2,3] ([1]Grad. Sch. Life Sci., Hokkaido Univ., [2]Fac. Sci., Hokkaido Univ., [3]JST, PRESTO)	1pF-04 Tomato Mutant Resources and Exome Database Developed by the NBRP Tomato Noriyuki Kuya[1], Koichi Sugimoto[1,2], Shoko Kawamoto[3], Naoya Fukuda[1], Hiroshi Ezura[1] ([1]T-PIRC, Univ. Tsukuba, [2]Research Center for Advanced Analysis, NARO, [3]National Institute of Genetics)	1pG-04 Functional analysis of SAUR in PP2C.D-mediated dephosphorylation of plasma membrane H^+-ATPase in guard cells Seiya Kimpara[1], Koji Takahashi[1], Kosuke Murakami[1], Yuki Hayashi[1], Toshinori Kinoshita[1,2] ([1]Grad. Sch. Sci., Univ. Nagoya, [2]WPI-ITbM, Univ. Nagoya)	1pH-04 Ⓔ Actin isovariant ACT8 regulates cold stress response in *Arabidopsis* through modulating GNOM-mediated cellular auxin homeostasis Rahman Abidur[1,2], Aya Hanzawa[1], Rahman Arifa[1] ([1]UGAS, Iwate University, [2]Dept. of Life Sciences, Fac. of Agriculture, Iwate Univ.)				14:45
1pE-05 Auxin dynamics in the stem cell region of *Marchantia polymorpha* Keito Yunoki[1], Satoshi Naramoto[2,3] ([1]Grad. Sch. Life Sci., Hokkaido Univ., [2]Fac. Sci., Hokkaido Univ., [3]JST, PRESTO)		1pG-05 Analysis of C1 Raf-like kinase BHP in light-induced stomatal opening Akinori Tange[1], Yuki Hayashi[1], Taku Sakakibara[1], Maki Hayashi[2], Yoshikatsu Matsubayashi[1], Toshinori Kinoshita[1,3] ([1]Grad. Sch. Sci., Univ. Nagoya, [2]Grad. Sch. Life Sci., Tohoku Univ., [3]WPI-ITbM, Univ. Nagoya)	1pH-05 Effects of Low Temperature and Plasma Treatment on Germination of Dried *Arabidopsis Thaliana* Seeds Kazuma Maki[1], Kazuo Tsugane[2], Kiyoshi Tatematsu[3], Hidetaka Ito[4] ([1]Grad. Sch. Life Sci., Hokkaido Univ., [2]IBBP Center, NIBB, [3]Research Enhancement Strategy Office, NIBB, [4]Fac. of Sci., Hokkaido Univ.)				15:00

Ⓔ=Presentation in English

● Day 1, Fri., March 13, PM (14:00–17:00)

Time	Room A	Room B	Room C	Room D
	Photosynthesis	Primary metabolism	Plant-organism interaction A	Genome function / gene regulation
15:15	1pA-06 Magnetic structural analysis of S_0 state of the manganese cluster by multi-frequency electron paramagnetic resonance (EPR) method Shinya Kosaki, Hiroyuki Mino (Grad. Sch. Sci., Nagoya Univ.)	1pB-06 Characterization of Three NAD Kinases in the Oleaginous Microalga *Nannochloropsis* Sora Ohashi[1], Yutaka Kodama[2], Toshiki Ishikawa[1], Maki Kawai-Yamada[1] ([1]Grad. Sch. Sci. Eng., Saitama Univ., [2]Cent. Biosci. Res. Educ., Utsunomiya Univ.)	1pC-06 [Cancelled]	1pD-06 Involvement of RNA processing/modifying enzymes in thermospermine-mediated regulation of mRNA translation in *Arabidopsis* Mitsuru Saraumi, F.M. Tonmoy Chowdhury, Taku Takahashi (Grad. Sch. Env. Life. Nat. Sci., Okayama Univ)
15:30	1pA-07 E Structural study of monomeric and dimeric photosystem I-LHCI supercomplexes from a bryophyte Pi-Cheng Tsai[1], Romain La Rocca[1], Hiroyasu Motose[2], Jian-Ren Shen[1], Fusamichi Akita[1] ([1]RIIS, Univ. Okayama, [2]Grad. Sch. Envir., Life, Nat. Sci. & Tech., Univ. Okayama)	1pB-07 Disruption of Glutathione Metabolism Causes Defense Hyperactivation and Cell Death at Vegetative Stage in Arabidopsis Takehiro Ito[1], Kazuma Kawahara[2], Takehiro Kamiya[1], Toru Fujiwara[1], Naoko Ohkama-Ohtsu[3] ([1]Grad. Sch. Agr. Life Sci., Univ. Tokyo, [2]Fac. Agr., Tokyo Univ. Agr. & Technol., [3]Inst. Agr., Tokyo Univ. Agr. & Technol.)	1pC-07 Functional analysis of group A MPK in *Physcomitrium patens* Riku Fukui, Teruaki Taji, Yoichi Sakata, Izumi Yotsui (Dept. of Biosci., Tokyo Univ. of Agri)	1pD-07 Identification of a ribonuclease involved in *NIP5;1* mRNA cleavage in Arabidopsis Mayuki Tanaka[1], Sotomayor Saul[2], Naoyuki Sotta[1], Toru Fujiwara[1] ([1]Grad. Sch. Agric., Osaka Metro. Univ., [2]Grad. Sch. of Agri., Univ. Tokyo,)
15:45	1pA-08 Exhaustive single-molecule spectroscopy analysis toward observation of photosystem II under repair cycle Kyosuke Watanabe, Shen Ye, Yutaka Shibata (Graduate school of science, Tohoku Univ.)	1pB-08 Comparative analysis of phytase activity and thermal stability in three cereal species Rioko Shibusawa[1], Etsuko Katoh[2], Naoki Hirotsu[1] ([1]Grad. Sch. Life Sci., Univ. Toyo, [2]Grad. Sch. of Food Nutr. Sci., Univ. Toyo)	1pC-08 Role of CCD (chitin-induced cell death) in the immune response of *Physcomitrium patens* Yoshifumi Kiyono, Takeru Ichihashi, Teruaki Taji, Yoichi Sakata, Izumi Yotsui (Dept. Biosci., Tokyo Univ. of Agri.)	1pD-08 E Elucidating the diversity of plant organellar RNA editosome Jingchan Xie, Tenghua Wang, Mizuki Takenaka (Graduate School of Science, Kyoto University)
16:00	1pA-09 Correlation analysis of accumulation levels of C_4 metabolic enzymes and the NDH complex using F_2 plants derived from hybrids between C_2 and C_4-like species of the genus *Flaveria* Asuka Nakamura, Mana Kasai, Kota Ishibashi, Yuri Munekage (Grad. Sch. SciTech., Kwansei Gakuin Univ.)	1pB-09 Functional analysis of Arabidopsis Ca^{2+}/CaM-dependent NAD kinase isoforms with different subcellular localizations Hiroaki Sakaguchi[1], Yutaka Kodama[2], Toshiki Ishikawa[1], Masatoshi Yamaguchi[1] ([1]Grad. Sch. Sci. Eng., Saitama Univ., [2]Cent. Biosci. Res. Educ., Utsunomiya Univ.)	1pC-09 E Single-cell-resolved calcium and organelle dynamics in resistosome-mediated cell death Yi-Feng Chen[1], Kuan-Yu Lin[1], Ching-Yi Huang[1], Liang-Yu Hou[1], Chin-Wen Chang[1], Enoch Lok Him Yuen[2], Wei-Che Sun[1], Bing-Jen Chiang[1], Hung-Yu Wang[1], Tolga Bozkurt[2], Chih-Hang Wu[1] ([1]IPMB, Academia Sinica, [2]DoLS, Imperial College London)	1pD-09 SD5-mediated U12-type splicing regulates nutrient-responsive seedling growth in Arabidopsis Kodai Ishibashi[1], Toshihiro Arae[1], Takeshi Yoshizumi[2], Minami Matsui[3], Takashi Hirayama[4], Misato Ohtani[1,3,5] ([1]Grad. Sch. Front. Sci., Univ. Tokyo, [2]Faculty of Agriculture, Univ. Takasaki of Health and Welfare, [3]KIBR, Yokohama City Univ., [4]Institute of Plant Science and Resources, Univ. Okayama, [5]Department of Biological Science, Grad. Sch. Sci., Univ. Tokyo)
16:15	1pA-10 Functional and regulatory diversification of plastid ATP synthase in green plants Sota Muraoka[1], Minoru Kumazawa[1,2], Kentaro Ifuku[1], Kaori Kohzuma[1] ([1]Grad. Sch. Agri., Kyoto Univ., [2]Inst. Low Temp. Sci., Hokkaido Univ.)		1pC-10 Decoding the Physiological Information of Plant VOCs Functioning as Informative Signals Activating Defense Responses in *Arabidopsis* Yasuo Yamauchi[1], Masatsugu Toyota[2], Mie N. Honjo[3], Hiroshi Kudoh[3], Masaharu Mizutani[1], Yukihiro Sugimoto[1], Junji Takabayashi[3] ([1]Grad. Sch. Agri. Sci., Kobe Univ., [2]Grad. Sch. Sci. Eng., Saitama Univ., [3]CER, Kyoto Univ.)	1pD-10 Analysis of the role of the SGS3 N-terminal region in secondary siRNA production Yuji Fujimoto[1], Yuriki Sakurai[1], Ryosuke Kowada[1,2], Keisuke Shoji[3], Manabu Yoshikawa[4], Hiro-oki Iwakawa[1] ([1]Coll. Sch., Rikkyo Univ., [2]Dept. of C. Biol. and Med. Sci., Grad. Sch. of Front. Sci., Univ. of Tokyo, [3]Grad. Sch. BASE, TUAT, [4]NARO)
16:30	1pA-11 Modulating the electron donor and acceptor sides of photosystem I alleviates growth defects in the Arabidopsis *crr2-2 pgr5-5* mutant Yuki Okegawa[1], Hiroshi Yamamoto[2], Toshiharu Shikanai[2], Wataru Sakamoto[1] ([1]IPSR, Univ. Okayama, [2]Grad Sch Sci, Univ. Kyoto)		1pC-11 Mechanism of ABA-Mediated Activation of NPR1-Dependent Salicylic Acid–Responsive Immunity Momoe Shinohara[1], Rina Honda[1], Tomomi Ohata[1], Munemasa Horio[1], Hiroshi Mori[1], Saki Noda[1], Hinano Takase[2], Keiko Kuwata[3], Toshinori Kinoshita[1,3], Tomonao Matsushita[4], Yoshikatsu Matsubayashi[1], Taishi Umezawa[2], Mika Nomoto[1,5,6], Yasuomi Tada[1,5] ([1]Grad. Sch. Sci., Nagoya Univ., [2]Grad. Sch. BASE, Tokyo Univ., Agri. and Tech., [3]ITbM, Nagoya Univ., [4]Grad. Sch. Sci., Kyoto Univ., [5]Centr. Gene Res., Nagoya Univ., [6]PRESTO, JST)	

Room E	Room F	Room G	Room H	Room X	Room Y	Room Z	Time
Development / Morphogenesis	Bioresources	Environmental response A / Physiological responses	Environmental response B / Environmental stresses				
1pE-06 The distribution and the function of plant hormone in fern *Ceratopteris richardii* Yuta Hanada[1], Eiki Kawarabuki[1], Satoshi Naramoto[2] ([1]Sch. Sci. Hokkaido. Univ., [2]Fac. Sci. Hokkaido Univ.)		1pG-06 Phosphoproteome analyses reveal a primary role of plasma membrane H+-ATPase regulation in CO2-induced stomatal movement in Arabidopsis Kaito Uchihashi[2], Yoshikatsu Matsubayashi[2], Koji Takahashi[2], Toshinori Kinoshita[1,2], Yohei Takahashi[1,2] ([1]ITbM, Nagoya U., [2]Grad. Sch. Sci., Nagoya U.)	1pH-06 Ⓔ Ethanol Application Enhances Freezing Stress Tolerance in Arabidopsis and Sugar Beet Daisuke Todaka[1], Kentaro Nakaminami[1], Akihiro Matsui[1], Seishi Ikeda[2], Thi Nhu Quynh Do[1,4], Maho Tanaka[1], Satoshi Takahashi[1], Chieko Torii[1], Junko Ishida[1], Atsushi J. Nagano[5,6], Motoaki Seki[1,3,7] ([1]Plant Genomic Network Res. Team, RIKEN CSRS, [2]Hokkaido Agri. Res. Center, NARO, [3]KIBR, Yokohama City Univ., [4]AGI, Vietnam, [5]Bioscience and Biotechnology Center, Nagoya Univ., [6]Institute for Advanced Biosciences, Keio Univ., [7]Grad. Sch. Sci. Eng., Saitama Univ.)	Symposium S04 Priming and Memory of Plants in Facing Environmental Changes (14:00-17:00)	Symposium S05 Advances in Cellular and Molecular Signaling in Response to Internal and External Stimuli from Algae to Plants (14:00-17:00)	Symposium S06 Underlying molecular antagonisms as drivers of plant diversification and ecological adaption (14:00-17:00)	15:15
1pE-07 Functional analyses of ROP GDP dissociation inhibitors in *Marchantia polymorpha* Yu Miyazaki[1], Airi Hayashi[2], Yuuki Sakai[1], Hirofumi Nakagami[3], Kenta C. Moriya[1], Yusuke Aihara[1], Hidehiro Fukaki[1], Kimitsune Ishizaki[1] ([1]Grad. Sch. Sci., Kobe Univ., [2]Fuc. Sci., Kobe Univ., [3]MPIPZ)		1pG-07 The new role of stomatal CO_2 response in plant growth and environmental stress tolerance in Arabidopsis Koki Nakano[1], Sinya Sato[2], Keiko Kano[2], Emi Mishiro[2], Toshinori Kinoshita[1,3], Yohei Takahashi[1,3] ([1]Grad. Sch. Sci., Univ. Nagoya, [2]Molecular Structure Center, WPI-ITbM, Univ. Nagoya, [3]WPI-ITbM, Univ. Nagoya)	1pH-07 Enhanced Abiotic Stress Tolerance via Ethanol Treatment in plants: Investigating the Role of Alcohol Dehydrogenase 1 (ADH1) Aki Kawamura[1,4], Daisuke Todaka[1], Akihiro Matsui[1], Chieko Torii[1], Naoki Takahashi[4], Motoaki Seki[1,2,3,4] ([1]Plant Genomic Network Research Team, RIKEN CSRS, [2]KIBR, Yokohama City Univ., [3]Grad. Sch. Sci. Eng., Saitama Univ., [4]Sch. Agr., Meiji Univ.)				15:30
1pE-08 Ⓔ A TONNEAU1-Reqruiting Motif (TRM) protein is required for air chamber development in *Marchantia polymorpha* Ayana Sano[1], Airi Hayashi[2], Yuuki Sakai[3], Kimitsune Ishizaki[3], Yoh Sakuma[1], Hirotaka Kato[1] ([1]Grad. Sch. Sci. Eng., Ehime Univ., [2]Fac. Sci., Kobe Univ., [3]Grad. Sch. Sci., Kobe Univ.)			1pH-08 Genome editing of the *Wfh-sm3* gene for fructan hydrolysis and impact of fructan accumulation on freezing tolerance in winter wheat Kodai Takemoto[1], Kentaro Sasaki[1], Akira Kawakami[2], Ryozo Imai[1] ([1]Institute of Agrobiological Science, NARO, [2]Hokkaido Agricultural Research Center, NARO)				15:45
1pE-09 CSI Is Essential for Schizogenous Intercellular Space Formation in *Marchantia polymorpha* Miya Mizutani[1], Isato Iguchi[1], Ryuichi Nishihama[2], Kimitsune Ishizaki[3], Takayuki Kohchi[4], Taku Demura[1] ([1]Div. Biosci., NAIST, [2]Dept. of Applied Biol. Sci., Fac. of Sci. Tech Tokyo Univ. of Sci., [3]Grad. Sch. Sci., Kobe Univ., [4]Grad. Sch. of Biostudies, Kyoto Univ.)			1pH-09 Freezing behaviors in *Camellia* flower buds visualized using MRI Masaya Ishikawa[1], Kazuma Iwasaki[2], Naoto Momiyama[2], Naohiro Yagyu[2], Naoto Fujita[2], Mai Kudo[1], Mingyi Zu[1], Yasuhiko Terada[2], Norihisa Matsushita[1], Kenji Fukuda[1] ([1]The University of Tokyo, Graduate School of Agricultural and Life Sciences, [2]University of Tsukuba, College of Engineering Sciences)				16:00
1pE-10 Ⓔ Evolutionary Dynamics of Small Peptide Signaling Systems in Liverworts Chihiro Furumizu[1,2], Mari Kondo[2], Kengo Matsushita[2] ([1]Inst. Agric. Life Sci., Academic Assembly, Shimane Univ., [2]Fac. Life Environ. Sci., Shimane Univ.)			1pH-10 The warm temperature insensitive mutant *aco3* in *Arabidopsis thaliana* Moe Masumoto[1], Rin Takeuchi[2], Ryo Takara[2], Tsuyoshi Furumoto[1,2] ([1]Grad. Agr., Univ. Ryukoku, [2]Agr., Univ. Ryukoku)				16:15
1pE-11 *IDD5*-mediated regulation of leaf morphogenesis in *Physcomitrium patens* Ren Yamada[1], Masaki Ishikawa[2], Mitsuyasu Hasebe[2], Akiko Kozaki[1] ([1]Grad. Sch. Sci., Shizuoka. Univ, [2]NIBB)			1pH-11 Functional analysis of *STTP*, a gene whose expression levels are responsive to seasonal temperature changes in *Arabidopsis* Kenta C. Moriya[1,2], Hanako Shimizu[1], Genki Yumoto[1,3], Susumu Uehara[4], Jiro Sugisaka[1], Tomoo Shimada[5], Ryutaro Tokutsu[6], Yusuke Aihara[2], Hidehiro Fukaki[2], Mika Nomoto[4], Yoshikatsu Matsubayashi[7], Yasuomi Tada[4], Kimitsune Ishizaki[2], Mie N. Honjo[1], Hiroshi Kudoh[1] ([1]Center for Ecol. Res., Kyoto Univ., [2]Grad. Sch. Sci., Kobe Univ., [3]IMS., Shinshu Univ., [4]Center for Gene Res., Nagoya Univ., [5]Grad. Sch. Sci., Kyoto Univ., [6]Sch. Veterinary Med., Kitasato Univ., [7]Grad. Sch. Sci., Nagoya Univ.)				16:30

Ⓔ=Presentation in English

● Day 1, Fri., March 13, PM (14:00–17:00)

Time	Room A	Room B	Room C	Room D
	Photosynthesis	Primary metabolism	Plant-organism interaction A	Genome function / gene regulation
16:45	1pA-12 Relation between PGRL1 and PGR5 in the green alga *Chlamydomonas reinhardtii* Hiroko Takahashi[1], Tetsuto Sato[2], Yuki Ito[2], Keisuke Yoshida[3], Yuki Okegawa[4], Ryutaro Tokutsu[5], Yukako Hihara[1] ([1]Grad. Sch. Sci. & Eng., Saitama Univ., [2]Dep. Biochem. & Mol. Biol., Saitama Univ., [3]Lab. Chem. & Life Sci., Inst. Int. Res., Inst. Sci. Tokyo, [4]Inst. Plant Sci. & Res., Okayama Univ., [5]Sch. Vet. Med., Kitasato Univ.)		1pC-12 E Decoding Long-Distance Immune Signaling of Chitin-Induced Systemic Resistance in Rice Micah Lagat[1], Tomoyuki Furuta[1], Naoki Yamaji[1], Hironori Kaminaka[2], Hideki Nishimura[1], Yoji Kawano[1] ([1]Institute of Plant Science and Resources, Okayama University, Okayama, [2]Faculty of Agriculture, Tottori University, Tottori, Japan)	

Room E	Room F	Room G	Room H	Room X	Room Y	Room Z	Time
Development / Morphogenesis	Bioresources	Environmental response A / Physiological responses	Environmental response B / Environmental stresses				
1pE-12 E From ER Sheets to Shoots: Membrane Remodeling and Control in Moss Prerna Singh[1,2], Tomomichi Fujita[1] ([1]Faculty of Science, Hokkaido University, [2]Institute for the Advancement of Higher Education, Hokkaido University)			1pH-12 Tissue-specific fructan responses during cold acclimation under diurnal temperature fluctuations in wheat Takuma Kikuchi[1], Jan Felix Gehrke[2], Toshihisa Kotake[1], Daisuke Takahashi[1] ([1]Grad. Sch. Sci. Eng., Saitama Univ., [2]Dept. Biol., Ulm Univ.)	Symposium S04 Priming and Memory of Plants in Facing Environmental Changes (14:00-17:00)	Symposium S05 Advances in Cellular and Molecular Signaling in Response to Internal and External Stimuli from Algae to Plants (14:00-17:00)	Symposium S06 Underlying molecular antagonisms as drivers of plant diversification and ecological adaption (14:00-17:00)	16:45

E=Presentation in English

● Day 2, Sat., March 14, AM (9:00–12:00)

Time	Room A	Room B	Room C	Room D
	Photosynthesis	Cell wall	Plant-organism interaction A	Organelles / Cytoskeleton / Endomembrane system
09:00	2aA-01 Photosynthetic Control Variants Generated in the Cyt b_6f Rieske Protein Shin-Ichiro Ozawa[1], Felix Buchert[2], Michael Hippler[1,2] ([1]Inst. Plant Sci. Res., Okayama Univ., [2]Inst. Plant Bio. Biotech., Univ. Münster)	2aB-01 E Molecular Characterization and Structural Insights of *SiCAD1* Gene in Indonesian Foxtail Millet (*Setaria italica*) Sintho Wahyuning Ardie[1], M Reza Pahlevi[2], Ramadaniarto Rizqullah[2], Daisuke Tsugama[3] ([1]Department of Agronomy and Horticulture, Faculty of Agriculture, IPB University, Indonesia, [2]Plant Breeding and Biotechnology Study Program, Graduate School, IPB University, Indonesia, [3]Asian Research Center for Bioresource and Environmental Sciences (ARC-BRES), Graduate School of Agricultural and Life Sciences, The University of Tokyo, Japan)	2aC-01 Analysis of stomatal immunity against grapevine downy mildew pathogen *Plasmopara viticola* Yoshiharu Mimata[1], Wei Zheng[1], Xuenan Zhang[1], Rao Zhang[1,2], Wenxiu Ye[1] ([1]IAAS, Peking Univ., [2]College of Life Sciences, Qingdao Agricultural Univ.)	2aD-01 A functional analysis of the non-photosynthetic chloroplast protein translocator TOC132 in Arabidopsis thaliana guard cells Ryosuke Toyomura, Boseok Song, Sho Yamagaki, Sakura Nishimura, Jo Narimatsu, Koh Iba, Juntaro Negi (Dept. Biol., Fac. Sci., Kyushu Univ.)
09:15	2aA-02 E Cytochrome b_6f influences linear electron flow through lateral distribution and modulates STT7 activity via a phosphorylation feedback loop Michael Hippler[1,3], Afifa Zaeem[1], Davide Tamborrini[2], Martin Scholz[1], Wojciech Wietrzynski[2], Markus Schwarzländer[1], Shin-Ichiro Ozawa[3], Ben Engel[2], Felix Buchert[1] ([1]Institute of Plant Biology and Biotechnology, University of Münster, 48143 Münster, Germany, [2]Biozentrum, University of Basel, Spitalstrasse 41, 4056 Basel, Switzerland., [3]Institute of Plant Science and Resources, Okayama University, Kurashiki, Japan)	2aB-02 Critical role of microtubule plus-end regulation for secondary cell wall patterning in protoxylem vessels Eri Kamon[1], Ya Ma[2], Arata Yoneda[3], Taku Demura[3,4], Misato Ohtani[2,3,4,5] ([1]Ritsumeikan Univ., [2]Grad. Sch. Front. Sci., Univ. Tokyo, [3]Grad. Sch. Sci. Tech., NAIST, [4]RIKEN, CSRS, [5]Grad. Sch. Sci., Univ. Tokyo)	2aC-02 E Cell death-mediated plant immunity against hemibiotrophic fungal pathogen infection Katsuma Yonehara[1,2], Naoyoshi Kumakura[1], Benjamin Cole[3], Hatsune Morinaka[1], Ayako Kawamura[1], Akira Iwase[1], Keiko Sugimoto[1], Dongbo Shi[1,5], Gitta Coaker[4], Ken Shirasu[1,2] ([1]CSRS, RIKEN, Japan, [2]Grad. Sch. Sci., Univ. Tokyo, Japan, [3]DOE JGI, Lawrence Berkeley Natl. Lab., USA, [4]Dept. Plant Pathol., Univ. California, USA, [5]Inst. Pioneering Research, RIKEN, Japan)	2aD-02 Analysis of CO_2-dependent starch metabolism in guard cells and investigation of its regulatory factors Tomoumi Honda, Okuma Reona, Jo Narimatsu, Koh Iba, Juntaro Negi (Dept. Biol., Fac. Sci., Kyushu Univ.)
09:30	2aA-03 The low-temperature response of HCO_3^- transport activity in *Synechococcus elongatus* PCC 7942 Nobuyuki Takatani, Tatsuo Omata, Makiko Aichi (Col. of Biosci. and Biotech. Chubu Univ.)	2aB-03 E Mechanical adaptation of *A. thaliana* root to sucrose supply Liyu Deng[1], Yunshu Wang[2], Yuta Nakagawa[3], Andres Aguilar Ariza[2], Tomomichi Fujita[4], Shumpei Hayashi[5], Akihiro Isozaki[3], Keisuke Goda[3,6,7], Hirotaka Hida[5], Toru Fujiwara[2], 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]SPMDR Unit, F-REI)	2aC-03 E A novel polyketide biosynthetic enzyme complex produces dihydroxyhexanoic acid and regulates turgor pressure in appressoria Naoyoshi Kumakura[1], Takayuki Motoyama[1], Keisuke Miyazawa[2,3], Toshihiko Nogawa[1], Katsuma Yonehara[1,4], Kaori Sakai[5], Nobuaki Ishihama[1], Kaisei Matsumori[3,4], Pamela Gan[1], Hiroyuki Koshino[1], Takeshi Fukuma[2,3], Richard O' Connell[5], Ken Shirasu[1,4] ([1]RIKEN CSRS, [2]Inst. Sci. Eng., Kanazawa Univ., [3]WPI-NanoLSI, Kanazawa Univ., [4]Grad. Sch. Sci., Tokyo Univ., [5]Univ. Paris-Saclay, INRAE)	2aD-03 miRNA pathway mediates maternal inheritance of chloroplast DNA in *Chlamydomonas* Yoshiyuki Nishiyama, Kana Matsumoto, Tomohito Yamasaki (Fac. Sci. & Technol., Kochi Univ.)

Room E	Room F	Room G	Room H	Room X	Room Y	Room Z	Time
Development / Morphogenesis	Reproduction	Environmental response A / Physiological responses	Environmental response B / Environmental stresses				
2aE-01 Ⓔ The Arabidopsis AN-GRF module governs body plan establishment through organ boundary control Ryoka Tsuru[1], Hirokazu Tsukaya[2], Gorou Horiguchi[1,3] ([1]Dept. Biol., Coll. Sci., Rikkyo Univ., [2]Grad. Sch. Sci., Univ. Tokyo, [3]Cent. Life Sci., Coll. Sci., Rikkyo Univ.)	2aF-01 Molecular Mechanisms of Host Synchronization and Autonomous Regulation of Floral Transition in *Cuscuta* Plants Masaki Takagawa[1], Toshiya Yokoyama[2], Mariko Asaoka[2], Kazuhiko Nishitani[2], Mitsutomo Abe[3], Ryusuke Yokoyama[1] ([1]Grad. Sch. Life Sci., Tohoku Univ., [2]Fac. Sci., Kanagawa Univ., [3]Grad. Sch. Art Sci., Univ. Tokyo)	2aG-01 Systematic measurement of isoprene emissions under various environmental conditions using a parallel growth chamber system Junnan Li[1], Kanako Sekimoto[2], Daisuke Fukuyama[2], Takuya Saito[3], Atsushi J. Nagano[4,5] ([1]Grad. Sch. of Agr., Ryukoku Univ., [2]Grad. Sch. Sci., Yokohama City Univ., [3]Earth System Division, NIES, [4]Bioscience and Biotechnology Center, Nagoya Univ., [5]IAB, Keio Univ.)	2aH-01 Elucidating the mechanisms of drought adaptation in wild rice through multi-omics analysis with indoor phenotyping Fumiyuki Soma[1], Yoshihiro Kawahara[2], Takanari Tanabata[3], Atsushi Hayashi[4], Yuka Kitomi[1], Nobuo Kochi[4], Eiji Yamamoto[1], Nobuhiro Tanaka[1], Michiya Negishi[4], Kenichi Tokuda[4], Hiroaki Sakai[2], Yusaku Uga[1] ([1]Institute of Crop Science, NARO, [2]Research Center for Advanced Analysis, NARO, [3]Kazusa DNA Research Institute, [4]Research Center for Agricultural Robotics, NARO)	Symposium S07 Frontiers in Plant Science Revealed by Space Environments: From Molecular Mechanisms to Future Horizons (9:00–12:00)	Symposium S08 Nuclear Architecture as a Scaffold: Structural Views on Gene Regulation and Cellular Function in Plants and Beyond (9:00–12:00)	Symposium S09 Asymmetries in plant structure and signaling (9:00–12:00)	09:00
2aE-02 TCP transcription factors promote apoplastic acidification to drive cell expansion in *Arabidopsis thaliana* Tomotsugu Koyama[1], Tadashi Kunieda[2,3], Hiromi Toyonaga[1], Mika Nobuhara[1], Nobutaka Mitsuda[4], Kouichi Soga[5], Junko Ishida[6], Motoaki Seki[6], Koji Takahashi[7,8], Toshinori Kinoshita[7,8], Ayumu Bessho[2], Taku Demura[2,3], Masaru Ohme-Takagi[9] ([1]Suntory Foundation for Life Sciences, [2]Division of Biological Science, Nara Institute of Science and Technology, [3]Center for Digital Green-innovation, Nara Institute of Science and Technology, [4]Biomanufacturing Process Research Center, AIST, [5]Graduate School of Science, Osaka Metropolitan University, [6]Center for Sustainable Resource Science, RIKEN, [7]Graduate School of Science, Nagoya University, [8]Institute of Transformative Bio-Molecules, Nagoya University, [9]National Cheng Kung University, College of Bioscience and Biotechnology)	2aF-02 Transcriptional control of *MACCHI-BOU4* gene in Arabidopsis during nectary development Ryosuke Ohta, Nobutoshi Yamaguchi, Toshiro Ito (NARA INSTITUTE of SCIENCR and TECHNOLOGY)	2aG-02 Ⓔ Mobile Glutamate Activates GLUTAMATE RECEPTOR-LIKE Channels to Orchestrate Systemic Wound Signals Rimsha Ishaq[1], Gen Hirohara[1], Takuma Hagihara[1], Keitaro Tanoi[2,3], Masatsugu Toyota[1,4,5] ([1]Dept. Biochem. Mol. Biol., Saitama Univ., [2]Grad. Sch. Agric. Life Sci., Univ. Tokyo, [3]F-REI, [4]SunRiSE, Suntory Fdn. Life Sci., [5]Coll. Plant Sci. Technol., Huazhong Agric. Univ.)	2aH-02 Cuticular wax plasticity in the amphibious plant *Rorippa aquatica* enables rapid gas exchange under submergence Shuka Ikematsu[1], Tatsuki Tsujino[1], Keita Minai[1], Tomu Shimada[1], Tomoaki Sakamoto[1], Takashi Nobusawa[2], Seisuke Kimura[1] ([1]Life Sci., Kyoto Sangyo Univ., [2]Grad. Sch. Integr. Sci., Hiroshima Univ.)				09:15
2aE-03 Ⓔ Investigation of the molecular mechanisms of Arabidopsis petiole formation based on RNA-seq Yujie Zhao, Hokuto Nakayama, Hirokazu Tsukaya (Grad. Sch. Sci., Univ. Tokyo)	2aF-03 Elucidation of the regulatory mechanisms of petal abscission mediated by the EIN3-ORE1 pathway Yuki Furuta, Nobutoshi Yamaguchi, Toshiro Ito (NAIST)	2aG-03 Molecular Basis of Action-Potential–Mediated Trapping Movements in the sundew *Drosera rotundifolia* Shoji Segami[1,2], Tadahiro Ochiai[2], Peng Chen[2], Hui Liu[2], Riku Matsuda[3], Liechi Zhang[1], Shoko Ohi[1], Hiraku Suda[4], Masatsugu Toyota[4], Mitsuyasu Hasebe[1,2] ([1]NIBB, [2]SOKENDAI, [3]Grad. Sch. Sci., Nagoya Univ., [4]Grad. Sch. Sci. Eng., Saitama Univ.)	2aH-03 Ⓔ The Conservation of ETR-HK-B3-Raf-SnRK2 Signaling Framework in Algae Uncovers Drought Resilience Mechanisms that Enabled the Transition from Aquatic to Terrestrial Habitats Mohammed Arif Sadik Polash[1,2], Yuto Yamazaki[1], Hideo Kimura[1], Md. Masudul Karim[1,3], Koichi Hori[4], Hiroyuki Ohta[4], Jun Minagawa[5], Hidetoshi Sakayama[6], Tomoaki Nishiyama[7], Yoichi Sakata[8], Daisuke Takezawa[1] ([1]Graduate School of Science and Engineering, Saitama University, Shimo-ohkubo 255, Sakura-ku, Saitama, 338-8570, Japan, [2]Department of Crop Botany, Khulna Agricultural University, Khulna-9202, Bangladesh, [3]Department of Crop Botany, Bangladesh Agricultural University, Mymensingh-2202, Bangladesh, [4]School of Life Science and Technology, Institute of Science Tokyo, 2 Chome-12-1, Ookayama, Meguro City, Tokyo, 152-8550, Japan, [5]National Institute of Basic Biology, 38 Nishigokana Myodaiji, Okazaki, 444-8585, Japan, [6]Graduate School of Science, Kobe University, 1-1, Rokkodai-Cho, Nada-ku, Kobe, 657-8501, Japan, [7]School of Science, University of Toyama, 2630, Sugitani, Toyama-Shi, Toyama, 930-0194, Japan, [8]Department of Bioscience, Tokyo University of Agriculture, 1-1-1 Sakuragaoka, Setagaya-ku, Tokyo 156-8502, Japan)				09:30

Ⓔ=Presentation in English

● Day 2, Sat., March 14, AM (9:00–12:00)

Time	Room A	Room B	Room C	Room D
	Photosynthesis	Cell wall	Plant-organism interaction A	Organelles / Cytoskeleton / Endomembrane system
09:45	2aA-04 Evaluation of CO_2–concentrating mechanisms in the amphibious plant *Hygrophila difformis* by analysis of photosynthetic O_2 evolution and electron transport rates Genki Horiguchi[1], Ko Noguchi[2] ([1]Agri., Tokyo univ. Agri. Tech., [2]Sch. Life Sci, Tokyo univ. Pharm. Life Sci.)	2aB-04 Structural Features of Arabidopsis TPFLA and their Roles in Exine Formation Kaho Kumazawa[1], Seiya Nishihara[1], Saki Nabeta[1], Nozomi Ueki[1], Kohei Tsuchida[1], Tadashi Kunieda[2], Haruko Ueda[3], Sumie Ishiguro[1] ([1]Bio-Agric. Sci., Nagoya Univ., [2]Bio. Sci., NAIST., [3]Sci. & Eng., Konan Univ.)	2aC-04 E Transcriptomic Insights into Broad-Spectrum Resistance of Luffa to Field-Isolated Fusarium Wilt Isolates in Taiwan Yu-Xuan Jiang[1], Che-Han Chu[1], Wen-Hsin Chung[2], Shu-Yun Chen[1] ([1]Department of Agronomy, Nantional Chung Hsing University, Taiwan, [2]Department of Plant Pathology, Nantional Chung Hsing University, Taiwan)	2aD-04 Differential ppGpp Accumulation Drives Distinct Growth through Transcriptomic and Metabolic Reprogramming in Plants Takanari Nemoto[1], Yuto Omata[1], Kazuma Sakoda[2], Mikiko Kojima[3], Hitoshi Sakakibara[3,4], Akira Oikawa[3,5], Sosuke Imamura[2], Shinji Masuda[1] ([1]Dep. Life Sci. Tech., Science Tokyo, [2]Space Environment and Energy Laboratories, NTT, Inc., [3]CSRS, RIKEN, [4]Grad. Sch. Bioagric. Sci., Nagoya Univ., [5]Grad. Sch. Agric., Kyoto Univ.)
10:00	2aA-05 Evaluation of the role of photosynthesis in cotyledon fate determination of the one-leaf plant *Monophyllaea* Shunji Nakamura[1], Ai Soma[2], Keitaro Tanoi[2], Hirokazu Tsukaya[1] ([1]Grad. Sch. Sci., Univ. Tokyo, [2]Grad. Sch. Agri. Life Sci., Univ. Tokyo)	2aB-05 E In situ cell wall-cuticle continuum analysis of intact Arabidopsis thaliana organs with attenuated total reflection Fourier transform infrared microspectroscopy Hidemasa Teraoka[1], Shota Saito[1], Naoki Numadate[2], Yoshimi Oshima[3] ([1]Grad. Sch. Arts & Sci., Univ. Tokyo, [2]Inst. Pure & Applied Sci., Tsukuba Univ., [3]Biomanufacturing Process Res. Cent., AIST)	2aC-05 E Breaking Defenses: Unraveling Effector Diversity in Wheat Leaf Rust Ankita Shree, Priyanka Kumari, Hasnain Raghib Hassan, Manish Kumar, Kunal Mukhopadhyay (Birla Institute of Technology)	2aD-05 Chloroplast-localized mechanosensitive channel MSL2 is involved in the osmoregulation of chloroplasts in guard cells Miho Yamahana[1], Atsushi Togaki[1], Chikako Tanaka[1], Kanako Yamasaki[1], Yoko Ishizaki[1], Yuki Sakamoto[2], Takashi Shiina[1] ([1]Fac. Agr., Setsunan Univ., [2]Fac. Sci., Shinshu Univ)
10:15	2aA-06 Uncovering a novel PyShell component linked to the function of the CO_2-concentrating mechanism in marine diatom *Phaeodactylum tricornutum* Masakazu Toyoshima[1], Ginga Shimakawa[2], Yusuke Matsuda[1] ([1]Sch. of Biol. and Environ. Sci., KGU, [2]Grad. Sch. of Agri. Sci., Kobe Univ.)	2aB-06 MYB16-mediated modification of the cell wall-cuticle continuum characterized by chemical structural and transcriptomic analysis Yoshimi Oshima[1,2], Tetsuya Hama[3], So Taniguchi[3], Yuko Takiguchi[1], Shingo Sakamoto[1], Taku Tsuyama[1,4], Shigeo S. Sugano[1], Nobutaka Mitsuda[1] ([1]BPRC, AIST, [2]PRESTO, JST, [3]Grad. Sch. Arts & Sci., Univ. Tokyo, [4]Sch. Agr., Univ. of Miyazaki)	2aC-06 E Identification and characterization of the effector for the paired NLRs Pit1 and Pit2 Alfino Sebastian[1], Motoki Shimizu[2], Nobuko Yasuda[3], Ryohei Terauchi[4], Fumi Fukada[1], Yoji Kawano[1] ([1]Institute of Plant Science and Resources, Okayama University, Japan, [2]Iwate Biotechnology Research Center, Japan, [3]National Agriculture and Food Research Organization, Japan, [4]Laboratory of Crop Evolution, Kyoto University, Japan)	2aD-06 How is thylakoid membrane lipid synthesis involved in the plastid gene expression? Kosei Noto[1], Risa Uwatoko[2], Yuki Hagiwara[1], Satoru Niida[3], Kurumi Yamada[3], Atushi Takabayashi[4], Koichi Kobayashi[5], Noriko Nagata[2], Sho Fujii[1,3] ([1]Grad. Sch. Agric. Life Sci., Hirosaki Univ., [2]Grad. Sch. Sci., Japan Women's Univ., [3]Fac. Agric. Life Sci., Hirosaki Univ., [4]ILTS, Hokkaido Univ., [5]Fac. Lib. Arts Sci. Global Edu., Osaka Metropolitan Univ.)
10:30	2aA-07 Localization and function of bestrophin in the marine diatom *Phaeodactylum tricornutum* Karin Niwa, Minori Nigishi, Yusuke Matsuda (Grad. Bio. Sci., Uiv. Kwanseigakuin)	2aB-07 Histochemical analyses of cell morphogenesis underlying flood tolerance in rice stems Kosuke Mori[1], Rio Ito[2], Motoyuki Ashikari[3], Keisuke Nagai[3] ([1]Grad. Sch. Bio. Sci., Univ. Nagoya, [2]Sch. Agr. Sci., Univ. Nagoya, [3]"Cent. Gen., Univ. Nagoya)	2aC-07 E Neofunctionalization of the RGF peptide signaling pathway drives haustorial organogenesis in parasitic plants Max Fishman[1], Anne Greifenhagen[1], Takanori Wakatake[1], Anuphon Laohavisit[1], Ryoko Hiroyama[1], Sachiko Masuda[1], Arisa Shibata[1], Satoko Yoshida[2], Ken Shirasu[1,3] ([1]RIKEN, Center for Sustainable Resource Science, [2]Nara Institute of Science and Technology, [3]Graduate School of Science, University of Tokyo)	2aD-07 Roles of anionic phospholipid PG and anionic glycolipid SQDG during etioplast-to-chloroplast differentiation Akiko Yoshihara[1], Risa Uwatoko[2], Keiko Kobayashi[2], Noriko Nagata[2], Koichi Kobayashi[1] ([1]Grad. Sch. Sci., Osaka Metro. Univ., [2]Fac. Sci., Japan Women's Univ.)
10:45	2aA-08 The function of PtSLC4-6 and PtSLC4-7 as chloroplast HCO_3^- transporters in the marine diatom *Phaeodactylum tricornutum* Miyuu Ninomiya, Kensuke Nakajima, Nawaly Hermanus, Yusuke Matsuda (Grad Bio Sci Univ Kwanseigakuin)	2aB-08 E Glycosylation-dependent sorting of an arabinogalactan protein SLEEPING BEAUTY mediates apical tip growth in *Physcomitrium patens* Chao-Yuan Yu[1], Manju Maharjan[2], Chao-Hsi Liu[3], Ooi-Kock Teh[1] ([1]Institute of Plant and Microbial Biology, Academia Sinica, [2]Department of Plant Physiology, Umeå Plant Science Centre, Umeå University, [3]Department of Environmental Engineering, National Cheng Kung University)	2aC-08 Strigolactone-Mediated Regulation of Nitrogen Responses and Pigmentation in Soil Filamentous Fungi Shingo Suginoo[1], Naoki Kato[2], Hiroyuki Osada[3], Yuichiro Tsuchiya[1,4] ([1]Grad. Sch. Sci., Nagoya Univ., [2]Grad. Sch. Agri., Setsunan Univ., [3]CSRS, Riken, [4]ITbM, Nagoya Univ.)	2aD-08 Compatibility between Arabidopsis ARC6 and its cyanobacterial homologue in the growth regulation of Arabidopsis Kota Kobayashi[1], Ryota Uto[1], Yasuko Ito-Inaba[1,2], Takehito Inaba[1] ([1]Fac. Agr., Univ. Miyazaki, [2]Grad. Sch. Life Sci., Tohoku Univ.)

Room E	Room F	Room G	Room H	Room X	Room Y	Room Z	Time
Development / Morphogenesis	Reproduction	Environmental response A / Physiological responses	Environmental response B / Environmental stresses				
2aE-04 Ⓔ Inferring cell division events from cell geometry: A revision of classical cell division rules Zining Wang[1], Yujie Zhao[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.)	2aF-04 Functional analysis of pistil factors associated with interspecific reproductive barriers in *Arabidopsis thaliana* Tsukasa Matsuura[1], Yoshinobu Kato[1], Kenta Shirasawa[2], Kayo Mori[1], Seiji Takayama[1], Sota Fujii[1,3] ([1]Grad. Sch. Agric. Lif. Sci, Univ. Tokyo, [2]Kazusa DNA. Res. Inst., [3]Suntory Rising Stars Encouragement Program in Life Sciences)	2aG-04 Requirement of *glabrous1* for the growth-promoting effects of olivine for enhanced weathering Minoru Ueda[1], Daisuke Todaka[1], Satoshi Takahashi[1], Junko Ishida[1], Maho Tanaka[1], Tokihiro Ikeda[2], Keiko Suzuki[3], Misako Miwa[4], Takeshi Uchiyama[5], Yasuhiro Ishimaru[5], Kazuhiro Sayama[6], Nobuyuki Uozumi[5], Shigeo Matsuyama[4], Atsushi J. Nagano[7,8], Hidehiko Kikuno[9], Motoaki Seki[1,10,11] ([1]RIKEN CSRS, [2]RIKEN Nishina Center, [3]RIKEN CEMS, [4]Dept. Quantum Sci. & Energy Eng., Grad. Sch. Eng., Tohoku Univ., [5]Dept. Biomol. Eng., Grad. Sch. Eng., Tohoku Univ., [6]GZR, AIST, [7]Biosci. Biotech. Ctr., Nagoya Univ., [8]IAB, Keio Univ., [9]TUA Miyako Subtropical Training and Research Farm, [10]KIBR, Yokohama City Univ., [11]Grad. Sch. Sci. Eng., Saitama Univ.)	2aH-04 *Arabidopsis* DMP1 mediates long distance signaling via extracellular vesicles under drought stress conditions Haruka Otani[1], Wakana Inoue[1], Miho Kikuchi[2], Mayuko Sato[3], Kiminori Toyooka[3], Takehiro Suzuki[3], Naoshi Dohmae[3], Fuminori Takahashi[1,2] ([1]Grad. Sch. Fac. Adv. Eng., TUS, [2]Fac. Adv. Eng., TUS, [3]CSRS, RIKEN)	Symposium S07 Frontiers in Plant Science Revealed by Space Environments: From Molecular Mechanisms to Future Horizons (9:00–12:00)	Symposium S08 Nuclear Architecture as a Scaffold: Structural Views on Gene Regulation and Cellular Function in Plants and Beyond (9:00–12:00)	Symposium S09 Asymmetries in plant structure and signaling (9:00–12:00)	09:45
2aE-05 Mechanisms of organ growth via VLCFA-mediated non-cell-autonomous signal from the epidermis Takashi Nobusawa[1], Takehide Kato[2], Masaaki Umeda[2], Miyo Terao Morita[3], Makoto Kusaba[1] ([1]Grad. Sch. Int. Sci. Life, Hiroshima Univ., [2]Grad. Sch. Sci. Technol, NAIST, [3]NIBB, NINS)	2aF-05 Identification of pollen-side factor interact with pistil pre-zygotic reproductive barrier peptide in *Arabidopsis* via GWAS Kazuki Hirano[1], Hiroki Miura[1], Takuya T. Nagae[2], Seiji Takayama[1], Sota Fujii[1,3] ([1]Grad. Sch. Agri. Life Sci., Univ. Tokyo, [2]RIKEN CSRS, [3]Suntory SunRiSE)	2aG-05 A Novel Period-Shortening Small Molecule Hiyori Fujikawa[1], Junichiro Yamaguchi[2], Hiromi Matsuo[1], Norihito Nakamichi[1] ([1]Graduate School of Bioagricultural Sciences, Nagoya University, [2]School of Advanced Science and Engineering, Waseda University)	2aH-05 Ⓔ Improving drought stress tolerance of cotton by using ethanol application Farhan Aziz[1,2], Daisuke Todaka[1], Maho Tanaka[1], Satoshi Takahashi[1], Khurram Bashir[1,2], Motoaki Seki[1,3,4] ([1]Plant Genomic Network Research Team, RIKEN Center for Sustainable Resource Science, 1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan, [2]Department of Life Sciences, Lahore University of Management Sciences, DHA Phase 5, Lahore 54792, Pakistan, [3]Kihara Institute for Biological Research, Yokohama City University, 641-12 Maioka-cho, Totsuka-ku, Yokohama, Kanagawa 244-0813, Japan, [4]Graduate School of Science and Engineering, Saitama University, Saitama, Saitama, 338-8570, Japan)				10:00
2aE-06 Negative control of a master transcriptional regulator for shoot epidermal cell differentiation Shinobu Takada[1], Ayaka Yoshida[1], Hiroyuki Iida[1,2] ([1]Dept. Biol. Sci., Grad. Sch. Sci., Univ. Osaka, [2]Organismal and Evolutionary Biology Programme, Faculty of Biological and Environmental Sciences, University of Helsinki)	2aF-06 Ⓔ A Novel Arabidopsis Protein, POTI, Plays an Important Role in Maintaining the Integrity of PollenTubes Natalia Julia Rzepecka[1], Yoko Ito[3], Emi Ito[3,4,5], Tomohiro Uemura[2] ([1]Faculty of Core Research, Ochanomizu Univ., [2]Graduate School of Humanities and Sciences, Ochanomizu Univ., [3]Institute for Human Life Sciences, Ochanomizu Univ., [4]Division of Cellular Dynamics, NIBB, [5]Basic Biology Program, Graduate Institute for Advanced Studies, SOKENDAI)	2aG-06 *CKL* genes control circadian period at higher temperatures Norihito Nakamichi, Mayuko Yamada, Hiromi Matsuo, Akari Maeda, Tomoaki Muranaka (Grad. Sch. Agr., Nagoya Univ.)	2aH-06 Novel stomatal closing compounds dissect the signaling pathway for underlying light-induced stomatal opening and improve drought tolerance in plants Kwangchul Shin[1], Yusuke Aihara[2,3], Kohei Fukatsu[1], Shigeo Toh[4], Kei Murakami[5], Yuki Hayashi[1], Ayato Sato[2,6], Toshinori Kinoshita[1,2] ([1]Grad. Sch. Sci., Nagoya Univ., [2]WPI-ITbM, Nagoya Univ., [3]Grad. Sch. Sci., Kobe Univ., [4]Grad. Sch. Agr., Meijo Univ., [5]Sch. Sci., Kwansei Gakuin Univ., [6]COMIT, Nagoya Univ.)				10:15
2aE-07 Analysis of the Regulatory Roles of HD-ZIP IV Transcription Factors in Leaf Epidermal Cell-Fate Determination Kenji Nagata[1], Takafumi Miyashita[2], Akitoshi Iwamoto[2,3], Taku Takahashi[4], Mitsutomo Abe[1] ([1]Grad. Sch. Arts and Sci., Univ. Tokyo, [2]Grad. Sch. Sci., Kanagawa Univ., [3]Dept. Biol. Fac. Sci. Kanagawa Univ., [4]Grad. Sch. Sci., Okayama Univ.)	2aF-07 Analysis of Ca^{2+} spike in *Arabidopsis* sperm cells Daigo Ishida[1], Naoya Sugi[1,2], Kazuki Motomura[3], Kazuo Ebine[4], Daichi Susaki[1,5], Daisuke Maruyama[1] ([1]KIBR, Yokohama City Univ., [2]RDP • ENS-Lyon, [3]Rea. Org. Sci. Tec., Ritsumeikan Univ., [4]Grad. School. Science. Eng., Saitama Univ., [5]Dept. Biol. Sci., Fac. Sci., Shizuoka Univ.)		2aH-07 Investigating the importance of roots in recovery from hypoxia-induced leaf wilting in *Brassica napus* Natsumi Takahashi[1], Nozomi Yokouchi[1], Hirokazu Takahashi[2], Mikio Nakazono[2], Kanna Izawa[1], Shin-ichi Nakamura[1], Akihisa Shinozawa[1] ([1]Dept. Bioscience, Tokyo Univ. Agric., [2]Grad. Sch. Bioagric. Sci., Univ. Nagoya)				10:30
2aE-08 Ⓔ Submergence-Induced Epidermal Cell Chloroplasts Differentiation in *Rorippa aquatica* Dwi Fajar Sidhiq[1], Shuka Ikematsu[2,3], Tomoaki Sakamoto[2,3], Seisuke Kimura[2,3] ([1]Grad. Sch. of Life Sci. Kyoto Sangyo Univ., [2]Fac. Life Sci., Kyoto Sangyo Univ., [3]Center for Plant Sci., Kyoto Sangyo Univ.)	2aF-08 Functional characterization of CRMC, a multi-CNBD cAMP receptor, in *Marchantia polymorpha* Ranran Iwabuchi[1], Motoki Nakagami[1], Chiaki Yamamoto[1], Tomoyuki Furuya[2], Fumio Takahashi[3], Masahiro Kasahara[1] ([1]Grad. Sch. Life Sci., Ritsumeikan Univ., [2]Grad. Sch. Sci., Univ. Osaka., [3]Faculty Pharma. Sci., Toho Univ.)		2aH-08 Analysis of ABA responsive activity in hypoxia-induced aerenchyma forming region in rice roots Momoka Kojima, Akihisa Shinozawa, Kanna Izawa, Shin-ichi Nakamura (Dept. Bioscience, Tokyo Univ. Agric.)				10:45

Ⓔ=Presentation in English

● Day 2, Sat., March 14, AM (9:00–12:00)

Time	Room A	Room B	Room C	Room D
	Photosynthesis	Cell wall	Plant-organism interaction A	Organelles / Cytoskeleton / Endomembrane system
11:00	2aA-09 Pyrenoid carbonic anhydrase sorting mechanism Riho Nagamatsu[1], Ginga Shimakawa[2], Yusuke Matsuda[1] ([1]Kwanseigakuin Univ., [2]Kobe Univ.)	2aB-09 E Identification of Putative Cell Wall Sensors in *Physcomitrium patens* Chin-Lien Tseng (Institute of Plant and Microbial Biology, Academia Sinica)	2aC-09 Involvement of cell wall integrity perturbation in induced systemic resistance triggered by root colonization of beneficial fungus *Trichoderma atroviride* in Arabidopsis Ayae Sakai[1], Aika Tsuneka[2], Kaoru Ohsawa[2], Momoko Takagi[2,3], Hironori Kaminaka[2] ([1]United Grad. Sch. Agr., Tottori Univ., [2]Fac. Agr., Tottori Univ., [3]Grag. Sch. Arts and Sci., Univ. Tokyo)	2aD-09 Regulation of chloroplast functions by the TGN-localized SNARE SYP4 Aimi Taura[1], Yoko Ito[2], Wataru Yamori[3], Noriko Nagata[4], Tomohiro Uemura[1,2,5] ([1]Grad. Sch. Humanities and Sciences., [2]IHLS., Ochanomizu Univ., [3]Graduate School of Agricultural and Life Sciences, Tokyo Univ., [4]Department of Chemical and Life Sciences, Faculty of Science, Japan Women's Univ., [5]Faculty of Core Research, Natural Science Div., Ochanomizu Univ.)
11:15	2aA-10 Identification of the Bass4 Protein Functioning as an Malate Transporter in NADP-ME Type C4 Plants Rin Yokoe[1], Ayaka Azuma[2], Fuka Iga[2], Tsuyoshi Furumoto[1,2] ([1]Grad. Agr, Univ. Ryukoku, [2]Agr, Univ. Ryukoku)	2aB-10 E A putative cell wall integrity sensor coordinates cell cycle progression in *Phsycomitrium patens* Ooi-Kock Teh, Yadav Bal Govind (Institute of Plant and Microbial Biology, Academia Sinica)	2aC-10 Root commensal bacteria digest immuno-eliciting peptides by secreting extracellular peptidases Yusuke Inagaki[1], Tomohisa Shimasaki[1], Ulla Neumann[2], Yumiko Makino[3], Tomoko Mori[3], Sara Christina Stolze[4], Hirohumi Nagami[4], Takuya Yoshida[3,5], Ryohei Thomas Nakano[1,4] ([1]Fac. of Sci., Hokkaido Univ., [2]CeMic, MPIPZ, [3]Trans-Omics Facility, NIBB, [4]MPIPZ, [5]Basic Biology Program, SOKENDAI)	2aD-10 Role of bZIP transcription factors in *Cyanidioschyzon merolae* Haruka Saito[1], Kan Tanaka[2], Toshihide Okajima[3], Mitsumasa Hanaoka[1,4,5] ([1]Grad. Sch. Horticul., Chiba Univ., [2]Lab. Chem. Life Sci., Science Tokyo, [3]SANKEN, Osaka Univ., [4]Plant Mol. Sch. Cent., Chiba Univ., [5]Res. Cent. Space Agr. Hort., Chiba Univ.)
11:30	2aA-11 Arabidopsis photorespiration allows for subcellular translocation of glutamine synthetase Shinya Wada[1], Hayato Sato[2], Keiki Ishiyama[1], Takanori Maruta[3], Amane Makino[1], Hiroyuki Ishida[1], Chikahiro Miyake[2] ([1]Grad. Sch. Agri., Tohoku Univ., [2]Grad. Sch. Agri., Kobe Univ., [3]Grad. Sch. Nat. Sci. Tech., Shimane Univ.)	2aB-11 E Divergent plasmodesmata targeting mechanisms between *Marchantia polymorpha* and *Nicotiana benthamiana* Kuan-Ju Lu[1,4], Ta Thi Thuy Lihn[1], Hui-Yu Chang[1], Sumanth Mutte[2,3], Shiuan-Jie Tsai[1], Yun-Zhen Li[1] ([1]Graduate Institute of Biotechnology, National Chung Hsing University, Taiwan, R.O.C., [2]MyGen Informatics Private Limited, India, [3]MyGen Informatics VOF, Netherlands, [4]Advanced Plant and Food Crop Biotechnology Center, National Chung Hsing University, Taiwan, R. O. C.)	2aC-11 E Bacterial methionine metabolism plays a role in root-commensal interactions Fiqih Ramadhan[1], Zoe Prockl[1], Jana Hucklenbroich[2], Silvina Perin[2], Tomohisa Shimasaki[1], Ryohei Thomas Nakano[1,2] ([1]Fac of Sci, Hokkaido Univ, [2]MPIPZ)	2aD-11 Exploring regulatory mechanisms of plastid functions in Arabidopsis roots Sho Fujii[1], Akira Iwase[2], Noriko Nagata[3], Ryuhei Maruoka[1], Reiji Kakizaki[1], Tamao Makino[1] ([1]Fac. Agri. Life Sci., Hirosaki Univ., [2]CSRS, RIKEN, [3]Fac. Sci., Japan Women's Univ.)
11:45	2aA-12 Expressional controls of CCM/pyrenoid components in marine diatoms under major nutrient starvations Momoka Amano[1], Ginga Shimakawa[2], Yusuke Matsuda[1] ([1]Grad. Sch. Sci. Tech., Kwansei Gakuin Univ., [2]Grad. Sch. Agric., Kobe Univ.)		2aC-12 E Towards unraveling the role of salicylic acid in executing hypersensitive cell death Keisuke Yoshida[2], Ai Obayashi[2], Keigo Tokunaga[1], Eriko Betsuyaku[1], Shunsuke Masuo[3], Shigeyuki Betsuyaku[1] ([1]Fac. of Agr., Ryukoku Univ., [2]Grad. Sch. of Agr., Ryukoku Univ., [3]Fac. of Life & Env. Sci./MiCS, Univ. of Tsukuba)	

Room E	Room F	Room G	Room H	Room X	Room Y	Room Z	Time
Development / Morphogenesis	Reproduction	Environmental response A / Physiological responses	Environmental response B / Environmental stresses				
2aE-09 Genomic basis for the loss and retention of terrestrial traits and aquatic adaptation in the obligate submerged plant *Callitriche hermaphroditica* Hiroki Mizoguchi, Hiroyuki Koga, Hirokazu Tsukaya (Grad. Sch. Sci., UTokyo)	2aF-09 Functional analysis of Mp*VICSPER1*, a homolog of voltage-gated ion channel, in sperm chemotaxis in *Marchantia polymorpha* Mizuki Morita[1], Noriyuki Suetsugu[2], Takayuki Kohchi[3], Taisuke Togawa[4], Katsuyuki T. Yamato[4] ([1]Grad. Sch. BOST., Kindai Univ., [2]Grad. Sch. Arts and Sciences., Univ. Tokyo, [3]Grad. Sch. Biostudies., Kyoto Univ., [4]Fac. BOST., Kindai Univ.)		2aH-09 ABA is involved in the recovery of leaves wilted by hypoxia in *Brassica napus* Akihisa Shinozawa[1], Nozomi Yokouchi[1], Hirokazu Takahashi[2], Mikio Nakazono[2], Kanna Izawa[1], Shin-ichi Nakamura[1] ([1]Dept. Bioscience, Tokyo Univ. Agric., [2]Grad. Sch. Bioagric. Sci., Univ. Nagoya)	Symposium S07 Frontiers in Plant Science Revealed by Space Environments: From Molecular Mechanisms to Future Horizons (9:00–12:00)	Symposium S08 Nuclear Architecture as a Scaffold: Structural Views on Gene Regulation and Cellular Function in Plants and Beyond (9:00–12:00)	Symposium S09 Asymmetries in plant structure and signaling (9:00–12:00)	11:00
2aE-10 Nucleolar development during transdifferentiation from mesophyll cells into xylem vessel cells and its regulatory factors Soya Tamaki[1], Ryuu Morikawa[2], Takaaki Yonekura[2], Shunji Shimadzu[3], Yuki Kondo[3], Munetaka Sugiyama[2] ([1]Department of Biological Sciences, Faculty of Science, The University of Tokyo, [2]Department of Biological Sciences, Graduate School of Science, The University of Tokyo, [3]Department of Biological Sciences, Graduate School of Science, The University of Osaka)	2aF-10 REAP1/AtSWAP70 integrates RAB5 and ROP signaling during sexual reproduction Emi Ito[1,2,3], Natalia Rzepecka[4], Yoko Ito[3], Tomoko Hirano[5], Kazuo Ebine[6], Yoshihisa Oda[7], Masa H Sato[5], Akihiko Nakano[8,9], Tomohiro Uemura[4,10], Takashi Ueda[1,2] ([1]Div. Cell Dynamics, NIBB, [2]Basic Biology Program, SOKENDAI, [3]IHLS, Ochanomizu Univ., [4]Faculty of Core Research, Ochanomizu Univ., [5]Grad. Sch. Life Env. Sci., Kyoto Prefectural Univ., [6]Grad. Sch. Sci. Engr., Saitama Univ., [7]Dept. Biol. Sci., Grad. Sch. Sci., Nagoya Univ., [8]Institute of Integrated Research, Sci. Tokyo, [9]RIKEN Center for Advanced Photonics, [10]Grad. Sch. Hum. Sci., Ochanomizu Univ.)		2aH-10 Investigating the role of ethylene in adventitious root formation in *Brassica napus* under hypoxic conditions Naoki Matsumoto[1], Nozomi Yokouchi[1], Hirokazu Takahashi[2], Mikio Nakazono[2], Kanna Izawa[1], Shin-ichi Nakamura[1], Akihisa Shinozawa[1] ([1]Dept. Bioscience, Tokyo Univ. Agric., [2]Grad. Sch. Bioagric. Sci., Univ. Nagoya)				11:15
2aE-11 Ⓔ Mutual inhibition between EPFL2 and auxin extends the intervals of periodic shoot morphogenesis Momoko Ikeuchi[1], Takeshi Tsuchida[1], Koichi Fujimoto[2], Toshiaki Tameshige[1,3] ([1]NAIST, [2]Hiroshima U., [3]KPU)	2aF-11 Analysis of GCS1 Intracellular Domain Deletion Mutants Ari Yoshimura[1], Tomoko Igawa[1,2,3] ([1]Grad. sch. Horticulture, Chiba Univ., [2]Plant Mol. Sci. Center, Chiba Univ., [3]Res. Center Space Agri. Hort., Grad. sch. Hort., Chiba Univ.)		2aH-11 [Cancelled]				11:30
2aE-12 Transcriptome analysis of differentially expressed genes during early adventitious shoot formation in ipecac Karin Okazaki[1,2], Katsushi Yamaguchi[3], Shuji Shigenobu[3], Keiko Sugimoto[1], Koichiro Shimomura[2], Mikihisa Umehara[2] ([1]CSRS, RIKEN, [2]Grad. School of Life Sci., Toyo Univ., [3]Trans-Omics Facility, NIBB)	2aF-12 Functional analysis of Arabidopsis LGM2 expressed in the egg cell Haruka Azuma[1], Toshiyuki Mori[2], Tomoko Igawa[1,3,4] ([1]Grad. Sch. Hort., Chiba Univ., [2]Dept. Hygiene, Tokyo Women's Med. Univ., [3]Plant Mol. Sci. Center, Chiba Univ., [4]Res. Center Space Agri. Hort., Grad. Sch. Hort., Chiba Univ.)		2aH-12 Functional Characterization of Metabolic Regulation of *Sulfur Deficiency-Induced* Genes in Soybean Aina Ieda, Shinichiro Komaki, Takayuki Tohge, Mutsumi Watanabe (Grad. Sch. of Sci. & Tech., NAIST)				11:45

Ⓔ=Presentation in English

● Day 2, Sat., March 14, PM (13:15–14:45)

Time	Room A	Room B	Room C	Room D
	Photosynthesis	Cell wall	Plant-organism interaction B	Organelles / Cytoskeleton / Endomembrane system
13:15	2pA-01 Development of a CRISPR interference system in a cyanobacterium, *Acaryochloris marina* Tohru Tsuchiya (Grad. Sch. Hum. Env. St., Kyoto Univ.)	2pB-01 E The essential role of xyloglucan in the formation and regulation of plasmodesmata in the moss *Physcomitrium patens* Phu Thanh Ngo[1], Marcel Pascal Beier[2,3,4], Chiyo Jinno[3,5], Tomomichi Fujita[3] ([1]Grad. Sch. Life Sci., Hokkaido Univ, [2]Inst. Advan. Hi Edu., Hokkaido Univ., [3]Fac. Sci., Hokkaido Univ, [4]Fukushima Inst. Res. Edu. Innov., [5]Bio Design Unit, OIST)	2pC-01 E Enhancing Soil Microbiome Resilience and Carbon Sequestration in Pomelo Orchards via Sod Culture and Biochar Amendments Chao-Li Huang[1,2], Chu-Chun Lin[2], Ying-Hsuan Huang[1] ([1]Institute of Tropical Plant Sciences and Microbiology, National Cheng Kung University, Taiwan, [2]Graduate Program in Translational Agricultural Sciences, National Cheng Kung University and Academia Sinica, Tainan, Taiwan)	2pD-01 Functional analysis of *psbE* RNA editing using chloroplast base-editing system in *Arabidopsis thaliana* Mitsuhiro Matsuo[1], Yuuki Kakimi[1], Yuuta Kondo[1], Junichi Obokata[1], Soichirou Satoh[2], Issei Nakazato[3], Shin-ichi Arimura[3] ([1]Fac. Agric., Setsunan Univ., [2]Grad. Sch. Life Environ. Sci., Kyoto Prefect. Univ., [3]Grad. Sch. Agric. Life Sci., Univ. Tokyo)
13:30	2pA-02 Predation-mediated adaptation of Photosynthesis in the Predatory Alga *Poterioochromonas malhamensis* Haruhiko Jimbo[1], Tomoki Minemura[1], Narumi Toda[2], Yuko Takizawa[3], Yoshito Chikaraishi[3], Ryuichi Hirota[2], Yoshitaka Nishiyama[1] ([1]Grad. Sch. Sci. Eng., Saitama Uni., [2]Grad. Sch. Integ. Sci. Life, Hiroshima Uni., [3]Inst. Low-temp., Hokkaido Univ.)	2pB-02 Functional analysis of β-1,4-glucanases involved in plant grafting Kentaro Okada[1], Yaichi Kawakatsu[2], Ken-ichi Kurotani[3], Toshihisa Kotake[4], Michitaka Notaguchi[1,2,3] ([1]Biosci. and Biotech. Center, Nagoya Univ., [2]College of Horticulture and Forestry, Huazhong Agricultural Univ., [3]Grad. Sch. Sci., Kyoto Univ., [4]Grad. Sch. Sci. Eng., Saitama Univ.)	2pC-02 E Grapevine phyllosphere pan-metagenomics reveals pan-microbiome structure, diversity, and functional roles in downy mildew resistance Jingyun Jin[1], Xiangfeng Wang[1], Xuenan Zhang[1], Junjie Mei[1], Wei Zheng[1], Linling Guo[1], Haisheng Sun[1], Lili Zhang[1], Chonghuai Liu[2], Wenxiu Ye[1], Li Guo[1] ([1]Peking University Institute of Advanced Agricultural Sciences, [2]Zhengzhou Fruit Research Institute, Chinese Academy of Agricultural Sciences)	2pD-02 E PpARC6s Mediate FtsZ-ring Remodeling At The Division Site In *Physcomitrium patens* Thi Huong Do[1,2], Marcel Pascal Beier[3], Hiroyoshi Takano[4], Tomomichi Fujita[1] ([1]Hokkaido University, [2]Fukushima University, [3]Soil and Plant Multi-Dynamics Research Unit, Fukushima Institute for Research, Education and Innovation, [4]Kumamoto University)
13:45	2pA-03 Function of a Putative Partner-Switching phosphatase Slr2031 in *Synechocystis* sp. PCC 6803 Keito Tanji, Haruna Kakuta, Yukako Hihara (Grad. Sch. Sci. Eng., Saitama Univ.)	2pB-03 E Xyloglucan endotransglucosylase/hydrolase family genes enhance plant grafting through callus proliferation Mu Xiong[1,2], Ting Zhang[1], Xin Qian[1], Akebaierjiang Kadeer[1], Ken-ichi Kurotani[2,3], Zhilong Bie[1], Ling Li[1], Changjin Liu[1], Xiangshuai Wu[1], Michitaka Notaguchi[1,2,3,4], Yuan Huang[1] ([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)	2pC-03 E A fungal nitrate-assimilation regulator CtAREA is involved in host protection conferred by plant endophyte *Colletotrichum tofieldiae* Akito Shiina, Kei Hiruma (Grad. Sch. Arts and Sci., Univ. Tokyo)	2pD-03 Excision of 641kb NUMT (Nuclear Mitochondrial DNA) in *Arabidopsis thaliana* chromosome 2 Rika Nakajima[1], Yugo Ito[1], Yuyang Zhong[1], Takayoshi Ishii[2,3], Shin-ichi Arimura[1] ([1]Grad. Sch. Agri. and Life. Sci., Univ of Tokyo, [2]Arid Land Research Center (ALRC), Tottori University, [3]International Platform for Dryland Research and Education (IPDRE), Tottori University)
14:00	2pA-04 Identification of a factor involved in the redox regulation of DNA-binding activity of the transcription factor RpaB Kousuke Kawarasaki[1], Hidaka Mihata[2], Kintake Sonoike[2], Yukako Hihara[1] ([1]Grad. Sch. Sci. Eng., Saitama Univ., [2]Fac. Edu. Integ. Arts Sci., Waseda Univ.)	2pB-04 E Chemical screening identified GPM1 as a novel compound enhancing graft adhesion in Fabaceae Qianqian Luo[1], Xueyao Shu[1], Ayato Sato[2,3], Yaichi Kawakatsu[4], Frank Opoku-Agyemang[1], Ken-ichi Kurotani[4,5], Michitaka Notaguchi[1,2,4,6,7] ([1]Grad. Sch. Bioagri. Sci., Univ. Nagoya, [2]Inst ITbM., Univ. Nagoya, [3]COMIT, Univ. Nagoya, [4]BB Center, Univ. Nagoya, [5]CSACRA, Univ. Kyoto, [6]Dept. Botany, Grad. Sch. Sci., Univ. Kyoto, [7]NKL for Germplasm Innovation, HZAU)	2pC-04 Immune receptor and symbiosis signaling drive iron-dependent beneficial bacterial interactions in rice Kanako Inoue[1], Masako Fuji[1], Masanao Sato[2], Jewish Dominguez John[1], Yutaka Sato[3], Masahiro Nagayasu[1], Yuki Fukumoto[1], Takumi Murakami[4,5], Takanori Kobayashi[6], Kiwamu Minamisawa[7], Junko Kyozuka[7], Yusuke Saijo[1] ([1]Div. Biol. Sci., Grad. Sch. Sci. & Technol., Nara Inst. Sci. & Technol. (NAIST), [2]Lab. Appl. Mol. Entomol., Div. Appl. Biosci., Res. Fac. Agric., Hokkaido Univ., [3]Dept. Genomics & Evol. Biol., Natl. Inst. Genet., [4]Sch. Life Sci. & Technol., Inst. Sci., Tokyo, [5]Dept. Informatics, Natl. Inst. Genet., [6]Res. Inst. Biores. & Biotechnol., Ishikawa Prefect. Univ., [7]Grad. Sch. Life Sci., Tohoku Univ.)	2pD-04 Re-evaluation of the Mitochondrial Fission Mechanism in *Arabidopsis thaliana* via Morphological Analysis of Mitochondrial Fission Mutants Masaru Hashimoto, Yugo Ito, Issei Nakazato, Hideki Takanashi, Shin-ichi Arimura (Graduate School of Agricultural and Life Sciences, The University of Tokyo.)

Room E	Room F	Room G	Room H	Room X	Room Y	Room Z	Time
Development / Morphogenesis	Reproduction	Plant hormones / Signaling molecules	Environmental response B / Environmental stresses				
2pE-01 WOX13 suppresses pluripotency acquisition of callus and development of lateral roots Eri Odaira, Momoko Ikeuchi (NAIST)	2pF-01 Ⓔ *EMU* genes are conserved regulators of egg maturation in two bryophyte lineages Tetsuya Hisanaga[1], Yen-Ting Lu[1,2], Yihui Cui[1], Fumiaki Tejima[1], Emiko Yoro[3,4], Tatsuaki Goh[1], Keiko Sakakibara[3], Keiji Nakajima[1] ([1]Grad. Sch. Sci. Tech., NAIST, [2]Grad. Sch. Arts and Sci., Univ. Tokyo, [3]Dept. Life Sci., Rikkyo Univ., [4]Grad. Sch. Sci., Univ. of Osaka)	2pG-01 Impact of Structural Diversity in Novel Cytokinin-like Substances on Their Modes of Action Mika Yoshino[1], Kazuki Miyata[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)	2pH-01 Overexpressing an activated form of potassium transporter AtHAK5 enhance low potassium and salinity tolerance in transgenic Arabidopsis Yuichi Tada, Kohei Watanabe, Yuki Watanabe, Megumi Itakura, Hiromi Suzuki (Sch. Biosci. Biotechnol., Tokyo Univ. Technol.)				13:15
2pE-02 Molecular genetic analysis of shoot regeneration focusing on the SWI2/SNF2 family member BTAF1 Yukino Ogihara-Yoshida[1], Hatsune Morinaka[2], Akihito Mamiya[3], Kuninori Iwamoto[1], Kyoko Ohashi-Ito[1], Akira Iwase[2], Keiko Sugimoto[2], Ryuu Morikawa[1], Takaaki Yonekura[1], Munetaka Sugiyama[1] ([1]Grad. Sch. Sci., Univ. Tokyo, [2]CSRS, RIKEN, [3]Grad. Sch. Sci., Kyoto Univ.)	2pF-02 BONOBO Induces The Cellular Reprogramming Gene, *LAXR*, During Germline Differentiation in the Liverwort *Marchantia polymorpha* Takeru Kumagai[1], Yoshihiro Yoshitake[1], Tomoaki Kajiwara[1], Megumi Iwano[1], Shogo Kawamura[1], Yukiko Yasui[1], Shohei Yamaoka[1], Ryuichi Nishihama[2], Takayuki Kohchi[1] ([1]Grad. Sch. Biostudies., Kyoto Univ., [2]Dept. Appl. Biol. Sci., Fac. Sci. Tech., Tokyo Univ. Sci.)	2pG-02 The role and products of FAS1 in leafy gall forming phytopathogens Kazuki Miyata[1], Mika Yoshino[1], Alicia Surjana[1], Mikiko Kojima[2], Kensuke Kouki[1], Toshio Nishikawa[1], Hitoshi Sakakibara[1,2] ([1]Grad. Sch. Bio. Sci., Nagoya Univ., [2]RIKEN CSRS)	2pH-02 A Universal Stress Response Enhances Plant Resilience Across Diverse Environments Hiroshi Mori[1], Mika Nomoto[1,2,3], Emi Okada[1], Fumika Okamoto[1], Wakako Inoue[2], Takakazu Matsuura[4], Yutaka Kodama[5], Shintaro Ichikawa[5], Kazuha Mori[1], Tomoko Suzuki[2,6,7], Takuya T. Nagae[7], Yu Saito[1], Sumire Fujiwara[8], Hiroki Tsutsui[9], Hiroshi Takagi[2,10,11], Takaya Ogawa[12], Akiko Maruyama-Nakashita[13], Tetsuya Higashiyama[14,15], Kiminori Toyooka[7], Nobutaka Mitsuda[8], Hirofumi Yoshioka[12], Izumi C. Mori[4], Yoshiharu Y. Yamamoto[16], Yasuomi Tada[1,2] ([1]Grad. Sch. Sci., Nagoya Univ., [2]Centr. Gene Res., Nagoya Univ., [3]JST, PRESTO, [4]Inst. Plant Sci. Resour. (IPSR), Okayama Univ., [5]Grad. Sch. Reg. Dev. Creat., Utsunomiya Univ., [6]Fac. Sci., Japan Women's Univ., [7]RIKEN CSRS, [8]Bioprod. Res. Inst., Natl. Inst. Adv. Ind. Sci. Technol. (AIST), [9]Okinawa Inst. Sci. Technol. Grad. Univ. (OIST), [10]Biosci. Biotechnol. Ctr., Nagoya Univ., [11]Inst. Adv. Res. (IAR), Nagoya Univ., [12]Grad. Sch. Bioagric. Sci., Nagoya Univ., [13]Fac. Agric., Kyushu Univ., [14]Inst. Transformative Bio-Molecules (WPI-ITbM), Nagoya Univ., [15]Dept. Biol. Sci., Grad. Sch. Sci., Univ. Tokyo, [16]Fac. Appl. Biol. Sci., Gifu Univ.)				13:30
2pE-03 Tracing the trajectories of cell fate reprogramming of mature somatic cells during shoot regeneration Hatsune Morinaka[1], Kotaro Torii[1], Dongbo Shi[1], Ayako Kawamura[1], Akira Iwase[1], Tetsuya Higashiyama[2], Munetaka Sugiyama[2], Keiko Sugimoto[1,2] ([1]CSRS, RIKEN, [2]Dept. Biol. Sci., Grad. Sch. Sci., Univ. Tokyo)	2pF-03 The search for target genes of the bHLH heterodimer BONOBO-LRL/DROP involved in generative cell differentiation during pollen development in Arabidopsis Nako Watanabe[1], Yuki Tomita[1], Takuya Miyakawa[1], Keisuke Inoue[1], Yoshihiro Yoshitake[1], Kazuo Ebine[2], Takeshi Nakano[1], Takayuki Kohchi[1], Takashi Araki[1], Shohei Yamaoka[1] ([1]Grad. Sch. Biostudies, Kyoto Univ., [2]Grad. Sch. Sci. Eng., Saitama Univ.)	2pG-03 Ⓔ Unravel the physiological role of cZ-type cytokinin during nitrogen deficiency stress Fanny Bellegarde[1,2], Graziella Valencia Cong[1], Miki Shibutani[1], Hitoshi Sakakibara[1,3] ([1]Graduate school of Bioagricultural Sciences, Nagoya University, [2]Institute for Advenced Research, Nagoya University, [3]RIKEN, CSRS)	2pH-03 Effects of Anesthetics on Plant Hormone and Ca^{2+} Signaling in Plant Wound Response Moca Iwabuchi[1], Sakuya Hirayama[1], Kyomi Shibata[2], Emi Yumoto[3], Koji Miyamoto[1,2,3], Ken Yokawa[4], Takuma Hagihara[5], Masatsugu Toyota[5,6,7], Masashi Asahina[1,2,3] ([1]Grad. Sch. Sci.& Eng, Teikyo Univ., [2]Env. & Biotech. Course, Dept. Integ. Sci. & Eng , Teikyo Univ., [3]Adv. Instrum. Anal. Ctr, Teikyo Univ., [4]Dept. Eng., Kitami Tech Univ., [5]Grad. Sch. Sci. Eng., Saitama Univ., [6]SunRiSE, Suntory Fdn. LifeSci., [7]Coll. Plant Sci. Technol., Huazhong Agric. Univ.)				13:45
2pE-04 Plant Pluripotency: BRAHMA-Mediated Epigenetic Priming via H3K27me3 Removal Sachihiro Matsunaga[1], Ayaka Horie[1], Hikaru Sato[1], Mariana Diaz[3], Takuya Sakamoto[2] ([1]Dept. Integrated Biosci., Grad. Sch. Frontier Sci., Univ. Tokyo, [2]Department of Science, Faculty of Science, Kanagawa University, [3]Department of Plant and Microbial Biology (IPMB), University of Zurich)	2pF-04 Study of the asymmetric zygotic division in the *Marchantia polymorpha* to understand the evolution of body axis formation Yusuke Kimata[1], Akane Fujimori[1], Yue Wang[1], Yosuke Okamura[2], Minako Ueda[1] ([1]Grad. Sch. Life Sci., Tohoku Univ., [2]Grad. Sch. Eng., Tokai Univ.)	2pG-04 Cytokinin signaling is involved in acclimation responses to mildly elevated temperatures in *Marchantia polymorpha* Shiori S. Aki[1], Ryuichi Nishihama[2], Takayuki Kohchi[3] ([1]Biological and Life Sciences, Faculty of Science and Engineering, Yamato University, [2]Department of Applied Biological Science, Faculty of Science and Technology, Tokyo University of Science, [3]Graduate School of Biostudies, Kyoto University)	2pH-04 Ⓔ Unveiling Peculiar Alteration of Iron-Cadmium Transport and Accumulation in Rice under Allelopathic L-DOPA Stress Moh Hari Rusli[1,2], Louis Grillet[1,2] ([1]Master Program in Global Agriculture Technology and Genomic Science, International College, National Taiwan University, [2]Department of Agricultural Chemistry, College of Bioresources and Agriculture, National Taiwan University.)				14:00

Ⓔ=Presentation in English

● Day 2, Sat., March 14, PM (13:15–14:45)

Time	Room A	Room B	Room C	Room D
	Photosynthesis	Cell wall	Plant-organism interaction B	Organelles / Cytoskeleton / Endomembrane system
14:15	2pA-05 E A Light-Responsive Partner-Switching System Regulating PSI Genes Expression in the Cyanobacterium *Synechococcus elongatus* PCC 7942 Xuan Huang[1,2], Hitomi Imamitsu[1,2], Kan Tanaka[2] ([1]LST, Science Tokyo, [2]CLS, IIR, Science Tokyo)		2pC-05 E A new bacterial model for mutualism and sustainable agriculture reveals distinct yet synergistic roles of immunity and symbiosis signaling in rice Yusuke Saijo, Kanako Inoue, John Jewish A. Dominguez, Sumire Kirita, Masahiro Nagayasu, Mari Okuda, Fumiaki Inoue (Biol. Sci., Nara Institute of Science and Technology)	2pD-05 Poly(A) status of mitochondrial mRNA regulates cellular function in plants Takashi Hirayama[1], Haruko Kaita[1], June-Sik Kim[1,2], Munetaka Sugiyama[3], Keiichi Mochida[2,4,5], Akihito Mamiya[6] ([1]IPSR, Okayama Univ., [2]CSRS, RIKEN, [3]Grad. Sch. Sci., Tokyo Univ., [4]KIBR, YCU, [5]SIDS, Nagasaki Univ., [6]Grad. Sch. Sci., Kyoto Univ.)
14:30	2pA-06 Involvement of RpaA on high light stress response in *S. elongatus* PCC7942 Kotone Saito[1], Hideo Iwasaki[2], Kan Tanaka[3], Mitsumasa Hanaoka[1,4,5] ([1]Grad. Sch. Horticul., Chiba Univ., [2]Sch. Adv. Sci. Eng., Waseda Univ., [3]Lab. Chem. Life Sci., Tokyo Inst. Tech, [4]Plant Mol. Sci. Cent., Chiba Univ., [5]Res. Cent. Space Agr. Hort., Chiba Univ.)		2pC-06 E Bacterial perception of root-derived signals mediates mutualistic associations in rice Zi Tong Heng[1], Kanako Inoue[1], John Jewish A. Dominguez[1], Masahiro Nagayasu[1], Min Fey Chek[1], Taito Matsuda[1], Shunsuke Tomita[3], Kiyoshi Mashiguchi[2], Shinjiro Yamaguchi[2], Yusuke Saijo[1] ([1]Division of Biological Science, Nara Institute of Science and Technology, [2]Institute for Chemical Research, Kyoto University, [3]Health and Medical Research Institute, National Institute of Advanced Industrial Science and Technology)	2pD-06 Analysis of PI3P-reduced mutant reveals phosphoinositide roles on autophagy and membrane trafficking in plant development Shino Goto-Yamada[1,2], Andisheh Poormassalehgoo[3], Elżbieta Kaniecka[3], Xavier Zarza[4], Kazusato Oikawa[2,5], Teun Munnik[4], Kenji Yamada[3], Shoji Mano[1,2] ([1]Lab. Organelle Reg., Natl. Inst. Basic Sci., [2]Dept. Basic Biol., Graduate Univ. Advanced Studies, [3]MCB, Jagiellonian Univ., [4]SILS, Univ. Amsterdam, [5]Dept. Cell Biol., Natl. Inst. Basic Biol.)

Room E	Room F	Room G	Room H	Room X	Room Y	Room Z	Time
Development / Morphogenesis	Reproduction	Plant hormones / Signaling molecules	Environmental response B / Environmental stresses				
2pE-05 The DREAM complex selectively regulates three distinct cell-cycle gene sets via the DNA-binding factors E2F, MYB3R, and TCX Hidekazu Iwakawa[1], Yuji Nomoto[1], Keito Mineta[1], Takamasa Suzuki[2], Masaki Ito[1] ([1]Grad. Sch. Nat. Sci. Technol., Kanazawa Univ., [2]Col. Biosci. Biotech., Chubu Univ.)	2pF-05 Discovery of a new plant tissue collaborating with antipodal cells and its function Kentaro Okada[1], Miki Matsumoto[1], Michitaka Notaguchi[1,2], Ryushiro Kasahara[1] ([1]BBC, Nagoya Univ., [2]Grad. Sch. Sci., Kyoto Univ.)	2pG-05 Ⓔ KL-signaling promotes light-dependent cell division in the Streptophyte algae *Closterium peracerosum-strigosum-littorale* Hsiang-ting Lee[1], Tomoaki Nishiyama[2,3], Junko Kawai[4], Keiko Sakakibara[4], Kotaro Nishiyama[5], Suzuki Taiki[5], Yusuke Kato[5], Yoshiya Seto[5], Junko Kyozuka[1] ([1]Graduate School of Life Science, Tohoku University, [2]School of Science, Academic Assembly, University of Toyama, [3]Research Center for Experimental Modeling of Human Disease, Kanazawa University, [4]College of Science, Rikkyo University, [5]Graduate School of Agriculture, Meiji University)	2pH-05 A nuclear CobW/WW-domain factor represses the CO_2-concentrating mechanism in the green alga *Chlamydomonas reinhardtii* Daisuke Shimamura[1,2], Junko Yasuda[1], Yosuke Yamahara[1], Hirofumi Nakano[1], Shin-Ichiro Ozawa[3,4], Ryutaro Tokutsu[5,6], Ayumi Yamagami[1], Tomonao Matsushita[5], Yuichiro Takahashi[4], Takeshi Nakano[1], Hideya Fukuzawa[1,7], Takashi Yamano[1,8] ([1]Grad. Sch. Biostudies, Kyoto Univ., [2]RIKEN, CSRS, [3]IPSR, Okayama Univ., [4]RIIS, Okayama Univ., [5]Grad. Sch. Sci., Kyoto Univ., [6]Sch. Vet. Med., Kitasato Univ., [7]Center for Higher Educational Development, Kyoto Women's Univ., [8]CeLiSIS, Kyoto Univ.)				14:15
2pE-06 Potential Coordinated Regulation of Cell Cycle Genes by the DREAM Complex and FLP Keito Mineta[1], Hidekazu Iwakawa[2], Moussa Benhamed[3], Masaki Ito[2] ([1]Grad. Sch. Nat. Sci. Tech., Kanazawa Univ., [2]Sch. Bio. Sci. Tech., Kanazawa Univ., [3]Université Paris-Saclay)	2pF-06 Morphology of Ohatsuki *Ginkgo biloba* trees in Tsukude, Shinshiro, Aichi, Japan Tomoka Fujii[1], Ryoma Furuhashi[1], HongQiao Lu[1], Hirofumi Yamashita[2], Masami Kobayashi[3], Yoshie Uchida[1,4], Hakuto Kageyama[4], Kazuhito Inoue[5,6], Hidenobu Uchida[1,6] ([1]Dept. Food Business, Nagoya Bunri Univ., [2]Dept. Inf. Env. Sci., Kyoto Pref. Univ., [3]Dept. Mat. Sci., Univ. Tsukuba, [4]Grad. Sch. Environ. Hum. Sci., Meijo Univ., [5]Dept. Biochem. Biotechno., Kanagawa Univ., [6]Res. Inst. Integ. Sci., Kanagawa Univ.)	2pG-06 *In Vitro* Evaluation and Application of Interactions Between the KAI2 Ligand-Signaling Components Keita Tanaka[1,2], Jiawang Wu[1,2], Yutaro Harada[3], Taiki Suzuki[3], Yujiao Yan[1,2], Yoshiya Seto[3], Hiromu Kameoka[1,2] ([1]CAS CEMPS, [2]CAS-JIC CEPAMS, [3]Agric., Meiji Univ.)	2pH-06 Mechanistic analysis of cold plasma-induced promotion of rice seed germination Taiyo Nagamatsu[1], Takamasa Okumura[2], Shota Sasaki[3], Weichen Zeng[4], Eri Kamon[1], Takeshi Ishimizu[1,8], Toshihisa Kotake[5], Mami Nomura[6], Tadashi Kunieda[7], Ryo Ono[4], Toshiro Kaneko[3], Kazunori Koga[2], Kazuya Ishikawa[8] ([1]College of Life Sciences, Ritsumeikan University, [2]Faculty of Information Science and Electrical Engineering, Kyushu University, [3]Graduate School of Engineering, Tohoku University, [4]Graduate School of Frontier Sciences, The University of Tokyo, [5]Graduate School of Science & Engineering, Saitama University, [6]Faculty of Science, Yamagata University, [7]Division of Biological Science, Div. of Biol. Sci., NAIST, [8]R-GIRO, Ritsumeikan University)				14:30

Ⓔ=Presentation in English

● Day 3, Sun., March 15, AM (9:00–11:00)

Time	Room A	Room B	Room C	Room D
	Systems biology	Biomembrane / Ion and solute transport	Plant-organism interaction B	Organelles / Cytoskeleton / Endomembrane system
09:00	3aA-01 Interspecific genomic differences of arbuscular mycorrhizal fungi and periodic patterns observed in axenically produced spores Yuuki Kobayashi[1], Taro Maeda[2], Sachiko Tanaka[3], Tatsuhiro Ezawa[4], Katsushi Yamaguchi[5], Takahiro Bino[6], Yuki Nishimoto[7], Shuji Shigenobu[5], Masayoshi Kawaguchi[3] ([1]Tokyo NODAI Resarch Inst., Tokyo Univ. of Agr., [2]Grad. Sch. Media and Govern., Keio Univ., [3]Div. Symbiotic Systems, NIBB, [4]Grad. Sch. Agr., Hokkaido Univ., [5]Trans-scale Biol. Cen., NIBB, [6]Div. Photophysical Biol., NIBB, [7]Div. Chromatin Regulation, NIBB)	3aB-01 Molecular Dissection of Action Potential-Mediated Rapid Long-Distance Signal Propagation in the non-vascular liverwort *Marchantia polymorpha* Kazuyuki Kuchitsu[1], Yu Iwamoto[1], Kenshiro Watanabe[1], Kyoka Hashinishi[1], Mateusz Koselski[2], Renata Welc-Stanowska[2], Piotr Wasko[2], Kazimierz Trębacz[2] ([1]Dept. Appl. Biol. Sci., Tokyo Univ. of Science, [2]Maria Curie-Sklodowska Univ., Poland)	3aC-01 Enhancing the nodule occupancy rate of N_2O-reducing rhizobia by utilizing symbiotic incompatibility Hanna Nishida[1], Manabu Itakura[2], Khin Thuzar Win[1], Feng Li[3], Kaori Kakizaki[2], Atsuo Suzuki[2], Satoshi Ohkubo[2], Luong Van Duc[2], Masayuki Sugawara[4], Koji Takahashi[3], Matthew Shenton[3], Sachiko Masuda[5], Arisa Shibata[5], Ken Shirasu[5], Yukiko Fujisawa[1], Misa Tsubokura[6], Hiroko Akiyama[6], Yoshikazu Shimoda[1], Kiwamu Minamisawa[2], Haruko Imaizumi-Anraku[1] ([1]NARO NIAS, [2]Grad. Sch. of Life Sci. Tohoku Univ., [3]NARO NICS, [4]Life and Food Sci. Obihiro Univ., [5]RIKEN CSRS, [6]NARO NIAES)	3aD-01 Nuclear Actin Filaments in Plants Tomoko Matsumoto[1], Atsuya Osaki[1], Takumi Higaki[2], Noriko Inada[1] ([1]Osaka Metropolitan University, Graduate School of Agriculture, [2]Kumamoto University, Graduate School of Advanced Science and Technology)
09:15	3aA-02 Establishment of a platform for analyzing vascular differentiation dynamics combining time-course transcriptomics and cell-type deconvolution Yuki Nishimura[1], Makoto Kashima[2], Shunji Shimadzu[1,3], Tasuku Ito[1], Yuki Kondo[1] ([1]Grad. Sch. Sci., Univ. Osaka, [2]Fac. Sci., Univ Toho, [3]VIB, Ghent Univ)	3aB-02 A Vascular Calcium Sensor Protein Controls Stomata Movement By Alteration Of Apoplastic Ion Concentration Shunya Saito[1], Takeshi Uchiyama[1], Kosuke Takebayashi[1], Misako Miwa[2], Sho Toyama[2], Hirotaka Sugiura[3], Wataru Kada[2], Shigeo Matsuyama[2], Fumihito Arai[3], Jörg Kudla[4], Masaru Tsujii[1], Yasuhiro Ishimaru[1], Nobuyuki Uozumi[1] ([1]Department of Biomolecular Engineering, Graduate School of Engineering, Tohoku University, Aobayama 6-6-07, Sendai 980-8579, Japan, [2]Department of Material Science, Graduate School of Engineering, Tohoku University, Aobayama 6-6-07, Sendai 980-8579, Japan, [3]Department of Mechanical Engineering, Graduate School of Engineering, The University of Tokyo, Hongo 7-3-1, Bunkyo-ku, Tokyo 113-8656, Japan, [4]Institut für Biologie und Biotechnologie der Pflanzen (IBBP), Universität Münster, Schlossplatz 7, 48149 Münster, Germany)	3aC-02 Analysis of shoot growth *Lotus japonicus* AON-deficient mutant inoculated with AM fungi Momoe Fukase[1], Kensuke Kawade[2] ([1]Fac. Sci., Univ. Saitama, [2]Grad. Sch. Sci., Univ. Saitama)	3aD-02 Heterologous expression of high-speed chimeric myosin XI in tomato promotes cytoplasmic streaming and plant growth Jun Obara[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.)
09:30	3aA-03 Development of transcriptomic biomarkers to independently estimate SA and JA response states and Application to plants under natural herbivore communities Atsuki Tomita[1,2], Taro Maeda[1], Natsumi Moriyama (Mori)[3], Yasuyuki Nomura[3], Yuko Kurita[4], Makoto Kashima[5], Shigeyuki Betsuyaku[6], Yasuhiro Sato[7], Atsushi J. Nagano[1,8] ([1]IAB, Keio Univ., [2]Grad. Sch. of Media & Governance, Keio Univ., [3]Res. Inst. Food Agr., [4]Fac. Agr., Tokyo Univ., [5]Fac. of Sci., Toho University, [6]Fac. Agr., Ryukoku Univ, [7]Grad. Sch. of Env. Sci., Hokkaido Univ., [8]Bioscience & Biotechnology Center, Nagoya University)	3aB-03 Characterization of the kinase inhibitor AG126 and its derivatives for analyzing PM H^+-ATPase phosphorylation in guard cells Shogo Kuwayama[1], Koji Takahashi[1], Maki Hayashi[2], Yuki Hayashi[1], Kohei Fukatsu[1], Yusuke Aihara[3], Shinya Sato[4], Keiko Kano[4], Emi Mishiro-Sato[4], Ayato Sato[4], Toshinori Kinoshita[1,4] ([1]Grad. Sch. Sci., Nagoya Univ., [2]Grad. Sch. Life Sci., Tohoku Univ., [3]Grad. Sch. Sci., Kobe Univ., [4]ITbM , Nagoya Univ.)	3aC-03 Carbon dynamics of AON-defective *Lotus japonicus* mutants infected with arbuscular mycorrhizal fungi Manaka Osawa[1], Kensuke Kawade[2] ([1]Fac. Sci., Univ. Saitama, [2]Grad. Sch. Sci., Univ. Saitama)	3aD-03 Actin-myosin interactions contribute to the uniformity of xylem cell wall structure through cytoplasmic streaming Saku Kijima[1], Haruko Ueda[2], Nobutaka Mitsuda[1], Yoshihisa Oda[3] ([1]AIST, Biomanufact. Process Res. Cent., [2]Konan Univ, Fac. Sci. Eng., [3]Nagoya Univ, Grad Sci)
09:45	3aA-04 Construction of a Robust Gene Expression Prediction Model Using Deep Learning with Large-Scale Field Transcriptome Data Dan Eiju[1,2], Soutarou Honda[3], Satoshi Ohkubo[4], Shunsuke Adachi[5], Koji Iwayama[6], Atsushi J. Nagano[1,7] ([1]Inst. Adv. Biosci., Keio Univ., [2]Grad. Sch. Media & Governance, Keio Univ., [3]Fac. Agriculture, TUAT, [4]Grad. Sch. Life Sci., Tohoku Univ., [5]Sch. Global Innovation, TUAT, [6]Fac. Data Sci., Shiga Univ., [7]Res. Ctr. Biol. Func. Dev. & Util., Nagoya Univ.)	3aB-04 Humidity Response Mediated by a Potassium Transporter in Plants Taro Yamanashi[1], Takeshi Uchiyama[1], Tomoko Takagi[2], Shunya Saito[1], Misako Miwa[1], Sho Toyama[1], Shigeo Matsuyama[1], Takuya Yokokita[3], Hidetoshi Kikunaga[3], Misaki Shimizu[4], Yoshiro Saito[4], Takamasa Suzuki[5], Noriko Nagata[2], Mutsumi Yamagami[6], Yasuhiro Ishimaru[1], Nobuyuki Uozumi[1] ([1]Grad. Sch. Eng., Univ. Tohoku, [2]Chem. and Bio. Sci., Japan Women's Univ., [3]RARiS, Univ. Tohoku, [4]Grad. Sch. Pharma., Univ. Tohoku, [5]College of Bio-sci. and Bio-tech., Univ. Chubu, [6]Inst. for Envi. Sci.)	3aC-04 E Investigation of the role of *CRINKLE* during rhizobial infection in *Lotus japonicus* Akira Akamatsu[1], Aya Shimomura[1,2], Tsuneo Hakoyama[1], Shusei Sato[3], Masayoshi Kawaguchi[4], Makoto Hayashi[1] ([1]CSRS • RIKEN, [2]Fac. Agri., Saga Univ., [3]Grad. Sch. Life Sci., Tohoku Univ., [4]NIBB)	3aD-04 Analysis of a novel factor promoting the microtubule-endoplasmic reticulum interaction Midori Doi, Takema Sasaki, Yoshihisa Oda (Grad. Sch. Sci., Nagoya Univ.)

Room E	Room F	Room G	Room H	Room X	Room Y	Room Z	Time
Development / Morphogenesis	Photoreceptors / Photoresponses	Plant hormones / Signaling molecules	Environmental response B / Environmental stresses				
3aE-01 E Multi-trait phenotypic plasticity of root and its molecular regulatory mechanism in amphibious plant *Callitriche palustris* Tomo Sato, Hiroyuki Koga, Hirokazu Tsukaya (Grad. Sch. Sci., Univ. Tokyo)	3aF-01 Arabidopsis Root Hair Formation is Regulated by the Root's Light Response via SPA1 Haruki Ichikawa, Ken Yokawa (Kitami Inst. Tech.)	3aG-01 Regulation of senescence initiation through the GREK receptor-like kinase family and pectins Daisuke Funabashi[1], Asuka Higo[2], Naoyuki Uchida[1,2] ([1]Grad. Sch. Sci., Univ. Nagoya, [2]Center for Gene Research, Univ. Nagoya)	3aH-01 E Extreme Environmental Tolerance of *Physcomitrium patens* Spores in ISS Exposure: A First Step Toward Moss-Based Terraforming Changhyun Maeng[1], Yuji Hiwatashi[2], Keita Nakamura[3], Osamu Matsuda[4], Hajime Mita[5], Kaori Yokotani[6], Shin-ichi Yokobori[7], Akihiko Yamagishi[7], Atsushi Kume[8], Tomomichi Fujita[1] ([1]Faculty of Science, Hokkaido University, [2]School of Food Industrial Sciences, Miyagi University, [3]Graduate School of Food, Agricultural and Environmental Sciences, Miyagi University, [4]Faculty of Science, Kyushu University, [5]Department of Life, Environment, and Applied Chemistry, Fukuoka Institute of Technology, [6]Faculty of Life and Environmental Sciences, University of Tsukuba, [7]School of Life Sciences, Tokyo University of Pharmacy and Life Sciences, [8]Faculty of Agriculture, Kyushu University)	Symposium S10 ASPB-JSPP Joint Symposium—Plant resilience and plasticity powered by dynamic cellular responses (9:00–11:00)			09:00
3aE-02 The Role of Polar Auxin Transport in Cell Polarity Establishment in Lateral Root Founder Cells Sanae Kaneta, Tatsuo Kakimoto (Grad. Sch. Sci., Univ. Osaka)	3aF-02 Analysis of light-dependent binding and dissociation between the blue-light receptor LLP and VTC2 Yuka Igawa[1], Yusuke Tachikawa[1], Yuki Urano[1], Tomoyuki Furuya[2], Fumio Takahashi[3], Tatsuya Iwata[3], Mineo Iseki[3], Noriyuki Suetsugu[4], Takayuki Kohchi[5], Masahiro Kasahara[1] ([1]Grad. Sch. of Life Sci., Ritsumeikan Univ., [2]Grad. Sch. of Sci., Univ. Osaka, [3]Faculty Pharma. Sci., Toho Univ., [4]Grad. Sch. Arts, Sci., Univ. Tokyo, [5]Grad. Sch. Biostudies, Kyoto Univ.)	3aG-02 Chemical genetics reveals ROS-triggered inter-organ communication for hypocotyl growth in *Arabidopsis thaliana* Yasuki Kawabata[1,2], Mizuki Murao[2], Asuka Higo[2], Naoyuki Uchida[2] ([1]Grad. Sch. Sci., Nagoya Univ., [2]Ctr. Gene Res., Nagoya Univ.)	3aH-02 Identification of a gene responsible for leaf-color variation in *Oxalis corniculata* Hideaki Iimura[1], Mitsuhiko Sato[1], Yuta Aoyagi[1], Yuya Fukano[2], Shinji Kikuchi[2], Kenta Shirasawa[1] ([1]Plant Genome Res., Kazusa DNA Res. Inst., [2]Grad. Sch. Hort., Univ. Chiba)				09:15
3aE-03 [Cancelled]	3aF-03 Phototropin monitors actual temperature to regulate temperature-dependent chloroplast movement via *cis-trans* autophosphorylation mode switching Minoru Noguchi[1], Tatsushi Fukushima[1,2], Saki Wakasugi[1,2], Yutaka Kodama[1,2] ([1]Ctr. Biosci. Res. Educ., Utsunomiya Univ., [2]Grad. Sch. Reg. Dev. Creat., Utsunomiya Univ.)	3aG-03 Analysis of a compound that inhibits plant hypocotyl elongation in dark Ayami Nakagawa[1], Keiko Kuwata[1], Shuya Yamada[1], Yumiko Takebayashi[2], Tsuyoshi Hirota[1], Ayato Sato[1], Naoyuki Uchida[3], Hitoshi Sakakibara[2,4], Akie Shimotohno[1], Kenichiro Itami[1,2,5], Kei Murakami[6], Keiko Torii[1,7,8] ([1]ITbM, Nagoya Univ., [2]RIKEN CSRS, [3]Center for Gene Res., Nagoya Univ., [4]Grad. Sch. Agr. Nagoya Univ., [5]RIKEN PRI, [6]Sch. Sci., Kwansei Gakuin Univ., [7]Dep. of Mol. Biosci., Univ. Texas at Austin, [8]Howard Hughes Medical Institute)	3aH-03 Analysis of *s-heat tolerant* (*sheat*) mutants of *Arabidopsis thaliana* Asuka Ogawa[1], Mire Yanagihara[1], Goro Masuda[2], Izumi Yotsui[1], Yoichi Sakata[1], Teruaki Taji[1] ([1]Dept. of Biosci., Tokyo Univ. of Agri, [2]NODAI Genome Research Center)				09:30
3aE-04 Investigation of lateral root development regulation mediated by temporal circadian rhythms Sota Nomoto[1], Takumi Onakado[1], Kosuke Mase[1], Akari Maeda[2], Satomi Sakaoka[1], Takamasa Suzuki[3], Soichi Inagaki[4], Todd Michael[5], Norihito Nakamichi[2], Hironaka Tsukagoshi[1] ([1]Agr., Meijo Univ, [2]Grad. Sch. Sci., Nagoya Univ, [3]Col. Biosci. Biothech., Chubu Univ, [4]Dept. of Biol. Sci., Grad. Sch. of Sci., Tokyo Univ, [5]Salk Institute)	3aF-04 Functional characterization of JAC1, a regulator of chloroplast accumulation response Yuki Inoue[1], Hiroki Irieda[2], Noriyuki Suetsugu[1] ([1]Grad. Sch. of Arts & Sci., Univ. Tokyo, [2]Acad. Assembly, Inst. Agric., Shinshu Univ.)	3aG-04 Trajectory of the evolution of SL receptor in parasitic plant *Striga hermonthica* Mayu Deguchi[1], Jia Xin Yap[2], Yuichiro Tsuchiya[1,2] ([1]Grad. Sch. Sci., Nagoya Univ., [2]ITbM, Nagoya Univ.)	3aH-04 Identification of the causal gene for the *sensitive to long-term heat* (*sloh12*) mutant of Arabidopsis Haruto Kinoshita[1], Goro Masuda[2], Izumi Yotsui[1], Yoichi Sakata[1], Teruaki Taji[1] ([1]Dept. of Biosci., Tokyo Univ. of Agri, [2]NODAI Genome Research Center)				09:45

E=Presentation in English

● Day 3, Sun., March 15, AM (9:00–11:00)

Time	Room A	Room B	Room C	Room D
	Systems biology	Biomembrane / Ion and solute transport	Plant-organism interaction B	Organelles / Cytoskeleton / Endomembrane system
10:00	3aA-05 E ATTED-II v13: Expanded Species and PCA-Based Condition Summaries Daffa Aprilio[1], Dalia Khatun[1], Takeshi Obayashi[1,2] ([1]Grad. Sch. Info. Sci., Tohoku Univ., [2]WPI-AIMEC, Tohoku Univ.)	3aB-05 E Proline-2'-Deoxymugineic Acid, a synthetic phytosiderophore, facilitates the rapid recovery of poplar trees from iron deficiency during early growth May Sann Aung[1], Motofumi Suzuki[2], Kyoko Toyofuku[1], Atsushi Ogawa[1], Hiroshi Masuda[1] ([1]Akita Prefectural University, [2]Aichi Steel Corporation)	3aC-05 Commonalities during mycorrhizal symbiosis in land plants Akihiro Yamazaki[1], Hector Montero[1], Alexandra Dallaire[1,2], Akira Iwase[1], Ayako Kawamura[1], Arika Takebayashi[1], Keiko Sugimoto[1], Uta Paszkowski[1,3] ([1]CSRS, RIKEN, [2]Université Laval, [3]University of Cambridge)	3aD-05 Analysis of a novel ROP signaling branch regulating pit formation in xylem vessels Wataru Kobayashi, Takema Sasaki, Yoshihisa Oda (Nagoya University Graduated School of Science)
10:15	3aA-06 E Charaterization of prion-like domain-containing proteins in diverse phytoplankton groups Matthew Brown, Yusuke Matsuda (Department of Biosciences, Kwansei Gakuin University)	3aB-06 Genome editing of metal transporter genes, *OsVIT1* or *OsYSL9*, increased the iron concentration in polished grains of Akitakomachi rice Hiroshi Masuda[1], Katsumi Takahashi[1], Maho Arakawa[1], Takeo Takahashi[1], Takanori Kobayashi[2], Hiroki Rai[1], Takehiko Matsumoto[1], Takehiro Kamiya[3], May Sann Aung[1] ([1]Akita Pref. Univ., [2]Ishikawa Pref. Univ., [3]Grad. Sch. Agri. Life Sci. Univ. Tokyo)	3aC-06 Genes with dual functions in arbuscular mycorrhizal symbiosis and other processes Zijie Li[1,2], Kenji Fukushima[3], Hiromu Kameoka[1,2] ([1]CAS CEMPS, [2]CAS–JIC CEPAMS, [3]National Institute of Genetics)	3aD-06 Exploring the remodeling mechanisms of organelles, the cytoskeleton, and the endomembrane system in sieve elements Yuki Sugiyama[1,2], Yoshihisa Oda[2] ([1]IAR, Nagoya Univ., [2]Dept. Biol. Sci., Grad. Sch. Sci., Nagoya Univ.)
10:30	3aA-07 Enhancement of transcription factor activity by introducing mutations designed based on AI-supported predictions Kentaro Kobayashi[1], Kensuke Yodoya[2], Koji Nagata[1], Kazuko Yamaguchi-Shinozaki[1,3], Junya Mizoi[1] ([1]Grad. Sch. Agr. Life Sci., Univ. Tokyo, [2]KAGOME CO., LTD, [3]Inst. Agr. Life Sci., Tokyo Univ. Agr.)	3aB-07 OsIET1 is a node-localized efflux transporter required for iron distribution in rice Jing Che[1], Sheng Huang[2], Yuting Qu[1], Yuma Yoshioka[3], Chiyuri Tomita[3], Takaaki Miyaji[3], Zhenyang Liu[1], Renfang Shen[1], Naoki Yamaji[2], Jian Feng Ma[2] ([1]State Key Laboratory of Soil and Sustainable Agriculture, Institute of Soil Science, Chinese Academy of Sciences, Nanjing, [2]Institute of Plant Science and Resources, Okayama University, [3]Department of Genomics & Proteomics, Advanced Science Research Center, Okayama University)	3aC-07 Host Invasion by Parasitic Plants Supported by Dynamic Modulation of Cell Wall Properties Chiharu Ito[1], Tadashi Kunieda[1], Songkui Cui[2], Taku Demura[1], Satoko Yoshida[1] ([1]NAIST, [2]CAS, Kunming)	3aD-07 A novel function of CDKA in the 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.)
10:45	3aA-08 E Multi-Pipeline Iterations and Multi-Omics Resolve Annotation Stochasticity and Uncover Extensive Gene Repertoire in Angiosperms Chang-Hung Chen[1], Chia-Chang Lin[2], Meng-Ting Tsai[1,3], Shang-Che Kuo[4], Chia-Chen Chu[1,2], Yung-Chu Yang[1], Yi-Chen Wu[1], Jhong-He Yu[1], Pin-Chien Liou[1], Chen-Wei Hu[1,2], Jung-Chen Su[5], Ying-Hsuan Sun[6], Jo-Wei Allison Hsieh[7], Te-Lun Mai[2], Ying-Lan Chen[3,8], Ying-Chung Jimmy Lin[1,2,4] ([1]Institute of Plant Biology, College of Life Science, National Taiwan University, Taipei, Taiwan, [2]Department of Life Science, College of Life Science, National Taiwan University, Taipei , Taiwan, [3]Department of Biotechnology and Bioindustry Sciences, College of Bioscience and Biotechnology, National Cheng Kung University, [4]Genome and Systems Biology Degree Program, College of Life Science, Academia Sinica and National Taiwan University, Taipei, Taiwan, [5]Department of Pharmacy, College of Pharmaceutical Sciences, National Yang Ming Chiao Tung University, Taipei, Taiwan, [6]Department of Forestry, College of Agriculture and Natural Resources , National Chung Hsing University, Taichung , Taiwan, [7]Genome Center, University of California, Davis, Davis, CA, USA, [8]University Center of Bioscience and Biotechnology, National Cheng Kung University, Tainan, Taiwan)		3aC-08 E Identification of the Master Regulator Controlling Haustorium Development in the Hemiparasite *Phtheirospermum japonicum* Ninghui Zhao, Yanmei Li, Lei Xiang, Satoko Yoshida (Graduate School of Science and Technology, NAIST)	3aD-08 Visualization of depolymerizing microtubule ends in plant cells using animal-derived EML2-L Yukimi Kitashima[1], Haruka Ono[1], Naoki Minamino[2], Takashi Hotta[3], Takumi Higaki[1] ([1]Graduate School of Science and Technology, Kumamoto University, [2]Faculty of Science, Fukuoka University, [3]Comprehensive Cancer Center, University of New Mexico)

Room E	Room F	Room G	Room H	Room X	Room Y	Room Z	Time
Development / Morphogenesis	Photoreceptors / Photoresponses	Plant hormones / Signaling molecules	Environmental response B / Environmental stresses				
3aE-05 RGF8 peptide is required for orientation switch during early stage of lateral root primordium development Mitsuki Noda[1], Sanae Kaneta[2], Tatsuo Kakimoto[2] ([1]Sch. Sci., Univ. Osaka, [2]Grad. Sch. Sci., Univ. Osaka)	3aF-05 The chloroplast photorelocation movement regulator KAC forms dark-induced condensates Takeshi Higa, Noriyuki Suetsugu (Grad. Sch. Arts and Sci., Univ. Tokyo)	3aG-05 E Exploring the natural variations in strigolactone perception among different *Striga hermonthica* ecotypes Wen Wei Loh[1], Jia Xin Yap[2], Kakeru Shioya[1], Yuichiro Tsuchiya[1,2] ([1]Grad. Sch. Sci., Nagoya Univ., [2]ITbM, Nagoya Univ.)	3aH-05 Identification of the causal gene in *sensitive to long term heat 2* (*sloh2*) mutant of Arabidopsis Haruomi Yoshino[1], Yusuke Murakoshi[1], Ryo Yamaguchi[1], Akito Hosoi[2], Goro Masuda[2], Takamasa Suzuki[3], Izumi Yotsui[1], Yoichi Sakata[1], Teruaki Taji[1] ([1]Dept. of Bioscience, Tokyo Univ. of Agriculture, [2]NODAI Genome Research Center, [3]Dept. of Biological Chemistry, College of Bioscience and Biotechnology, Chubu Univ.)	Symposium S10 ASPB-JSPP Joint Symposium—Plant resilience and plasticity powered by dynamic cellular responses (9:00–11:00)			10:00
3aE-06 Mechanism maintaining the patterned expression of Arabidopsis *BEARSKIN1/2* in the outer root cap layers Tatsuaki Goh[1], Makoto Yamamoto[1], Yuri Kataoka[1], Koki Ueno[1], Akinori Fujimoto[1], Nobutoshi Yamaguchi[1], Shunsuke Miyashima[1,2], Keiji Nakajima[1] ([1]Grad. Sch. Sci. Tech., NAIST, [2]Inst. Biores, Engr., Ishikawa Pref. Univ.)	3aF-06 Analysis of the mechanism regulating guard cell-specific expression of *BLUS1*, an essential factor for blue light-dependent stomatal opening Ayuri Yamaguchi[1], Mika Nomoto[2,3], Hassan Nadeem[4], Diwaker Shukla[4], Yasuomi Tada[2,3], Juntaro Negi[5], Makoto Shirakawa[6,7], Atsushi Takemiya[8] ([1]Fac. Sci., Yamaguchi Univ., [2]Grad. Sch. Sci., Nagoya Univ., [3]Cent. Gene Res., Nagoya Univ., [4]Dept. Bioeng. • UIUC, [5]Grad. Sch. Sci., Kyushu Univ., [6]Grad. Sch. Biol. Sci., NAIST, [7]Academia Sinica, [8]Grad. Sch. Sci. Tech. Innov., Yamaguchi Univ.)	3aG-06 Regulation of strigolactone biosynthesis by PHR transcription factors in *Marchantia paleacea* Akiyoshi Yoda[1], Kyoichi Kodama[1], Takahito Nomura[2], Junko Kyozuka[1] ([1]Grad. Sch. of Life Sci., Tohoku Univ., [2]Ctr. of Biosci. Res. and Edu., Utsunomiya Univ.)	3aH-06 Elucidating the mechanisms of long-term heat tolerance in *Arabidopsis* via functional analysis of the *sensitive to long-term heat7* (*sloh7*) mutant Ririka Nosuga[1], Akito Hosoi[2], Takamasa Suzuki[3], Izumi Yotsui[1], Yoichi Sakata[1], Teruaki Taji[1] ([1]Dept. of Biosci., Tokyo Univ. of Agri., [2]NODAI Genome Research Center, [3]Dept. of Biological Chemistry, College of Bioscience and Biotechnology, Chubu Univ.)				10:15
3aE-07 E Regulatory mechanisms underlying stem cell maintenance in the *Arabidopsis* root cap Paktraporn Mekloy[1,2], Akie Shimotohno[1], Ye Zhang[2], Masaaki Umeda[2] ([1]ITbM, Nagoya Univ., [2]Grad. Sch. Sci. Tech., NAIST)	3aF-07 Photosynthesis-dependent stomatal opening mediated by sugars as mesophyll messengers Eigo Ando[1], Yuki Hayashi[1], Toshinori Kinoshita[1,2] ([1]Dep. Biol. Sci., Div. Nat. Sci., Grad. Sch. Sci., Nagoya Univ., [2]WPI-ITbM, Nagoya Univ.)	3aG-07 Studies on the sequence elements responsible for the long-distance transport of mRNAs Takumi Iwata[1], Kentaro Okada[2], Shiori Nagahara[1], Ken-ichi Kurotani[1], Nobuyoshi Mochizuki[1], Michitaka Notaguchi[1,2] ([1]Grad. Sch. Sci., Kyoto Univ., [2]Biosci and Biotech Center, Nagoya Univ.)	3aH-07 Analysis for molecular functions of plant progesterone receptor candidates 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. Bio., Univ. Kyoto, [2]RIKEN, CSRS, [3]Grad. Sch. Humanities and Sci., Univ. Ochanomizu, [4]Ctr. Bio., Univ. Utsunomiya, [5]KIBR, Yokohama City Univ., [6]Dept. Bio., Univ. Teikyo)				10:30
3aE-08 Analysis of the effects of haploidization on growth in *Arabidopsis thaliana* Takafumi Miyashita[1], Suzuka Kikuchi[2], Munetaka Sugiyama[3], Akitoshi Iwamoto[1,4] ([1]Dept. Biol. Sci., Grad. Sch. Sci., Kanagawa Univ, [2]Grad. Sch. Sci. and Technol. for Inov., Yamaguchi Univ, [3]Dept. Biol. Sci., Grad. Sch. Sci., Univ. Tokyo, [4]Dept. Biol. Sci., Fac. Sci., Kanagawa Univ)	3aF-08 E Analysis of evolutionary conservation of photosynthesis signaling mechanisms dependent on B4-Raf-like kinases in land plants Shota Yamauchi[1], Hayato Watanabe[1], Tomoki Kuribayashi[1], Hinano Takase[2], Kota Yamashita[2], Taishi Umezawa[2], Ryuichi Nishihama[1] ([1]Fac. Sci. Tech., Tokyo Univ. Sci., [2]Grad. Sch. BASE, Tokyo Univ. Agri. Tech.)	3aG-08 Elucidation of the catalytic mechanism of ABA2 and identification of its authentic reaction products in ABA biosynthesis Keisuke Fujiyama[1], Sayaka Yamada[2], Yuri Ozasa[2], Miu Sato[2], Mikiko Kojima[1], Yumiko Takebayashi[1], Yuri Kanno[1], Jun Takeuchi[3,4], Toshiyuki Ohnishi[3,4], Yasushi Todoroki[3], Masanori Okamoto[1] ([1]CSRS, RIKEN, [2]Grad. Sch. Integr. Sci. Technol., Shizuoka Univ., [3]Fac. of Agr., Shizuoka Univ., [4]RIGST, Shizuoka Univ.)	3aH-08 E The U1 snRNP component RBP45D regulates thermomorphogenesis through alternative splicing in Arabidopsis Geeng-Loo Chong, Ping Chang, Hsin-Yu Hsieh, Shih-Long Tu (Institute of Plant and Microbial Biology, Academia Sinica)				10:45

E=Presentation in English

● Day 3, Sun., March 15, PM (13:30–15:30)

Time	Room A	Room B	Room C	Room D
	Systems biology	Biomembrane / Ion and solute transport		Organelles / Cytoskeleton / Endomembrane system
13:30	3pA-01 Ⓔ Bootstrap-Like Degradome Profiling and Quantum Computing for Accurate Plant microRNA Target and Precursor Predictions Chih-Ling Huang, Yu-Ling Hung, Jia-Zhen Yu, Shih-Shun Lin (Institute of biotechnology, National Taiwan University)	3pB-01 Identification of critical residues required for polar localization of a rice manganese transporter, OsNramp5 Noriyuki Konishi, Jian Feng Ma (Okayama Univ. IPSR)		3pD-01 Regulation of NIP5;1 Polar Localization and Boron Transport Mechanism by Myosin XI Haiyang Liu[1], Keita Muro[2], Riku Chishima[1], Junpei Takano[2], Motoki Tominaga[1,3] ([1]Grad. Sch., Adv. Sci. Eng., Waseda Univ, [2]Grad. Sch., Agri., Osaka Metropolitan Univ., [3]Fac. Educ. Integrated Arts. Sci., Bio., Waseda Univ.)
13:45	3pA-02 Ⓔ Transposable elements drive evolution and perturb gene expression in *Brassica rapa* and *B. oleracea* Yao-Cheng Lin[1], Po-Xing Zheng[1], Chia-Ying Ko[1], Jheng-Yang Ou[1], Andrea Zuccolo[2] ([1]Agricultural Biotechnology Research Center, Academia Sinica, Taiwan, [2]Manash Kozybayev North Kazakhstan University, Kazakhstan)	3pB-02 Identification of ZIP Transporters for Zinc Uptake and Their Zinc-Dependent Vacuolar Trafficking in Arabidopsis Roots Masaya Neki[1], Nodoka Horikawa[2], Ayane Namiki[3], Sho Nishida[4,5], Junpei Takano[1,2,3] ([1]Department of Applied Biological Sciences, Faculty of Agriculture, Osaka Metropolitan University, [2]Graduate School of Life and Environmental Sciences, Osaka Prefecture University, [3]Osaka Prefecture University, Faculty of Life and Environmental Sciences, [4]Department of Biological Resource Sciences, Faculty of Agriculture, Saga University, [5]Kagoshima University Graduate School of Agricultural Sciences)		3pD-02 Functional analysis of Arabidopsis RABH1 GTPase Haruka Iwashita[1], Chihiro Ohori[2], Yoko Ito[3], Emi Ito[6,7], Akihiko Nakano[4,5], Takashi Ueda[6,7], 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]Science Tokyo, Institute of Integrated Research, [5]Live Cell Super-Resolution Imaging Research Team, RIKEN Center for Advanced Photonics., [6]Division of Cellular Dynamics, National Institute for Basic Biology., [7]The Department of Basic Biology, SOKENDAI.)
14:00		3pB-03 Degradation of structure variants of boric acid channels through the ERAD pathway in *Arabidopsis* Zhe Zhang[1,2], Sheliang Wang[2,3], Junpei Takano[1,2] ([1]Grad. Sch. Agr., OMU, [2]Grad. Sch. Life & Environ. Sci., OPU, [3]Coll. Resour. & Environ., HZAU)		3pD-03 Analysis of lipid signaling at the *trans*-Golgi network – How does phosphatidylinositol 4-phosphate (PI4P) function in the endomembrane system in plants? Yoko Hasegawa[1], Nelson Serre[1], Lise Noack[1], Matthieu Platre[1], Amélie Bernard[2], Yohann Boutté[2], Yvon Jaillais[1] ([1]Laboratoire Reproduction et Développement des Plantes (RDP), Université de Lyon, ENS de Lyon, UCB Lyon 1, CNRS, INRAE - France, [2]Laboratory of Membrane Biogenesis (LBM), CNRS/Université de Bordeaux - France)
14:15		3pB-04 Ⓔ Functional characterization of a tonoplast-localized aquaporin, OsTP2;1 in rice Jun Ge, Namiki Mitani, Jian Feng Ma (IPSR, Okayama Univ.)		3pD-04 Identification and functional significance of novel proteins localized to leaf lipid droplets Takashi L. Shimada[1,2], Yuto Omata[1], Yuya Iwai[2], Emi Mishiro-Sato[3], Keiko Kano[3], Haruko Ueda[4], Ikuko Hara-Nishimura[4] ([1]Fac. Hort., Chiba Univ., [2]Grad. Sch. Hort., Chiba Univ., [3]Nagoya Univ., [4]Konan Univ.)
14:30		3pB-05 Diverse Transport Properties and Expression Profiles of OsHKT1;1 Variants in Rice Shahin Imran[1], Shuntaro Ono[1], Rie Horie[2], Maki Katsuhara[1], Tomoaki Horie[2] ([1]Institute of Plant Science and Resources, Okayama University, [2]Faculty of Textile Science and Technology, Shinshu University)		3pD-05 Coupling Machine Learning with Genetics Reveals Physical Rules of Pyrenoid Phase Separation Koujiro Matsuo[1], Takashi Yamano[1,2] ([1]Grad. Sch. Biostudies, Kyoto University, [2]CeLiSIS, Kyoto University)
14:45		3pB-06 Ⓔ Functional Role of an Ion-Conducting Aquaporin, OsPIP2;4, in Ion Homeostasis and Salt Stress Response in Rice Plants Newton Chandra Paul[1], Tomoaki Horie[2], Maki Katsuhara[1] ([1]Institute of Plant Science and Resources, Okayama University, [2]Faculty of Textile Science and Technology, Shinshu University)		3pD-06 Identification of a novel factor required for nuclear anchoring against cytoplasmic streaming Kentaro Tamura[1], Mana Iwano[1], Naoya Kawahara[2], Yui Arahira[1], Tomoo Shimada[2] ([1]Sch. Food and Nutritional Sci., Univ. Shizuoka, [2]Grad. Sch. Sci., Kyoto Univ.)
15:00		3pB-07 Ⓔ Water and Ion Pathways in Ion-Conducting/Channel Aquaporins in Tomato PIP2s Fakhar Uddin Talukder, Maki Katsuhara (Institute of Plant Science and Resources, Okayama University)		3pD-07 Analysis of the function of graft-induced germin-like protein on plasmodesmata sealing during xylem development Shiori Nagahara[1], Yinhua Jin[2], Moe Mori[2], Kentaro Okada[3], Nobuyoshi Mochizuki[1], Ken-ichi Kurotani[1], Michitaka Notaguchi[1,2,3] ([1]Grad. Sch. Sci., Kyoto Univ., [2]Grad. Sch. Bioagri. Sci., Nagoya Univ., [3]Biosci. Biotech. Center, Nagoya Univ.)
15:15				3pD-08 Search for Novel Plasmodesmata-associated Genes through Gene Network Analysis Taisei Ohyama[1], Ken-ichi Kurotani[1], Shiori Nagahara[1], Michitaka Notaguchi[1,2] ([1]Grad. Sch. Sci., Kyoto Univ., [2]Biosci. Biotech. Ctr., Nagoya Univ.)

Room E	Room F	Room G	Room H	Room X	Room Y	Room Z	Time
		Plant hormones / Signaling molecules	Environmental response B / Environmental stresses				
		3pG-01 Analysis of crosstalk between ABA and GA via DELLA-GAF1 complex Nozomi Okonagi, Yuki Taninaga, Seitaro Nakabayashi, Yohsuke Takahashi, Jutarou Fukazawa (Grad. Sch. Int. Sci., Hiroshima Univ.)	3pH-01 Expression of a C-terminal truncated PICL protein in Escherichia coli for the structural analysis of the temperature-sensing protein PICL Shuta Imada[1], Takato Matumoto[1], Arisa Nakamura[2], Tuyosi Furumoto[1,2] ([1]Agr., Univ. Ryukoku, [2]Grad. Sch. Agr., Univ. Ryukoku)	Symposium S11 Next-Trend of Plant Biology in Japan and Taiwan (13:30-16:30)	Symposium S12 Recent Advances in the Regulation of Photosynthetic Electron Transport and the Roles of Alternative Electron Flows (13:30-16:30)		13:30
		3pG-02 Mechanism of DELLA-mediated transcriptional activation and growth inhibition via histone modification Hiroki Ando[1], Akira Nozawa[2], Hidetaka Kosako[3], Tatsuya Sawasaki[2], Yohsuke Takahashi[1], Jutarou Fukazawa[1] ([1]Grad. Sch. Int. Sci., Hiroshima Univ., [2]PROS, Ehime Univ., [3]IAMS, Tokushima Univ.)	3pH-02 The novel thermosensor protein PICL integrates and senses cytosolic redox levels and temperature information Takato Matsumoto, Tsuyoshi Furumoto (Grad. sch. Agri., Univ. Ryukoku)				13:45
		3pG-03 Ⓔ Role of NITRATE TRANSPORTER 1.5 in regulating auxin distribution in *Arabidopsis* roots Rubaet Sharmin Ema[1], Hayato Shinonaga[1], Ken-ichiro Hayashi[2], Masaaki Umeda[1] ([1]Grad. Sch. Sci. & Tech., NAIST, [2]Department of Bioscience, Okayama Univ. Sci.)					14:00
		3pG-04 The molecular mechanism of brassinosteroid responsive transcriptional activation via the novel factor BIL7 Kaisei Nishida[1], Yusuke Nakamura[1], Ayumi Yamagami[1], Takuya Miyakawa[1], Tadao Asami[2], Takeshi Nakano[1] ([1]Life Sci., Kyoto Univ., [2]KIBR, Yokohama City Univ)					14:15
		3pG-05 Functional analysis of TGA transcription factors in the moss *Physcomitrium patens* Hiroki Takauo, Teruaki Taji, Yoichi Sakata, Izumi Yotsui (Dept. of Biosci., Tokyo Univ. of Agri)					14:30
		3pG-06 Ⓔ Hyperactivated jasmonic acid signaling enforces plant–microbiome feedbacks in *Arabidopsis* Tung Tse Lu[1], Miguelito Isip[1], Chiao Jung Han[1], Hung Jui Shih[1], Lai Loi Trinh[1], Silvina Perin[2], Yu Chun Lin[3], Po An Lin[3], Ka-Wai Ma[1,3] ([1]Institute of Plant and Microbial Biology, Academia Sinica, Taipei, Taiwan., [2]Department of Plant Microbe Interactions, Max Planck Institute for Plant Breeding Research, Cologne, Germany., [3]Department of Entomology, National Taiwan University, Taipei, Taiwan.)					14:45
							15:00
							15:15

Ⓔ=Presentation in English

List of Chairpersons of Oral Presentations

Day 1 Fri., March 13, AM

1aA-01-1aA-12	Photosynthesis	Haruki Yamamoto Ritsuko Fujii Yuichi Fujita
1aB-01-1aB-12	Primary metabolism	Yushi Yoshitake Soichi Kojima Atsuko Miyagi
1aC-01-1aC-06	Specialized (secondary) metabolism	Yusuke Aihara Masami Hirai
1aD-01-1aD-12	Genome function/gene regulation	Koki Nakamura Takuya Sakamoto Eriko Sasaki
1aE-01-1aE-12	Development/Morphogenesis	Hatsune Morinaka Hiroyuki Koga Atsuko Kinoshita
1aF-01-1aF-12	New technology	Hiraku Suda Ayumu Takatsuka Masaki Odahara
1aG-01-1aG-12	Environmental response A/Physiological responses	Tatsuki Akabane Ken'ichi Ogawa Akie Shimotohno
1aH-01-1aH-12	Environmental response B/Environmental stresses	Fuminori Takahashi Yasunari Fujita Junya Mizoi

Day 1 Fri., March 13, PM

1pA-01-1pA-12	Photosynthesis	Kentaro Ifuku Yuki Okegawa Yoshifumi Ueno
1pB-01-1pB-09	Primary metabolism	Nozomu Sakurai Yuki Nakamura Yusuke Shikanai
1pC-01-1pC-12	Plant-organism interaction A	Yasuomi Tada Naoyoshi Kumakura Yoshiharu Mimata
1pD-01-1pD-10	Genome function/gene regulation	Taiji Kawakatsu Kyonoshin Maruyama Yukio Kurihara
1pE-01-1pE-12	Development/Morphogenesis	Momoko Ikeuchi Yukiko Yasui Miya Mizutani
1pF-01-1pF-04	New technology, Bioresources	Tsubasa Shoji
1pG-01-1pG-07	Environmental response A/Physiological responses	Shinya Yoshikawa Koji Takahashi
1pH-01-1pH-12	Environmental response B/Environmental stresses	Daisuke Todaka Takehito Inaba Hidetaka Ito

Day 2 Sat., March 14, AM

2aA-01-2aA-12	Photosynthesis	Makiko Aichi Yusuke Matsuda Ko Noguchi
2aB-01-2aB-11	Cell wall	Eri Kamon Emiko Okubo-Kurihara Toshihisa Kotake
2aC-01-2aC-12	Plant-organism interaction A	Shigeyuki Betsuyaku Shigetaka Yasuda Yasuhiro Kadota
2aD-01-2aD-11	Organelles/Cytoskeleton/Endomembrane system	Sho Fujii Juntaro Negi Tomohito Yamasaki
2aE-01-2aE-12	Development/Morphogenesis	Munetaka Sugiyama Tatsuaki Goh Yuuki Sakai

2aF-01-2aF-12	Reproduction	Ryusuke Yokoyama Tomoko Igawa Katsuyuki T. Yamato
2aG-01-2aG-06	Environmental response A/Physiological responses	Norihito Nakamichi Shoji Segami
2aH-01-2aH-12	Environmental response B/Environmental stresses	Akihisa Shinozawa Toshinori Kinoshita Fumiyuki Soma

Day 2 Sat., March 14, PM

2pA-01-2pA-06	Photosynthesis	Yoshitaka Nishiyama Yukako Hihara
2pB-01-2pB-04	Cell wall	Kentaro Okada
2pC-01-2pC-06	Plant-organism interaction B	Akihiro Yamazaki Hiromu Kameoka
2pD-01-2pD-06	Organelles/Cytoskeleton/Endomembrane system	Mitsuhiro Matsuo Takashi Hirayama Shoji Mano
2pE-01-2pE-06	Development/Morphogenesis	Hirotaka Kato Yoko Ikeda
2pF-01-2pF-06	Reproduction	Tetsuya Hisanaga Yusuke Kimata
2pG-01-2pG-06	Plant hormones/Signaling molecules	Shiori S. Aki Shuka Ikematsu Chihiro Furumizu
2pH-01-2pH-06	Environmental response B/Environmental stresses	Daisuke Shimamura Yoshiharu Y. Yamamoto

Day 3 Sun., March 15, AM

3aA-01-3aA-08	Systems biology	Koh Aoki Yuuki Kobayashi Takeshi Obayashi
3aB-01-3aB-07	Biomembrane/Ion and solute transport	Maki Katsuhara Noriyuki Konishi
3aC-01-3aC-08	Plant-organism interaction B	Momoko Takagi Hironori Kaminaka Hanna Nishida
3aD-01-3aD-08	Organelles/Cytoskeleton/Endomembrane system	Noriko Inada Takumi Higaki Yuki Sugiyama
3aE-01-3aE-08	Development/Morphogenesis	Sachihiro Matsunaga Tomoyuki Furuya Takashi Nobusawa
3aF-01-3aF-08	Photoreceptors/Photoresponses	Eigo Ando Shota Yamauchi Takeshi Higa
3aG-01-3aG-08	Plant hormones/Signaling molecules	Keita Tanaka Toshiaki Kozuka Masanori Okamoto
3aH-01-3aH-08	Environmental response B/Environmental stresses	Hideaki Iimura Takamasa Suzuki

Day 3 Sun., March 15, PM

3pA-01-3pA-02	Systems biology	Atsushi Fukushima
3pB-01-3pB-07	Biomembrane/Ion and solute transport	Akiko Maruyama Akira Yoshinari
3pD-01-3pD-08	Organelles/Cytoskeleton/Endomembrane system	Shiori Nagahara Takashi Yamano Kentaro Tamura
3pG-01-3pG-06	Plant hormones/Signaling molecules	Izumi Yotsui Jutarou Fukazawa
3pH-01-3pH-02	Environmental response B/Environmental stresses	Satoshi Kidokoro

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 10, 9:00 a.m. - March 15), 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.

- Presentations submitted for the PCP Poster Award are indicated by adding P to their presentation numbers in the poster presentation program. Additionally, a special mark is placed on the number cards of the posters to signify their submission for the award.

- Schedule

Presentation No. / place	1P001–1P196 / Sports Room (B3F) 1P197–1P260 / Multi-purpose Sports Room (B2F)	2P001–2P196 / Sports Room (B3F) 2P197–2P268 / Multi-purpose Sports Room (B2F)
Mounting	March 13　9:00–12:30	March 14　10:30–12:00
Discussion	March 13 Odd numbers 17:30–18:15 Even numbers 18:15–19:00	March 15 Odd numbers 11:00–11:45 Even numbers 11:45–12:30
Removal	March 14　9:00–10:30	March 15　15:00–16:30

• 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

1P001 P State transitions, as acclimation to light fluctuations in the ocean
Masato Kubota[1,2], Asako Ishii[1], Chiyo Noda[1], Eunchul Kim[3], Makio Yokono[1,2], Jun Minagawa[1,2] ([1]National Institute for Basic Biology, [2]The Graduate University for Advanced Studies, SOKENDAI, [3]College of Humanities and Sciences , Nihon University)

1P002 P Heterogenous energy transfer in photosynthetic antenna complexes revealed by single-molecule time-resolved fluorescence spectroscopy
Shinnosuke Masuda[1,2,3], Mai Watanabe[4], Toru Kondo[1,2,3] ([1]SOKENDAI, [2]NIBB, [3]ExCELLS, [4]Grad. Sch. of Science, Tokyo Metropolitan Univ.)

1P003 P Characterization of early light-induced protein (ELIP) in overwintering evergreen leaves of *Taxuscuspidata* and *Euonymus fortunei*
Peiyuan Li[1,2], Kanoko Shimohara[1,2], Junko Kishimoto[1], Kiyomi Ono[1], Zihao Ye[1,2,3], Seiji Akimoto[4], Atsushi Takabayashi[1], Ryouichi Tanaka[1] ([1]Inst Low Temp Sci, Hokkaido Univ, [2]Grad Sch Env Sci, Hokkaido Univ, [3]Huazhong Agricultural Univ, [4]Grad Sch Sci, Kobe Univ)

1P004 Comparison of winter photochemical responses in nine evergreen species growing in the Hokkaido University Botanical Garden
Azusa Ito[1,2], Konoha Ueda[1,2], Enis Koçmer[1,2], Peiyuan Li[1,2], Zihao Ye[1,2,3], Mitsutoshi Kitao[4], Takayuki Azuma[5], Junko Kishimoto[1], Kiyomi Ono[1], Ryouichi Tanaka[1] ([1]Inst. Low Temp. Sci., Hokkaido Univ., [2]Grad. Sch. Env. Sci., Hokkaido Univ., [3]Huazhong Agricultural Univ., [4]FFPRI, Hokkaido Res. Sta., [5]Field Sci. Ctr. N. Biosphere, Hokkaido Univ.)

1P005 P A mutation that enhances PSII water oxidation: mechanistic insights and *in vivo* validation
Ko Imaizumi[1], Shin-ichi Arimura[2], Taishi Nishimura[3], Ryo Nagao[4,5], Keisuke Saito[6,7], Takeshi Nakano[3], Hiroshi Ishikita[6,7], Takumi Noguchi[4], Kentaro Ifuku[1] ([1]Grad. Sch. Agric., Kyoto Univ., [2]Grad. Sch. Agric. Life Sci., Univ. Tokyo, [3]Grad. Sch. Biostudies, Kyoto Univ., [4]Grad. Sch. Sci., Nagoya Univ., [5]Fac. Agric., Shizuoka Univ., [6]RCAST, Univ. Tokyo, [7]Dept. Appl. Chem., Univ. Tokyo)

1P006 P An Integrated Pipeline for Achieving High-Resolution Cryo-EM Analysis of Photosystems
Zitong Yang[1,2], Raymond N. Burton-Smith[3], Asako Ishii[4], Shinsa Kameo[1,2], Soichiro Seki[5], Minoru Kumazawa[1], Genji Kurisu[5], Ryouichi Tanaka[1,2], Makio Yokono[4], Jun Minagawa[4], Kazuyoshi Murata[3], Akihiro Kawamoto[5], Atsushi Takabayashi[1,2] ([1]ILTS, Hokkaido Univ., [2]Grad. Env. Sci., Hokkaido Univ., [3]ExCELLS, NINS, [4]NIBB, NINS, [5]IPR, Univ. Osaka)

1P007 P Development of a Novel Method for Evaluating Cyclic Electron Transport Using Isolated Thylakoids Based on pH Changes
Keiichiro Tanigawa[1], Kazuhiko Sugimoto[2], Masaru Kono[3], Wataru Yamori[1], Ichiro Terashima[2] ([1]Grad. Sch. Agri., the Univ. Tokyo, [2]Natl. Chung Hsing Univ., [3]Astrobiology Center, Natl. Inst. Nat. Sci.)

1P008 Enhanced Photosynthetic Efficiency of Freshwater Cyanobacteria in Seawater Cultivation
Kaisei Kurosaki[1], Masahiro Karikomi[2], Takashi Osanai[1] ([1]Fac. Agr., Meiji Univ., [2]Grad. Sch. Agr., Meiji Univ.)

1P009 P Responses of a cyanobacterium *Halomicronema hongdechloris* to different light qualities: white-light-adapted cells vs far-red-light-adapted cells
Zhe Wang[1], Yipeng Wang[1], Toshiyuki Shinoda[2], Tatsuya Tomo[2], Seiji Akimoto[1] ([1]Grad. Sch. Sci., Kobe Univ., [2]Grad. Sch. Sci., Tokyo Univ. Sci.)

1P010 P Light-responsive proton translocation across the cytoplasmic membranes regulates intracellular pH and metabolism in cyanobacteria
Akito Machida[1], Akane Echigo[2], Kumiko Kondo[3], Toru Hisabori[3,4,5], Shinji Masuda[1] ([1]Dept. Life Sci. & Tech., Science Tokyo, [2]Dept. Life Sci. & Tech., Tokyo Inst. Tech., [3]Lab. Chem. & Life Sci., IIR, Tokyo Inst. Tech., [4]Res. Inst. Integr. Sci., Kanagawa Univ., [5]SOKENDAI)

1P011 P Responses of nitrogenase to oxygen in the nitrogen-fixing cyanobacterium *Leptolyngbya boryana*: Induction and short oxygen exposure
Sara Bakri, Hiroya Kotani, Mari Banba, Haruki Yamamoto, Kazuma Uesaka, Yuichi Fujita (Grad. School. Bioagricultural Sci., Nagoya Uni)

1P012 Structure of the PSII assembly intermediate accumulated in the *ctpA*-deficient *Synechocystis* sp. PCC6803 mutant
Keiko Yokoi, Masato Akutsu, Noritoshi Inagaki (NARO RCAA)

1P013 Isolation and characterization of oxygen-evolving photosystem II complexes from a glaucophyte *Cyanophora paradoxa*
Yoshifumi Ueno, Tatsuya Tomo (Inst. Arts Sci., Tokyo Univ. Sci.)

1P014 Effects of canthaxanthin substitution for β-carotene on photosystem II in *Synechocystis* sp. PCC6803
Takanori Fukasawa, Ryo Nagao (Grad. Sch. Integrated Sci. & Tech., Shizuoka Univ.)

1P015 Effects of exogenous reductants on the donor side of PSII in cyanobacteria
Kokoa Mukouyama[1], Mayuko Oshiumi[2], Hisako Kawai-Kubota[3], Rimi Koyama[1], Naoki Mizusawa[1,4] ([1]Fac. Biosci. Appl. Chem., Hosei Univ., [2]Grad. Sch. Sci. Eng., Hosei Univ., [3]Fac. Sci., Yamagata Univ., [4]Res. Micro-Nano Tech, Hosei Univ.)

1P016 Isolation and characterization of an active dimeric photosystem II complex that retains three extrinsic proteins from *Synechocystis* sp. PCC 6803

Mayuko Oshiumi[1], Kazuna Tanemura[1], Hisako Kawai-Kubota[2], Rimi Koyama[3], Naoki Mizusawa[1,3,4] ([1]Grad. Sch. Sci. Eng, Hosei Univ., [2]Fac. Sci., Yamagata Univ., [3]Fac. Biosci. Appl. Chem., Hosei Univ., [4]Res. Micro-Nano Tech, Hosei Univ.)

1P017 Changes in Time-Resolved Fluorescence Spectra of Land Plants, Induced by an Excitation Laser with Different Intensities

Sakura Iga[1], Seiji Akimoto[1,2] ([1]Fac. Sci. Kobe Univ., [2]Grad. Sch. Sci. Kobe Univ.)

1P018 Cryo-EM structure of the PSI–LHCI supercomplex from a freshwater green alga *Raphidocelis subcapitata*

Yaoting Guo, Pi-Cheng Tsai, Haowei Jiang, Fusamichi Akita, Jian-Ren Shen (Advanced Research Field, Research Institute for Interdisciplinary Science, and Graduate School of Environmental, Life, Natural Science and Technology, Okayama University, Okayama, Japan.)

1P019 Marimo (*Aegagropila brownii*) Spherical Aggregates Are Nearly Anoxic Under Calm Conditions: Field Dissolved Oxygen Measurements and Reoxygenation Responses

Masaru Kono[1,2], Keisuke Yoshida[2], Yoichi Oyama[3] ([1]ABC, [2]Dept. Life Sci & Tech., Science Tokyo, [3]Kushiro City Board of Education)

1P020 Distribution of Iron among Protein Complexes in Thylakoid Membrane of the Barley Cultivar 'Sarab-1' and Redistribution of Iron under Iron-Deficient Conditions

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

1P021 Charge separation reaction proceeding in the core complex of photosynthetic reaction center from the green sulfur bacterium *Chlorobaculum tepidum*

Tomomi Inagaki[1], Takeru Kawakami[2], Kazuki Terauchi[1], Chihiro Azai[2] ([1]Graduate School of Life Sciences, Ritsumeikan University, [2]Graduate of Science and Engineering, Chuo University)

1P022 Structural changes caused by replacing Ca with Yb in the manganese cluster of photosystem II

Takeru Kanda[1], Yoshiki Nakajima[2], Jian-Ren Shen[2] ([1]Graduate School of Environmental, Life, Natural Science and Technology, Okayama University, [2]Research Institute for Interdisciplinary Science, Okayama University)

1P023 Structural basis of formate-induced inhibition on the acceptor side of photosystem II

Ayana Nishitani[1], Jian-Ren Shen[2], Ryo Nagao[3], Yoshiki Nakajima[2] ([1]Department of Biology Faculty of Science, Okayama University, [2]Research Institute for Interdisciplinary Science, Okayama University, [3]Faculty of Agriculture, Shizuoka University)

1P024 Evaluation of interspecific genetic potential of different cultivars of canola (*Brassica napus* L.) using RNA-Seq analysis and measurement of chlorophyll fluorescence under the influence of NaCl salinity stress

Mobina Ulfat[1], Habib-ur-Rehman Athar[2], Sarah Ambreen[2], Hazem M. Kalaji[3] ([1]Lahore College for Women University, Lahore, Pakistan, [2]Bahauddin Zakria University, Multan, Pakistan, [3]Warsaw University of Life Sciences SGGW, Warsaw, PL)

1P025 Contribution of the mitochondrial respiratory chain to sustaining the CO_2 assimilation rate

Tatsuhisa Konishi, Yusuke Mizokami, Ko Noguchi (Grad. Sch. Life Sci., Univ. Pharm. and Life Sci.)

1P026 The Plastid Terminal Oxidase (PTOX) participates in stomatal dynamics regulation in *Arabidopsis thaliana*

Pablo Ignacio Calzadilla[1,2], Clara Sotos[1], Giles N. Johnson[2], Anja Krieger-Liszkay[1] ([1]Institute for Integrative Biology of the Cell (I2BC), Université Paris-Saclay, CEA, CNRS, Gif-sur-Yvette cedex 91198, France., [2]Department of Earth and Environmental Sciences, Faculty of Science and Engineering, University of Manchester, Manchester M13 9PT, United Kingdom.)

1P027 Development of a Measurement and Data Analysis System for Photosynthetic Electron Transport

Kazuhiko Sugimoto, Ichiro Terashima (Inst. Mol. Biol., National Chung Hsing University)

1P028 Investigation of PIFI's role in redox regulation of chloroplast NDH activity

Kenta Miura[1], Minami Murai[1], Ko Imaizumi[1], Keisuke Yoshida[2], Toru Hisabori[3,4], Kaori Kohzuma[1], Kentaro Ifuku[1] ([1]Grad. Sch. Agric., Kyoto Univ., [2]CLS, Science Tokyo, [3]SOKENDAI, [4]Kanagawa Univ.)

1P029 Redox-Based Deactivation of Photosynthetic Enzymes: Emerging Mechanisms and Implications

Keisuke Yoshida[1], Yuka Fukushi[1], Jun Inaba[1], Masaru Kono[1,2], Toru Hisabori[3,4] ([1]CLS, Sci. Tokyo, [2]ABC, [3]SOKENDAI, [4]Kanagawa Univ.)

1P030 The Involvement of Light-Harvesting Complex I in Photosystem I Photoprotection in *Arabidopsis thaliana*

Daisuke Takagi, Aya Kishie (Fac. Agric.)

■ Primary metabolism

1P031 P Exploring the Role of Tomato SWEET Sugar Transporters in Seed Development and Oil Accumulation

Han-Yu Ko[1,2], Yuki Nakamura[1], Woei-Jiun Guo[2] ([1]RIKEN Center for Sustainable Resource Science (CSRS), Yokohama, Japan, [2]Department of Biotechnology and Bioindustry Sciences, National Cheng Kung University, Tainan City 7013, Taiwan)

1P032 P Analysis of Influence on Nitrogen Use Efficiency at Vegetative Growth of Chromosomal Regions Related to the Steeper Leaf Nitrogen Gradient of a Super-High-Yielding Rice Cultivar "Takanari"

Wataru Kikuchi, Yusuke Murata, Leo Takabatake, Hiroyuki Ishida (Grad. Sch. Agri. Sci., Tohoku Univ.)

1P033 Integrated analysis of sink-to-source transition in soybean leaves using ^{14}C tracing and RNA-seq

Ai Soma[1], Ryohei Sugita[2], Yuko Kurita[1], Natsuko I. Kobayashi[1], Tomoko. M Nakanishi[1], Keitaro Tanoi[1,3] ([1]Graduate School of Agricultural and Life Sciences, The University of Tokyo, [2]Radioisotope Research Center, Nagoya University, [3]Fukushima Institute for Research, Education and Innovation)

1P034 AckA-dependent carbon allocation supports photomixotrophic growth in *Synechocystis* sp. PCC 6803

Sara Horibe (Sch. Agric., Meiji Univ.)

1P035 High-level production of aromatic compounds in *Synechococcus* sp. PCC 7002 using environment-responsive expression control

Kenya Tanaka[1,2,3], Akihiko Kondo[2], Tomohisa Hasunuma[1,3,4,5] ([1]EGBRC, Kobe Univ., [2]Grad. Sch. Eng. Sci. RCSEC, [3]Grad. Sch. Sci. Technol. Innov., Kobe Univ., [4]CSRS, Riken, [5]Grad. Sch., Eng., Kobe Univ.)

1P036 Comparative analysis of hydrogen productivity in cyanobacterial mutants with alternative nitrogenase expression

Takeshi Sato[1,2], Souhei Taniguchi[3], Kazuhito Inoue[1,2] ([1]Res. Inst. Integr. Sci., Kanagawa Univ., [2]Dept. Biochem. Biotech., Kanagawa Univ., [3]Dept. Biol. Sci., Kanagawa Univ.)

■ Specialized (secondary) metabolism

1P037 P Discovery of *O*-Methyltransferase Genes Involved in Asarone Biosynthesis in *Acorus calamus* L.

Oyundari Ganbat[1], Bolortuya Ulziibat[2], Takumi Ogawa[1], Takao Koeduka[3], Atsushi Okazawa[1] ([1]Graduate School of Agriculture, Osaka Metropolitan University, [2]Department of Research and R&D Policy, Mongolian Academy of Sciences, [3]Graduate School of Science and Technology for Innovation, Yamaguchi University)

1P038 P Characterization of tomato high sugar mutant *hs1*

Misaki Kobayashi[1], Shaoze Yuan[1], Islam M. Y. Abdellatif[1,2], Siyan Xu[1], Tohru Ariizumi[1,3], Hiroshi Ezura[1,3], Kenji Miura[1,3] ([1]Grad. Sci. Life & Earth Sci., Univ. Tsukuba, [2]Univ. Minia, [3]Tsukuba-Plant Innovation Research Center)

1P039 P Dynamic Cluster Evolution and Conserved Regulatory Control of Diterpene Biosynthesis Across the *Oryzoideae*

Youming Liu[1], Shiho Tomiyama[1], Ikuya Motegi[1], Naoki Yamamoto[2], Koji Miyamoto[3], Yoshimasa Tsujii[4], Hiroyasu Furuumi[5], Yutaka Sato[5], Masaki Mori[6], Hideaki Nojiri[1], Kazunori Okada[1] ([1]Graduate School of Agricultural and Life Sciences, the University of Tokyo, Tokyo, Japan, [2]College of Life Science, China West Normal University, Nanchong, China, [3]Graduate School of Science and Engineering, Teikyo University, Utsunomiya, Japan, [4]Faculty of Applied Bioscience, Tokyo University of Agriculture, Tokyo, Japan, [5]National Institute of Genetics, Mishima, Japan, [6]Institute of Agrobiological Sciences, NARO, Tsukuba, Japan)

1P040 Analysis of the Process of Cellular "Metabolic" Differentiation in *Catharanthus roseus*

Mai Uzaki[1], Ayako Kawamura[1], Hatsune Morinaka[1], Matt Stata[2], Kotaro Yamamoto[3], Rhee Seung[2], Keiko Sugimoto[1], Masami Y. Hirai[1,4] ([1]RIKEN CSRS, [2]Plant Resilience Institute, Michigan State University, [3]Sch. Sci., Yokohama City Univ., [4]Grad. Sch. Agricul. Sci., Nagoya Univ.)

1P041 Metabolic Engineering of *Synechococcus elongatus* PCC 7942 for Biosynthesis of the Plant Monoterpenoid Geraniol

Kaushalya Dayarathne, Toshiki Ishikawa, Maki Kawai-Yamada (Grad. Sch. Sci. & Eng., Univ. Saitama)

1P042 Elucidation of the Regulatory Mechanism of Phytoalexin Production in Rice Under Light and Dark Conditions

Yumi Oshima[1], Emi Yumoto[2], Koji Miyamoto[1,2] ([1]Grad. Sch. Sci. Eng. Teikyo Univ., [2]Adv. Instrum. Anal. Cent., Teikyo Univ.)

1P043 Exploring the potential of rice allelopathy on sustainable agriculture

Meng-Chun Lin[1], Feng-Yin Su[1], Yu-Ting Su[1], Yi-Jhen Hong[1], You-Ming Liu[2], Kazunori Okada[2] ([1]Department of Agronomy, National Chiayi University, [2]Agro-Biotechnology Research Center, the University of Tokyo)

1P044 Production of β-Amyrin Using a Transient Expression System in *N. benthamiana*

Mei Takasugi[1], Yuriko Nagai[2], Much Z. Fanani[3], Hikaru Seki[3,4], Kenji Miura[1,2] ([1]Bio. Sci., Univ. Tsukuba, [2]T-PIRC, Univ. Tsukuba, [3]Grad. Sch. Eng., Univ. Osaka, [4]OTRI, Univ. Osaka)

1P045 [Cancelled]

1P046 Establishment of a distribution atlas of triterpenoid saponins in *Luffa aegyptiaca*

Sakura Masuda[1], Takumi Ogawa[1,2], Naoya Ogawa[3], Kentaro Takahama[3], Atsushi Okazawa[1,2] ([1]Sch. Agric., Osaka Met. Univ., [2]Grad. Sch. Agric., Osaka Met. Univ., [3]Tech. Center, Nagoya Univ.)

1P047 Phytochemical characterization of *Ludisia discolor* roots and stems and evaluation of their antioxidant and anti-inflammatory properties

Cheng-Sin Lin[1], Tsong-Long Hwang[2], Sio-Hong Lam[3], Wen-Chieh Tsai[1] ([1]Inst. Trop. Plant Sci. & Microbiol., Natl. Cheng Kung Univ., Tainan, Taiwan, [2]Grad. Inst. Health Ind. Tech., Coll. Human Ecol., Chang Gung Univ. Sci. & Tech., Taoyuan, Taiwan, [3]Dept. Pharm., Coll. Med., Natl. Cheng Kung Univ., Tainan, Taiwan)

1P048 Investigation of the biosynthetic pathway of saclipins, UV-absorbing compounds in *Aphanothece sacrum*

Yoshie Uchida, Hakuto Kageyama (Grad. Sch. Environ. Hum. Sci., Meijo Univ.)

1P049 The environmental stress response of a novel mycosporine-like amino acid in the cyanobacterium *Gloeocapsa* sp. BRSZ strain

Taiki Aono[1], Sasiprapa Samsri[2], Rungaroon Waditee-Sirisattah[2], Hakuto Kageyama[1] ([1]Grad. Sch. Env. Hum. Sci., Meijo Univ., [2]Chulalongkorn Univ.)

1P050 Functional Characterization of GlcHMS326, a Novel Mycosporine-Like Amino Acid from a Cyanobacterium *Gloeocapsa* sp. BRSZ

Erika Katayama[1], Taiki Aono[1], Tomoki Tsuboi[1], Samsri Sasiprapa[2], Waditee-Sirisattha Rungaroon[2], Hakuto Kageyama[1] ([1]Grad. Sch. Env. Hum. Sci., Meijo Univ., [2]Chulalongkorn Univ.)

■ Biomembrane/Ion and solute transport

1P051 Functional characterization of a flavin transporter in plants

Rui Shibata, Takanori Maruta, Takahiro Ishikawa, Takahisa Ogawa (Grad. Sch. Nat. Sci. Technol., Shimane Univ.)

1P052 Phenotypic characterization of Arabidopsis mutants lacking four paralogs of the heme-specific ABC transporter functioning in plastids

Mayo Ota[1], Yuma Yoshioka[2], Kohji Nishimura[3], Mihoko Takenoya[4], Hiromitsu Tabeta[5], Mikiko Kojima[5], Muneo Sato[5], Shinji Masuda[6], Masami Y. Hirai[5], Hitoshi Sakakibara[5,7], Takaaki Miyaji[2,8], Tatsuru Masuda[4], Takayuki Shimizu[1] ([1]Faculty of Science, Nara Women's University, [2]Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama University, [3]Faculty of Life and Environmental Sciences, Shimane University, [4]Graduate School of Arts and Sciences, The University of Tokyo, [5]RIKEN Center for Sustainable Resource Science, [6]Department of Life Science and Technology, Institute of Science Tokyo, [7]Graduate School of Bioagricultural Sciences, Nagoya University, [8]Advanced Science Research Center, Okayama University)

1P053 Application of NanoSIMS to investigate the mechanism of iron transport and homeostasis through high-resolution localization of nicotianamine

Tomoko Nozoye[1,2], Miyuki Takeuchi[3], Fabian Hollmann[4], Stephan Clemens[4] ([1]Meiji Gakuin University, Center for Liberal Arts, [2]The University of Tokyo, Department of Global Agricultural Sciences, Laboratory of Plant Biotechnology, [3]The University of Tokyo, Graduate School of Agricultural and Life Sciences, Department of Biomaterial Sciences, [4]University of Bayreuth, Department of Plant Physiology, Bayreuth, Germany)

1P054 Spatiotemporal analysis of calcium transport into tomato fruits using real-time ^{45}Ca monitoring

Takuma Hirashima[1], Yusuke Shikanai[1], Yong-Gen Yin[2], Nobuo Suzui[2], Mitsutaka Yamaguchi[2], Yuto Nagao[2], Akihiro Saito[1], Naoki Kawachi[2,3], Kyoko Higuchi[1] ([1]Tokyo University of Agriculture, [2]The Takasaki Institute for Advanced Quantum Science, National Institutes for Quantum Science and Technology (QST), [3]Fukushima Institute for Research, Education and Innovation)

1P055 P Phosphate starvation-induced CORNICHON HOMOLOG 5 as endoplasmic reticulum cargo receptor for PHT1 transporters in *Arabidopsis*

Chang-Yi Chiu[1], Cheng-Da Tsai[1], Jhih-Yi Wang[1], Alastair J. McGinness[2], Satomi Kanno[3], Verena Kriechbaumer[2], Tzu-Yin Liu[1,4] ([1]Institute of Bioinformatics and Structural Biology, College of Life Sciences and Medicine, NTHU, [2]Endomembrane Structure and Function Research Group, School of Biological and Medical Sciences, Oxford Brookes University, Headington, Oxford OX3 0BP, UK, [3]Institute for Advanced Research, NAIAS, Nagoya University, Fro-cho, Chikusa-ku, Nagoya, Japan, [4]Department of Life Science, College of Life Sciences and Medicine, National Tsing Hua University, Hsinchu 30013, Taiwan)

1P056 P A genome-wide association study identifies a novel nitrate transporter that regulates leaf nitrate distribution

Meng-Jia Wang[1,2], Yi-Fang Tsay[2] ([1]Molecular and Cell Biology, Taiwan International Graduate Program, Academia Sinica, National Defense Medical University, Taipei 114201, Taiwan, [2]Institute of Molecular Biology, Academia Sinica, Taipei 11529, Taiwan)

■ Organelles/Cytoskeleton/Endomembrane system

1P057 P Functional characterization of a root cap–specific myosin XI in *Arabidopsis thaliana*

Kohei Tachibana[1,2], Keigo Ito[2], Yusaku Inaba[2], Syun Ohata[2], Akiho Kibukawa[2], Yukinori Nishigami[3], Tatsuaki Goh[4], Keiji Nakajima[4], Motoki Tominaga[1,2] ([1]Fac. Educ. Integrated Arts. Sci., Bio., Waseda Univ., [2]Grad. Sch., Adv. Sci. Eng., Waseda Univ., [3]Res. Inst. Elec. Sci., Hokkaido Univ., [4]Grad. Sch. Sci. Tech., NAIST)

1P058 P Functional analysis of Syntaxin 6-like protein in vascular plants (SYLK) localized to the Golgi apparatus

Sara Tode[1], Emi Ito[2,3], Yoko Ito[4], Yutaro Shimizu[5], Wataru Yamori[6], Naoya Katsuhama[6], Kei Hiruma[7], Akihiko Nakano[8,9], Tomohiro Uemura[1,10] ([1]Grad. Sch. Humanities and Sciences, Ochanomizu Univ., [2]Division of Cellular Dynamics, National Institute for Basic Biology, [3]The Department of Basic Biology, SOKENDAI, [4]IHLS., Ochanomizu Univ., [5]LBM, UMR5200 CNRS/Bordeaux Univ.,, [6]ISAS, Univ. Tokyo, [7]Grad. Sch. Arts and Sciences, Univ. Tokyo, [8]Science Tokyo, Institute of Integrated Research, [9]Faculty of Core Research, Natural Science Div., Ochanomizu Univ., [10]Faculty of Core Research, Natural Science Div., Ochanomizu Univ.)

1P059 P Involvement of PHOSPHATE TRANSPORTER TRAFFIC FACILITATOR1 in COPII assembly by interacting with SAR1 GTPase

Hui-Fang Anne Lung (Institute of Bioinformatics and Structural Biology, National Tsing Hua University (NTHU), Taiwan)

1P060 P Roles of the Sec1/Munc18 protein VPS45 and the Qa-SNARE protein SYP4 in auxin-related development in Arabidopsis thaliana

Kosuke Ogita[1], Narumi Fukasawa[1], Ruian Wang[1], Tomohiro Uemura[2], Hirokazu Tanaka[1] ([1]Life Sci, Grad. Agriculture, Meiji Univ., [2]Natural Sci Div, Core Research, Ochanomizu Univ.)

1P061 P Integrated Pipeline for Pyrenoid Biogenesis: Combining Live Imaging, Computational Modeling, and AI-Driven Screening

Koujiro Matsuo[1], Takashi Yamano[1,2] ([1]Graduate School of Biostudies, Kyoto University, [2]Center for Living Systems Information Science (CeLiSIS), Kyoto University)

1P062 P Analysis of the regulatory mechanism of chloroplast development by a brassinosteroid signaling factor BPG4 via its disulfide bond

Chihiro Ujihara[1], Shunshu Ri[1], Takao Ohashi[1], Ryo Tachibana[2], Ayumi Yamagami[1], Takuya Miyakawa[1], Takeshi Nakano[1] ([1]Grad. Sch. Biostudies, Kyoto Univ., [2]University of Cambridge)

1P063 Fruits quality and photosynthesis related genes analysis of *BPG4-KO* tomato; BPG4 is a chloroplast regulating factor in Brassinosteroid signaling

Shunshu Ri[1], Chihiro Ujihara[1], Ryo Tachibana[2], Ayumi Yamagami[1], Magdalena Rossi[3], Koichi Sugimoto[4], Hiroshi Ezura[4], Takeshi Nakano[1] ([1]Grad. sch. Biostudies., Kyoto univ., [2]Univ. Cambridge, [3]Univ. San Paulo, [4]Grad. sch. Bioindustrial Sci., Tsukuba univ.)

1P064 Introduction of regioselective bacterial heme oxygenases into *Arabidopsis hy1-1* supports the retrograde heme signaling hypothesis

Mihoko Takenoya[1], Takayuki Shimizu[2], Keita Miyake[1], Tatsuru Masuda[1] ([1]Grad. Sch. Arts Sci., Univ. Tokyo, [2]Fac. Div. Nat. Sci., Nara Women's Univ.)

1P065 Functional analysis of a heme speicfic transporter localized at chloroplast envelope membrane in *Marchantia polymorpha*

Mihoko Takenoya[1], Noriyuki Suetsugu[1], Takayuki Shimizu[2], Yingxi Chen[1], Yuuma Yosioka[7], Takaaki Miyaji[3,7], Koji Nishimura[4], Hitoshi Sakakibara[5,6], Mikiko Kojima[5], Yumiko Takebayashi[5], Masami Y. Hirai[5], Hiromitsu Tabeta[5], Muneo Sato[5], Keita Miyake[1], Tatsuru Masuda[1] ([1]Grad. Sch. Arts Sci., Univ. Tokyo, [2]Fac. Div. Nat. Sci., Nara Women's Univ., [3]Grad. Sch. Med. Dent Pharm Sci., Okayama Univ., [4]Fac. Life. Env. Sci., Shimane Univ., [5]Cen. Sus. Sci., RIKEN, [6]Grad. Sch. Bioagri Sci., Nagoya Univ., [7]Adv Sci Res Ctr, Okayama Univ.)

1P066 Functional dissection of *MYB*-related transcription factors in chloroplast biogenesis during de-etiolation

Ryo Tachibana, Kumari Billakurthi, Julian M. Hibberd (Dep. Plant Sciences, Univ. Cambridge)

1P067 Marchantia DPD1-MutS protein degrades organelle DNA in Arabidopsis pollen

Tsuneaki Takami, Wataru Sakamoto (IPSR, Okayama Univ.)

1P068 The SGR1 G139S mutation suppresses multiple phenotypes of the *egy1* mutant

Yuki Karasaki, Kenta Maezaka, Yang Fee Kim, Yusuke Kato (Fac. Agric., Setsunan Univ.)

1P069 Intracellular distribution and differentiation status of plastids in rice gametes and developing zygotes

Riho Tomishima[1], Yumi Goto[2], Aya Satoh[1], Mayuko Sato[2], Moe Honda[3], Hiroyuki Tsuji[3,4], Kiminori Toyooka[2], Takashi Okamoto[1] ([1]Grad. Sch. Sci., Tokyo Metropolitan Univ., [2]RIKEN CSRS, [3]KIBR., Yokohama City Univ., [4]Biosci. Biotech Ctr., Nagoya Univ.)

1P070 The role of osmoregulation of amyloplasts in gravity sensing in Arabidopsis thaliana

Atsushi Togaki[1], Chikako Tanaka[1], Kanako Yamasaki[1], Yuki Sakamoto[2], Yoko Ishizaki[1], Takashi Shina[1] ([1]Fac. Agric., Setsunan Univ, [2]Fac. Sci., Shinshu Univ)

■ Cell wall

1P071 P Survey of Novel Transcription Factors Regulating Tension Wood Formation in Hybrid Aspen

Mizuho Kanie[1], Katsuhiro Tokita[2], Ryosuke Sano[2], Taku Demura[2], Naoki Takata[3], Misato Ohtani[1,2] ([1]Grad. Sch. Sci., Univ. Tokyo, [2]Grad. Bio., NAIST, [3]Forest Bio Res. Cent., FFPRI)

1P072 Subfunctionalization of secondary cell wall master regulators, NST/SND transcription factors, in hybrid aspen

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

1P073 Transcriptome analysis of secondary cell wall formation in a *Cryptomeria japonica* ectopic xylem cell induction system

Ryosuke Sato[1], Soichiro Nagano[2], Yoshihiko Nanasato[1], Ken-ichi Konagaya[1], Toru Taniguchi[1], Naoki Takata[1] ([1]Forest Bio Res. Cent., For. Forest Prod. Res. Inst., [2]Forest Tree Breeding Cent., For. Forest Prod. Res. Inst.)

1P074 Single-cell and spatial omics reveal progressive loss of xylem developmental complexity across seed plants

Peng Shuai[1,2], Jo-Wei Allison Hsieh[3,4], Chung-Ting Kao[5], Chen-Wei Hu[3], Ray Wang[3], Shang-Che Kuo[6], Ming-Ren Yen[3], Pin-Chien Liou[7], Yi-Chi Ho[7], Chia-Chen Chu[5], Shuotian Huang[1,2], Jiao Liu[1,2], Lixia Zhang[1,2], Chia-Chen Wu[8], Yi-Jyun Luo[9], Quanzi Li[10], Chuan-Chih Hsu[11], Chao-Li Huang[12], Jung-Chen Su[13], Mei-Chun Tseng[7], Ying-Lan Chen[14,15], Te-Lun Mai[3], Ying-Chung Jimmy Lin[3,5,6] ([1]College of Forestry, Fujian Agriculture and Forestry University, [2]Chinese Fir Engineering Technology Research Center of the State Forestry and Grassland Administration, [3]Department of Life Science, College of Life Science, National Taiwan University, [4]The Genome Center, University of California, [5]Institute of Plant Biology, College of Life Science, National Taiwan University, [6]Genome and Systems Biology Degree Program, National Taiwan University and Academia Sinica, [7]Institute of Chemistry, Academia Sinica, [8]School of Forestry and Resource Conservation, National Taiwan University, [9]Biodiversity Research Center, Academia Sinica, [10]National Key Laboratory for Development and Utilization of Forest Food Resources, Zhejiang A&F University, [11]Institute of Plant and Microbial Biology, Academia Sinica, [12]Institute of Tropical Plant Sciences and Microbiology, National Cheng Kung University, [13]Department of Pharmacy, National Yang Ming Chiao Tung University, [14]Department of Biotechnology and Bioindustry Sciences, National Cheng Kung University, [15]Graduate Program in Translational Agricultural Sciences, National Cheng Kung University)

1P075 Functional analysis of Trihelix transcription factors involved in xylem vessel formation in Arabidopsis

Hinata Masukagami[1], Ya Ma[1], Akira Mine[3], Misato Ohtani[1,2] ([1]Grad. Sch. Front. Sci., Univ. Tokyo, [2]Grad. Sch. Sci., Univ. Tokyo, [3]Grad. Sch. Agri., Univ. Kyoto)

1P076 Functional analysis of reactive oxygen species in the early stages of ectopic vascular formation

Yusuke Ohba[1,2], Li Jiuyi[2], Keita Matsuoka[1], Yuki Kondo[3], Kazuyuki Kuchitsu[4], Shinobu Satoh[5], Hiroaki Iwai[5,6], Masashi Asahina[1,7] ([1]Dept. Biosci, Teikyo Univ., [2]Gard. Sch. Sci. and Tech., Univ. Tsukuba, [3]Grad. Sch. Sci. Dept. Bio. Sci., Osaka Univ., [4]Dept. appl. Bio. Sci., Tokyo Univ. Sci., [5]Fac. Life and Env. Sci., Univ. Tsukuba, [6]Bio. Tokai Univ., [7]Adv. Inst. anal. Ctr., Teikyo Univ.)

1P077 Development of an *In Vitro* Grafting Method for Interfamily and Vegetable Grafts

Yaichi Kawakatsu[1], Hafiz Muhammad Nasir[1], Abdul Rasool Ataeei[1], Michitaka Notaguchi[1,2,3,4], Munenori Kitagawa[1] ([1]Huazhong Agricultural University, College of Horticulture and Forestry Sciences, [2]Bioscience and Biotechnology Center, Nagoya University, [3]Graduate School of Bioagricultural Sciences, Nagoya University,, [4]Department of Botany, Graduate School of Science, Kyoto University)

1P078 Comprehensive analysis of genes involved in grafting success between plants of the same family

Ken-ichi Kurotani[1], Masashi Asahina[2,3], Michitaka Notaguchi[1] ([1]Grad. School. Sci., Kyoto Univ., [2]Env. & Biotech., Dept. Integ. Sci. & Eng., Teikyo Univ., [3]Adv. Inst. Anal. Ctr., Teikyo Univ.)

■ Development/Morphogenesis

1P079 P Stomatal Lineage Cells Regulate Substomatal Cavity Formation Through Inter-Tissue Signaling during Leaf Development

Chynthia Devi Hartono[1,2], Kuan-Chuan Tseng[1], Wei-Han Fang[1], Tzu-Chuan Huang[1], Chia-Ming Lee[3], Bi-Chang Chen[3], Wei-Chen Chu[4], Shen-Long Tsai[2], Chin-Min Kimmy Ho[1] ([1]Institute of Plant and Microbial Biology, Academia Sinica, Nangang, Taipei, Taiwan, [2]Department of Chemical Engineering, National Taiwan University of Science and Technology, Taipei, Taiwan, [3]Research Center for Applied Sciences, Academia Sinica, Nangang, Taipei, Taiwan, [4]Institute of Cellular and Organismic Biology, Academia Sinica, Nangang, Taipei, Taiwan)

1P080 HDL mediates chromatin condensation to establish stable centromere architecture

Tsai-Chen Chen, Chin-Min Ho (Institute of Plant and Microbial Biology, Academia Sinica)

1P081 P A novel CLE peptide cooperates with TDIF signalling to regulate cambium stem cell fate in Arabidopsis

Hui Cao[1,2], Dongbo Shi[1] ([1]RIKEN Yokohama Campus, [2]University of Potsdam)

1P082 Regulation of secondary vascular formation during taproot thickening in sugar beet

Toshiaki Kozuka[1], Srisuthep Namthip[1], Yuma Shimizu[1], Masashi Asahina[2,3], Yosuke Kuroda[4], Masaki Ito[1] ([1]Inst. Sci. & Eng., Kanazawa Univ., [2]Env. & Biotech., Dept. Integ. Sci. & Eng., Teikyo Univ., [3]Adv. Inst. Anal. Ctr., Teikyo Univ., [4]HARC/NARO)

1P083 P SUPERMAN-mediated Flower Development in *Arabidopsis thaliana*

Febri Yuda Kurniawan, Nobutoshi Yamaguchi, Toshiro Ito (Laboratory of Plant Stem Cell Regulation and Floral Patterning, Grad. Sch. of Biol. Sci., Nara Inst. of Sci. and Tech.)

1P084 Flowering Regulation mediated by the RABH1 group in Involving Arabidopsis thaliana

Asaki Sato[1], Emi Ito[2,3,4], Yoko Ito[2], Tomohiro Uemura[1,2,5] ([1]Grad. Humanities and Sciences, Univ. Ochanomizu, [2]IHLS., Ochanomizu Univ., [3]Division of Cellular Dynamics, NIBB, [4]Basic Biology Program, Graduate Institute for Advanced Studies, [5]Faculty of Core Research, Natural Science Div., Ochanomizu Univ., Department of Life Science, Ochanomizu University)

1P085 The role of auxin in developmental changes caused by mechanical forces exerted on the floral primordium of *Arabidopsis thaliana*

Amika Kanda[1], Akitoshi Iwamoto[1,2] ([1]Dept. Biol. Sci., Grad. Sch., Sci., Kanagawa Univ., [2]Dept. Biol. Sci., Fac. Sci., Kanagawa Univ.)

1P086 Development of an Experimental System for Single-Nucleus RNA-Seq and Single-Cell Resolution Three-Dimensional Imaging Analysis of Barley Shoot Apex

Ryota Takeda[1], Jun Ito[1], Yuko Nomura[1], Nao Sato[1], Atsuko Hirota[2], Makoto Hayashi[2], Tohaku Seki[2], Yosuke Sasai[2], Ping Kao[2], Keiko Sugimoto[2], Daisuke Saisho[3], Hiroshi Hisano[3], Tomoki Uchino[4], Shuhei Nasuda[4], Kaoru Tonosaki[1], Tetsu Kinoshita[1], Kana Amagai[5], Makoto Kashima[5], Hiroyuki Tsuji[1,6] ([1]Kihara Inst. Biol. Res., Yokohama City Univ., [2]CSRS, RIKEN., [3]IPSR, Okayama Univ., [4]Grad. Sch. Agric., Kyoto Univ., [5]Fac. Sci., Toho Univ., [6]Biosci. Biotechnol. Center, Nagoya Univ.)

1P087 Single-cell resolution imaging of barley inflorescences where three meristems develop simultaneously without bracts

Ryouta Mitsuishi[1], Jun Ito[1], Yuko Nomura[1], Ryota Takeda[1], Hiroyuki Tsuji[1,2] ([1]Kihara Inst. Biol. Res., Yokohama City Univ., [2]Biosci. Biotechnol. Center, Nagoya Univ.)

1P088 *De novo* Induction of Meristem-like Structures by Gall-Inducing Midge in *Aster scaber*

Asumi Fujimoto[1], Akiteru Maeno[2], Tomoaki Sakamoto[3,4], Seisuke Kimura[3,4], Seiji Takeda[1,5], Norihiro Ohtsubo[1] ([1]Grad. Sch. Life Environ. Sci., Kyoto Pref. Univ., [2]Cell Architecture Laboratory, NIG., [3]Faculty of Life Sciences, Kyoto Sangyo Univ., [4]Center for Plant Sciences, Kyoto Sangyo Univ., [5]Faculty of Science and Engineering, Yasuda Women's Univ.)

1P089 P The mechanism of tomato fruit set regulated by jasmonate localization in ovule

Yukako Nomura[1], Yoshihito Shinozaki[2], Taiji Kawakatsu[3], Mikiko Kojima[4], Yumiko Takebayashi[4], Hitoshi Sakakibara[5], Hiroshi Ezura[2,6], Tohru Ariizumi[2,6] ([1]Graduate School of Life and Environmental Sciences, University of Tsukuba, Japan, [2]Faculty of Life and Environmental Sciences, University of Tsukuba, Japan, [3]Institute of Agrobiological Sciences, National Agriculture and Food Research Organization, Japan, [4]RIKEN Center for Sustainable Resource Science, Japan, [5]Graduate School of Bioagricultural Sciences, Nagoya University, Japan, [6]Tsukuba Plant Innovation Research Center, University of Tsukuba, Japan)

1P090 P Indispensable Roles of RBOH-mediated ROS Production Orchestrating Development and Morphogenesis in *Marchantia polymorpha*

Yuto Yamashita[1], Yuki Hagiwara[1], Kenji Hashimoto[1], Mizuki Ogawa[1], Seigo Hoshino[1], Hidemasa Suzuki[2], Megumi Iwano[3], Toshiki Ishikawa[4], Ryuichi Nishihama[1], Kazuyuki Kuchitsu[1] ([1]Department of Applied Biological Science, Tokyo University of Science, Noda, Japan, [2]Graduate School of Life Sciences, Tohoku University, Sendai, Japan, [3]Graduate School of Biostudies, Kyoto University, Kyoto, Japan, [4]Graduate School of Science and Engineering, Saitama University, Saitama, Japan)

1P091 Hierarchical Regulation of Rhizoid Tip Growth by Ca2+/CPK-RBOH/ROS Module in Marchantia polymorpha

Mika Kimura, Yuto Yamashita, Seigo Hoshino, Kenji Hashimoto, Takafumi Hashimoto, Kazuyuki Kuchitsu (Tokyo University of Science)

1P092 P Evolutionarily conserved RLF, a cytochrome b_5-like heme-binding protein, regulates organ development across land plants

Kentaro P. Iwata[1], Takayuki Shimizu[2], Hiromitsu Tabeta[3], Yuuki Sakai[1], Tomoyuki Furuya[4], Hinatamaru Fukumura[1], Yuki Kondo[4], Masami Y. Hirai[3], Tatsuru Masuda[5], Kimitsune Ishizaki[1], Hidehiro Fukaki[1] ([1]Grad. Sch. of Sci., Kobe Univ., [2]Fac. Sci., Nara Women's Univ., [3]RIKEN CSRS, [4]Grad. Sch. of Sci., Univ. of Osaka, [5]Grad. Sch. of Arts and Sci., Univ. of Tokyo)

1P093 Molecular functional differentiation of three subgroups of BZR/BES transcription factors in *Marchantia polymorpha*

Tomoyuki Furuya[1], Shohei Nosaki[2,3], Yuki Takabatake[1], Masahiro Kasahara[4], Yuki Kondo[1] ([1]Grad. Sch. Sci., Univ. of Osaka, [2]Inst. of Life and Env. Sci., Univ. of Tsukuba, [3]T-PIRC, Univ. of Tsukuba, [4]College Sch. Sci., Ritsumeikan Univ.)

1P094 The developmental roles of TALE homeobox transcription factors KNOX2 and BELL in hornworts

Kazune Ezaki[1], Tomoaki Nishiyama[2], Keiko Sakakibara[1] ([1]College of Sci., Rikkyo Univ., [2]Sch. of Sci., Univ. of Toyama)

1P095 Regulation of sex-determination gene expression associated with the transition of sexual reproductive systems in liverworts

Yukiko Yasui[1], Yuka Umeya[1], Yuki Akimoto[1], Eita Shimokawa[1], Masaki Shimamura[2], Takayuki Kohchi[1] ([1]Grad. Sch. Biostudies, Kyoto Univ., [2]Grad. Sch. Integ. Sci. Life, Hiroshima Univ.)

1P096 Investigating how neofunctionalized *LEAFY* is involved in the evolution of dioecy in *Nepenthes*

Yuhan Guo[1,2], Kenji Fukushima[1,2] ([1]SOKENDAI, [2]National Institute of Genetics)

1P097 Characterizing plant cell totipotency regulators during zygotic embryogenesis in Arabidopsis thaliana

Ping Kao, Keiko Sugimoto (CSRS, RIKEN)

1P098 P Analysis of mechanisms regulating the transcriptional repression of Mp*LAXR*, a stem cell factor that positively regulates regeneration in *Marchantia polymorpha*

Hina Motoshige[1], Haruka Mine[1], Aya Iwaki[1,2], Emi Hainiwa[2], Shohei Yamaoka[2], Yutaka Kodama[3], Shota Yamauchi[1], Takayuki Kohchi[2], Ryuuichi Nishihama[1] ([1]Dept. Appl. Biol. Sci., Fac. Sci. Tech., Tokyo Univ. Sci., [2]Grad. Sch. Biostudies., Kyoto Univ., [3]Cent. Bio., Utsunomiya Univ.)

1P099 Plantlet regeneration from female gametophytes and immature embryos of *Podocarpus macrophyllus*

Yasunori Ohmiya[1], Yoshihisa Hosoi[2] ([1]Forest Tree Breeding Center, FFPRI, [2]Forestry and Forest Products Research Institute)

1P100 Optimization of callus induction conditions for transformation of the fern *Equisetum arvense*

Chihiro Uchida, Yoh Sakuma, Hirotaka Kato (Grad. Sch. Sci. Eng., Ehime Univ.)

1P101 P Cell fate transition during wound-induced adventitious shoot formation in *Drosera rotundifolia*

Yosuke Sasai[1,2], Shoji Segami[3,4], Dongbo Shi[2], Noriko Takeda-Kamiya[2], Hatsune Morinaka[2], Ayako Kawamura[2], Arika Takebayashi[2], Akira Iwase[2], Kiminori Toyooka[2], Mitsuyasu Hasebe[3,4], Keiko Sugimoto[1,2] ([1]Univ. Tokyo, Dep. Biol. Sci, [2]CSRS, RIKEN, [3]NIBB, [4]SOKENDAI)

1P102 P Dissecting Cell Wall-Mediated Regenerative Pathways in the *Arabidopsis* Root Meristem

Hazel Marie Kugan, Ye Zhang, Masaaki Umeda (Laboratory of Plant Growth Regulation, Graduate School of Science and Technology, Nara Institute of Science and Technology (NAIST))

1P103 Exploring interacting factors and functional analysis of the histone demethylase LDL3 during shoot regeneration in *Arabidopsis thaliana*

Tasuku Nakahashi[1], Hikaru Sato[1], Nodoka Handa[1], Yuki Sakamoto[2], Takuya Sakamoto[3], Sachihiro Matsunaga[1] ([1]Dept. Integr. Biosci., Grad. Sch. Front. Sci., Univ. Tokyo, [2]Fac. Sci., Univ. Shinshu, [3]Fac. Sci., Univ. Kanagawa)

1P104 Studies on the *VAH* Gene Negatively Influencing Stemness in *Arabidopsis*

Ryuji Tsugeki[1], Yoko Ikeda[2], Hitoshi Mori[3,4], Yuta Aoyagi[5], Hideki Hirakawa[6] ([1]Grad. Sch. Sci., Kyoto Univ., [2]IPSR, Okayama Univ., [3]Grad. Sch. Bioagric. Sci., Nagoya Univ., [4]Grad. Sch. Food Agric. Sci., [5]Kazusa DNA Res. Inst., [6]Grad. Sch. Agri., Kyushu Univ.)

1P105 Embryogenesis of the family Lentibulariaceae with novel body plans

Ao Masuda[1], Mitsuyasu Hasebe[2], Natsu Katayama[1] ([1]Grad. Sch. Sci., Univ Tokyo, [2]NIBB)

1P106 P Morphological characterization of glandular trichomes and neck strip

Shaoxuan Jiang, Toru Fujiwara, Takehiro Kamiya (Graduate School of Agricultural and Life Sciences, The University of Tokyo)

1P107 P The roles of organelle-localized RNA-binding proteins in mobile mRNA transport

Jen Wei Chiu (Institute of Plant and Microbial Biology, Academia Sinica)

1P108 Signatures of positive selection in pulvinus-expressed genes facilitate the evolution of rapid movement in *Mimosa*

Yan-Han Fang[1], Hiroaki Mano[2], Tomoaki Nishiyama[3], Shuji Shigenobu[4], Mitsuyasu Hasebe[2,5], Chao-Li Huang[1,6] ([1]Graduate Program in Translational Agricultural Sciences, National Cheng Kung University and Academia Sinica, Tainan, Taiwan, [2]Division of Evolutionary Biology, National Institute for Basic Biology, Aichi, Japan, [3]School of Science, Academic Assembly, University of Toyama, Toyama, Japan, [4]Laboratory of Evolutionary Genomics, National Institute for Basic Biology, Aichi, Japan, [5]Basic Biology Program, SOKENDAI (The Graduate University for Advanced Studies), Kanagawa, Japan, [6]Institute of Tropical Plant Sciences and Microbiology, College of Biosciences and Biotechnology, National Cheng Kung University, Tainan, Taiwan)

1P109 The breakdown of distyly in *Primula sieboldii*

Lele Shang, Michael Lenhard (University of Potsdam)

1P110 P ZYP1 Mediates Synaptonemal Complex Assembly and Ensures Crossover Assurance in Maize

Tzu-Han Huang[1,2], Chung-Ju Rachel Wang[1] ([1]Institute of Plant and Microbial Biology, Academia Sinica, Taipei, Taiwan, [2]Institute of Plant Biology, National Taiwan University, Taipei, Taiwan)

■ Reproduction

1P111 P Molecular Study of Substrate Specificities and Inhibitor Recognition of *Petunia* S-RNases

Yu Wang[1], Yoshinobu Kato[1], Shuhei Kusano[2], Shinya Hagihara[2], Seiji Takayama[1], Sota Fujii[1] ([1]University of Tokyo, [2]RIKEN)

1P112 P Comparative transcriptomic analysis reveals why endosperm does not develop in *Phalaenopsis* orchids

Hai Nguyen Nguyen Thanh[1], Ming-Bang Huang[1], Ming-Tsair Chan[1,2], Masaru Ohme-Takagi[1] ([1]CBB. NCKU., [2]ABRC. Academia Sicnica)

1P113 P Genetic Variation and Crossover Suppression in CML228 Compared with Other Maize NAM Inbreds and its Hybrid Behavior

Sami Adnan, Chung-Ju Rachel Wang (Institute of Plant and Microbial Biology (IPMB), Academia Sinica)

1P114 Comparing floral induction by salicylic and benzoic acid in duckweed plants, *Wolffiella hyalina*

Minako Isoda[1], Sayaka Maki[2], Tokitaka Oyama[3], Masahiro Kanaoka[2] ([1]Fac. Sci. Eng., Yasuda Women's Univ., [2]Fac. Life Environ. Sci., Prefectural Univ. Hiroshima, [3]Grad. Sch. Sci., Kyoto Univ.)

1P115 Auxin triggered orchid ovary post-pollination morphology

Ming-Bang Huang[1], Nguyen Thanh Hai Nguyen[1], Masaru Ohme Takagi[1], Ming-Tsair Chan[2] ([1]College of Bioscience and Biotechnology, National Cheng Kung University, [2]ABRC, Academia Sinica)

1P116 Pollen-Coat Defects and Impaired Hydration in the GRP-Cluster Knockout Mutant

Mari Takusagawa, Haruki Oguni, Surachat Tangpranomkorn, Seiji Takayama, Sota Fujii (Grad. Sch. Agr., UTokyo)

1P117 Search of new mechanisms regulating self-incompatibility on the stigma side in Brassicaceae

Hitomi Ogama[1], Hatsune Tasaka[1], Yuka Kimura[1], Seiji Takayama[1], Sota Fujii[1,2] ([1]Grad. Sch. Agric. Lif. Sci, Unic. Tokyo, [2]Suntory Rising Stars Encouragement Program in Life Science)

■ Plant hormones/Signaling molecules

1P118 P Identifying further components of the *KLUH*-dependent signaling pathway by exploiting cryptic genetic variation

Mingyang Wang (University of Potsdam Institute for Biochemistry and Biology Genetics Research Group)

1P119 P Effects of root-derived genetic factors on shoot growth in *Arabidopsis thaliana* accessions

Kota Monden[1], Takatoshi Kiba[2], Ryo Tabata[3], Takushi Hachiya[4] ([1]Grad. Sch. Nat. Sci. & Tech., Shimane Univ., [2]IPSR, Okayama Univ., [3]Sch. Agri., Meiji Univ., [4]ICSR, Shimane Univ.)

1P120 P Jasmonates induce seed germination of root parasitic plants

Taiki Suzuki[1], Kotaro Nishiyama[2], Michio Kuruma[1], Tomoya Ishikawa[1], Marco Burger[3], Koji Miyamoto[4], Wendi Jiang[1], Hanae Kaku[2], Hiromu Tsuzuki[5], Naoki Kitaoka[5], Hideyuki Matsuura[5], Yoshiya Seto[2] ([1]Grad. Sch. Agriculture, Meiji Univ., [2]Sch. Agriculture, Meiji Univ., [3]Salk Institute for Biological Studies, [4]Fac. Science and Engineering, Teikyo Univ., [5]Sch. Agriculture, Hokkaido Univ.)

1P121 P SAHY2 suppresses VSP acid phosphatase activity to regulate abscisic acid and jasmonic acid biosynthesis under salt stress in *Arabidopsis*

Bo-Yu Yang[1,2], Hieng-Ming Ting[2], Wan-Hsing Cheng[1] ([1]Institute of Plant and Microbial Biology, Academia Sinica, [2]Institute of Plant Biology, National Taiwan University)

1P122 P GA-related compounds regulate plant growth by modulating cytokinin levels in *Marchantia polymorpha*

Takuya Segawa[1], Shogo Kawamura[1], Eita Shimokawa[1], Rui Sun[1,2], Shohei Yamaoka[1], Mikiko Kojima[3], Masanori Okamoto[3], Yoshihiro Yoshitake[1], Takayuki Kohchi[1] ([1]Grad. Sch. Biostudies, Kyoto Univ., [2]Institute for Chemical Research, Kyoto Univ., [3]RIKEN Center for Sustainable Resource Science)

1P123 P Progesterone Binding Activity of the Plant Progesterone Receptor Candidate AmPR and Identification of AmPR Signaling Factors

Sena Ishigami, Yuka Kinugasa, Ayumi Yamagami, Takuya Miyakawa, Takeshi Nakano (Grad. Sch. Bio., Univ. Kyoto)

1P124 P Mode of action and the effects of a compound that increase both jasmonic acid and salicylic acid in Arabidopsis

Mizuki Ogawa[1], Sota Ogawa[1], Seigo Hoshino[1], Kentaro Namiki[1], Kaisei Chujo[1], Manami Awano[1], Nobutaka Kitahata[1,2], Yuho Saito[1], Hiroshi Abe[3], Tadao Asami[2,4], Seisuke Kimura[5], Kenji Matsui[6], Kouji Kuramochi[1], Kazuyuki Kuchitsu[1] ([1]Dept. Appl. Biol.

Sci., Tokyo Univ. of Science, [2]Grad. Sch. Agric. Life Sci., The Univ. of Tokyo, [3]RIKEN BRC, [4]KIBR, Yokohama City Univ., [5]Fac. Life Sciences, Kyoto Sangyo Univ., [6]Fac. Agriculture, Yamaguchi Univ.)

1P125 Screening of Novel Phloem-mobile Polypeptides

Nanami Yamaguchi, Mari Ogawa-Ohnishi, Yoshikatsu Matsubayashi (Grad. Sch. Sci., Univ. Nagoya)

■ Photoreceptors/Photoresponses

1P126 P Arabidopsis *BEL1-LIKE HOMEODOMAIN 1* acts as a suppressor of FIN219/JAR1 in regulating hypocotyl elongation through direct interaction under far-red light

Sushanthi Poovendhan, Huai-Ju Chen, Hsu-Liang Hsieh (Institute of Plant Biology, College of Life Science, National Taiwan University, Taipei, Taiwan)

1P127 Effects of Light on Lateral Root Nutritropism of Nipponbare

Hasan Mehraj, Kiyoshi Yamazaki, Toru Fujiwara (Lab of Plant Nutrition and Fertilizer, School of Agriculture and Life Sciences, The University of Tokyo)

1P128 Identification and functional studies of ubiquitin E3 ligases responsible for FIN219-regulated degradation of GUS-CCT1 proteins in response to blue light

Wei Lee, Hsu-Liang Hsieh (National Taiwan University Institute of Plant Biology)

1P129 Functional Study of FIN219 and NPH3 Interaction in Arabidopsis Phototropism

Chia-Cheng Yen, Hsu-Liang Hsieh (National Taiwan University Institute of Plant Biology)

1P130 Phosphoproteomic identification of novel phototropin phosphorylation substrates

Natsune Yukawa[1], Rio Goto[2], Saashia Fuji[1], Hinano Takase[3], Hassan Nadeem[4], Diwakar Shukla[4], Taishi Umezawa[3], Atsushi Takemiya[1] ([1]Grad. Sch. Sci. Tech. Yamaguchi Univ., [2]Fac. Sci. Yamaguchi Univ., [3]Grad. Sch. BASE, Tokyo Univ. Agri. Tech., [4]Dept. Bioeng., UIUC)

1P131 Phosphorylation of a sucrose phosphate synthase by the group B4 Raf-like kinase MpPRAF in *Marchantia polymorpha*

Hayato Watanabe[1], Shota Yamauchi[1], Akida Jahan[1], Hinano Takase[2], Kota Yamashita[2], Taishi Umezawa[2], Ryuichi Nishihama[1] ([1]Dept. Appl. Biol. Sci., Fac. Sci. Tech., Tokyo Univ. Sci., [2]Grad. Sch. BASE, Tokyo Univ. Agri. and Tech.)

1P132 Analysis of phosphorylation of translation initiation factor-binding proteins by the group B4 Raf-like kinase MpPRAF in *Marchantia polymorpha*

Tomohiro Kanazawa[1], Shota Yamauchi[1], Akida Jahan[1], Eri Koide[2], Takayuki Kohchi[2], Ryuichi Nishihama[1] ([1]Dept. Appl. Biol. Sci., Fac. Sci. Tech., Tokyo Univ. Sci., [2]Grad. Sch. Biostudies., Kyoto Univ.)

1P133 An Inexpensive Benchtop Solar Simulator for the Study of Phototropism in Plants and Algae

Andy Crofts[1,2], Chizuru Honda[1] ([1]Akita International University, Department of International Liberal Arts, [2]Akita Prefectural University, Department of Biological Production)

■ Environmental response A/Physiological responses

1P134 The effects of environmental pH on nutritropism

Haruki Murata (Graduate School of Agricultural and Life Sciences, The University of Tokyo)

1P135 Molecular mechanisms in the root gravitropism regulation of the Brassinosteroids signaling factor BIL8

Kaname Narumi[1], Ayumi Yamagami[1], Shinn Suzuki[1], Tadao Asami[2], Takeshi Nakano[1] ([1]Grad. Sch. Biostudies, Kyoto Univ., [2]KIBR, Yokohama City Univ)

1P136 P Mutation of a Ribosomal Protein (UL13X) Mediated Root Growth Defects under Calcium Deficiency in *Arabidopsis thaliana*

Yicong Chen[1], Arpna Kumari[1], Hirofumi Fukuda[1,2], Naoyuki Sotta[1,3], Toru Fujiwara[1] ([1]The Faculty of Agriculture, The University of Tokyo, [2]National Agriculture and Food Research Organization, [3]Department of Agricultural Biology, Osaka Metropolitan University)

1P137 Genome-wide association study of the leaf area-to-shoot biomass ratio in Arabidopsis in response to foliar-applied urea

Kosuke Matsuo[1,2], Raj Kishan Agrahari[2], Toru Fujiwara[2], Takehiro Kamiya[2] ([1]Tokyo College of Biotechnology, [2]Department of Applied Biological Chemistry, The University of Tokyo, Japan)

1P138 P Effect of High pH on Iron Acquisition in Rice

Tomoki Okamura[1], Keita Takahashi[1], Akiko Watanabe[2], Sayaka Kudo[2], Yuta Hasegawa[2], Seiji Nagasaka[1,2] ([1]Grad. Sch. Life Sci., Toyo Univ., [2]Dept. Life Sci., Toyo Univ.)

1P139 P Analysis of light- and photosynthesis-dependent phosphorylation of plasma membrane H^+-ATPase in plant

Xin Yu[1], Toshinori Kinoshita[1,2] ([1]Graduate School of Science, Nagoya University, [2]Institute of Transformative Bio-Molecules, Nagoya University)

1P140 Light-off signals flower-opening in the night-blooming Ipomoea nil QX909

Sumiko Kaihara[1], Soya Nakaga[2], Eiji Nitasaka[3] ([1]blank, [2]Fac. Agr., Niigata-U, [3]Fac. Sci., Kyushu-U)

1P141 Enhancement of lettuce growth by lighting control synchronized with lunar rhythm

Kyosuke Kawai (TOYOTA BOSHOKU CORPORATION)

1P142 Functional characterization of plasma membrane H^+-ATPase in guard cells using GFP-tagged AHA1

Takeharu Koyasu[1], Koji Takahashi[1], Kohei Fukatsu[1], Yutaka Kodama[2], Toshinori Kinoshita[1,3] ([1]Grad. Sch. Sci., Nagoya Univ., [2]C-Bio, Utsunomiya Univ., [3]ITbM, Nagoya Univ.)

1P143 S-Glutathionylation of Histone H2B At Cys^{40} Regulates SPL-Dependent Flowering via BZR1–PIF4 Signaling in Oncidium Under High Ambient Temperature

Senthil Kumar Rajendran[1,2], Kai-Wun Yeh[2], Ching-Hui Yeh[1] ([1]Department of Life Science, National Central University, Zhongli, Taoyuan, Taiwan R.O.C, [2]Institute of Plant Biology, National Taiwan University, Taipei, Taiwan R.O.C)

1P144 P Analysis on the circadian oscillatory mechanism independent of the KaiC phosphorylation rhythm

Maho Arakawa[1], Yoriko Murayama[1], Daichi Itaki[1], Kumiko Miwa[2], Moe Mimura[1], Remi Kameshima[1], Yohko Kitayama[2], Takao Kondo[2], Hideo Iwasaki[1] ([1]Grad. Sch., Adv. Sci., Waseda Univ., [2]Grad. Sch. Sci., Univ. Nagoya)

1P145 Regulation of Autophagic Activity in Response to Nitrate Signaling in Arabidopsis

Daiki Shinozaki, Shuichi Yanagisawa (Agro-Biotechnology Res., Grad. Sch. Agri. Life Sci., Univ. Tokyo)

■ Environmental response B/Environmental stresses

1P146 *Marchantia polymorpha* partially relies on MpRAD51B to maintain resistance to DNA-damaging treatments

Mika Teranishi[1], Ayako Sakamoto[2] ([1]Graduate School of Life Sciences, Tohoku University, [2]Department of Quantum-Applied Biosciences, QST)

1P147 Role of protein disulfide isomerase PDI1;1 in actin structures in *Oryza sativa* root cells

Yayoi Onda[1], Suzuka Otogawa[2], Tomoya Okino[2], Daiki Nagata[2] ([1]Grad. Sch. Agr., Ehime Univ., [2]Fac. Agr., Ehime Univ.)

1P148 Prediction of the higher-order structure of Strontium transport proteins in *Arabidopsis thaliana*

Takeshi Nagata, Icchi Nakagawa, Mio Onoe, Takanobu Sakamoto (Setsunan University)

1P149 Analysis of Fe Accumulation and Localization By Ti in *Arabidopsis thaliana* For Lunar Agriculture

Kazuki Indo[1], Tokuma Oiwa[2], Takeshi Nagata[2] ([1]setsunan univercity graduate school of science and engneering life science, [2]setsunan univercity paculty of science and engneering)

1P150 Increase Phosphorus Utilization Efficiency in *Synechocystis* sp. PCC 6803

Rinsei Negishi, Naohiro Hososaka, Tatsunori Hiyoshi, Norihiro Sato (Tokyo University of Pharmacy and Life Sciences)

1P151 Strategy for Exploring *cis*-elements involved in water-responsive expression of *CYP707A3* in Arabidopsis

Chihiro Maruyama[1,2], Sotaro Katagiri[1], Chisato Oshima[1,3], Yuri Kanno[1], Yumiko Takebayashi[1], Keisuke Fujiyama[1], Yuanjie Weng[1], Tetsuo Kushiro[3], Masanori Okamoto[1,2] ([1]RIKEN • CSRS, [2]Yokohama City Univ., [3]Meij Univ.)

1P152 Role of Mycosporine-like Amino Acids in Salt Stress Tolerance Mechanisms of Cyanobacteria

Tomoki Tsuboi, Hakuto Kageyama (Grad. Sch. Env. Hum. Sci. Meijo Univ.)

1P153 P The temperature-dependent diversity of photosynthetic activity in bryophytes

Shoma Yoshimoto[1], Fumino Maruo[2], Makiko Kosugi[3], Satoshi Imura[4,5], Chihiro Azai[1] ([1]Faculty of Science and Engineering, Chuo Univ., [2]New Field Pioneering Div. Toyota Boshoku Corp., [3]National Institute for Basic Biology, [4]National Institute of Polar Research, [5]The Graduate University for Advanced Studies (SOKENDAI))

1P154 Cysteine-rich peptide that regulates salt-induced xylem gap formation

Yu Okumura[1], Naoyuki Uchida[2] ([1]Grad. Sch. Sci., Nagoya Univ., [2]Ctr. Gene Res., Nagoya Univ.)

1P155 Analysis of stress granule formation in Arabidopsis heat shock factor mutants

Yuzuki Nishi[1], Shiyu Shimoyama[1], Mei Ichikawa[2], Yukiko Yamamoto[2], Takahito Takei[2,3], Nobutoshi Yamaguchi[4], Takahiro Hamada[1,2] ([1]Grad. Sch. Sci. and Eng., Okayama Univ. of Sci., [2]Fac. of Sci., Okayama Univ. of Sci., [3]BPRC, AIST, [4]Grad. Sch. Sci. and Tec., NAIST)

1P156 Galactolipid synthesis suppress cell death under zinc starvation

Kanato Ohe[1], Yoichiro Fukao[1], Yushi Yoshitake[2] ([1]Grad. Sch. Life Sci., Ritsumeikan Univ, [2]Sch. Life Sci., Ritsumeikan Univ)

1P157 P BGLU18, a β-glucosidase for rapid ABA production, triggers early stress responses in Arabidopsis

Yutong Song, Yuma Mitsuzono, Hiroshi Shimada, Atsushi Sakamoto (Grad. Sch. Integr. Sci. Life, Hiroshima Univ.)

1P158 Isolation and Functional Analysis of Novel Regulators of Abscisic Acid (ABA) Biosynthesis by Novel Screening which isolates transcriptional complexes on a specific promoter *in planta*

Tomoki Kuribayashi[1], Hikaru Sato[1,2], Satoru Fujimoto[3], Kazuo Shinozaki[2], Sachihiro Matsunaga[1] ([1]Grad. Sch. Frontier Sci., Univ. Tokyo, [2]RIKEN, CSRS, [3]Tokyo Univ. of Sci., Dept. of Appl. Biol. Sci.)

1P159 Cross-species analysis of ABA-induced phosphosignaling landscapes in rice, soybean, and Arabidopsis

Hinano Takase[1], Sotaro Katagiri[2], Takuma Ide[1], Aina Nagano[1], Haruki Sakurai[3], Hana Kokubo[4], Taiki Yanagisawa[4], Masanori Okamoto[2], Taishi Umezawa[1,3,4] ([1]Graduate School of Bio-Applications and Systems Engineering, Tokyo University of Agriculture and Technology, [2]RIKEN Center for Sustainable Resource Science (CSRS), [3]Graduate School of Advanced Interdisciplinary Science, Tokyo University of Agriculture and Technology, [4]Faculty of Agriculture, Tokyo University of Agriculture and Technology)

1P160 Evaluation of soybean drought response using the Crop-Type automated phenotyping system CRIPPS

Miki Fujita[1], Yukari Nagatoshi[2], Yasunari Fujita[2,3], Kazuo Shinozaki[1] ([1]RIKEN CSRS, [2]JIRCAS, [3]Tsukuba U.)

1P161 P Low Concentration Ethanol Enhances Growth and Yield in Soybean: Evidence of Genotype Dependent Chemical Priming

Selwan Abdelhakam[1], Islam Abdellatif[2], Saki Igarashi[1], Daisuke Todaka[3], Motoaki Seki[3,4], Kenji Miura[1,2] ([1]Degree Program in Life and Earth Sciences, University of TsukubaUniversity of Tsukuba, [2]Tsukuba-Plant Innovation Research Center, University of Tsukuba, [3]Plant Genomics Network Research Team, RIKEN Center for Sustainable Resource Science, [4]Kihara Institute for Biological Research, Yokohama City University)

1P162 P Mutation on *Co-chaperonin10* (*Os07g0641700*) enhance susceptibility to root heat stress in rice Koshihikari (*Oryza sativa L.*)

Mel Anthony Talavera[1,2], Sachiko Funayama-Noguchi[2], Yoshihiro Ohmori[3], Takehiro Kamiya[2], Toru Fujiwara[2] ([1]Grad. Sch. Univ. Tokyo, [2]Department of Applied Biological Chemistry, Graduate School of Agricultural and Life Sciences, The University of Tokyo, [3]2Agricultural Bioinformatics Research Unit, Graduate School of Agricultural and Life Sciences, The University of Tokyo)

1P163 P Small Disordered Proteins Enable Rapid Cellular Protection Against Cold Stress

Arriel Fadhilah[1], Yutaro Okumura[1], Shin-ichiro Kidou[1,2] ([1]Graduate School of Science, Nagoya City University, [2]Research Center for Biological Diversity, Nagoya City University)

1P164 Physiological Effects of Long-term High Temperatures and High Humidity Conditions on *Solanum lycopersicum* cv. Micro-Tom

Takumi Morokuma[1], Lia Ooi[1,2] ([1]Research, Technology & Value Creation Division, Nagase Viita Co., Ltd., [2]Faculty of Environmental, Life, Natural Science and Technology, Okayama Uni., Japan)

1P165 The GREK receptor-like kinase family defines the leaf senescence window in *Arabidopsis*

Asuka Higo[1], Tamami Kamiya[2], Naoyuki Uchida[1] ([1]Center for Gene Research, Nagoya Univ., [2]Grad. Sch. Sci., Nagoya Univ.)

1P166 Analyses of cell wall-related and disease-responsive gene mutants in low-calcium-induced cell death in Arabidopsis

Koharu Yamada, Akihiro Saito, Kyoko Higuchi, Yusuke Shikanai (Facl. Appl. Biosci., Tokyo Univ. Agri.)

1P167 Rice Responses to Acidic Stress Revealed by Transcriptome–Metabolome Integration and Functional Validation of Key Stress-Induced Metabolites

Ching-Yao Liu, Hao-Jen Huang (Department of Life Sciences, National Cheng Kung University)

1P168 Functional Analysis of the Glutamate Receptor-Like (GLR) Ion Channel in *Marchantia polymorpha* and its Role in Ca^{2+} Signaling

Kyoka Hashinishi[1], Yuki Kamiya[1], Yushin Tsuruda[1], Yu Iwamoto[1], Kenshiro Watanabe[1], Kenji Hashimoto[1], Daisuke Yamada[2], Akiyoshi Saitoh[2], Kazuyuki Kuchitsu[1] ([1]Department of Biological Sciences, Tokyo University of Science, [2]Faculty of Pharmaceutical Sciences, Tokyo University of Science)

1P169 Large-scale salt tolerance evaluation and population genetic analysis using *Arabidopsis thaliana* accessions

Yuki Harada[1], Kousuke Hanada[2], Izumi Yotsui[1], Yoichi Sakata[1], Teruaki Taji[1] ([1]Dept. of Biosci., Tokyo Univ. of Agri, [2]Dept. Biosci. Bioinfo., Kyutech)

1P170 P A novel quinone inhibitor suppresses haustorium induction in Orobanchaceae parasitic plants

Saori Suga[1], Ryoga Inoue[1], Shogo Wada[1], Yumiko Shirano[2], Natsumi Aoki[1], Anuphon Laohavisit[2], Takamasa Suzuki[3], Ayato Sato[2,4], Satoko Yoshida[1] ([1]Bioscience., NAIST, [2]ITbM., Univ. Nagoya, [3]Grad. Biological Chemistry., Univ. Chubu, [4]COMIT., Univ. Nagoya)

1P171 Relationship between high-pH responsive *NRT2* expression in root tips and root elongation maintenance in barley under high-pH conditions
Taiga Hosono, Yusuke Shikanai, Akihiro Saito, Kyoko Higuchi (Tokyo Univ. Agri.)

1P172 Functional analysis of *Arabidopsis* GRF6 that represses drought stress responses
Akari Umezawa[1], Junki Maeya[1], Ami Omata[1], Fuminori Takahashi[1,2] ([1]Grad. Sch. Fac. Adv. Eng., TUS, [2]Fac. Adv. Eng., TUS)

1P173 Functional analysis of Arabidopsis *NADK2* gene in response to water stress
Akiyoshi Kawaoka[1], Ryosuke Hashimoto[2], Satoshi Kidokoro[1], Keishi Osakabe[2], Yuriko Osakabe[1] ([1]Sch. of Life Sci. & Tech., Inst. of Sci. Tokyo, [2]Grad. Sch. of Tech., Ind. & Soc. Sci., Tokushima Univ.)

1P174 P *Marchantia Polymorpha* Heat Shock Transcription Factor B Orchestrates Transcriptional Networks for Land Plant Adaptation
Huan-Chi Tien[1,2,3,4], Thalimaraw Lavakau[1], Kuan-Hung Lin[1], Ming-Ren Yen[1], Hsiu-Ru Yang[1], Ting-Ying Wu[1,2,3,4] ([1]Institute of Plant and Microbial Biology, Academia Sinica, Taipei, Taiwan, [2]Molecular and Biological Agricultural Sciences Program, Taiwan International Graduate Program, Chung-Hsing University and Academia Sinica, Taipei, Taiwan, [3]Graduate Institute of Biotechnology, National Chung-Hsing University, Taichung, Taiwan, [4]Biotechnology Center, National Chung-Hsing University, Taichung, Taiwan)

1P175 Effects of Presence or Absence of Bicarbonate Ion on Rice Responses to Saline-Alkaline Stress and Functional Analysis of the Cation/H^+ Exchangers OsCHX11 and OsCHX16
Mami Nampei, Daichi Toyama, Mitsuki Kondo, Akihiro Ueda (Grad. Sch. Integr. Sci. Life, Hiroshima Univ.)

1P176 Role of the HOMEODOMAIN GLABROUS in the DNA damage response in Arabidopsis
Toshiki Wada, Naoki Takahashi (Grad. Sch. Agri., Meiji Univ.)

1P177 Role of gibberellin catabolism in stem cell regeneration in *Arabidopsis* roots
Miyu Isozaki, Toshiki Wada, Naoki Takahashi (Sch. Agri., Meiji. Univ)

1P178 P Roles of acylplastoquinone species in the cyanobacterium *Synechocystis* sp. PCC 6803
Mizuki Endo, Yunosuke Suzuki, Norihiro Sato (Tokyo University of Pharmacy and Life Sciences)

1P179 P Rice Reproductive RNA Mechanisms in Response to Environmental Stress
Ryusei Sone[1,2], Reina Komiya[1] ([1]RIKEN, CSRS, [2]The University of Tokyo, Graduate School of Agriculture and Life Sciences)

1P180 P Ecotype-Specific Sensitivity to DNA Methylation Inhibitors in *Arabidopsis*
Xin Sun, Hidetaka Ito, Atushi Kato (Hokkaido University, Morphology and Function Laboratory III)

1P181 P Salt-Driven Cell Cycle Activation in Synchronized Cells of *Mesembryanthemum crystallinum*
Phan Thuy Tien Nguyen[1], Yuri Kondo[1], Sakae Agarie[2] ([1]Graduate School of Bioresource and Bioenvironmental Sciences, Kyushu University, 744, Motooka, Nishi-ku, Fukuoka 819-0395, Japan, [2]Faculty of Agriculture, Kyushu University, W5-444, 744, Motooka, Nishi-ku, Fukuoka 819-0395, Japan)

1P182 Screening CRISPR-Edited Plant Biosensors of Detecting Phosphate Deficiency
Ming-Liang Yeh[1], Chin-Wen Chiu[2], Tat-Heng Lam[2], Choun-Sea Lin[3], Chiu Chi-Chou[1], Ming-Jung Liu[1,2] ([1]Institute of Tropical Plant Sciences and Microbial Biology, NCKU, Tainan, Taiwan, [2]Biotechnology Center in Southern Taiwan, Academia Sinica, Tainan, Taiwan, [3]Agricultural Biotechnology Research Center, Academia Sinica, Taipei, Taiwan)

1P183 P Identification of Transcription Factors for CAM Carbon Fixation Genes
Yuri Kondo[1], Tien Nguyen Phan Thuy[1], Sakae Agarie[2] ([1]Graduate School of Bioresource and Environmental Sciences, Kyushu University, [2]Graduate School of Agriculture, Kyushu University)

1P184 P SALT OVERLY SENSITIVE 1 Na^+/H^+ antiporter operates in mature root zone and is a major contributor to root Na^+ exclusion
Tomoki Nagata[1], Ryohei Sugita[2], Takaaki Ogura[1], Natsuko I. Kobayashi[1], Yuko Kurita[1], Lana Shabala[3], Sergey Shabala[3], Keitaro Tanoi[1,4] ([1]Grad. Sch. Agr. & Life Sci., Univ. Tokyo, [2]Radioisotope Res. Ctr., Nagoya Univ., [3]Sch. Biol. Sci., Univ. Western Australia, [4]Fukushima Inst. Res., Educ. & Innov. (F-REI))

1P185 P Elucidation of mechanisms underlying plant response to heat-drought combination regulated by ELM2-Domain Protein in Arabidopsis
Rita Rose Chacko[1], Mai Nagaya[1], Hee Yong Lee[1], Nobuhiro Suzuki[2] ([1]Grad. Sch. Sci. Tech. Sophia. University, [2]Fac. Sci. Tech. Sophia University)

1P186 P Desiccation-induced dynamics of free water in bryophytes
Miyu Tanabe[1], Fumino Maruo[2], Makiko Kosugi[3], Satoshi Imura[4,5], Chihiro Azai[1] ([1]Faculty of Science and Engineering, Chuo Univ., [2]New Field Pioneering Div. Toyota Boshoku Corp., [3]National Institute for Basic Biology, [4]National Institute of Polar Research, [5]The Graduate University for Advanced Studies (SOKENDAI))

1P187 P Mechanistic Analysis of *ONSEN* Activation under Heat Stress and Identification of Novel Transcriptional Regulators
Zhiyu Ge[1], Hidetaka Ito[2] ([1]Grad. Sch. Life Sci., Hokkaido Univ., [2]Grad. Sch. Sci., Hokkaido Univ.)

1P188 P *Serendipita indica* volatiles mitigate cadmium uptake and toxicity in Plants
Naresh Singh Yengkhom[1,2] ([1]Academia Sinica, Biotechnology Center in Southern Taiwan, [2]National Cheng Kung University, NCKU-AS Graduate School of Bioscience and Biotechnology)

1P189 P Enhancing tomato quality, high sugar content and GABA accumulation, with mutations in *ESKs* and *GAD3* genes
Seungje Choi[1], Takeru Iwama[1], Misaki Kobayashi[1], Abdellatif Islam[1,2], Hiroshi Ezura[1,2], Kenji Miura[1,2] ([1]Grad. Sci. Life & Earth Sci., Univ. Tsukuba, [2]Tsukuba-Plant Innovation Research Center)

1P190 P **Isolation and Identification** of halotolerant-PGPR enhancing salt tolerance of *Arabidopsis*
Hibiki Watanabe[1], Kousuke Yamamoto[2], Izumi Yotsui[1], Yoichi Sakata[1], Teruaki Taji[1] ([1]Dept. of Biosci., Tokyo Univ. of Agri, [2]Dept. of Microbio., Tokyo Univ. of Agri)

1P191 P Cyanobacterium *Synechococcus elongatus* PCC 7942 forms cellulosic biofilm by induction of a diguanylate cyclase from *E. coli*
Chihiro Yamaguchi, Jiro Mori, Robert Kanaly, Shinsuke Kutsuna (Grad. Sch. Nanobiosci., Yokohama City Univ.)

1P192 P DE-ETIOLATED1 Mediates Non-Photochemical Quenching and Transposon Activation in *Chlamydomonas reinhardtii*
Koseki Yamada[1,2], Konomi Fujimura-Kamada[1], Katsushi Yamaguchi[3], Shuji Shigenobu[3], Jun Minagawa[1,2] ([1]Department of Environmental Photobiology, National Institute for Basic Biology, [2]Basic Biology Course, The Graduate University for Advanced Studies, SOKENDAI, [3]Trans-Omics Faculty, National Institute for Basic biology)

1P193 ROS regulatory systems are involved in regulating memory of 5-min heat stress in *Arabidopsis thaliana*
Nobuhiro Suzuki[1], Chinatsu Sumi[2], Rio Shimizu[2], Makoto Fujiwara[1] ([1]Fac. Sci. Tech., Sophia University, [2]Grad. Sch. Sci. Tech., Sophia University)

■ Plant-organism interaction

1P194 P Identification of host factors targeted by Type III effector hopR1 from *Pseudomonas syringae* pv. *tabaci* 6605
Kana Kuroe[1], Nanami Sakata[1], Yoshiteru Noutoshi[1], Kazuhiro Toyoda[1], Hirofumi Nakagami[2], Yuki Ichinose[1], Hidenori Matsui[1] ([1]Grad. Environ. & Life Sci., Okayama Univ., [2]MPIPZ)

1P195 P A Protease-like Effector Mediates Maize Susceptibility to Smut Fungi
Minh-Quang Chau[1,2,3], Lay-Sun Ma[1,2,4] ([1]Institute of Plant and Microbial Biology, Academia Sinica, Taipei 11529, Taiwan, [2]Molecular and Biological Agricultural Sciences Program, Taiwan International Graduate Program, National Chung Hsing University and Academia Sinica, Taipei 11529, Taiwan, [3]Graduate Institute of Biotechnology, National Chung-Hsing University, Taichung 402, Taiwan, [4]Biotechnology Center, National Chung Hsing University, Taichung 402, Taiwan)

1P196 P Convergent evolution of phytoalexin-responsive mechanisms in independently evolved broad host-range fungal pathogens
Akira Ashida, Minami Kawashima, Teruhiko Kuroyanagi, Makoto Ojika, Ikuo Sato, Sotaro Chiba, Daigo Takemoto (Grad. Sch. Bioagr. Sci., Nagoya Univ.)

1P197 P Tryptophan metabolism mediates local and systemic suppression of the potential virulence of *Arabidopsis* root endophyte *Colletotrichum tofieldiae*
Ren Ujimatsu[1], Paweł Bednarek[2], Kei Hiruma[1] ([1]Grad. Sch. Art. and Sci., UTokyo, [2]IBCH, PAS)

1P198 P Collaborative Regulation of PR1 Processing by Apoplastic Proteases Balances Growth and Immunity in Maize
Yu Han Lin[1,2], Lay-Sun Ma[1] ([1]Institute of Plant and Microbial Biology, Academia Sinica, [2]Institute of Plant Biology, National Taiwan University)

1P199 P Disarming Plant Ros-Mediated Defenses: The Filament Associated Effector Face1 in *Ustilago Maydis* Virulence
Neelima Chandrasekharan[1,2,3], Lay-Sun Ma[1,2,4] ([1]Institute of Plant and Microbial Biology, Academia Sinica, Taipei, Taiwan, [2]Molecular and Biological Agricultural Sciences Program, Taiwan International Graduate Program, Chung-Hsing University and Academia Sinica, Taipei, Taiwan, [3]Graduate Institute of Biotechnology, National Chung-Hsing University, Taichung, Taiwan, [4]Biotechnology Center, National Chung-Hsing University, Taichung, Taiwan)

1P200 P Hunting for oxidatively modified proteins involving in plant immune responses by redox proteomics
Yuta Hino[1], Miki Yoshioka[1], Akira Ashida[1], Maurizio Camagna[1], Daigo Takemoto[1], Kenya Tanaka[2], Hirofumi Yoshioka[1] ([1]Grad. Sch. Bioagr. Sci., Nagoya Univ., [2]EGBRC, Kobe Univ.)

1P201 P Investigating Potential Roles Of VIP3, TSN1/2 For Viral Defense And RNA Silencing In *Arabidopsis Thaliana*
Liang-He Chen, Jia-Zhen Yu, Shih-Shun Lin (Institute of Biotechnology, National Taiwan University)

1P202 P Atypical E2F Transcription Factor Regulates Jasmonic Acid Signaling

Pertunia Nomcebo Nxumalo[1], Yi-Ting Chen[1], Nguyen Thanh Hai Nguyen[1], Ming-Tsair Chan[2], Masaru Ohme-Takagi[1] ([1]National Cheng Kung University, [2]ABRC, Academia Sinica)

1P203 P Possible involvement of retrograde signaling in SALICYLIC ACID INDUCTION DEFICIENT2-mediated plant immunity

Tsuyoshi Kitada[1], Wakana Harada[2], Ai Obayashi[2], Shunsuke Masuo[3], Shigeyuki Betsuyaku[2] ([1]Grad. Sch. Agr., Ryukoku Univ., [2]Fac. Agr., Ryukoku Univ., [3]Fac. of Life & Env. Sci./MiCS, Univ. of Tsukuba)

1P204 P Effects of growth-phase-dependent metabolisms in *Pseudomonas* sp. Y132 on duckweed growth

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

1P205 Identification of marker genes for root nodule senescence in *Lotus japonicus*

Seitaro Okuhira, Toshiki Uchiumi, Mitsutaka Fukudome (Grad. Sch. Sci and Eng., Univ. Kagoshima)

1P206 P Potential Cross-species Signaling via Small RNA Between the Hemiparasite *Phtheirospermum japonicum* and Its Host *Arabidopsis thaliana*

Xin Li[1], Allison Vanek[2,3], Michael Axtell[2,3], Satoko Yoshida[1] ([1]Grad. Sch. Sci., Nara Institute of Science and Technology, Nara, Japan, [2]Huck Institutes of the Life Sciences, The Pennsylvania State University, University Park, Pennsylvania, United States of America, [3]Department of Biology, The Pennsylvania State University, University Park, Pennsylvania, United States of America)

1P207 Functional contribution of bacterial *NIF* gene clusters in plant-growth-promoting *Sphingomonas*–rice interactions

Fumiaki Inoue, John Jewish A. Dominguez, Kanako Inoue, Yusuke Saijo (Grad. Sch. Sci and Tech., NAIST)

1P208 P Root exudate–mediated promotion of root colonization by a rice plant growth-promoting bacterium

Masahiro Nagayasu, Kanako Inoue, John Jewish A. Dominguez, Mutsumi Watanabe, Takayuki Tohge, Yusuke Saijo (Division of Biological Science, Nara Institute of Science and Technology (NAIST))

1P209 P Profiling changes in soil nitrogen-cycling microbiomes following application of peptide-based biostimulants across different nitrogen input levels

Chu-Chun Lin[1], Nai-Hua Ye[3], Ming-Yuan Lee[3], Chao-Li Huang[1,2] ([1]NCKU-AS Graduate-Program in Translational Agriculture Sciences, NCKU, Taiwan, [2]Institute of Tropical Plant Sciences and Microbiology, NCKU, Taiwan, [3]Ch Biotech R&D Co., Ltd)

1P210 [Cancelled]

1P211 Postfire resilience of soil bacterial communities in two *Pinus* species with contrasting fire adaptations

Yen-Ju Chen[1], Ching-An Chiu[2], Chao-Li Huang[1,3] ([1]Institute of Tropical Plant Sciences and Microbiology, National Cheng Kung University, Tainan, Taiwan, [2]Department of Forestry, National Chung Hsing University, Taichung, Taiwan, [3]Graduate Program in Translational Agricultural Sciences, National Cheng Kung University and Academia Sinica, Taiwan)

1P212 Soil Microbiome and Physiological Responses of Flint Corn to Swine Wastewater Irrigation

Zongyi Lin[1], Hao-Jen Huang[2], Chao-Li Huang[1,3] ([1]Institute of Tropical Plant Sciences and Microbiology, National Cheng Kung University, Tainan, Taiwan, [2]Department of Life Sciences, National Cheng Kung University, Tainan, Taiwan, [3]Graduate Program in Translational Agricultural Sciences, National Cheng Kung University and Academia Sinica, Taiwan)

1P213 System for direct evaluation of combined metal stress and herbivory responses in isolated rice leaves

Kidest Ameha Abebe, Yuko Hojo, Tomonori Shinya, Ivan Galis (Institute of Plant and Resource Sciences, Okayama University)

1P214 Investigate the role of Actin in Plant Immunity

Hsuan-Yu Pan, Yi-Ju Lu (National Taiwan University)

1P215 Insect gut bacteria-produced β-1,4-galactooligosaccharides elicit defense responses in rice

Tomonori Shinya[1], Toshihisa Kotake[2], Yuka Fujiwara[1], Yuko Hojo[1], Kiwamu Hyodo[1], Akio Tani[1], Yoshihisa Yoshimi[2,3], Tatsuya Fujiki[4], Raja Hasnain Ahmad[4], Toshiki Nokami[4], Hanae Kaku[5], Naoto Shibuya[5], Ivan Galis[1] ([1]IPSR, Okayama Univ., [2]Grad. Sch. Sci. Eng., Saitama Univ., [3]Fac. Biology-Oriented Sci. Technol., Kindai Univ., [4]Fac. Eng., Tottori Univ., [5]Sch. Agri., Meiji Univ.)

1P216 Inactivated *Bacillus thuringiensis* BtHS1 Remnants Enhance Ferredoxin-Mediated Resistance to *Colletotrichum* spp. in Tomato

Jia Ying Lin (Dept. Life Sci., Natl. Taitung Univ.)

1P217 Systematic analysis of c-di-GMP catalytic proteins reveals differential regulation in virulence and interbacterial competition in phytopathogen *Agrobacterium*

Xuan Lai[1,2], Chiu-Ping Cheng[2], Erh-Min Lai[1] ([1]Institute of Plant and Microbial Biology, Academia Sinica, [2]Institute of Plant Biology, National Taiwan University)

1P218 Analysis of transcriptomic response of Arabidopsis roots to interaction with endophytes

Tomasz Oleszkiewicz[1], Subhankar Bera[1], Atsushi J. Nagano[2,3], Rafał Ważny[1], Piotr Rozpądek[1], Kenji Yamada[1] ([1]MCB, Jagiellonian Univ., [2]BBC, Nagoya Univ., [3]IAB, Keio Univ.)

1P219 Impact of *Rhodopseudomonas palustris* PS3 on tomato growth, soil health and soil microbiota composition

Sook-Kuan Lee[1], Ming-Shu Chiang[2], Zeng-Yei Hseu[3], Chih-Horng Kuo[4], Chi-Te Liu[3,5,6] ([1]Department of Horticulture, National Chung Hsing University, Taichung, Taiwan, [2]Department of Agronomy, National Taiwan University, Taipei, Taiwan, [3]Department of Agricultural Chemistry, National Taiwan University, Taipei, Taiwan, [4]Institute of Plant and Microbial Biology, Academia Sinica, Taipei, Taiwan, [5]Institute of Biotechnology, National Taiwan University, Taipei, Taiwan, [6]Agricultural Biotechnology Research Center, Academia Sinica, Taipei, Taiwan)

1P220 Structural Alterations in PR1 Result in Functional Diversify

Chao Hsuan Yeh, YuHan Lin, Lay-Sun Ma (Institute of Plant and Microbial Biology)

■ Genome function/gene regulation

1P221 P Initial Characterization of Genes Potentially Responsible For Surface-Adhesion In Liquid Media And Gliding Motility In The Filamentous Cyanobacterium, *Leptolyngbya boryana*

Shu Ushio[1], Aimi Watanabe[1], Kotomi Takahashi[1], Keitaro Yashiro[1], Dai Okuyama[1], Kazama Toida[1], Takashi Shimokawa[2], Hideo Iwasaki[1,3] ([1]Grad. ASE., Univ. Waseda, [2]Inst. Quantum Science and Technology, QST, [3]metaPhorest)

1P222 Profiling of the HDL–HDA6–KYP module reveals its central role in heterochromatin organization during Arabidopsis silique development

Chia-Yang Chen, Chin-Min Ho (Institute of Plant and Microbial Biology, Academia Sinica)

1P223 Uncovering Agronomically Favorable Genotypes in Temperate *Japonica* Rice through Haplotype Analysis of a Japan-MAGIC population

Hirofumi Fukuda[1,2], Akari Fukuda[2], Toshihiro Sakamoto[3], Yoshihiro Kawahara[4], Ken Naito[5], Taiji Kawakatsu[6,7], Jun-ichi Yonemaru[1,2], Daisuke Ogawa[2] ([1]Res. Cen. Agri. Info. Tech., NARO, [2]Inst. Crop. Sci., NARO, [3]Inst. Agro-Env. Sci., NARO, [4]Res. Cen. Adv. Anal., NARO, [5]Res. Cen. Genet. Resour., NARO, [6]Inst. Agrobio. Sci., NARO, [7]RIKEN BRC)

1P224 Genome sequencing of Arabis stelleri, a sand beach-inhabiting species close to Arabidopsis

Tatsuaki Hirano[1], Kazuki Sugekawa[1], Kousuke Hanada[2], Yoshiharu Y. Yamamoto[1,3,4] ([1]Grad. Sch. Nat. Sci. Tech, Gifu Univ., [2]Grad. Sch. Eng., Kyutech, [3]Fac. Appl. Biol. Sci, Gifu Univ., [4]RIKEN CSRS)

1P225 Genetic engineering of the enzymes involved in carotenoid biosynthesis in *Euglena*

Vicki Nishinarizki[1,2], Iman Permana Maksum[2,3], Shun Tamaki[4], Anzu Minami[1,5], Keiichi Mochida[1,5,6,7], Toto Subroto[2,3] ([1]RIKEN, CSRS, [2]Faculty of Mathematics and Natural Sciences, Universitas Padjadjaran, [3]Research Center for Molecular Biotechnology and Bioinformatics, Universitas Padjadjaran, [4]Department of Biological Science, Faculty of Sciences and Engineering, Yasuda Women's, [5]Kihara Institute for Biological Research, Yokohama City University, [6]RIKEN BZP, [7]School of Information and Data Sciences, Nagasaki University)

1P226 Functional Analysis of B1-RAF kinase in the moss *Physcomitrium patens*

Ibuki Shima, Izumi Yotsui, Teruaki Taji, Yoichi Sakata (Dept. Bioscience, Tokyo Univ. of Agriculture)

1P227 Live-cell imaging analysis of histone modification dynamics in *Arabidopsis thaliana*

Sora Oshima[1], Hikaru Sato[1], Megumi Matsuoka[1], Mio K. Shibuta[2], Takuya Sakamoto[3], Nanami Ito[1], Tatsuaki Goh[4], Yuko Sato[5], Hiroshi Kimura[6], Sachihiro Matsunaga[1] ([1]Dept. Integrated Biosci., Grad. Sch. Frontier Sci., Univ. Tokyo, [2]Fac. Sci., Yamagata Univ., [3]Dept. Sci., Fac. Sci., Kanagawa Univ., [4]Div. Biol. Sci., Grad. Sch. Sci. Tech., NAIST, [5]MIB, Kyushu Univ., [6]IIR, Science Tokyo)

1P228 Imaging analysis of histone acetylation in different cell types of *Arabidopsis thaliana*

Misaki Toraiwa[1], Takuya Sakamoto[1], Shigeru Hanamata[1,2], Mio K. Shibuta[3], Yuko Sato[4], Hiroshi Kimura[5], Sachihiro Matsunaga[6] ([1]Fac. Sci., Kanagawa Univ, [2]Fac. Pharm. Sci., Tokyo Univ. Sci., [3]Fac. Sci., Yamagata Univ., [4]Med. Inst. Bioreg., Kyushu Univ., [5]Cell Biol. Center, Instit. Innov. Res., Science Tokyo, [6]Grad. Sch. Sci., Univ. Tokyo)

1P229 Effect of boron conditions on chromatin structures and gene expression profiles in Arabidopsis cultured cells

Ayane Komatsu[1], Shigeru Hanamata[1,2], Shimpei Uraguchi[3,4], Yuduki Nakamura[3], Masako Kiyono[3], Takuya Sakamoto[1] ([1]Fac. Sci., Kanagawa Univ., [2]Fac. Pharm. Sci., Tokyo Univ. Sci., [3]Dep. Public Health., Sch. Pharm., Kitasato Univ., [4]Grad Sch Hort, Chiba Univ.)

1P230 Functional Antagonism between JMJ27 and HDA6 in Regulating Flowering Time

Jyun-An Chang, Keqiang Wu (National Taiwan University Institute of Plant Biology)

1P231 P Regulation of flowering time by HAKAI, a component of the m^{6}A writer complex

Takumi Noyori[1], Shusei Mori[1,2], Hiroshi Watanabe[1], Soichi Inagaki[1] ([1]Dept. Biol. Sci., Grad. Sch. Sci., Univ. Tokyo, [2]Dept. Plant Sci., Univ. Cambridge)

1P232 Elucidation of the Epigenetic Growth Control Mechanism of *met1* mutants

Hisashi Iitsuka, Yuho Itabashi, Naoya Sugi, Miyako Kusasno, Hiroshi Shiba (Grad. Lif. Env. Sci., Univ. Tshukuba)

1P233 Functional analysis of endosperm-specific DNA methyltransferases in Arabidopsis

Hiroki Tsutsui, Hidetoshi Saze (Okinawa Institute of Science and Technology)

1P234 The Relationship Between DNA Methylation and Salt Stress Tolerance In *Arabidopsis*

Risa Kawashima, Sayaka Tominaga, Taiko To (Sch. Life Science and Technology., Science Tokyo)

1P235 P Functional Interaction of JMJ28 and GCN5 in Regulating ABA and Drought Responses

Wen-Chi Liao[1], Chin-Min Ho[2], Keqiang Wu[1] ([1]Institute of Plant Biology, National Taiwan University, [2]Institute of Plant and Microbial Biology, Academia Sinica)

1P236 P Transcriptome analysis reveals acid stress response and mitigation mechanisms in acid-tolerant and acid-sensitive tomatoes

Pei-Yu Su[1], Ching-Han Chang[2], Hao-Jen Huang[1,2] ([1]Dept. Life Sci., Natl. Cheng Kung Univ., [2]Grad. Prog. Transl. Agric. Sci., Natl. Cheng Kung Univ. & Acad. Sinica)

1P237 Is JAH3 a novel corepressor? :Analysis of the negative regulation of JA–Ethylene responses

KwiMi Chung, Kouki Matsuo (AIST BPRC)

1P238 Genome-wide identification of NAC transcription factors associated with heat stress and fruit development in Lycium barbarum

Tai-Sheng Yen, Pin-Ci Yen, Wen-Lii Huang, You-Yi Chen (Department of Agronomy, National Chiayi University, Chiaiyi, Taiwan)

1P239 P BASIC PENTACYSTEINEs Modulate The Circadian Clock By Repressing The Evening Complex In Arabidopsis

Yi-Chen Lee, Shao-Chi Tsai, Yen-Jui Chang, Xun-Xian Huang, Huang-Lung Tsai (National Taiwan University)

1P240 Analysis of the *NRT1.3* promoter that confers epidermis-specific expression suppression in *Arabidopsis*

Shuta Yamamoto, Taku Takahashi (Grad. Sch. Env. Lif. Nat. Sci., Okayama Univ.)

1P241 Roles of alternative transcription start sites for regulation of xylem vessel cell differenciation

Yusei Yanagiya[1], Toshihiro Arae[2], Misato Ohtani[1,2] ([1]Grad. Sch. Front. Sci., Univ. Tokyo, [2]Grad. Sch. Sci., Univ. Tokyo)

1P242 Development of efficient regeneration system for resource crops by transcriptional activation using CRISPR-dCas9

Jo Nishimura[1], Jun Sakaguchi[1], Miki Takehara[1], Satoshi Kidokoro[1], Keishi Osakabe[2], Yuriko Osakabe[1] ([1]Sch. of Life Sci. & Tech., Science Tokyo., [2]Grad. Sch. of Tech., Ind. & Soc. Sci., Tokushima Univ.)

1P243 P Pre-mRNA splicing regulates cellular dedifferentiation via lipid metabolism in a cytokinin-dependent manner in Arabidopsis

Ami Takeuchi[1], Toshiki Ishikawa[2], Toshihiro Arae[1], Munetaka Sugiyama[3], Misato Ohtani[1,3,4,5] ([1]Grad. Sch. Front. Sci., Univ. Tokyo, [2]Grad. Sch. Sci. Eng., Saitama Univ., [3]Grad. Sch. Sci., Univ. Tokyo, [4]Div. Bio. Sci., NAIST, [5]CSRS, RIKEN)

1P244 Transcriptomic Rewiring Uncovers ATG8a-Dependent Viral Suppression of Light and miRNA Pathways by P1/HC-Pro^{Tu}

Phuong Anh Tran (National Taiwan University)

1P245 P AtMSRB5 stabilizes AHA through 14-3-3ω to promote root growth

Freta Kirana Balladona[1,2] ([1]Graduate Program of Translational Agricultural Sciences, National Cheng Kung University, Taiwan, [2]Academia Sinica-Biotechnology Center of Southern Campus, Agricultural Biotechnology Research Center, Taiwan)

■ Systems biology

1P246 P Construction of Sorghum Coexpression Data and Prospects for Integrating Epigenomics Variation

Daffa Akbar Aprilio[1], Akane Kitamura[2], Atsushi Okazawa[3], Yutaka Tamaru[4,5], Takeshi Obayashi[1,2] ([1]Graduate School of Information Sciences, Tohoku University, [2]Advanced Institute of Marine Ecosystem Change (WPI-AIMEC), Tohoku University, [3]Department of Agricultural Biology, Graduate School of Agriculture, Osaka Metropolitan University, [4]Green X-tech Research Center, Green Goals Initiative, Tohoku University, [5]Department of Molecular Bioengineering, Graduate School of Engineering, Tohoku University)

1P247 P AI-based large-scale structural modeling integrated with multi-omics reveals candidate plant receptor–peptide interactions from *Pseudomonadales* microbiota

Miguelito Isip[1,2], Lai Loi Trinh[1], Ka-Wai Ma[1,2] ([1]Institute of Plant and Microbial Biology, Academia Sinica, Taipei, Taiwan, [2]Molecular and Biological Agricultural Sciences Program, Taiwan International Graduate Program, National Chung-Hsing University and Academia Sinica, Taipei, Taiwan)

■ New Technology

1P248 Cavity Imaging Tool (CavIT): a method for high-resolution analysis of substomatal airspaces in leaves
Wei-Han Fang[1], Tzu-Chuan Huang[1], Chun-Ping Yu[2], Chynthia Devi Hartono[1,3], Chin-Min Kimmy Ho[1] ([1]Institute of Plant and Microbial Biology, Academia Sinica, Taipei, Taiwan, [2]Research Center for Information Technology, Academia Sinica, Taipei, Taiwan, [3]Department of Chemical Engineering, National Taiwan University of Science and Technology, Taipei, Taiwan)

1P249 Development of a Noninvasive and Rapid Imaging Method for Long-distance Protein Movement using Florigen as a case study
Kotaro Nishiyama[1], Haruka Kimura[1], Ayato Sato[2,3], Makoto Shirakawa[4], Yoshiya Seto[1] ([1]Sch. Agri., Meiji Univ., [2]WPI-ITbM, Nagoya Univ., [3]COMIT, Nagoya Univ., [4]IPMB, Academia Sinica)

1P250 P To infinity and beyond: A novel agrobacterial strain allows transient expression and functional genomics research across plant lineages
Juan Carlos Lopez-Agudelo[1,2,3], Yueh-Ning Swee[1], Wei-Jia Liu[1], May Htet Aung[1], Chih-Hang Wu[1,2,4] ([1]Institute of Plant and Microbial Biology, Academia Sinica, Taipei 115201, Taiwan, [2]Molecular and Biological Agricultural Sciences Program, Taiwan International Graduate Program, National Chung Hsing University and Academia Sinica, Taipei 115201, Taiwan, [3]Graduate Institute of Biotechnology, National Chung Hsing University, Taichung 402202, Taiwan, [4]Biotechnology Center, National Chung Hsing University, Taichung 402202, Taiwan)

1P251 P Investigation of the causal genes in frequent T-DNA truncation in “Princettia” (*Euphorbia pulcherrima* x *Euphorbia cornastra*)
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.)

1P252 Development and use of cloning system for problematic genes
Yuta Iwamoto[1], Wang Junhao[2], Hideaki Nojiri[2], Takushi Hachiya[1], Yutaka Sato[3], Kazunori Okada[2], Tsuyoshi Nakagawa[1] ([1]Cent. Integ. Res. Sci., Shimane Univ, [2]Agro-Biotech. Res. Cent. Grad. Sch. Agr. Life Sci., Univ. Tokyo, [3]Plant Genet., Nat. Inst. Genet)

1P253 Development of binary vectors enabling naked-eye visualization of T-DNA insertion in rice callus
Kiyoshi Yamazaki, Raj Kishan Agrahari, Toru Fujiwara (Grad. Sch. Agr. Life Sci., Tokyo Univ.)

1P254 A transcriptome-based pipeline for automated discovery of known and novel microRNAs in *Marchantia polymorpha*
Jia-Zhen Yu[1], Yu-Ling Hung[1], Chi-Ling Huang[1], Jia-Ling Guo[1], Sae Anada[2], Keisuke Inoue[2,3], Takashi Araki[2], Shih-Shun Lin[1] ([1]Institute of Biotechnology, National Taiwan University, [2]Graduate School of Biostudies, Kyoto University, [3]CeLiSIS, Kyoto University)

1P255 Boosting CRISPR Power in Moss: Dual-gRNA and Polycistronic Designs Enable Large, Multiplex Gene Deletions
Elena Kozgunova[1,2] ([1]Graduate School of Science, Nagoya University, [2]Institute for Advanced Research, Nagoya University)

1P256 High-Throughput Gene Knockout in *Nicotiana benthamiana* via TRV-Delivered CRISPR and Agrobacterium Infiltration
Ivan Wong (University of Illinois at Urbana Champaign)

1P257 Creation of double-petal *Cyclamen* by multiplex genome editing using CRISPR/Cas9
Satoru Komagata[1], Chisato Watarai[1], Kimiyo Sage-Ono[1], Masaki Endo[2], Seiichi Toki[2,3], Tsubasa Yano[4], Teruhiko Terakawa[4], Michiyuki Ono[1] ([1]T-PIRC, Univ. Tsukuba, [2]NIAS, NARO, [3]Ryukoku Univ., [4]Inplanta Innovations Inc.)

■ Bioresources

1P258 RIKEN BRC’s 2025 Progress in Collection, Distribution, and Quality Control of Plant Cell Resources
Toshihiro Kobayashi, Mayumi Sugawara, Yuri Shitomi, Mamiko Kouzai, Taiji Kawakatsu (RIKEN BRC)

1P259 Adding Bioresource Information to the RIKEN BRC Exp-Plant Catalog
Satoshi Iuchi, Taiji Kawakatsu (RIKEN BRC Experimental Plant Division)

1P260 The Influence of Environmental Education on Preferences for Plant Health Conditions
Ying-Chu Chen[1], Po-Ching Wang[2] ([1]National Taiwan University, Department of Forestry and Resource Management, [2]National Chiayi University, Department of Landscape Architecture)

■ Photosynthesis

2P001 Adaptation of energy transfer in red alga *Porphyridium Purpureum* to different green light intensities
Hidetaka Kurachi[1], Shimpei Aikawa[2], Seiji Akimoto[1] ([1]Grad. Sch. Sci., Kobe Univ., [2]JIRCAS)

2P002 Identification of key chlorophyll *a* molecules responsible for the 695 nm fluorescence emission in CP47 of *Thermosynechococcus vulcanus*

Songbo Fan, Hiroshi Kuroda, Haowei Jiang, Yoshiki Nakajima, Jian-Ren Shen (Research Institute for interdisciplinary Science, Okayama University)

2P003 Investigation of Interspecies Differences in Light Environment Responses in Diatoms

Shiori Kitamura[1], Jian Xing[2], Minoru Kumazawa[3], Atsushi Takabayashi[3], Kentaro Ifuku[1,2] ([1]Fac. Agri., Kyoto Univ., [2]Grad. Sch. Agri., Kyoto Univ., [3]Inst. Low Temp. Sci., Hokkaido Univ.)

2P004 Efficient Quenching by Phosphorylated Lhcb1–Enriched PSI–PSII Megacomplexes Formed in Thylakoid Membranes of Iron-Deficient Barley

Akihiro Saito[1], Suzuha Hirayama[1], Miku Arakaki[1], Kai Nakano[1], Makio Yokono[2], Yusuke Shikanai[1], Kyoko Higuchi[1] ([1]Dept. Agric. Chem., Fac. Appl. Biosci., Tokyo Univ. Agric., [2]Div. Environ. Photobiol., NIBB)

2P005 Co-expression and chloroplast localization of a nitrogenase-like enzyme in plant cells using ribosome skipping

Yui Shimizu, Haruki Yamamoto, Takafumi Yamashino, Yuichi Fujita (Grad. Sch. Bioagri. Sci., Nagoya Univ.)

2P006 Deciphering the evolution of pigment biosynthetic pathways and Bacteria

Yusuke Tsukatani[1], Arisa Nishihara[2], Chihiro Azai[3], Masaru K. Nobu[1] ([1]JAMSTEC, [2]AIST, [3]Fac. of Sci. and Eng., Chuo Univ.)

2P007 Distribution regulation of tetrapyrrole biosynthesis by two chelatases in cyanobacteria

Shun Hatano, Tatsuru Masuda, Keita Miyake (Grad, Sch, Arts Sci., Univ. Tokyo.)

2P008 Excitation-energy-dissipating photosystem complex accumulated during desiccation in desert green alga *Chlorella ohadii*

Soma Kawamura, Makio Yokono, Chiyo Noda, Jun Minagawa (National Institute for Basic Biology)

2P009 Energy distribution mechanisms to PSI and PSII in the far-red-light-utilizing Antarctic alga *Prasiola crispa*

Hibika Umehara[1,2], Makiko Kosugi[1,2], Jun Minagawa[1,2] ([1]Natl. Inst. Basic Biol., [2]SOKENDAI)

2P010 Far-red light absorption and excitation energy transfer mechanism in the far-red light-harvesting antenna protein complex in a green alga, *Prasiola crispa*

Makiko Kosugi[1,2], Keisuke Saito[3,4], Yusuke Yoneda[2,5], Hikaru Kuramochi[2,5,6], Hiroshi Ishikita[3,4], Jun Minagawa[1,2] ([1]Nat. Inst. Basic Biol., [2]Grad. Inst. Adv. Stu., SOKENDAI, [3]Dep. App. Chem., Univ. Tokyo, [4]Res. Cent. Adv. Sci. Tech., Univ. Tokyo, [5]Res. Cent. Integ. Molecul. Sys., Inst. Molecul. Sci., [6]Grad. Sch. Engin. Sci., Univ. Osaka)

2P011 Redox Regulation of PPDK-Regulatory Proteins from *Arabidopsis thaliana*

Subaru Nishide[1,2], Keisuke Yoshida[1,2] ([1]Laboratory for Chemistry and Life Science, Institute of Integrated Research, Institute of Science Tokyo, Yokohama Japan, [2]School of Life Science and Technology, Institute of Science Tokyo, Yokohama, Japan)

2P012 Complementation of the PyShell gene to the PyShell-less mutants of the marine diatom, *Thalassiosira pseudonana*

Rika Ikeda, Yusuke Matsuda (Grad. Bio. Sci., Kwanseigakuin Univ)

2P013 Correlation between the intercellular CO_2 concentration and the heat dissipation during phase transition in CAM plants

Shunki Kawata[1], Naoki Ohishi[2], Shin Kore-eda[1] ([1]Grad. Sch. Sci. and Eng., Saitama Univ., [2]Dept. Biochem. Mol. Biol., Saitama Univ.)

2P014 Effect of genome editing knock out of the CO2/light sensing transcription factor, PtbZIP11

Haruta Koyama, Yusuke Matsuda (Kwansei Gakuin University)

2P015 Flow Cytometry as a Tool for Analyzing Photoacclimation of Cyanobacteria in Co-culture

Ting-Hsuan Chan[1], Ming-Yang Ho[1,2] ([1]Department of Life Science, National Taiwan University, [2]Institute of Plant Biology, National Taiwan University)

2P016 Isolation and Characterization of High-Temperature-Tolerant Cyanobacteria from Taiwan for Flue-Gas Carbon Capture Applications

Tzu-Ling Chen[1,3], Pa-Yu Chen[2], Hsiu-An Chu[3], Ming-Yang Ho[1,2] ([1]Institute of Plant Biology, National Taiwan University, [2]Department of Life Science, National Taiwan University, [3]Institute of Plant and Microbial Biology, Academia Sinica)

2P017 Effectiveness of Protamine in the Cell Harvesting Process of *Synechocystis* sp. PCC 6803

Kokone Sato[1], Michiyo Honda[2], Takashi Osanai[1] ([1]Sch. Agr., Univ. Meiji, [2]Sch. Sic., Univ. Meiji)

2P018 Significance of Acetate Metabolism in Cyanobacteria

Yuka Soga[1], Masahiro Karikomi[2], Takashi Osanai[1] ([1]Agri., Univ. Meiji, [2]Grad. Sch. Agri., Univ. Meiji)

2P019 Analysis of the effect of polysulfide on chloroplast biogenesis in *Arabidopsis thaliana*

Otoa Matsui[1], Shingo Kasamatsu[2], Yousuke Seto[3], Satoru Watanabe[4], Tomohiko Tsuge[5], Hideshi Ihara[2], Tatsuru Masuda[6], Takayuki Shimizu[1] ([1]Graduate School of Humanities and Sciences, Nara Women's University, [2]Graduate School of Science, Osaka

Metropolitan University, [3]Cancer Chemotherapy Center, JFCR, [4]Faculty of Life Sciences, Tokyo University of Agriculture, [5]Institute for Chemical Research, Kyoto University, [6]Graduate School of Arts and Sciences, The University of Tokyo)

2P020 Functional analysis of chloroplast formation factors in early branching cyanobacteria

Shota Suzuki[1], Wataru Sakamoto[2], Toshihiko Eki[1,3], Shigeru Kawai[1], Yuu Hirose[1,3] ([1]Toyohashi Tech. Grad. Sch. Eng., Dept. of Appl. Chem. & Life Sci., [2]Okayama Univ. Inst. of Plant Sci. & Resources, [3]Toyohashi Tech. Dept. of Appl. Chem. and Life Sci.)

2P021 Discovery of a novel protein that is involved in the thylakoid membrane formation in cyanobacteria

Yoshiki Shirotori[1,5], Kimie Atsuzawa[2], Egi tritya Apdila[3], Yasuko Kaneko[2], Koichiro Awai[3], Masaru K. Nobu[4], Yusuke Tsukatani[5], Shigeki Ehira[1] ([1]Grad. Sch Sci, Tokyo Metropolitan Univ, [2]Grad. Sch. Sci Eng., Saitama Univ., [3]Grad. Sch. Sci. Tec., Shizuoka Univ., [4]XSTAR., JAMSTEC, [5]BGC., JAMSEC)

2P022 Intracellular thiol modifications of transcription factors responsive to polysulfide and reactive oxygen species in photosynthetic bacteria

Otoha Takeda[1], Masaru Hashimoto[2], Shingo Kasamatsu[3], Tatsuru Masuda[4], Takayuki Shimizu[1] ([1]Faculty of Science, Nawa Women's University, [2]Graduate School of Agricultural and Life Sciences, The University of Tokyo, [3]Graduate School of Science, Osaka Metropolitan University, [4]Graduate School of Arts and Sciences, The University of Tokyo)

2P023 Functional Analysis of Polysulfide- and ROS-Sensing Transcriptional Regulators in Purple Photosynthetic Bacteria

Shuxian Wang[1], Yosuke Seto[2], Yutaro Kumagai[3], Masaru Hashimoto[4], Shintaro Maeno[5], Yasuhiro Gotoh[6], Tetsuya Hayashi[7], Tatsuru Masuda[8], Takayuki Shimizu[1] ([1]Graduate School of Humanities and Sciences, Nara Women's University, [2]Cancer Chemotherapy Center, JFCR, [3]Department of Life Science and Biotechnology, AIST, [4]Graduate School of Agriculture and Life Science, The University of Tokyo, [5]Organization for Research Initiatives, Yamaguchi University, [6]Advanced Genomics Center, NIG, [7]Graduate School of Medical Sciences, Kyushu University, [8]Graduate School of Arts and Sciences, The University of Tokyo)

2P024 Analysis of metabolism and extracellular efflux mechanism of sulfur globule generated by sulfide-dependent photosynthesis

Miyu Ikushima[1], Nanako Kanno[2], Shigeru Kawai[3], Shinsuke Shigeto[2], Tatsuru Masuda[4], Christiane Dahl[5], Takayuki Shimizu[1] ([1]Faculty of Science, Nara Women's University, [2]Department of Chemistry, School of Science, Kwansei Gakuin University, [3]Department of Applied Chemistry and Life Science, Toyohashi University of Technology, [4]Graduate School of Arts and Sciences, The University of Tokyo, [5]Institut für Mikrobiologie & Biotechnologie, Rheinische Friedrich-Wilhelms-Universität Bonn)

2P025 Photosynthetic analyses of the double mutants of TRX*f* and chloroplast-localized eukaryotic TXRs in *Marchantia polymorpha*

Taichi Sugiyama[1], Yuuki Sakai[2], Masaru Kono[1,3], Kimitsune Ishizaki[2], Keisuke Yoshida[1] ([1]CLS, Sci. Tokyo, [2]Grad. Sch. Sci. Kobe Univ., [3]ABC)

2P026 Light-wavelength-dependent pigment biosynthesis in thermophilic photosynthetic bacterium *Chloroflexus aurantiacus*

Yuuri Asou, Yuu Hirose, Shigeru Kawai (Department of Applied Chemistry and Life Science, Toyohashi University of Technology)

2P027 Considerations on the evolutionary relationship between C8-vinyl reductase (DVR) present only in the bacteriochlorophyll *a* synthesis and anther types of DVR

Jiro Harada[1], Ken Yamamoto[1], Hitoshi Tamiaki[2] ([1]Dept. Med. Biochem., Kurume Univ. Sch. Med., [2]Grad. Sch. Life Sci., Ritsumeikan Univ.)

2P028 Synergistic Co-utilization of Malate and Succinate Enhances Photofermentative H_2 Production in *Cereibacter sphaeroides*: Implications for Redox Balancing

Sakiko Nagashima, Ayumu Kurihara, Kenji Nagashima, Kazuhito Inoue (Kanagawa University)

2P029 Photoreduction of ferric iron catalysed by a flavoenzyme from a non-phototrophic bacterium

Daisuke Seo[1], Kazuhito Inoue[2], Hirofumi Komori[3] ([1]Inst. Mat. Sci., Kanazawa Univ., [2]Dep. Biochem. Biotech., Kanagawa Univ., [3]Fac. Edu., Kagawa Univ.)

■ Primary metabolism

2P030 Evolution and physiological significance of non-peroxisomal allantoin synthesis in plant purine catabolism

Yuta Takeuchi, Hiroshi Shimada, Atsushi Sakamoto (Grad. Sch. Integr. Sci. Life, Hiroshima Univ.)

2P031 Different responses of grain-free amino acid accumulation in rice cultivars to the change in nitrogen application rates

Aya Kishie[1], Daisuke Takagi[2] ([1]Grad. Sch. Agric., Setsunan Univ., [2]Fac. Agric., Setsunan Univ.)

2P032 Physiological and Transcriptomic Characterization of a Nitrogen-Insensitive Variety from the World Rice Core Collection

Honoka Kurikawa[1], Keisuke Kutsuwada[1], Tomoko Nishizawa[2], Mikiko Koizumi[2], Makoto Kobayashi[2], Takanari Tanabata[3], Atsushi Fukushima[4,5], Miyako Kusano[2,6,7] ([1]Grad. Sch. Life and Envi Sci., Univ. Tsukuba, [2]CSRS., RIKEN, [3]Sci. & Tech., Univ. Chitose Inst. Sci. and Tech., [4]Life and Envi Sci., Univ. Kyoto Pref, [5]R-IH., RIKEN, [6]Life and Envi Sci., Univ. Tsukuba, [7]T-PIRC)

2P033 Dynamics of Triacylglycerol Accumulation during Seed Development in Soybean and Arabidopsis thaliana

Yuta Ihara[1], Yuki Nakamura[1,2] ([1]CSRS, RIKEN, [2]Grad. Sch. Sci., Univ. Tokyo)

2P034 Functional analysis of phosphocholine in Arabidopsis roots

Moe Ito[1,2], Van C. Nguyen[2], Artik Elisa Angkawijaya[2], Misako Kato[1], Yuki Nakamura[2,3] ([1]Graduate School of Science, Ochanomizu University, [2]RIKEN CSRS, [3]Department of Biological Sciences, Graduate School of Science, The University of Tokyo)

2P035 Physiological role of root-type ferredoxin:NADP(H) oxidoreductase in *Arabidopsis thaliana*

Kota Monden[1], Daisuke Otomaru[1], Takamasa Suzuki[2], Tsuyoshi Nakagawa[3], Takushi Hachiya[3] ([1]Graduate School of Natural Science and Technology, Shimane University, [2]College of Bioscience and Biotechnology, Chubu University, [3]Department of Molecular and Functional Genomics, Interdisciplinary Center for Science Research, Shimane University)

■ Specialized (secondary) metabolism

2P036 Enzymatic activity of DET2 in plant progesterone metabolism

Rikuto Hamada[1], Kenichi Uchida[2], Takao Yokota[2], Takahito Nomura[1] ([1]Ctr. for Biosci. Res. and Edu., Utsunomiya Univ., [2]Fac. of Sci. and Eng., Teikyo Univ.)

2P037 Characterization of sterol metabolic enzymes in *Physcomitrium patens*

Rin Nakamura[1], Masaharu Mizutani[2], Takahito Nomura[1] ([1]Ctr. for Biosci. Res. and Edu., Utsunomiya Univ., [2]Grad. Sch. of Agri., Kobe Univ.)

2P038 Analysis of the regulatory mechanisms of salicylic acid synthesis via CNL, a key enzyme of salicylic acid synthesis in tobacco, and salicylic acid synthetase HSR203J

Momoho Osada, Shinpei Katou (Grad. Sch. Sci., Univ. Shinshu)

2P039 Functional analysis of *calmodulin-like* genes in salicylic acid synthesis in tobacco

Kota Arai, Riho Kuribara, Shinpei Katou (Grad. Sch. Sci. & Tech., Univ. Shinshu)

2P040 Involvement in SA biosynthesis of two paralogous cinnamoyl-CoA hydratase/dehydrogenases with distinct expression pattern and subcellar localization

Shinnosuke Itou, Kazumi Murata, Shinpei Katou (Grad. Sch. Sci and Tec., Univ. Shinshu)

2P041 The additive effects of jasmonic acid overproduction between *dgd1* mutants and under phosphate starvation in Arabidopsis

Huan-Chi Chou, Chun-Wei Yu (Instituete of Molecular and Cellular Biology, National Taiwan University)

2P042 Effects of elicitors on the levels of cysteine sulfoxide derivatives in *Allium* species

Shimpei Kawaguchi[1], Kanako Murata[1], Ayuna Kisanuki[1], Takashi Asano[2], Mami Yamazaki[1,3], Naoko Yoshimoto[1,3] ([1]Grad. Sch. Pharm. Sci., Chiba Univ., [2]Sch. Pharm., Iwate Med. Univ., [3]Plant Mol. Sci. Cent, Chiba Univ.)

2P043 Identification and functional analysis of beta-substituted alanine synthases in garlic

Mio Takeda[1], Mami Yamazaki[1,2], Naoko Yoshimoto[1,2] ([1]Grad. Sch. Pharm. Sci., Chiba Univ., [2]Plant Mol. Sci. Cent., Chiba Univ.)

2P044 Aluminum resistance in *Eucalyptus camaldulensis* with knockdown of hydrolysable tannin biosynthesis

Ko Tahara[1], Mitsuru Nishiguchi[1], Hideyuki Ito[2,3], Haruna Uemori[3,4], Yuji Iwaoka[3], Hiromi Yamashita[3], Toshiyuki Murakami[4], Chihiro Oda-Yamamizo[1] ([1]FFPRI, [2]National Institutes of Biomedical Innovation, Health and Nutrition, [3]Grad. Sch. Okayama Prefectural Univ., [4]Maruzen Pharmaceuticals, Co., Ltd.)

2P045 Search for biosynthetic genes of hydrolysable tannins in *Eucalyptus camaldulensis* using herbaceous model plants

Chihiro Oda-Yamamizo, Tokuko Ujino-Ihara, Ko Tahara (FFPRI)

2P046 Analysis of betalain biosynthesis-related genes in *Phytolacca japonica*

Yukiko Fukayama[1], Takumi Ogawa[1], Kenji Miura[2], Manabu Horikawa[3], Atsushi Okazawa[1] ([1]Grad. Sch. Agric., Osaka Met. Univ., [2]Fac. Sch. Life Environ. Sci., Univ. Tsukuba, [3]Bioorg. Res. Inst., Suntory Found. Life Sci.)

2P047 Elucidating the Genetic Diversity of Natural Rubber Based on Multi-omics Analysis of *Hevea* Species Genomes and Latex

Emiko Okubo-Kurihara[1,6], Nyok Sean Lau[2], Yuko Makita[3], Fetrina Oktavia[4], Tomoko Kuriyama[6], Minami Matsui[5,6] ([1]Keio University, Division of Biology, [2]Universiti Sains Malaysia, [3]Mebashi Institute of Technology, [4]Indonesian Rubber Research Institute, [5]Yokohama City University, [6]RIKEN Center for Sustainable Resource Science)

2P048 Identification and Functional Analysis of 2-Oxoglutarate-Dependent Dioxygenases Involved in Calystegine Biosynthesis in *Atropa belladonna*

Kohei Nakanishi[1,2], Ryota Akiyama[1], Arisa Nakae[1], Tsukasa Mikawa[1], Bubwoong Kang[1], Masaharu Mizutani[1], Tsubasa Shoji[2] ([1]Grad. Sch. Agric. Sci., Kobe Univ., [2]INM, Toyama Univ.)

2P049 Unraveling Phloem-Mediated Regulation in the Ripening of Non-Climacteric Fruits in *Capsicum annuum*

Chia-Chi Yeh, Wei-Jie Ciou, Ping-Yi Lin, Zhi-Yu Fu, I-Chun Pan (Department of Horticulture, National Chung Hsing University)

■ Biomembrane/Ion and solute transport

2P050 Zinc transport function of OsMRS2-8, a member of magnesium transporter family

Natsuko I. Kobayashi[1], Ayako Nishizawa-Yokoi[2], Yusaku Noda[3], Naoto Yamada[3], Naoki Kawachi[3,4], Koichi Ito[5], Keitaro Tanoi[1,4] ([1]Grad. Sch. Agri. Life Sci., Univ. Tokyo, [2]NARO, [3]QST, [4]F-REI, [5]Grad. Sch. Front. Sci., Univ. Tokyo)

2P051 Nitrate transporter NRT1.11/1.12 affect leaf angle in *Arabidopsis*

Yiyi Juan[1,2], Po-Kai Hsu[1], Yi-Fang Tsay[1] ([1]Institute of molecular biology, Academia Sinica, [2]Department of Agronomy, National Taiwan University)

2P052 CO_2 permeability of rice PIP2 aquaporins

Mahbuba Siddika, Izumi C. Mori (IPSR, Okayama Univ.)

2P053 Improvement of tolerance to high concentrations of magnesium in plants through disruption of an upstream ORF using genome editing

Naoko Onishi[1], Noriya Hayashi[1], Hirotaka Iinuma[1], Toshiki Mori[2], Atsushi Kaido[1], Toshihiro Watanabe[1], Zhihang Feng[3], Takehiro Kamiya[3], Toru Fujiwara[3], Yuta Hiragori[1], Satoshi Naito[1], Hitoshi Onouchi[1] ([1]Grad. Sch. Agr., Hokkaido Univ., [2]Sch. Agr., Hokkaido Univ., [3]Grad. Sch. Agr. Sci., Univ. Tokyo)

2P054 Search for the regulatory proteins of Arabidopsis magnesium transporter CST2/MGR1 using the proximal-dependent labeling enzyme AirID

Kurumi Nakata[1], Taiga Hagimoto[1], Akira Nozawa[2], Tatsuya Sawasaki[2], Jian Feng Ma[3], Toshinori Kinoshita[4], Shin-ichiro Inoue[1] ([1]Grad. Sch. Sci. Eng., Saitama Univ., [2]PROS, Ehime Univ., [3]IPSR, Okayama Univ., [4]ITbM, Nagoya Univ.)

■ Organelles/Cytoskeleton/Endomembrane system

2P055 Genetical analysis of Tadukan-type cytoplasmic male sterile rice crossed with various fertility restorer lines

Ayumu Takatsuka[1,2], Tomohiko Kazama[1], Keisuke Igarashi[2], Kinya Toriyama[2] ([1]Grad. Sch. Biores. Bioenviron. Sci., Kyushu Univ., [2]Grad. Sch. Agri. Sci., Tohoku Univ.)

2P056 On Gene Expression in Plant Mitochondria: Transcription and RNA editing

Jingchan Xie[1], Jingxiu Ji[1], Akihito Mamiya[1], Chang Zhou[2], Tenghua Wang[1], Sachi Takenaka[1], Issei Nakazato[2], Shin-ichi Arimura[2], Mizuki Takenaka[1] ([1]Grad. Sch. Sci., Kyoto Univ., [2]Grad. Sch. Agric., Univ. Tokyo)

2P057 Functional analysis of plant AOX in mitochondrial thermogenesis

Shungo Higashi[1], Takashi Fukada[1], Yasuko Ito-Inaba[2], Noriko Inada[1] ([1]Osaka Metropolitan Univ., Schl. Of Agri, [2]Fac. Agri., Univ. Miyazaki)

2P058 Live Cell Monitoring of Chloroplast Nucleoids during Chloroplast Autophagy in Arabidopsis Leaves

Sakuya Nakamura, Shinya Hagihara, Masanori Izumi (RIKEN CSRS)

2P059 Functional redundancy of Clade I ATG8 isoforms in nitrogen remobilization during rice vegetative growth

Kyohei Komatsu[1], Ryotaro Kitayama[1], Ryota Suzuki[1], Sota Izumi[1], Mayu Ito[1], Arisa Masuko[1], Takahiro Ni[1], Eri Kondo[1], Masafumi Hidaka[1], Mao Suganami[2], Masanori Izumi[3], Shinya Wada[1], Hiroyuki Ishida[1] ([1]Grad. Sch. Agri. Sci., Tohoku Univ., [2]IFeS, Fac. Food Agri. Sci., Fukushima Univ., [3]CSRS, Riken)

2P060 Structural analysis of the peroxisomal ATP-dependent protease LON2, a regulator of autophagy

Wataru Tsuchiya[1], Keiko Yokoi[1], Masato Akutsu[1], Satomi Inaba-Inoue[2], Toshio Moriya[2], Toshiya Senda[2], Shino Goto-Yamada[3], Akira Kato[4], Noritoshi Inagaki[1] ([1]NARO/RCAA, [2]KEK/SBRC, [3]NIBB/Lab. Organelle Reg., [4]Niigata Univ./Faculty of Sci.)

2P061 Spatiotemporal regulation of F-actin accumulation in response to mechanical stress

Yun-Ching Yen, Han Tang (Graduate Institute of Biochemistry, National Chung Hsing University, Taichung, ROC, Taiwan)

2P062 Chloroplast Movement Involving Myosin XI Adaptors

Haruto Takiura[1], Jun Obara[2], Motoki Tominaga[3] ([1]Sch. Edu, Sci., Bio., Waseda Univ., [2]Grad. Sch., Adv. Sci. Eng., Waseda Univ., [3]Educ. Integrated Arts. Sci., Bio., Waseda Univ.)

2P063 The Microtubule-Associated Protein AIR9 regulate the Cortical Microtubule Orientation and Stability in the Moss *Physcomitrium patens*

Keita Nakamura[1], Satoshi Naramoto[2], Yoshikatsu Sato[3], Yuji Hiwatashi[4] ([1]Grad. Sch. Food, Agricul. Environ. Sci., Miyagi Univ., [2]Grad. Sch. Life Sci., Hokkaido Univ., [3]ITbM, Nagoya Univ., [4]Sch. Food, Agricul. Environ. Sci., Miyagi Univ.)

2P064 Elucidating the role of MPB2C in cortical microtubule nucleation

Yuto Yamazumi[1], Noriyoshi Yagi[2], Masayoshi Nakamura[2] ([1]Grad. Sch. Sci., Univ. Nagoya, [2]Grad. Sch. Sci., Univ. Saitama)

2P065 Function of kinesin family in the development of Marchantia polymorpha

Hiroyasu Motose, Runon Ibara (Okayama Univ.)

2P066 Functional analysis of factors involved in glutelin transport and accumulation in rice using newly identified *glup* mutants

Mako Fukuda, Toshihiro Kumamaru (Kyushu Univ., Agri.)

2P067 Tissue-Specific Cargo Selection by PATROL1: AHA1 in Guard Cells but Not AHA1/AHA2 in Roots

Mimi Hashimoto-Sugimoto, Wakana Oya, Hitoshi Sakakibara (Grad. Sch. Bioagri. Sci, Nagoya Univ.)

2P068 Molecular genetic analysis of the mechanisms underlying the formation and function of the shoot epidermis

Yusuke Sagawa[1], Satomi Tai[2], Sawa Mizuguchi[1], Kazuo Ebine[3], Takashi Ueda[3], Hirokazu Tanaka[1] ([1]Dept. Life Sci. Agriculture, Meiji Univ., [2]Grad. Sch. Sci., Osaka Univ., [3]Division of Cellular Dynamics, NIBB)

2P069 Protein-retention expansion microscopy of Arabidopsis roots

Yutaro Shimizu, Dumazel Amandine, Louise Fougere, Emmanuelle Bayer, Mónica Fernandez-Monreal, Yohann Boutte, Magali Grison (Bordeaux University)

2P070 Roles of the TGN-localized membrane trafficking components in regulating the root meristem in Arabidopsis

Ruian Wang, Kosuke Ogita, Hirokazu Tanaka (Meiji Univ. Grad. School of Agri.)

2P071 Observation of Plasmodesmata Formation During Grafting

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

2P072 Localization Analysis of PDLP1 and PDLP5 Using Super-Resolution Live Imaging

Chika Otake[1], Nao Nakamigawa[1], Yoko Ito[2], Masayoshi Nakamura[3], Shiori Nagahara[4], Michitaka Notaguchi[4], Tomohiro Uemura[1,5] ([1]Grad. Sch. Life Sci., Ochanomizu Univ., [2]Human Life, Ochanomizu Univ., [3]Grad. Sch. Sci. & Engr., Saitama Univ., [4]Grad. Sch. Sci., Kyoto Univ., [5]Fac. of Core Recr., Ochanomizu Univ.)

■ Cell wall

2P073 Cell wall integrity in mechanosensing shapes wound-induced regeneration patterns

Shunnenn Kou, Kann Tou (Graduate Institute Of Biochemistry, National Chung Hsing University)

2P074 Divergent evolution and lineage-Specific expansion of hybrid proline-rich proteins (HyPRPs) in vascular plants

Sou-Yu Cheng, Ming-Der Huang (Department of Biological Sciences, National Sun Yat-sen University, Taiwan)

2P075 Analysis of Composition and Localization of Cell Wall Polysaccharides in *Sphagunam palustre*

Tadashi Kunieda[1,2], Suguru Aiba[1], Natsune Nakamura[1], Taku Demura[1,2] ([1]Div. of Biol. Sci., NAIST, [2]CDG, NAIST)

2P076 Analysis of the effects of varieties of white light source on sturdy stem formation in *Arabidopsis thaliana*

Koshiro Hatanaka[1], Momoka Ohashi[2], Daisuke Takahashi[2], Toshiya Yokoyama[3], Kazuhiko Nishitani[3], Takuya Sakamoto[3], Mariko Asaoka[3] ([1]Grad. Fac. Sci., Kanagawa Univ., [2]Grad. Sch. Sci. Eng., Saitama Univ., [3]Fac. Sci., Sci., Kanagawa Univ.)

2P077 Identification and molecular characterisation of pollen-derived cutin-degrading enzymes

Mengyi Xu[1], Yoshinobu Kato[1], Seiji Takayama[1], Sota Fujii[1,2] ([1]Grad. Sch. Agri. Life Sci., Univ. Tokyo, [2]Suntory SunRiSE)

2P078 Effects of glucosylation of haustorium inducing factors on haustorium induction in parasitic plants

Moe Takahashi[1], Lei Xiang[1], Shoko Inaba[2], Bing Xie[1], Takayuki Tohge[3], Yuki Tobimatsu[4], Satoko Yoshida[1] ([1]NAIST, Plant Symbiosis, [2]Kansai Gakuin Uni., [3]NAIST, Plant Secondary Metabolism, [4]Kyoto Uni.)

2P079 β-Galactoglucomannan is involved in cell adhesion in tomato fruit

Yoshihisa Yoshimi[1,2], Li Yu[2], Konan Ishida[2], Rosalie Cresswell[2,3], Raymond Wightman[4], Georgina Lindop[5], Karin Müller[5], William Willats[6], Paul Dupree[2,3], Paul Dupree[2] ([1]Fac. Bio.-Ori. Sci. Tech, Kindai Univ., [2]Dept. Biochem., Univ. Cambridge, [3]Dept. Phys., Warwick Univ., [4]Sainsbury Lab., Univ. Cambridge, [5]Cam. Adv. Imag. Cent., Univ. Cambridge, [6]Sch. Nat. Env. Sci., Newcastle Univ.)

■ Development/Morphogenesis

2P080 The Role Of The Phloem Specific NAC Transcription Factor In The Phloem Development
Shinnosuke Kajiwara[1], Tatsuo Kakimoto[1], Yuki Kondo[1], Pingping Qian[1,2] ([1]Graduate School of Science, The University of Osaska, [2]Graduate School of Life Science, Lanzhou University)

2P081 Regulation of *LONESOME HIGHWAY* by uORF in *Arabidopsis thaliana*
Naota Fujishima, Kuninori Iwamoto, Kyoko Ohashi-Ito (Grad. Sci., Univ. Tokyo)

2P082 LONESOME HIGHWAY-LIKE3 regulates vascular cell proliferation in the root apical meristem
Kyoko Ohashi-Ito[1], Marino Mori[1], Kuninori Iwamoto[1], Hiroo Fukuda[2] ([1]Grad. Sch. Sci., The Univ. of Tokyo, [2]Akita Prefectural Univ.)

2P083 *LSH4/LSH10* mediated root growth regulation downstream of VLCFA signaling under high ambient temperature
Nanami Yasui[1], Yuta Uemura[1], Rena Kasahara[1], Rika Sasaki[1], Takamasa Suzuki[2], Hironaka Tsukagoshi[1] ([1]Grad. Sch. Agr. Meijo Univ., [2]Coll. Biosci. & Biotech. Chubu Univ.)

2P084 Elucidation of a novel molecular mechanism of plant growth induced by root zone cooling
Yuri Hachisuka[1], Yuta Uemura[1], Rena Kasahara[1], Takamasa Suzuki[2], Hironaka Tsukagoshi[1] ([1]Grad. Sch. Agr. Meijo. Univ, [2]Coll. Biosci. & Biotech. Chubu. Univ)

2P085 Elucidation of Root Development Mechanisms Involving the Blocking of Iron Absorption Genes Expression
Kanau Sato, Kazuto Sakai, Hironaka Tsukagoshi (Grad. Sch. Agr. Meijo Univ.)

2P086 Nitrogen-inducible peptide LOHN1 negatively regulates lateral root initiation via modulating auxin transport in Arabidopsis
Tomoya Sonoda[1], Kazuhiro Ito[1], Takamasa Suzuki[2], Takumi Higaki[3], Hidehiro Fukaki[4], Kousuke Hanada[5], Koh Iba[1], Kensuke Kusumi[1] ([1]Grad. Sch. Sci., Kyushu Univ., [2]Col. Biosci. Biotech., Chubu Univ., [3]Kumamoto Univ., FAST, [4]Grad. Sch. Sci., Kobe Univ., [5]Dep. Biosci. Bioinform., Kyutech.)

2P087 A Novel Circadian Clock Transcriptional Complex Regulating Lateral Root Development
Ayano Kato[1], Sota Nomoto[1], Syunsaku Yamamoto[1], Takumi Ohnakado[1], Kosuke Mase[1], Satomi Sakaoka[1], Takamasa Suzuki[2], Soichi Inagaki[3], Yasuomi Tada[4], Yoshikatsu Matsubayashi[5], Norihito Nakamichi[6], Hironaka Tsukagoshi[1] ([1]Agr., Meijo Univ, [2]Col. Biosci. Biothech., Chubu Univ, [3]Grad. Sch. of Sci., Tokyo Univ, [4]Cent. Gene Res., Nagoya Univ, [5]Grad. Sch. Sci., Nagoya Univ, [6]Grad Sch Bioagric Sci., Nagoya Univ)

2P088 A novel wound defense strategy, “Cells lock”, as an initial response to endogenous and exogenous damage in root
Kosuke Mase[1], Honomi Mizuno[1], Keigo Nakamura[1], Koki Tomida[1], Nanari Furukawa[1], Shiho Ueno[1], Sesshu Takagi[1], Kanau Sato[1], Satomi Sakaoka[1], Takamasa Suzuki[2], Soichi Inagaki[3], Atsushi Morikami[1], Hironaka Tsukagoshi[1] ([1]Faculty of Agr., Univ. Meijo, [2]Biosci. Biotech., Univ. Chubu, [3]Grad. Sch. Sci., Univ. Tokyo)

2P089 CLE46 Peptide Signal in Wound-induced Root Regeneration in *Arabidopsis*
Tatsuya Ito[1], Hiroo Fukuda[2,3], Satoshi Endo[2] ([1]Grad. Sch. Bioenviron. Sci., Kyoto Univ. Adv. Sci., [2]Fac. Bioenviron. Sci., Kyoto Univ. Adv. Sci., [3]Akita Pref. Univ.)

2P090 The role of gibberellin metabolism in root tip regeneration in *Arabidopsis*
Aoi Ishikawa, Zen Machida, Naoki Takahashi (Sch. Agri., Meiji Univ.)

2P091 *Role of bHLH transcription factor in root tip regeneration in Arabidopsis*
Haruki Kano, Aoi Ishikawa, Naoki Takahashi (Sch. Agri., Meiji. Uni.)

2P092 Phenotypic Analysis and Gene Expression Profiling of Roots in Tomato bZIP11 Genome-Edited Plants
Yuri Morita[1,2], Yoshimi Nakano[2], Takahito Takei[2], Saku Kijima[2], Sumire Fujiwara[2], Shigeo S. Sugano[1,2] ([1]TUS, Sci. Tech., [2]AIST BPRC)

2P093 Investigating Genetic Factors Affecting Differential Stomatal Patterns of *Callitriche palustris* and *Callitriche deflexa*
Jiyang Kim[1], Yuki Doll[2], Tomoki Kamimura[1], Hiroyuki Koga[1], Hirokazu Tsukaya[1] ([1]Grad. Sch. Sci., Univ. Tokyo, [2]Div. Bio. Sci., Grad. Sch. Sci. Tech., NAIST)

2P094 Mechanisms of cotyledon size control through primary and secondary metabolism
Hiromitsu Tabeta[1,2], June-Sik Kim[1,3], Hiroyuki Koga[4], Teruki Kameyama[2], Atsuko Hirota[1], Yushiro Fuji[1], Muneo Sato[1], Makoto Hayashi[1], Keiichi Mochida[1], Hirokazu Tsukaya[4], Ali Ferjani[2], Masami Y. Hirai[1,5] ([1]RIKEN CSRS, [2]Department of Biology, Tokyo Gakugei University, [3]IPSR, Okayama University,, [4]Department of Biological Sciences, Graduate School of Science, The University of Tokyo, [5]Department of Applied Biosciences, Graduate School of Bioagricultural Sciences, Nagoya University)

2P095 Analysis of the localization of 45S rDNA in mutants of AS2 and RH10, involved in leaf development in *Arabidopsis thaliana*

Rina Kawamoto[1], Sayuri Ando[1], Yasuhiro Kamei[2], Misako Saita[2], Yasunori Machida[3], Chiyoko Machida[1], Shoko Kojima[1] ([1]Grad. Sch. Biosci. and Biotech., Chubu Univ, [2]NIBB, [3]Grad. Sch. Sci., Nagoya Univ)

2P096 Initiation of asexual reproduction by the AP2/ERF gene *GEMMIFER* in *Marchantia polymorpha*

Go Takahashi[1], Saori Yamaya[2], Tomohiro Kiyosue[2], Yuki Hirakawa[1] ([1]Grad. Sch. Integr. Sci. Life, Univ. Hiroshima, [2]Grad. Sch. Sci., Univ. Gakushuin)

2P097 A divergent *PaWUS-PaCLV3* module regulates shoot regeneration in *Phalaenopsis aphrodite*

Chih-Chi Lee[1,2], Pou-Yi Chang[1,2], Hsiang-Yin Lin[1,2], Jhun-Chen Chen[1,2], Yan-Lin Lai[1,2], Ya-Ting Chao[1], Su-Chiung Fang[1,2] ([1]Agricultural Biotechnology Research Center, Academia Sinica, [2]Biotechnology Center in Southern Taiwan, Academia Sinica)

2P098 Microplastic Pollution as a Stress Factor Affecting Plant Callus Induction and Regeneration

Yu-Ning Chen, Tzu-Hsun Yu, Fu-Yu Hung (NCHU, GIB)

2P099 Functional analysis of chromatin regulatory factors involved in the acquisition of pluripotency in callus cells

Yasuhiro Kozaki, Ayaka Shimoki, Momoko Ikeuchi (NAIST, bio)

2P100 Mechanism of adventitious bud formation on leaf in *Heloniopsis orientalis*

Tomoaki Sakamoto[1,2], Anna Hata[1], Yui Kuroda[1], Seisuke Kimura[1,2] ([1]Life Sci., Kyoto Sangyo Univ., [2]Center for Plant Sci., Kyoto Sangyo Univ.)

2P101 Rapid Ca^{2+} flux as a wounding response is required for regeneration in *P. patens*

Kouann Ou, Kann Tou (Graduate Institute of Biochemistry, National Chung Hsing University, Taiwan)

2P102 Elucidating the Molecular Basis of Medial–Lateral Stamen Elongation in *Arabidopsis thaliana*

Koki Nakamura, Nobutoshi Yamaguchi, Toshiro Ito (Div. Biol. Sci., NAIST.)

2P103 Plasticity of Morphogenesis During Early Wheat Embryo Development in vitro

Saya Okamoto, Takashi Okamoto, Atsuko Kinoshita (Tokyo Metropolitan University)

2P104 Validation of a plastid-mediated regulatory model of SCL28 activity in cell size control

Yuji Nomoto[1], Hirotomo Takatsuka[2], Keisuke Yamada[1], Masaki Ito[1] ([1]Sch. Biol. Sci. Tech., Kanazawa Univ., [2]Faculty Div. Nat. Sci., Nara Women's Univ.)

2P105 Exploring the evolutionary background of the cell size regulator SCL28 in moss

Rihoko Senga[1], Toshinari Takahashi[1], Yuji Nomoto[2], Masaki Katagiri[1], Hidekazu Iwakawa[2], Takumi Nishiuchi[3], Masaki Ishikawa[4,5], Mitsuyasu Hasebe[4,5], Rumiko Kofuji[2], Masaki Ito[2] ([1]Grad. Sch. Nat. Sci. & Tech., Kanazawa Univ., [2]Sch. Biol. Sci. & Tech., Kanazawa Univ., [3]ReCEMHD., Kanazawa Univ., [4]Div. Evol. Biol., Natl. Inst. Basic Biol., Japan, [5]Basic Biol., SOKENDAI, Japan)

2P106 Analysis of Complex Formation and DNA-Binding Properties of the Cell Size Regulator SCL28 Using a Cell-Free Translation System

Masaki Katagiri[1], Poyu Chen[2], Hidekazu Iwakawa[2], Takumi Nishiuchi[3], Akira Nozawa[4], Masaki Ito[2] ([1]Grad. Sch. Nat. Sci. & Tech., Kanazawa Univ., [2]Sch. Biol. Sci. & Tech., Kanazawa Univ., [3]ReCEMHD, Kanazawa Univ., [4]PROS, Ehime Univ.)

2P107 N-terminally Truncated Arabidopsis NSE5/SNI1 Retains SMC5/6 Function via Downstream Translation Initiation

Mika Yoshimura, Takashi Ishida (FAST, Kumamoto Univ.)

2P108 The relationships between the developmental constraint of and the maximization of the light capture efficiency of the divergence angle in spiral phyllotaxis

Takaaki Yonekura, Munetaka Sugiyama (Grad. Sch. Sci., Univ. Tokyo)

2P109 *Marchantia* Early Embryo Shares a Cell Division Rule with *Arabidopsis* inferred from 3D Shape-Based Modeling

Akira Osada[1], Sohta Nakamura[2], Naoya Kamamoto[1], Katsuyoshi Matsushita[1], Yue Wang[2], Minako Ueda[2], Yusuke Kimata[2], Koichi Fujimoto[1] ([1]Graduate School of Integrated Sciences for Life, Hiroshima University, [2]Graduate School of Life Sciences, Tohoku University)

2P110 The potential role of Arabidopsis H3K4 demethylases LDL1 and LDL2 in plant regeneration by the lncRNA-mediated epigenetic regulation

Yi-Ting Chang (National Chung Hsing University, Graduated Institute of Biotechnology (GIB), Taiwan)

2P111 Can plasma-irradiated non-edible biomass serve as a plant growth enhancer?

Sesshu Takagi[1], Ryohei Oguchi[2], Takamasa Suzuki[3], Yuki Yoshida[1], Motoyuki Shimizu[1], Masafumi Ito[4], Hironaka Tsukagoshi[1] ([1]Grad. Sch. Agr. Meijo Univ., [2]Sch. Agr. Meijo Univ., [3]Coll. Biosci. & Biotech. Chubu Univ., [4]Fac. Sci. & Tec. Meijo Univ.)

2P112 Most Commercial Lettuce, *Lactuca sativa*, Seeds Are Not Strictly Photoblastic

Hidenobu Tsujimura (Student Science Research Institute)

■ Reproduction

2P113 Functional analysis of brassinosteroids and flavonols in conferring temperature stress tolerance in pollen tubes
Kumi Matsuura-Tokita[1,2], Ayaka Sakai[2], Takamasa Suzuki[3], Akihiko Nakano[4], Tetsuya Higashiyama[1,2] ([1]Grad. Sch. Sci., The Univ. Tokyo, [2]Sch. Sci., Nagoya Univ., [3]Dept. Bio. Chem., Chubu Univ., [4]RAP, RIKEN)

2P114 Understanding and Overcoming Interspecific Barriers in Pollen Tube Attraction
Takuya T. Nagae[1], Hidenori Takeuchi[2], Keisuke Matsuda[3], Shiori Nagahara[4], Yoko Mizuta[5,6], Tetsuya Higashiyama[7] ([1]RIKEN, CSRS, [2]Grad. Sch. Arts & Sci., Univ. Tokyo, [3]Grad. Sch. Med. Sci., Kyushu Univ., [4]Grad. Sch. Sci., Kyoto Univ., [5]Inst. Adv. Res., Nagoya Univ., [6]ITbM (WPI), Nagoya Univ., [7]Grad. Sch. Sci., Univ. Tokyo)

2P115 Exploring downstream target genes of PpRKD transcription factor responsible for archegonium development in *Physcomitrium patens*
Emiko Yoro[1,2], Ryohei Sato[1], Nobuhiro Akiyoshi[1], Yuki Kondo[2], Tomoyuki Furuya[2], Keiko Sakakibara[1] ([1]Dept. Life Sci., Rikkyo Univ., [2]Grad. Sch. Sci., Univ. of Osaka)

2P116 Identification of a novel RLCK subfamily involved in the reproductive process
Riko Inoue[1], Ryo Noguchi[2], Sho Tanaka[2], Shigeo S. Sugano[3], Takahito Takei[2,3], Daisuke Maruyama[4], Takahiro Hamada[1,2] ([1]Fac. of Life Sci., Okayama Univ. of Sci., [2]Fac. of Sci., Okayama Univ. of Sci, [3]BPRC, AIST, [4]KIBR, Yokohama City Univ.)

2P117 Elucidation of embryo-to-endosperm communication through analysis of embryo development-dependent *LBD35*
Yi-Ting Chen[1], Yilin Zhang[2], Hironori Takasaki[2], Nguyen Thanh Hai Nguyen[1], Tomokazu Kawashima[3], Ming-Tsair Chan[1,4], Masaru Takagi[1] ([1]Graduate Program of Translational Agricultural Sciences, National Cheng Kung University, Tainan, Taiwan, [2]Graduate School of Science and Engineering, Saitama University, Saitama, Japan, [3]Department of Plant and Soil Science, University of Kentucky, United States, [4]Agricultural Biotechnology Research Center, Academia Sinica Biotechnology Center in Southern Taiwan, Taiwan)

2P118 Induction of endosperm development without fertilization in *Oryza sativa*
Nguyen Thanh Hai Nguyen[1], Yoshimi Oshima[2], Yi-Ting Chen[1], Nobutaka Mitsuda[2], Masaru Takagi[1] ([1]National Cheng Kung University – Academia Sinica Graduate-Program in Translational Agriculture Sciences, Tainan, Taiwan, [2]Biomanufacturing Process Research Center, National Institute of Advanced Industrial Science and Technology (AIST), Ibaraki, Japan)

2P119 *MAC1* and *AM1* play critical but independent roles to regulate the mitosis-to-meiosis transition in pollen mother cells in maize
Ching-Chih Tseng, Chung-Ju Rachel Wang (Institute of Plant and Microbial Biology, Academia Sinica, Taipei, Taiwan)

2P120 Identifying interaction between PeDL and SWEETs and their regulation of Gynostemium Development
Sean Yuet To[1], Wen-Chieh Tsai[1], You-Yi Chen[2], Shao-Ting Lin[1] ([1]Inst. of Tropical Plant Sciences and Microbiology, NCKU, Tainan City, 701, Taiwan., [2]Grad Inst. of Agronomy, NCYU, Chiayi City, 600, Taiwan.)

■ Plant hormones/Signaling molecules

2P121 Unraveling the Genetic Architecture of Tomato Fruit Drop Through Combined Molecular Profiling and Segregation Analysis
Yu-Ting Huang[1], Yu-Heng Lin[2], Amit Dhingra[3], I-Chun Pan[1] ([1]Department of Horticulture, National Chung Hsing University, [2]Taichung District Agricultural Research and Extension Station, MOA, [3]Department of Horticultural Sciences, Texas A&M University)

2P122 Identification of the molecular target of the plant growth-promoting compound PPG and functional analysis of its natural analogues
Sakurako Katsuta[1], Shun Takeno[2,3], Shota Tanaka[2,3], Keiya Kaga[1,7], Kazuma Ohata[1], Ayumi Yamagami[1], Takuya Miyakawa[1], Shoji Segami[4], Yasumitsu Kondo[2], Naoshi Domae[2], Kei Tsuzuki[3], Yoshiya Seto[3], Tetsuo Kushiro[3], Masayoshi Maeshima[5], Tadao Asami[6], Takeshi Nakano[1] ([1]Grad. Sch. Biostudies., Univ. Kyoto, [2]RIKEN, CSRS, [3]Grad. Sch. Agriculture, Univ. Meiji, [4]NIBB, [5]Grad. Sch. Bioagricultural Sciences, Univ. Nagoya, [6]KIBR, Yokohama City Univ., [7]Grad. Sch. Science & Engineering, Univ. Saitama)

2P123 The allelopathy induced by a single-gene mutation in the Arabidopsis thaliana *sur2* mutant is mediated by extracellular auxin
Yui Kobayashi[1], Kang Xu[2], Emi Yumoto[4], Masashi Asahina[3,4], Ken-ichiro Hayashi[5], Hidehiro Fukaki[6], Masaaki Watahiki[7] ([1]Grad. Life. Sci., Hokkaido Univ., [2]Sch. Agri. Biol., Shanghai Jiao Tong Univ., [3]Env. & Biotech., Dept. Integ. Sci. & Eng., Teikyo Univ., [4]Adv. Inst. Anal. Center, Teikyo Univ., [5]Dept. Biosci., Okayama Univ. Sci., [6]Grad. Sch. Sci., Kobe Univ., [7]Fac. Sci., Hokkaido Univ.)

2P124 Biosynthetic pathway of a natural auxin, phenylacetic acid, in Arabidopsis
Haruki Iwama[1], Kaisei Maruyama[2], Akie Watanabe[2], Takemoto Agui[2], Shunsuke Watanabe[3], Zhao Yunde[4], Ken-ichiro Hayashi[5], Mitsunori Seo[6,7], Masanori Okamoto[7], Hiroyuki Kasahara[2,7] ([1]Fac. Agri., Tokyo Univ. Agri. Tech., [2]Grad. Sch. Agri., Tokyo Univ.

Agri. Tech., [3]Fac. Sci. Eng., Yasuda Women's Univ., [4]UCSD, [5]Dept of Biosci., Okayama Univ. Sci., [6]TBRC, Univ. Ryukyus., [7]RIKEN CSRS)

2P125 Analysis of the Regulatory Mechanism of Early Hypocotyl Growth Mediated by the Interaction Between BIL1 and ABA-Responsive Transcription Factors

Natsuki Futagami[1], Nobutaka Mitsuda[2], Ayumi Yamagami[1], Takuya Miyakawa[1], Takeshi Nakano[1] ([1]Grad. Sch. Bio., Univ. Kyoto, [2]AIST)

2P126 Analysis for the BR signaling factor BIL7 function and interactome

Asuma Kubono[1], Kaisei Nishida[1], Senri Nakamura[1], Ayumi Yamagami[1], Takuya Miyakawa[1], Tadao Asami[2], Takeshi Nakano[1] ([1]Grad. Sch. Biostudies., Kyoto Univ., [2]KIBR, Yokohama)

2P127 The role of BIN2 phosphorylation in regulating the activity of the BR signaling factor BIL7

Senri Nakamura[1], Kaisei Nishida[1], Yusuke Nakamura[1], Ayumi Yamagami[1], Takuya Miyakawa[1], Takehiro Suzuki[2], Naoshi Dohmae[2], Akira Nozawa[3], Tatsuya Sawasaki[3], Tadao Asami[4], Takeshi Nakano[1] ([1]Grad. Sch. Biostudies., Kyoto University, [2]CSRS, Riken, [3]PROS, Ehime University, [4]KIBR, Yokohama City Univ.)

2P128 Evolution and functional diversification of plant auxin metabolic genes

Takemoto Agui[1], Yuki Suganuma[1], Risayo Mizutani[1], Masaki Shimamura[2], Ken-ichiro Hayashi[3], Hiroyuki Kasahara[1,4] ([1]Grad. Sch. Agric., TUAT, [2]Grad. Sch. Integr. Sci. Life, Hiroshima Univ., [3]Dept. Biosci., Okayama Univ. Sci, [4]CSRS, RIKEN)

2P129 Functional Analysis of Group C Raf-like Kinases in *Marchantia*

Hana Kokubo[1], Hinano Takase[2], Shota Yamauchi[3], Ryuichi Nishihama[3], Taishi Umezawa[2] ([1]Department of Biological Production, Tokyo University of agriculture and Technology, [2]Graduate School of Bio-Applications and Systems Engineering, Tokyo University of agriculture and Technology, [3]Department of Applied Biological Science, Faculty of Science and Technology, Tokyo University of Science)

2P130 Evolutionary and Functional Significance of ShPP2C1 in the Parasitic Life Strategy of *Striga*

Sotaro Katagiri[1], Daisuke Fukuhara[2], Keisuke Fujiyama[1], Hijiri Fujioka[3], Yukihiro Sugimoto[3], Masanori Okamoto[1,4] ([1]CSRS, RIKEN, [2]C-Bio • Utsunomiya Univ., [3]Kobe Univ., [4]Yokohama City Univ.)

2P131 A method to quantify plant hormones from very small tissues

Yumiko Takebayashi[1], Hiromi Suzuki[1,2], Masami Y. Hirai[1], Mitsunori Seo[1,3] ([1]RIKEN, CSRS, [2]School of Bioscience and Biotechnology, Tokyo University of Technology, [3]Tropical Biosphere Research Center, University of the Ryukyus)

2P132 High-throughput comprehensive phytohormone analysis and quantification using LC–MS/MS

Mikiko Kojima[1], Yumiko Takebayashi[1], Masanori Okamoto[1], Masami Y. Hirai[1], Hitoshi Sakakibara[1,2] ([1]RIKEN CSRS, [2]Grad. Sch. Bio. Sci., Nagoya Univ)

2P133 Strawberry Protoplast Isolation using its Callus Tissue

Hibiki Tanimitsu, Fumi Homma, Toshio Sano (Grad. Sch. Life Sci. Univ. Hosei)

2P134 An ABC transporter for strigolactones in Arabidopsis

Shuo Zhao[1], Kei Suzuki[2], Kiyoshi Mashiguchi[1], Shinjiro Yamaguchi[1] ([1]ICR, Univ. Kyoto, [2]Grad. Sch. Life. Sci, Univ. Tohoku)

2P135 LWD1 acts as a mobile factor coordinating circadian rhythms between neighboring and distant tissues in *Arabidopsis*

Yi-Chen Wu, Ying Wang, Shu-Hsing Wu (Institute of Plant and Microbial Biology, Academia Sinica)

2P136 [Cancelled]

2P137 Genome-wide Identification of Mobile mRNAs Based on a Conserved Sequence

Shioto Ishihara[1], Ken-ichi Kurotani[1], Shiori Nagahara[1], Tomomi Suzuki[1], Kentaro Okada[2], Takumi Iwata[1], Nobuyoshi Mochizuki[1], Michitaka Notaguchi[1,2] ([1]Grad. Sch. Sci., Kyoto Univ, [2]Biosci. and Biotech. Center, Nagoya Univ.)

2P138 Functional analysis of ABI5-related bZIP transcription factors in *Marchantia polymorpha*

Amane Shibuya[1], Yuta Kidokoro[1], Daisuke Takezawa[2], Teruaki Taji[1], Yoichi Sakata[1], Izumi Yotsui[1] ([1]Dept. of Biosci., Tokyo Univ. of Agri, [2]Graduate School of Science and Engineering, Saitama University)

2P139 Polycistronic expression of KARRIKIN-INSENSITIVE2 and a histidine kinase in the liverwort *Marchantia polymorpha*

Rui Sun, Kiyoshi Mashiguchi, Shinjiro Yamaguchi (Inst. Chem. Res., Kyoto Univ.)

■ Environmental response A/Physiological responses

2P140 Water as a Compass: Hydrostimulation-Triggered Aerial Root Growth in Phalaenopsis aphrodite
Yueh-Ju Hou[1], Su-Chiung Fang[2], Jhun-Chen Chen[2], Hua-Chen Chang[1], I-Chian Chen[1] ([1]Department of Life Sciences, National University of Kaohsiung, Kaohsiung, Taiwan, [2]Biotechnology Center in Southern Taiwan, Academia Sinica, Tainan, Taiwan)

2P141 Development of Synthetic Compounds that Disrupt Plant Root Tropism
Yuma Shisaka, Shuhei Kusano, Sakuya Nakamura, Masanori Izumi, Shinya Hagihara (RIKEN CSRS)

2P142 L-DOPA Activates an Alternative Root-to-Shoot Signaling Mechanism in Response to Iron Deficiency
En-Jung Hsieh (National Taiwan University)

2P143 N-status communication among leaves
Peirong Tsai[1,2], Yi-Fang Tsay[2] ([1]Department of Life Science, National Taiwan University, [2]Institute of Molecular Biology, Academia Sinica)

2P144 IRONMAN and BTS: A Regulatory Circuit for Enhancing Plant Iron Acquisition
Tong Yu Jhang (National Taiwan University Department of Agricultural Chemistry)

2P145 Fanctional analysis of P-type cyclin Involved in phosphate deficiency response in Arabidopsis thaliana
Yuki Kitagawa, Masami Sekine, Rena Kamekawa (Facal. Bioresour. Univ. Ishikawa)

2P146 Feeding the Grain: How Phosphate Energizes Starch Production in Rice
Chiu-Ling Yang[1], Wen-Chien Lu[1], Jo-Chi Hung[2], Swee-Suak Ko[2], Tzyy-Jen Chiou[1] ([1]Agricultural Biotechnology Research Center, Academia Sinica, Taipei, Taiwan, [2]Biotechnology Center in Southern Taiwan, Academia Sinica, Tainan, Taiwan)

2P147 The effect of *ArabidopsisNodGS* gene on nitrogen uptake
Soichiro Noda, Ken'ichi Ogawa (RIBS Okayama)

2P148 Analysis of Factors Determining the Guttation Rate from a Hydathode
Yuki Yaguchi, Reina Ito, Moeka Kuriki, Haruna Sumino, Kanon Takahashi, Ko Noguchi, Yusuke Mizokami (Grad. Sch. Life Sci., Tokyo Pharm Univ.)

2P149 Circadian regulation of stomatal ABA sensitivity in *Arabidopsis thaliana*
Chihiro Endo, Saya Mizushima, Ayaka Nogi, Ko Noguchi, Yusuke Mizokami (Fac. Life Sci., Tokyo Pharm. Univ.)

2P150 Functional characterization of Arabidopsis plantacyanin, a blue copper protein
Yuina Dohi[1], Mirai Matsuoka[1], Satoshi Sano[2] ([1]Fac. Life Env. Sci., Kyoto Pref. Univ., [2]Grad. Sch. Life Env. Sci., Kyoto Pref. Univ.)

2P151 Sequence Variation In The Promoter Of A LncRNA Related To Petal Movement And Its Potential Impact On Gene Expression In *Arabidopsis Thaliana*
Yufei Bai (Grad. Sch. Nanobioscience., YCU)

■ Environmental response B/Environmental stresses

2P152 GPL13 interacts with ERF1 and co-regulates stress-responsive genes in Arabidopsis
Meng-Ju Chen, Mei-Chun Cheng (Department of Biochemical Science & Technology, National Taiwan University)

2P153 [Cancelled]

2P154 Functional Dissection of AIL7 Reveals Its Transcriptional and Interaction-Mediated Roles in Stress Responses
Ping-Chien Hsin, Mei-Chun Cheng (Department of Biochemical Science & Technology, National Taiwan University)

2P155 The *OsSPL2*-regulated NF-Y transcription factor *OsHAP2J* and *DUF1719* modulate pathogen defenses in rice
Cheng-Chung Huang, Yi-Tsang Tsai, Shang-Yuan Liu, Meng-Jou Chung, Shih-Tong Jeng (National Taiwan University Institute of Plant Biology)

2P156 LWD1 interacts with HY5 to mediate *DREB* gene expression in response to abiotic stresses in Arabidopsis
Jing-Fen Wu[1], Sim Lin Lim[2], Shu-Hsing Wu[1] ([1]Institute of Plant and Microbial Biology, Academia Sinica, [2]Biodiversity Research Center, Academia Sinica)

2P157 [Cancelled]

2P158 Splicing Integrity Under Cold Stress: The Central Role of OsRH42 in Rice Chilling Tolerance
Wei-Shen Zhang (Department of Life Sciences, National Central University, Taoyuan, Taiwan)

2P159 Molecular physiological responses of rice seedlings to saline-alkaline stress
Mitsuki Kondo[1], Mami Nampei[1], Tanee Sreewongchai[2], Akihiro Ueda[1] ([1]Graduate School of Integrated Sciences for Life, Univ. Hiroshima, [2]Faculty of Agriculture, Univ. Kasetsart)

2P160 Analysis of Hyperosmotic Stress Tolerance in *Marchantia polymorpha* Strains Collected in Japan and Identification of Responsible Loci

Hiroki Kato, Takehide Kato, Taku Demura (Nara Institute of Science and Technology, Grad. School of Sci. and Tech.)

2P161 Functional analysis of barley cold-induced small protein CISP with intrinsically disordered regions

Yutaro Okumura[1], Arriel Fadhilah[1], Shin-ichiro Kidou[1,2] ([1]Grad. Sch. Sci., Nagoya City Univ., [2]Research Center for Biological Diversity)

2P162 Exploration of Relationship between Blossom-end rot and Fruit Ionome in Tomato

Yusuke Shikanai, Yuka Takata, Amiri Watanabe, Akihiro Saito, Kyoko Higuchi (Department of Agricultural Chemistry, Tokyo university of Agriculture)

2P163 Characterization of MYB-Related Transcription Factors Regulating Pi Starvation and Heat Stress Adaptation in *Arabidopsis thaliana*

Yi-Zhen Wu[1], Kuang-Yu Cheng[1], Wei-Yung Hsu[1], Ichiro Terashima[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, Taichung, Taiwan, [2]Biomanufacturing and Process Research Center, National Institute of Advanced Industrial Science and Technology (AIST), Tsukuba, Japan, [3]Institute of Tropical Plant Sciences and Microbiology, National Cheng Kung University, Tainan, Taiwan, [4]Advanced Plant and Food Crop Biotechnology Center, National Chung Hsing University, Taichung, Taiwan)

2P164 Comprehensive transcriptome analysis of photoperiod-dependent dormancy using natural variants of *Lemna turionifera*

Shogo Ito[1], Makoto Kashima[2], Tokitaka Oyama[1] ([1]Department of Botany, Division of Biological Sciences, Graduate School of Science, Kyoto University, [2]Faculty of Science Department of Biomolecular Science, Toho University)

2P165 Transcriptomic Discovery of Key Transcription Factors Conferring Disease Resistance in a Novel Orchid Hybrid

Kai-Lun Yeh[1], Yu-Wen Hsu[1], Su-Hui Liu[1], Pin-Hui Sung[2], Ichiro Terashima[1], Chuan-Ming Yeh[1,3,4] ([1]Institute of Molecular Biology, National Chung Hsing University, Taichung, Taiwan, [2]Kaohsiung District Agricultural Research and Extension Station, Ministry of Agriculture, Pingtung, Taiwan, [3]Advanced Plant and Food Crop Biotechnology Center, National Chung Hsing University, Taichung, Taiwan, [4]Biomanufacturing and Process Research Center, National Institute of Advanced Industrial Science and Technology (AIST), Tsukuba, Japan)

2P166 Evaluation of temperature effects on stem fragments regeneration in the invasive alien plant *Alternanthera philoxeroides*

Kanata Arai, Naoki Hirotsu (Grad. Sch. Life Sci., Univ. Toyo)

2P167 Isolation and Characterization of Lead-Sensitive Mutants in *Arabidopsis thaliana*

Haruka Serizawa, Yuki Nisiyama, Izumi Yotsui, Teruaki Taji, Yoichi Sakata (Dept. of Bioscience., Tokyo Univ. of Agri)

2P168 Functional analysis of the rice transcription factor OsHsfA1a in the whole-plant level heat shock response

Yuhe Zhao, Tatsuki Tanaka, Junya Mizoi (Grad. Sch. Agr. Life Sci., Univ. Tokyo)

2P169 Identification of Transcription Factors Modulating High-Affinity Phosphate Transporter Expression

Jr-Han Lai[1], Yoshimi Nakano[2], Nobutaka Mitsuda[2], Masaru Ohme-Takagi[2,3], Ichiro Terashima[1], Chuan-Ming Yeh[1,2,4] ([1]Institute of Molecular Biology, National Chung Hsing University, Taichung, Taiwan, [2]Biomanufacturing and Process Research Center, National Institute of Advanced Industrial Science and Technology (AIST), Tsukuba, Japan, [3]Institute of Tropical Plant Sciences and Microbiology, National Cheng Kung University, Tainan, Taiwan, [4]Advanced Plant and Food Crop Biotechnology Center, National Chung Hsing University, Taichung, Taiwan)

2P170 Functional analysis of CrHRZ, a homolog of the ubiquitin ligase HRZ involved in iron nutrient responses, in a green alga *Chlamydomonas reinhardtii*

Haruka Shinkawa[1,2], Takanori Kobayashi[1], Kazuyuki Kuchitsu[2] ([1]Res. Inst. Biores. Biotech., Ishikawa Pref. Univ., [2]Dept. Appl. Biol. Sci., Fac. Sci. Tech., Tokyo Univ. Sci.)

2P171 Quantification of c-di-GMP Using a Biosensor in *Synechococcus elongatus* PCC7942

Koichiro Takatsuki, Chihiro Yamaguchi, Shinsuke Kutsuna (Grad. Sch. Bio. Nano., Univ. Yokohama City)

2P172 Application of salt tolerant genes identified from Arabidopsis to crop

Sanako Yokota[1], Hirotaka Ariga[2], Kanna Izawa[1], Izumi Yotsui[1], Yoichi Sakata[1], Teruaki Taji[1] ([1]Dept. of Biosci., Tokyo Univ. of Agri, [2]National Agriculture and Food Research Organization)

2P173 Responsibility of exopolyphosphatase gene for cellular response to sulfur starvation in *Synechocystis* sp. PCC 6803

Miki Kamimura, Mizuki Endo, Norihiro Sato (Tokyo University of Pharmacy and Life Sciences)

2P174 Changes inascorbate levels in *Opuntia* (prickly pear cactus) in response to environmental stresses

Qiaochu Wang[1], Shuusuke Kawachi[2], Misaki Ito[2], Kazuya Yoshimura[1,2] ([1]Dept. Biol. Chem., Coll. Biosci. Biotech., Chubu Univ., [2]Dept. Food Nutr. Sci., Coll. Biosci. Biotech., Chubu Univ.)

2P175 BZR1 Stability Is Coordinated by HSP101 and ATG8 to Regulate Thermotolerance in Rice Seeds

Yun-Sheng Hu, Senthil Kumar Rajendran, Ching-Hui Yeh (Department of Life Science, National Central University, Zhongli, Taoyuan, ROC)

2P176 A Novel Oxylipin KODA Improves Drought Tolerance in Lettuce (*Lactuca sativa*)

Toki Nakamura[1], Mineyuki Yokoyama[2], Naoto Kawakami[2], Hirokazu Ohno[3], Hiromi Suzuki[4], Yuichi Tada[4] ([1]Grad. Sch. Bio., Tokyo Univ. of Tech., [2]Sch. Agri., Meiji Univ., [3]Maruzen Pharmaceuticals Co., Ltd, [4]Sch. Bio., Tokyo Univ. of Tech.)

2P177 Photoresponse Mechanisms under Monochromatic High-light Conditions in *Acaryochloris marina* MBIC 11017

Kanta Watanabe[1], Keita Miyake[2], Tatsuru Masuda[1,2] ([1]Grad, Sch, Sci., Univ. Tokyo, [2]Grad, Sch, Arts Sci., Univ. Tokyo)

2P178 Plasmid Shuffling Supports Light Environment Adaptation in *Acaryochloris marina*

Keita Miyake[1], Tomonori Kashimoto[3], Chikahiro Matsumoto[3], Ryosuke Hasama[6], Mayuko Sato[4], Kiminori Toyooka[4], Yu Kanesaki[5], Wataru Iwasaki[2], Rei Narikawa[6] ([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]Grad, Sch, Health Sci., Gunma Univ, [6]Dep, Bio Sci, Grad, Sch, Sci., Tokyo Metropolitan Univ)

2P179 Alterations in oxidative stress responses in *Arabidopsis thaliana* high-polyploids

Suzuka Kikuchi[1], Futa Oura[2], Daiki Ito[3], Takafumi Miyashita[4], Hiroyuki Koga[5], Kanae Nishii[6], Akitoshi Iwamoto[3] ([1]Grad. Sch. Sci. and Technol. for Inov., Yamaguchi Univ., [2]Fac. Agric., Yamaguchi Univ., [3]Fac. Sci., Kanagawa Univ., [4]Grad. Sch. Sci., Kanagawa Univ., [5]Grad. Sch. Sci., Univ. Tokyo, [6]Res. Inst. for Integrated Sci., Kanagawa Univ.)

2P180 Gibberellin biosynthesis contributes to plant tolerance to combined heat and high light stress in *Arabidopsis*

Tomoya Hotta, Mayu Nawata, Naoki Takahashi (Sch. Agri., Meiji Univ.)

2P181 Unraveling the transcriptional regulation of bioactive polysaccharide biosynthesis in *Dendrobium* Taiseed Tosnobile

Kai-Lun Yeh[1], Su-Hui Liu[1], Chi-Luan Wen[2], Ichiro Terashima[1], Chuan-Ming Yeh[1,3,4] ([1]Institute of Molecular Biology, National Chung Hsing University, Taichung, Taiwan, [2]Seed and Seedling Testing Section, Taiwan Seed Improvement and Propagation Station, Ministry of Agriculture, Taichung, Taiwan, [3]Advanced Plant and Food Crop Biotechnology Center, National Chung Hsing University, Taichung, Taiwan, [4]Biomanufacturing and Process Research Center, National Institute of Advanced Industrial Science and Technology (AIST), Tsukuba, Japan)

2P182 Vacuolar dynamics of Arabidopsis root tips after release of osmotic pressure revealed by electron microscopy

Mayumi Nakayama[1,2], Mayumi Wakazaki[3], Yumi Goto[3], Mayuko Sato[3], Kiminori Toyooka[3] ([1]Organization for Research Promotion, Tohoku Univ., [2]Grad. Sch. Life Sci, Tohoku Univ., [3]RIKEN CSRS)

2P183 Investigation of candidate genes involved in the alleviation of salt stress by silicon dioxide nanoparticles in rice

Ryoichi Araki[1,2], Hidetoshi Miyazaki[3], Ping An[4] ([1]Fac. Edu., Wakayama Univ., [2]Ctr. Food Agric. Res. Edu., Wakayama Univ., [3]Sci. Res. Unit, The Glb. Environ. Forum, [4]Arid Land Res. Ctr., Tottori Univ.)

2P184 A Preliminary Study on Habitat Conditions and Population Structure of the Endangered Aster altaicus Willd. in Eastern Taiwan

Chun Han Chen (National Taitung University)

2P185 Functional analysis of *LOC_Os06g36590* (*OsKEA3*) in ion homeostasis and its potential involvement in grain filling

Li-Yen Lin[1], Nobuhiro Tanaka[2], Kiyoshi Yamazaki[1], José M. Pardo[3], Francisco Javier Quintero[3], Imelda Mendoza[3], Hideki Takanashi[1], Yoshihiro Ohmori[1], Takehiro Kamiya[1], Toru Fujiwara[1] ([1]Grad. Sch. Agr. Life Sci., Univ. Tokyo, [2]Inst. Crop. Sci., NARO, [3]Inst. Plant Biochem. & Photosynth, CSIC–Univ. of Seville, Spain)

2P186 Elucidation of morphological regulation mechanism of curly leaf in parsley

Shinnosuke Ishino[1], Eri Kamon[1], Takeshi Ishimizu[1,2], Kazuya Ishikawa[2] ([1]College of Life Sciences, Ritsumeikan University, [2]R-GIRO, Ritsumeikan University)

2P187 Ethanol application enhances drought stress tolerance in cabbage

Shunsuke Adegawa[1,2], Daisuke Todaka[1], Junko Ishida[1], Maho Tanaka[1], Tomoyuki Takeda[1], Farhan Aziz[1], Motoaki Seki[1,2,3] ([1]Plant Genomic Network Research Team, RIKEN Center for Sustainable Resource Science, [2]Graduate School of Science and Engineering, Saitama University, Saitama, [3]Kihara Institute for Biological Research, Yokohama City University)

2P188 Analysis of quantitative trait loci associated with photosynthetic adaptation to iron deficiency in barley

Karin Irie[1], Soichiro Matsuoka[1], Takehiro Kobayashi[1], Mayuko Furuhata[1], Nobuhiro Tanaka[2], Yusuke Shikanai[1], Akihiro Saito[1], Kyoko Higuchi[1] ([1]Grad. Sch. Appl. Biosci., Tokyo Univ. Agri., [2]Inst. Crop. Sci, NARO)

2P189 Functional analysis of rice small Heat Shock Proteins (sHSPs) under heat stress conditions

Minaho Aramaki[1], Toyohiro Tanaka[1], Yuki Kojima[1], Junya Mizoi[2], Fuminori Takahashi[1,3] ([1]Grad. Sch. Fac. Adv. Eng., TUS, [2]Grad. Sch. Agr. Life Sci., Univ. Tokyo, [3]Fac. Adv. Eng., TUS)

2P190 Effect Of Heterologous Minor-Type Ferredoxin AtFd1 In *Solanum Lycopersicum* Against *Ralstonia Solanacearum* Rd4 And Heat Stress

Bing Rong Chiu, Chong Yu Lin, Wen Chi Fang, Xiang En Huang (National Taitung university)

2P191 Pyramiding of wild rice QTLs enhanced grain yield under low nitrogen conditions

Bright Gyamfi Adu[1], Yoshihiro Ohmori[2], Toru Fujiwara[1], Akifumi Shimizu[3], Hiroaki Hayashi[4] ([1]Grad. Sch. SCI., Univ. of Tokyo, [2]Agricultural Bioinformatics Research Unit, The University of Tokyo, [3]School of Environmental Science, University of Shiga Prefecture, [4]Hayashi Farm, Kunisaki City, Oita)

2P192 Isolation of Heavy-ion beam-Induced Mutants and Alkaline Stress Response in the Minimal-Gene-Set Green Alga *Medakamo hako*

Yayoi Inui[1], Yoji Okabe[1], Hayato Ozaki[1], Shinichiro Maruyama[1], Kazuhide Tsuneizumi[2], Tsuyoshi Takeshita[1,3], Mayuko Sato[4], Kiminori Toyooka[4], Tomoko Abe[2], Sachihiro Matsunaga[1] ([1]Grad. Sch. of Front. Sci., Univ. of Tokyo, [2]RIKEN Nishina Center for Accelerator-Based Science, [3]Graduate School of Human and Environmental Studies, Kyoto University, [4]RIKEN Center for Sustainable Resource Science)

2P193 Isolation and genetic analyses of *salt overly tolerant4* and *6* mutants of Arabidopsis

Tomoyo Ohashi[1], Akito Hosoi[2], Izumi Yotsui[1], Yoichi Sakata[1], Teruaki Taji[1] ([1]Dept. of Biosci., Tokyo Univ. of Agri., [2]Nodai Genome Research Center)

2P194 Analysis of molecular functions of brassinosteroid signaling factor BIL7 in environmental stress resistance

Shogo Kitayama[1], Kaisei Nishida[1], Ayumi Yamagami[1], Tadao Asami[2], Takeshi Nakano[1] ([1]Grad. Sch. Bio., Univ. Kyoto, [2]KIBR, Yokohama City Univ)

2P195 Identification of the locus responsible for the long-term heat tolerance of *Arabidopsis thaliana* Berg-1

Asumi Kitashima[1], Goro Masuda[2], Izumi Yotsui[1], Yoichi Sakata[1], Teruaki Taji[1] ([1]Dept. of Biosci., Tokyo Univ. of Agri, [2]Nodai genome research center)

2P196 DGD1 is Essential for Regulating the Number of Chloroplasts in the Guard Cells of *Arabidopsis*

Li-Xin Zhang, Chun-Wei Yu (Institute of Molecular and Cellular Biology, National Taiwan University)

2P197 Quinoa: an emerging model experimental plant with high nutritional value and adaptability to harsh environments

Yasunari Fujita[1,2], Yasufumi Kobayashi[1], Miki Fujita[3], Takuya Ogata[1], Yukari Nagatoshi[1], Yasuo Yasui[4] ([1]JIRCAS, [2]Grad. Sch. Life Environ. Sci., Univ. Tsukuba, [3]RIKEN CSRS, [4]Grad. Sch. Agr., Kyoto Univ.)

2P198 Deciphering the mechanisms of copper tolerance through transcriptome analysis in two contrasting rice cultivars with different Cu toxicity phenotypes

Min-Yu Yang[1], Chin-Yu Wu[2], Chwan-Yang Hong[1] ([1]Department of Agricultural Chemistry, National Taiwan University, Taipei, Taiwan, [2]Department of Plant Industry, National Pingtung University of Science and Technology, Pingtung, Taiwan)

2P199 Increased anthocyanin accumulation and plant growth by driving *PAP1* expression using the 3'downstream region of the sulfate transporter *SULTR2;1* gene

Nguyen Ha Trang, Abdul Wakilu Sulemana, Moeka Fujita, Li Hongqiao, Akiko Maruyama (Kyushu University)

2P200 Potential Involvement of PIF4 Protein Interactions in NO_2-Responsive Growth

Misa Takahashi, Atsushi Sakamoto (Graduate School of Integrated Sciences for Life, Hiroshima University)

■ Plant-organism interaction A

2P201 Mechanism of induction of plant immune responses by a bacterial endophyte, *Delftia* sp. BR1R-2

Takafumi Hashimoto, Seiya Takeishi, Ryo Sato, Kazuyuki Kuchitsu, Toshiki Furuya (Dept. Appl. Biol. Sci., Tokyo Univ. of Sci.)

2P202 miR396 controls *SVP* and *CIB4* accumulation while SVP bypasses direct interaction with PHYL1

Bing-Nan Shen, Yu-Ling Hung, Zhao-Jun Pan, Supidcha Jirawitchalert, Huong Giang Nguyen, Shih-Shun Lin (Inst. Biotech., NTU)

2P203 Decoding Lipid-based Molecular Dialogues Between Plants And Microorganisms

Lin-Jie Shu[1], Anuphon Laohavisit[2], Takamasa Suzuki[3], Yasuhiro Kadota[1], Ken Shirasu[1] ([1]Plant Immunity Group, CSRS, RIKEN, [2]Institute of Transformative Bio-Molecules, Nagoya University, [3]Department of Biological Chemistry, Chubu University)

2P204 Unraveling the role of a lncRNA near plant immune receptor gene *SNC1*

Takuma Horimoto[1], Misaki Chino[1], Tokuji Tsuchiya[2], Hiroshi Uchiyama[1] ([1]Grad. Sch. Bioresource Sci., Nihon Univ., [2]The Sainsbury Laboratory, Norwich, UK)

2P205 Expression Analysis of Defense-Related Genes in *Arabidopsis thaliana* Treated with Fermented Botanical Product (FBP)

Yuri Mizuno[1], Ryota Kato[2], Shigeyuki Betsuyaku[2], Kotaro Fujioka[1], Hideto Torii[1] ([1]Manda Fermentation Co. Ltd., [2]Fac. Agric., Ryukoku Univ.)

2P206 Elucidation of plant-herbivore interactions mediated by VOCs in plant immunity

Miyu Watanabe[1], Kazuha Mori[1], Hiroshi Mori[1], Liu Zhang[2], Rintaro Moriyama[2], Ryosuke Sugiyama[3,4], Shinya Ariyasu[1], Osami Shoji[1], Kenji Matsui[5], Akiko Maruyama[2], Kanako Sekimoto[4,6], Mika Nomoto[1,4,7], Yasuomi Tada[1,7] ([1]Grad. Sch. Sci., Nagoya Univ., [2]Grad. Sch. Agr., Kyusyu Univ., [3]Grad. Sch. Pharm. Sci., Chiba Univ., [4]JST, PRESTO, [5]Grad. Sch. Sci. Tech. Innov., Yamaguchi Univ., [6]Grad. Sch. Nanobiosci., Yokohama City Univ., [7]Centr. Gene Res., Nagoya Univ.)

2P207 A novel rice transcription factor modulates AM symbiosis by interacting with SLR1 and PHR2 and recognizing specific motifs

Pei-Jung Chen, Wan-Ning Kuo, Man-Chi Ho, Yu-Ting Chang, Zheng-Lin Guo, Hsuan-Chih Shih, Shu-Yi Yang (Institute of Plant Biology, Department of Life Science, National Taiwan University, Taipei, Taiwan)

2P208 Nutrient-dependent Volatile Signaling by *Pseudomonas aeruginosa* Shapes *Arabidopsis* Growth Outcomes

Yuniar Devi Utami[1], Atsushi Suwa[2], Atsushi Minami[2], Kei Hiruma[1] ([1]Grad. Sch. Arts and Sci., Univ. Tokyo, [2]Dept. Chem., Science Tokyo)

2P209 Expression analysis of *NIN* in *Lotus japonicus* treated with spermine

Moe Shinozaki[1], Sho Okamoto[2], Kensuke Kawade[2] ([1]Fac. Sci., Univ. Saitama, [2]Grad. Sch. Sci., Univ. Saitama)

2P210 Analysis of Symbiotic Responses to Nitrogen-Fixing Bacteria in the Strawberry Rhizosphere

Miyabi Sakata[1], Marika Umetsuki[1], Yoshikazu Shimoda[2], Sachiko Isobe[3], Hideki Hirakawa[4], Kenta Shirasawa[5], Takashi Soyano[6], Masayoshi Kawaguchi[6], Takuya Suzaki[7], Akiyoshi Tominaga[8], Shigeru Hanano[9], Shusei Sato[9], Toshiki Uchiumi[1], Mitsutaka Fukudome[1] ([1]Grad. Sch. Sci. and Eng., Univ. Kagoshima, [2]Inst. Agrobiol. Sci., NARO, [3]Grad. Sch. Agri. Life Sci., Univ. of Tokyo, [4]Grad. Sch. Biores. and Bioenviron., Univ. Kyushu, [5]Kazusa DNA Res. Inst., [6]NIBB, [7]Life Environ Sci., Univ. Tsukuba, [8]Fac. Agric., Univ. Shizuoka, [9]Grad. Sch. Life Sci., Univ. Tohoku)

2P211 Unraveling CEP2 Upstream Signaling and the Role of Tomato ECIP1 in Lateral Root Regulation

Shu-Rui Yang, Yu-Chi Zhao, Shu-Yi Yang (Institute of Plant Biology, Department of Life Science, National Taiwan University, Taipei, Taiwan)

2P212 Analysis of organelle dynamics during rhizobial infection in *Lotus japonicus*

Kazusato Oikawa[1,2], Sachiko Tanaka[1], Takashi Soyano[1,2], Masayoshi Kawaguchi[1,2] ([1]Divi. Symb. Sys., NIBB, [2]School of Life Science, SOKENDAI)

2P213 Functional Analysis of Caffeate O-methyltransferase in Root Nodule Symbiosis

Yuki Ueuchi[1], Akito Hase[1], Shoko Inaba[1], Akira Akamatsu[2], Naoya Takeda[1] ([1]Grad. Sch. of Sci. and Eng., Univ. Kwansei Gakuin, [2]CSRS)

2P214 Function of trehalase in autotrophic plant–fungal interactions

Takaya Tominaga[1], Risa Sasaki[1], Ayae Sakai[2], Hironori Kaminaka[3] ([1]Grad. Sch. Sci. and Tech., NAIST, [2]United Grad. Sch. Agr., Tottori Univ., [3]Fac. Agr., Tottori Univ.)

2P215 Identification of biosynthesis enzymes for Myc-LCOs, key signaling molecules in arbuscular mycorrhizal symbiosis

Daiki Sano[1], Rin Mamiya[1], Taro Maeda[2], Atsushi J. Nagano[2], Satoshi Kondo[3], Shoko Inaba[1], Akira Akamatsu[4], Naoya Takeda[1] ([1]Grad. Sch. of Sci. and Eng., Univ. Kwansei Gakuin, [2]Univ. Keio, [3]Toyota Conpon Research Institute, [4]RIKEN • CSRS)

2P216 Model-guided microbiome engineering for crop resilience

Shinichi Yamazaki[1,2], Masaru Nakayasu[3], Keiko Kanai[3], Rie Mizuno[3], Rumi Kaida[4], Sachiko Masuda[2], Arisa Shibata[2], Ken Shirasu[2], Atsushi J. Nagano[5,6], Yoshiharu Fujii[4], Akifumi Sugiyama[3], Yuichi Aoki[1,7] ([1]ToMMo, Tohoku Univ., [2]CSRS, RIKEN, [3]RISH, Kyoto Univ., [4]Tokyo Univ. of Agri. Tech., [5]BBC, Nagoya Univ., [6]IAB, Keio Univ., [7]GSIS, Tohoku Univ.)

2P217 Nutrient-dependent co-inoculation effects of the fungus *Colletotrichum tofieldiae* and multiple bacteria in *Arabidopsis thaliana*

Risa Ayano, Yuniar Devi Utami, Kei Hiruma (Grad. Sch. Arts and Sci., Univ Tokyo)

2P218 G Protein-Mediated Perception of Plant Phenolics Regulates UmPR-1La-Dependent Filamentation in *Ustilago maydis*

Pin Chih Chang[1], Minh-Quang Chau[1,2], Lay-Sun Ma[1] ([1]Institute of Plant and Microbial Biology, Academia Sinica, Taipei, Taiwan, [2]Molecular and Biological Agricultural Sciences Program, Taiwan International Graduate Program, Chung-Hsing University and Academia Sinica, Taipei, Taiwan)

2P219 Elucidating the Genetic Basis of Strigolactone Signaling in *Colletotrichum tofieldiae*-Mediated Plant Growth Promotion

Momoko Takagi, Masami Nakamura, Kei Hiruma (Grad. Sch. Arts and Sci., Univ. Tokyo)

2P220 Function of cysteinyl-tRNA synthetase of rhizobia in the root nodule symbiosis with *Lotus japonicus*

Mitsutaka Fukudome[1], Asuka Ikuta[2], Mika Nomura[2], Toshiki Uchiumi[1] ([1]Grad. Sch. of Sci. and Eng. Kagoshima Univ., [2]Fac. of Agri. Kagawa Univ.)

2P221 Unipolar polysaccharide-mediated attachment of the N_2O-reducing bacterium *Bradyrhizobium ottawaense* SG09 to plant roots

Yudai Takeguchi[1], Ryota Shibuya[1], Momoi Kondo[2], Natsuki Yamamoto[2], Eriko Betsuyaku[2], Manabu Itakura[3], Kiwamu Minamisawa[3], Masayuki Sugawara[4], Shigeyuki Betsuyaku[2] ([1]Graduate School of Agriculture, Ryukoku University, [2]Faculty of Agriculture, Ryukoku University, [3]Graduate School of Life Sciences, Tohoku University, [4]Department of Life and Food Sciences, Obihiro University of Agriculture and Veterinary Medicine)

2P222 Plasticity of interactions between plants and root symbiotic bacteria and fungi in solfatara fields

Akifumi Murata[1], Mikihito Noguchi[1], Keitaro Fukushima[2], Hirokazu Toju[3] ([1]Grad. Sch. Sci., Univ. Kyoto, [2]Sch. Food & Agri., Univ. Fukushima, [3]Grad. Sch. Bio., Univ. Kyoto)

2P223 Analysis of Biotic Interactions Influenced by Phenylethanoid Glycosides Exuded from *Orobanche minor*

Masahiko Otani[1], Yui Onodera[1], Haruka Ohno[2], Ryota Suzuki[3], Tomohiko Harada[3], Shun Hashimoto[3], Masaru Bamba[4], Kotaro Nishiyama[1], Shusei Sato[3], Yoshiya Seto[1,2] ([1]Sch. Agri., Meiji. Univ., [2]Grad. Sch. Agri., Meiji. Univ., [3]Grad. Sch. Life Sci., Tohoku Univ., [4]Fac. Agri., Shizuoka Univ.)

2P224 TurboID-Based Profiling Reveals Molecular Links Between XA21 Signaling and WRKY62-Mediated Immune Regulation in Rice

Ching-Hong Chao (Department of Life Sciences, National Central University, Taoyuan, Taiwan)

2P225 Functional Characterization of *PALADIN* Reveals Its Role in *XA21*-Mediated Defense and Phytoalexin Gene Activation in Rice

Tsung-Chi Chen (Department of Life Sciences, National Central University)

2P226 Identification of rice genes involved in regulating the abundance of iron-reducing bacteria in the rhizosphere soil

Chikashi Tanaka[1], Chikako Shimoshige[1], Li-Yen Lin[1], Zhihang Feng[1], Hirotomo Ohba[2], Yoko Masuda[1,3], Keishi Senoo[1,3], Yoshihiro Ohmori[1], Toru Fujiwara[1] ([1]Grad. Sch. Agr. Life Sci., Univ. Tokyo, [2]Niigata Agr. Res. Inst., [3]CRIIM, Univ. Tokyo)

2P227 Functional Analysis of Actin Depolymerizing Factors in the Response to Brassicaceae Anthracnose

Miku Ohashi[1], Sakura Aoki[1], Takashi L. Shimada[2], Takashi Ueda[3], Masaaki Umeda[4], Noriko Inada[1] ([1]Sch. of Agri., Osaka Metropolitan Univ.,, [2]Grad. Sch. of Horticul., Chiba Univ.,, [3]NIBB, [4]Adv. Sci., NAIST)

2P228 The potyviral suppressor HC-Pro^{Tu} inhibits miRNA methylation and cooperates with HESO1 to destabilize AGO1 in *Arabidopsis Thaliana*

Huong Giang Nguyen, Bing-Nan Shen, Shih-Shun Lin (Institute of Biotechnology, National Taiwan University)

■ Genome function/gene regulation

2P229 Equipping *A. hallerigemmifera* with Genetics: A Perennial Framework for All-Season Epigenetic Memory

Shuiyi Liu, Annisa Krama, Hiroshi Shiba, Diana Buzas (Tsukuba-Plant Innovation Research Centre and Faculty of Life and Environmental Sciences, University of Tsukuba)

2P230 Hc-Pro insertion change whole-genome DNA methylation and increases structural variation in *Arabidopsis thaliana*

Yi-Hsuan Li[1], Liang-He Chen[2], Yu-Shin Nai[1,3], Shih-Shun Lin[2] ([1]Doctoral Program in Microbial Genomics, National Chung Hsing University and Academia Sinica, Taiwan, [2]Institute of Biotechnology, National Taiwan University, Taipei, Taiwan, [3]Department of Entomology, National Chung Hsing University, Taichung City, Taiwan)

2P231 Comparative analysis of spatial arrangement of chromosomal domains among *Arabidopsis* ecotypes

Kento Yano[1], Natsumaro Kutsuna[2], Takuya Sakamoto[1] ([1]Grad. Sci., Kanagawa Univ, [2]LPIXEL Inc)

2P232 Multi-omics Analyses Provide Insights Into The Interplay Between DNA Methylation And Transcriptional Programs During Black Raspberry (*Rubus occidentalis*) Fruit Ripening

Wei-Hsun Hsieh[1,2], Yu-Hung Hung[3,4], Jian-Hui Zhang[3,4], Han-Yi Chen[3,4], Liang-Peng Lin[1,2], Meng-Hsun He[1,2], Yen-Ching Wang[1,2], Yu-Yu Ho[1,2], Gina Fernandez[5], Penelope Perkins-Veazie[4,5], Brandon Le[6], Xu Li[3,4], Tzung-Fu Hsieh[3,4], Jer-Young Lin[1,2] ([1]Biotechnology Center in Southern Taiwan, Academia Sinica, [2]Agricultural Biotechnology Research Center, Academia Sinica, [3]Department of Department of Plant and Microbial Biology, North Carolina State University, [4]Plants for Human Health Institute, North Carolina State University, [5]Department of Horticultural Science, North Carolina State University, [6]Institute for Integrative Genome Biology Bioinformatics Core Facility, University of California)

2P233 Suppressor analysis of the *Arabidopsis drol1* mutant reveals ABA-like signaling triggered by intron-retaining mRNAs

Takamasa Suzuki (Col. Biosci. Biotech., Chubu Univ.)

2P234 DCL4 functions in reproductive stage in *Marchantia polymorpha*

TzuYu Wang, Jia-Zhen Yu, Yu-Ling Hung, Shih-Shun Lin (National Taiwan University)

2P235 DCP5 recruits selective mRNAs to processing bodies to ensure the developmental precision of young Arabidopsis seedlings

Tsen Ying Lin[1], Sim Lin Lim[2], Shu-Hsing Wu[1] ([1]Institute of Plant and Microbial Biology, Academia Sinica, [2]Biodiversity Research Center, Academia Sinica)

2P236 Formation of useful agricultural traits via flavonoid-mediated regulation of Dicer activity

Toshiyuki Fukuhara, Riho Yamanashi, Kazunori Kuriyama (Tokyo University of Agriculture & Technology)

2P237 [Cancelled]

2P238 MAC3A and MAC3B regulate the alternative splicing of RNA-binding proteins in flowering time regulation

Yun-Tung Ly[1], Hsin-Yu Hsieh[2], Wen Dar Lin[2], Shih-Long Tu[2], Chin-Mei Lee[1] ([1]Institution of Plant Biology, National Taiwan University, Taipei, Taiwan, [2]Institute of Plant and Microbial Biology, Academia Sinica, Taipei, Taiwan)

2P239 Regulation of the free-running period length via alternative splicing of the central circadian clock oscillator gene *PRR7* in *Arabidopsis thaliana*

Seiya Izawa, Marina Kishi, Chiaki Teramae, Yusuke Takata, Takafumi Yamashino (Grad. Sch. Bioagri. Sci., Nagoya Univ.)

2P240 AtCFI function on gene expression regulation through cleavage and polyadenylation site regulation at the 3' ends of pre-mRNAs

Xiaojuan Zhang[1], Łukasz Szewc[2,3], Mateusz Bajczyk[2], David Bielewicz[4], Kei Yura[5,6,7], Miku Odoi[1], Cyrose Suzie Silvosa-Millado[1,8], Mariko Kato[1], Marta Garcia-León[9], Vicente Rubio[9], Mika Nomoto[10], Yasuomi Tada[10], Tsuyoshi Furumoto[11], Zofia Szweykowska-Kulinska[2], Dorothee Staiger[3], Takashi Aoyama[1], Artur Jarmolowski[2], Tomohiko Tsuge[1] ([1]ICR/Grad. Sch. Sci., Kyoto Univ., [2]Inst. Mol. Biol. Biotech., Adam Mickiewicz Univ., [3]Biology, Bielefeld Univ., [4]WCAT, [5]Grad. Sch. Humanit. Sci., Ochanomizu Univ., [6]Ctr. Interdiscip. AI and Data Sci., Ochanomizu Univ., [7]Sch. Adv. Sci. Eng., Waseda Univ., [8]DBSES, Univ. Philippines Mindanao, [9]CNB-CSIC, [10]Ctr. Gene Res., Nagoya Univ., [11]Sch. Agric., Ryukoku Univ.)

2P241 Characterization of Spliceosome Associated Protein 130 (SAP130L) Like Protein in Arabidopsis

Cyrose Suzie Silvosa-Millado[1,2], Kei Yura[3,4], Vicente Rubio[5], Shiori S. Aki[6], Mariko Kato[1], Tomohiko Tsuge[1] ([1]ICR/ Grad. Sch. Sci., Kyoto Univ., [2]DBSES, CSM, Univ. Philippines Mindanao, [3]Grad. Sch. Humanit. Sci., Ochanomizu Univ., [4]Sch. Adv. Sci. Eng., Waseda Univ., [5]CNB-CSIC, [6]Biol. Life Sci., Fac. Sci. Eng., Yamato Univ.)

2P242 Genome-wide survey of ribosome collision in de-etiolating Arabidopsis

Yueh Cho, Shu-Hsing Wu (Institute of Plant and Microbial Biology, Academia Sinica, Taipei, Taiwan)

2P243 Loss of both wobbleU_{34} modifications in mcm^5s^2U tRNAs impairs rRNA biosynthesis, growth, and development in *Arabidopsis thaliana*

Yumi Nakai[1], Yukio Kurihara[2], Yuko Makita[3], Gorou Horiguchi[4], Kosei Iwabuchi[5], Akiko Harada[5], Masato Nakai[6], Takato Yano[1] ([1]Dept. of Biochemistry, Faculty of Medicine, OMPU, [2]Synthetic Genomics Research Group, RIKEN Center for Sustainable Resource Science, [3]Graduate School of Engineering, Maebashi Institute of Technology,, [4]Dept. of Life Science College of Science Rikkyo University, [5]Dept. of Biology, Faculty of Medicine, OMPU, [6]Institute for Protein Research, Osaka University)

2P244 Upstream ORF-mediated translational regulation of the Arabidopsis *CIPK6* gene in response to sugar starvation

Miyu Kitagawa, Ke Ma, Mariko Takemoto, Karin Murakami, Taihei Karino, Yuta Hiragori, Satoshi Naito, Hitoshi Onouchi (Grad. Sch. Agr., Hokkaido Univ.)

2P245 Investigation of peptide sequences that affect mRNA translation in *Arabidopsis thaliana*

Daichi Araki, Yuhei Chadani, Taku Takahashi (Grad. Sch. Env. Lif. Nat. Sci. Okayama Univ.)

2P246 Optimized Ribosome Profiling Reveals New Insights Into Translational Regulation In Synchronized *Chlamydomonas reinhardtii* Cultures

Yen-Ling Lin[1,2], Eva Yuhua Kuo[1,2,3], Shih-Yi Wang[1,2], Chih-Chi Lee[1,2], Su-Chiung Fang[1,2,3] ([1]Agricultural Biotechnology Research Center, Academia Sinica, Taipei, Taiwan, [2]Biotechnology Center in Southern Taiwan, Academia Sinica, Tainan, Taiwan, [3]Department of Marine Biotechnology and Resources, National Sun Yat-sen University, Kaohsiung, Taiwan)

2P247 SUMO protease SMT7 modulates cell division through translation

Yu-Hua Kuo[1,2,3], Shih-Yi Wang[1,2], Yen-Ling Lin[1,2], Su-Chiung Fang[1,2,3] ([1]Biotechnology Center in Southern Taiwan, Academia Sinica, [2]Agricultural Biotechnology Research Center, Academia Sinica, [3]3Department of Marine Biotechnology and Resource, Sun Yat-Set University)

2P248 Investigating the role and the regulatory mechanisms of eIF4E in light and heat responses

Chih-Yung Fan (Department of Biochemical Science and Technology, National Taiwan University)

2P249 Modulating AtJ3 Prenylation to Investigate Plant Thermotolerance in Arabidopsis

Yun-Jen Chang, Jia-Rong Wu, Pei-Hua Chang, Rida Zhora, Shaw-Jye Wu (Department of Life Science, National Central University, Taoyuan, Taiwan)

2P250 Exploring the Role of SUMO-Specific Proteases in Size-Dependent Cell Division in *Chlamydomonas reinhardtii*

Hua-Chen Chang[1,2,3], Yen-Ling Lin[2,3], Su-Chiung Fang[1,2,3] ([1]Institute of Tropical Plant Sciences and Microbiology, National Cheng Kung University, Tainan, Taiwan, [2]Biotechnology Center in Southern Taiwan, Academia Sinica, Tainan, Taiwan, [3]Agricultural Biotechnology Research Center, Academia Sinica, Taipei, Taiwan)

2P251 Functional Analysis of Cytosolic Thioredoxins in the Primitive Red Alga *Cyanidioschyzon merolae*

Rihito Hayashi, Kan Tanaka, Keisuke Yoshida (CLS, Science Tokyo)

2P252 A concerto orchestrated between *O*-GlcNAcylation and salinity stress

Pei-Wen Lo[1], Keiko Kano[1], Jiun-Jie Shie[2], Emi Mishiro-Sato[1], Akira Yoshinari[1], Wolf B. Frommer[1,4], Masayoshi Nakamura[1,3] ([1]ITbM, Nagoya University, [2]Instititute of Chemistry, Academia Sinica, [3]Dept. Biochem. Mol. Biol., Saitama U., [4]Heinrich Heine University)

2P253 Functional analysis of *Procholorococcus* NATL1A KaiC in vitro

Daisuke Kawanaka, Shinsuke Kutsuna, Kento Yosida (Grad. Micro. Sci., Univ. Yokohama)

2P254 Identification of miR159 in MpAGO1 Highlights Its Regulatory Roles with miR319 in Marchantia polymorpha

Jia-Ling Guo[1], Jia-Zhen Yu[1], Phuong Anh Tran[1], Christian Møller[2], Shih-Shun Lin[1] ([1]Institute of Biotechnology, National Taiwan University, Taipei, Taiwan, [2]Department of System Biology, Yonsei University, Seoul, Korea)

2P255 Decoding 3′ UTR-mediated Nonsense-mediated mRNA Decay in Arabidopsis with Degradome Profiling and Machine Learning

Tzu-Hsiang Lin[1,2,3], Wen-Chi Lee[1], Tze-Ching Chan[1], Bo-Han Hou[1], Ho-Ming Chen[1,2] ([1]Agricultural Biotechnology Research Center, Academia Sinica, Taiwan, [2]Bioinformatics Program, Taiwan International Graduate Program, National Yang Ming Chiao Tung University, Academia Sinica, Taiwan, [3]Institute of Biomedical Informatics, National Yang Ming Chiao Tung University, Taiwan)

■ Systems biology

2P256 Exploring understudied genes and proteins responsive to the phytohormone abscisic acid by integrating omics data

Takuya Yoshida[1,2] ([1]Trans-Omics Facility, NIBB, [2]Basic Biology Program, SOKENDAI)

2P257 A database for exploring transcriptomic effects of chemical and genetic perturbations

Hayoung Lee[1,2], Hiroki Yagi[3], Ayato Sato[4], Atsushi J. Nagano[2,5] ([1]Feculty of Agriculture, Ryukoku Univ., [2]Bioscience and Biotechnology Center, Nagoya Univ., [3]Sch Vet Med, Kitasato Univ., [4]WPI-ITbM, Nagoya Univ., [5]IAB, Keio University)

2P258 MiRiQ3.0: an updated database for *in silico* screening of rice mutants

Takahiko Kubo[1], Yoshiyuki Yamagata[1], Takehiko Ogura[1], Hiroaki Matsusaka[1], Atsushi Toyoda[2], Yutaka Sato[2], Toshihiro Kumamaru[1] ([1]Fac. Agr. Kyushu Univ., [2]National Inst. Genetics)

■ New Technology

2P259 Establishment of a Non-sterile Double Flowering Technology in *Eustoma grandiflorum* by Genome Editing of the *EgAP2* Homologous Gene

Shiori Sakamoto[1], Yukiko Shimbo[1], Noriko Ohnuma[2], Yuriko Ikeda[1], Tsubasa Yano[3], Maki Ohtsubo[1], Kimitoshi Sakaguchi[2], Takashi Kasai[2], Teruhiko Terakawa[3], Kazuyoshi Fujita[4], Seiji Takeda[1,5], Norihiro Ohtsubo[1] ([1]Grad. Sch. Life Environ. Sci., Kyoto Pref. Univ, [2]Miyoshi & Co., Ltd., [3]Inplanta Innovations Inc., [4]Miyoshi Agritech & Co., Ltd., [5]FSE, Yasuda Women's Univ.)

2P260 Development of efficient and accurate prime editing system in plants

Ayako Nishizawa-Yokoi[1], Keiko Iida[1], Akiko Mori[1], Miho Takemura[2], Yutaro Shuto[3], Ryoya Nakagawa[3], Osamu Nureki[3], Seiichi Toki[4,5] ([1]Inst. Agrobiol. Sci. s, NARO, [2]Res. Inst. Biores. Biotech., Ishikawa Pref. Uni, [3]Grad. Sch. Sci., Univ. Tokyo, [4]Grad. Sch. Nanobiosci., Yokohama City Univ., [5]Fac. Agric., Ryukoku Univ.)

2P261 Organelle-Specific Random Mutagenesis by N-recognizing TALE Repeats Fusion Proteins

Chiyo Fujii, Nanami Kosaka, Issei Nakazato, Shin-ichi Arimura (Grad. Sch. Agri. and Life Sci., Univ. Tokyo)

2P262 Attempt to establish a method to evaluate chloroplast translation rates by using anti-ribosome antibodies

Daiki Nihshikawa, Sho Fujii (Fac. Agri. Life Sci., Univ. HIROSAKI)

2P263 The influence of positive charge on *A. thaliana* root growthThe influence of positive charge on *A. thaliana* root growth

Marcel Pascal Beier[1], Liyu Deng[2], Fernando Arteaga Arteaga[3] ([1]Soil Plant Multi-Dyn. Res. Unit, Fukushima Inst. Res. Edu. Innov., [2]Hokkaido Univ., [3]Nat. Inst. Tech, Tomakomai Coll.)

2P264 Developing a Molecular Method for Interspecific Identification of *Nannochloropsis*

Chun Fan Chang, Chun-Wei Yu (Institute of Molecular and Cellular Biology, National Taiwan University)

2P265 Percoll gradient pre-treatment improves the quality of high molecular DNA in *Streptocarpus*

Kanae Nishii[1,2], Michelle Hart[2], Nathan Kelso[2], Sadie Barber[2], Michael Moeller[2] ([1]Kanagawa Uni, [2]Roy. Bot. Gard. Edinburgh)

2P266 Development of cellurose structure-based hydrogels aimed at application in plant cultivation

Nozomi Kamiya[1], Shusuke Okamoto[2], Kentaro Tamura[2], Daisuke Nagai[2] ([1]Grad. Sch. Integ. Pharma. Nutri. Sci., Univ. Shizuoka, [2]Sch. Food Nutri. Sci., Univ. Shizuoka)

2P267 Development and Research Support of Plant Hormone Analysis

Emi Yumoto[1], Koji Miyamoto[1,2], Masashi Asahina[1,2] ([1]Adv. Inst. Anal. Ctr., Teikyo Univ., [2]Env. & Biotech., Dept. Integ. Sci. & Eng., Teikyo Univ.)

2P268 RIKEN CSRS Metabolome and Phytohormone Analysis Platform 2026 Supporting Research of Plant Physiology

Tetsuya Mori, Yuta Ihara, Mikiko Kojima, Makoto Kobayashi, Ryosuke Sasaki, Muneo Sato, Kouji Takano, Yumiko Takebayashi, Yutaka Yamada, Masami Y. Hirai (RIKEN CSRS)