

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

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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)

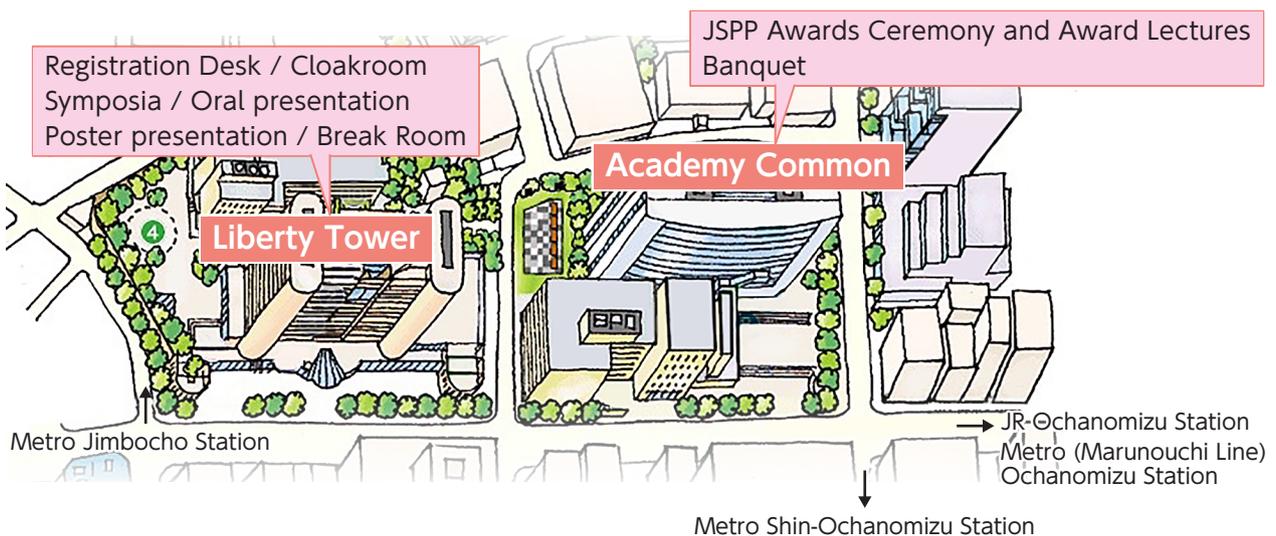
Meiji University Surugadai Campus (Liberty Tower, Academy Common)



By Train (Nearest Stations)

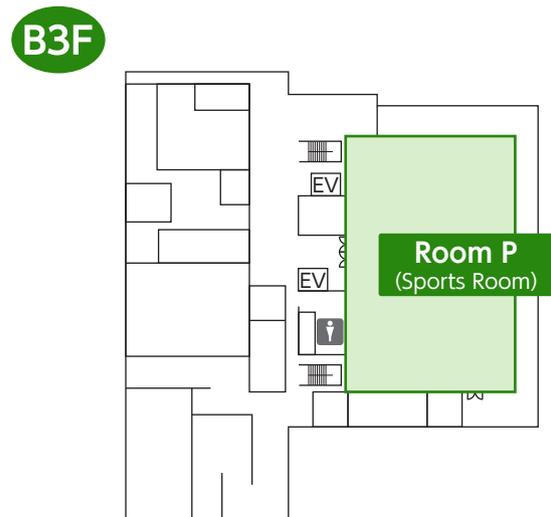
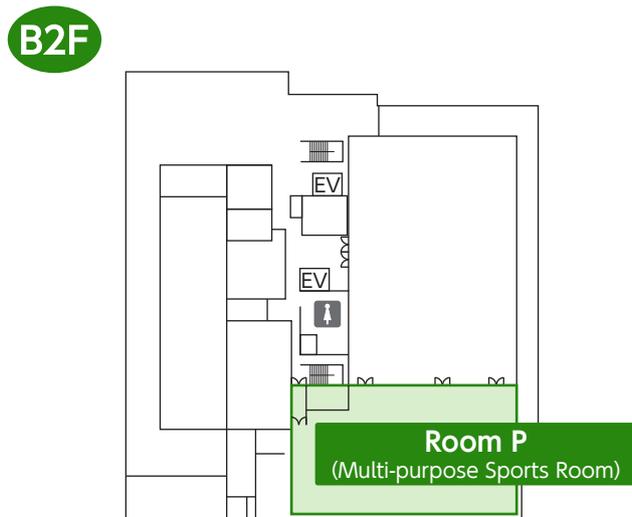
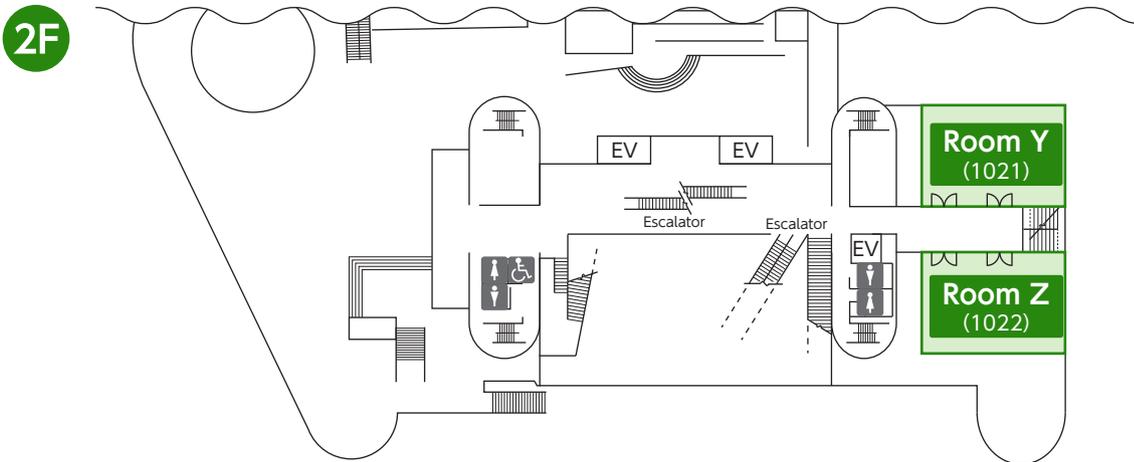
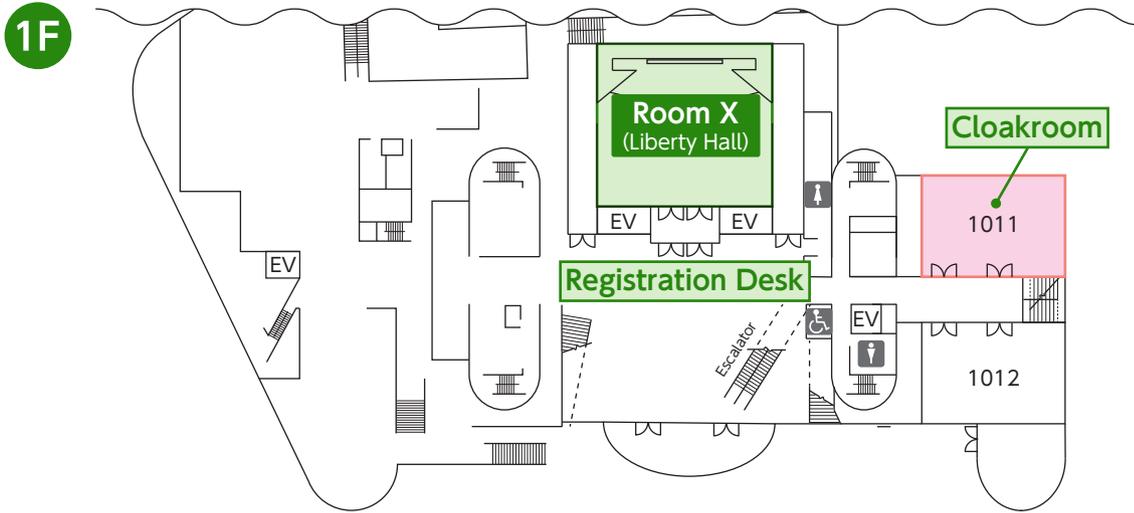
- JR Chuo Line / Sobu Line 3-minute walk from Ochanomizu Station (Ochanomizubashi Exit)
- Tokyo Metro Marunouchi Line 3-minute walk from Ochanomizu Station (Exit 2)
- Tokyo Metro Chiyoda Line 5-minute walk from Shin-Ochanomizu Station (Exit B1)
- Toei Mita Line / Toei Shinjuku Line / Tokyo Metro Hanzomon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

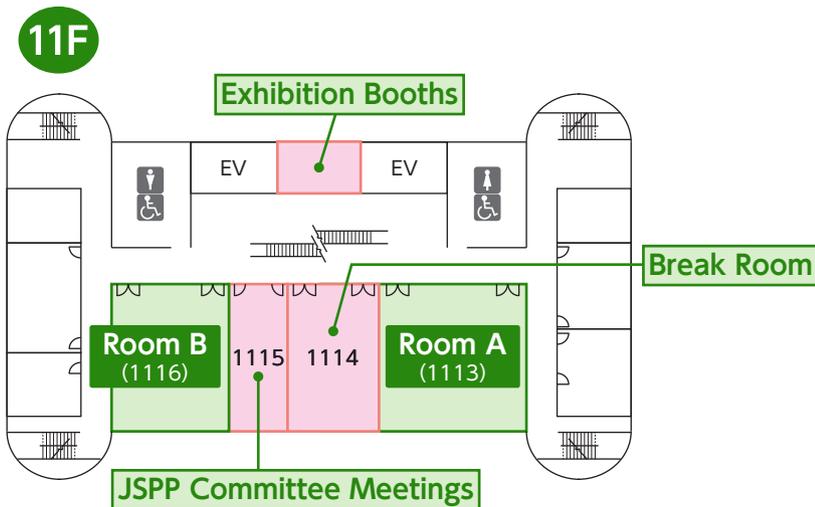
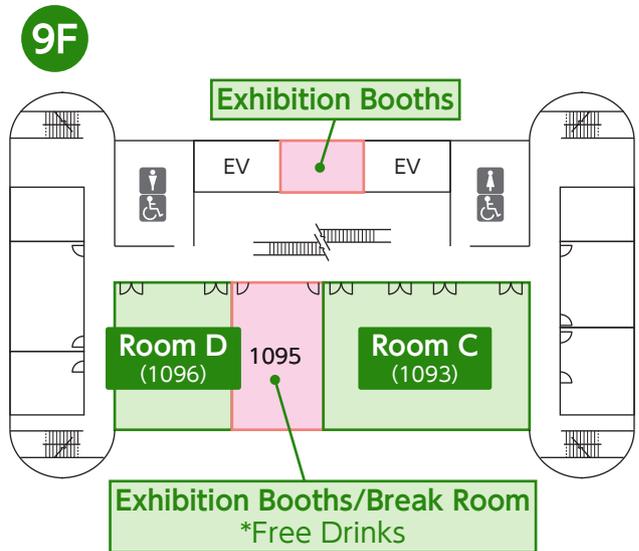
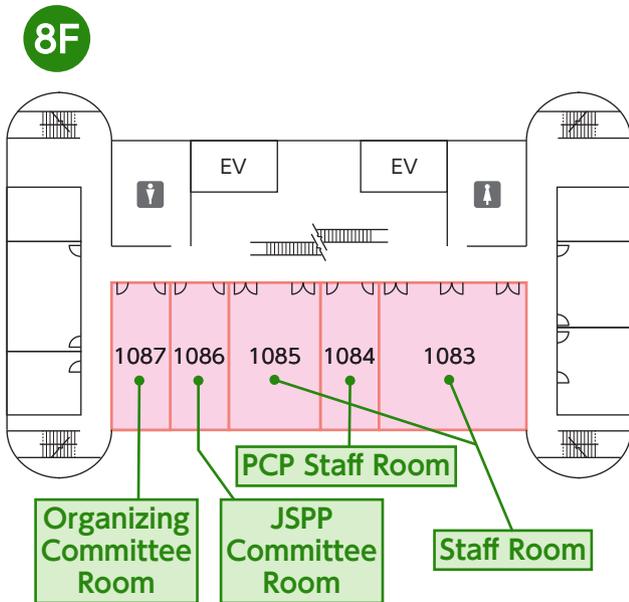
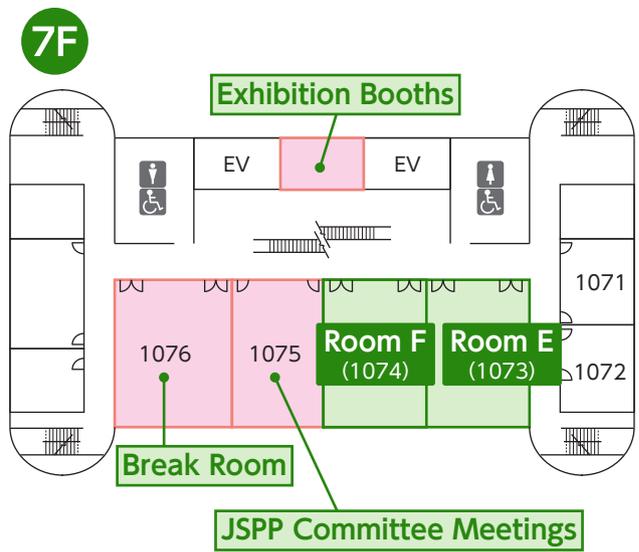
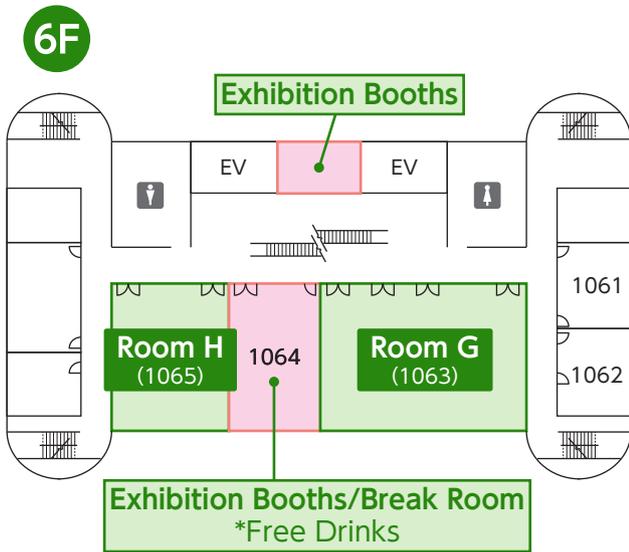
Campus Map (Meiji University Surugadai Campus)



Conference Room (Meiji University Surugadai Campus)

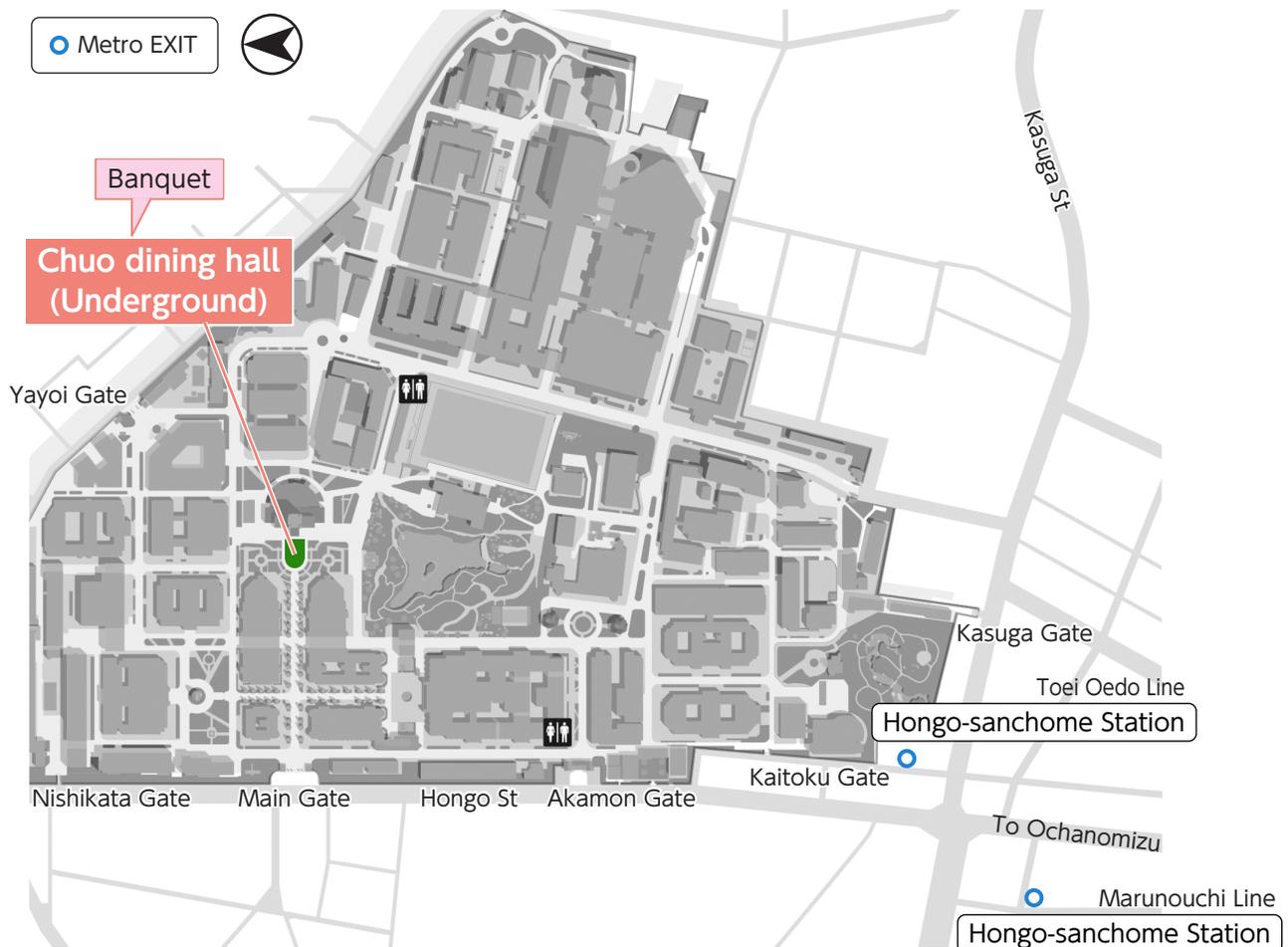
Liberty Tower





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-sanchoime Station (Exit 2)

Toei Oedo Line 6-minute walk from Hongo-sanchoime 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.

	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												

	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			JSPF Awards: Ceremony and Lectures Academy Common 3F		Banquet* Meiji University 18:00 ~ 20:00 The University of Tokyo 18:15 ~ 20:00	

	9	10	11	12	13	14	15	16	17	18	19
A	Systems biology					Systems biology					
B	Biomembrane / Ion and solute transport					Biomembrane / Ion and solute transport					
C	Plant-organism interaction B				Luncheon Seminar* ABiS						
D	Organelles / Cytoskeleton / Endomembrane system					Organelles / Cytoskeleton / Endomembrane system					
E	Development / Morphogenesis										
F	Photoreceptors / Photoresponses										
G	Plant hormones / Signaling molecules					Plant hormones / Signaling molecules					
H	Environmental response B / Environmental stresses					Environmental response B / Environmental stresses					
P	Poster presentation*										
				Questions and answers 2P001 ~ 2P268			Poster removal 2P001 ~ 2P268				
			Odd numbers	Even numbers							
X	Symposium S10 ASPB-JSPP Joint Symposium —Plant resilience and plasticity powered by dynamic cellular responses					Symposium S11 Next-Trend of Plant Biology in Japan and Taiwan					
Y						Symposium S12 Recent Advances in the Regulation of Photosynthetic Electron Transport and the Roles of Alternative Electron Flows					
Z					Luncheon Seminar* International Committee						
Other											

JSPSP Awards Ceremony and Award Lectures (Day 2, PM)

JSPSP Award, JSPSP Young Investigator Awards, PCP Best Paper Award, PCP Top Cited Regular Paper Award, PCP Top Cited Review Paper Award, JSPSP 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	JSPSP Award, JSPSP Young Investigator Awards, PCP Best Paper Award, PCP Top Cited Regular Paper Award, PCP Top Cited Review Paper Award	JSPSP President
15:22	Honorary Membership Award Kazuo Shinozaki (RIKEN Honorary Scientist and Science Advisor)	JSPSP President
15:37	PCP Poster Awards	JSPSP Editor-in-Chief
15:46	MIRAI 2030 Logo Design Awards, MIRAI 2030 Fellow Award	Former JSPSP President

Award Lectures

Language: Japanese

15:59	A01	JSPSP 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	JSPSP Young Investigator Award “Molecular mechanisms regulating vegetative reproduction in plants” Aino Komatsu (Graduate School of Life Sciences, Tohoku University)
16:26	A03	JSPSP Young Investigator Award “The Differentiation and Evolution of Plant Idioblasts” Makoto Shirakawa (Institute of Plant and Microbial Biology, Academia Sinica)
16:35	A04	JSPSP 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	JSPSP Young Investigator Award “Dissecting plant-microbe interactions with new sequencing and imaging technologies” Tatsuya Nobori (The Sainsbury Laboratory)
16:53	A06	JSPSP 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 <i>Marchantia polymorpha</i> ” 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	<p>Opening Remarks Motoaki Seki (RIKEN CSRS)</p> <p>Chairperson: Atsushi Takemiya</p>
9:37	<p>S01-1 Accelerating Functional Discovery of Plant-Derived Small Molecules for Enhancing Agricultural Resilience <u>Seung Rhee</u>^{1,2,3,4}, Miriam Goodman⁵, Emily Fryer⁵ (¹Plant Resilience Institute, Michigan State University, USA, ²Department of Biochemistry and Molecular Biology, Michigan State University, USA, ³Department of Plant Biology, Michigan State University, USA, ⁴Department of Plant, Soil, and Microbial Sciences, Michigan State University, USA, ⁵Department of Molecular and Cellular Physiology, Stanford University, USA)</p>
10:03	<p>S01-2 Manipulating stomatal responses to improve water use efficiency <u>Tracy Lawson</u> (University of Illinois)</p>
10:29	<p>S01-3 Enhancing plant resilience by chemical, epigenetic and genome regulations <u>Motoaki Seki</u>^{1,2,3} (¹RIKEN CSRS, ²KIBR, Yokohama City Univ., ³Graduate Sch. Sci. Eng., Saitama Univ.)</p> <p>Chairperson: Motoaki Seki</p>
10:55	<p>S01-4 Molecular basis of stomatal opening for improved plant water use efficiency <u>Atsushi Takemiya</u> (Grad. Sch. Sci. Tech. Innov., Yamaguchi Univ.)</p>
11:21	<p>S01-5 Stomatal mechanisms: Molecular insights driving plant resilience and productivity <u>Toshinori Kinoshita</u> (ITbM, Nagoya University)</p>
11:47	<p>S01-6 Molecular insights into ABA signaling: implications for plant stress resilience <u>Taishi Umezawa</u> (AIS, Tokyo Univ. Agric. Tech.)</p>
12:13	<p>Closing Remarks Atsushi Takemiya (Grad. Sch. Sci. Tech. Innov., Yamaguchi Univ.)</p>

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	<p>Opening Remarks Kanako Bessho-Uehara (Tohoku University)</p> <p>Chairperson: Kanako Bessho-Uehara</p>
9:35	<p>S02-1 High-throughput, in-depth plant phosphoproteomics and N-glycoproteomics Chin-Wen Chen, Ting-An Chen, Pei-Yi Lin, <u>Chuan-Chih Hsu</u> (Institute of Plant and Microbial Biology, Academia Sinica)</p>
10:00	<p>S02-2 Exploration of Phospho-Switches regulating growth and environmental responses in <i>Arabidopsis</i> using ¹⁵N metabolic labeling-based phosphoproteomics <u>Yuri Ohkubo</u>, Natsuki Tada, Yuki Kato, Saki Noda, Yoshikatsu Matsubayashi (Grad. Sch. Sci., Nagoya University)</p> <p>Chairperson: Yuri Ohkubo</p>
10:25	<p>S02-3 Phosphoproteomic insights into brassinosteroid-regulated sugar metabolism <u>Kanako Bessho-Uehara</u>¹, Hongliang Zhang², Yalikusnjiang Aizezi², Ajeet Chaudhary², Cao Son Trinh², Shou-Ling Xu², Zhi-Yong Wang² (¹Tohoku University, ²Carnegie Institution)</p> <p>Chairperson: Kanako Bessho-Uehara</p>
10:50	<p>S02-4 Activity-based high-throughput screening and MS-based proteomics for identifying site-specific proteases in plants <u>Sayaka Matsui</u>¹, Yoshikatsu Matsubayashi², Yuki Hirakawa¹ (¹Grad. Sch. Integr. Sci. Life, Hiroshima Univ., ²Grad. Sch. Sci., Nagoya Univ.)</p>
11:15	<p>S02-5 Search for signaling factors in the self-incompatibility of Brassicaceae plants using BioID <u>Maki Hayashi</u> (Grad. Sch. Life Sci., Tohoku Univ.)</p>
11:40	<p>S02-6 MS imaging and live single-cell MS analyses revealed spatially organized transcellular alkaloid metabolism <u>Kotaro Yamamoto</u> (Sch. Sci. Yokohama City Univ.)</p>
12:05	<p>Closing Remarks Kanako Bessho-Uehara (Tohoku University)</p>

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

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| 9:30 | S03-1 Targeted Base Editing for the Chloroplast Genome
<u>Shin-ichi Arimura</u> , 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
<u>Ralph Bock</u> (Max Planck Institute of Molecular Plant Physiology, Germany) |
| 10:20 | S03-3 Real-Time Monitoring of Plant Physiological Dynamics with Hyperspectral Imaging
<u>Kaori Kohzuma</u> (Graduate School of Agriculture, Kyoto University, Japan) |
| 10:40 | Break |

Chairperson: Wataru Sakamoto

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| 10:45 | S03-4 Rewriting Rubisco's evolutionary script for the next generation in crop CO ₂ fixation
<u>Spencer Whitney</u> (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
<u>Wataru Yamori</u> (Graduate School of Agricultural and Life Sciences, The University of Tokyo, Japan) |
| 11:35 | S03-6 Protein import into chloroplasts
<u>Hsou-min Li</u> (Institute of Molecular Biology, Academia Sinica, Taiwan) |
| 12:05 | S03-7 Structural Insights into the pH-Dependent Functional Regulation of the Cytochrome <i>b₆f</i> Complex
<u>Genji Kurisu</u> (Institute for Protein Research, Osaka University, Japan) |

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

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| 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
<u>Yee-yung Charng</u> (Agricultural Biotechnology Research Center, Academia Sinica, Taiwan) |
| 14:40 | S04-2 Epigenetic Regulation of Cold Stress Response and Memory in <i>Arabidopsis</i>
Munissa Sadykova, <u>Hidetoshi Saze</u> (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
<u>Isabel Baurle</u> (Institute of Biochemistry and Biology, University of Potsdam, Potsdam, Germany) |
| 15:30 | Break |

Chairperson: Yee-yung Charng

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| 15:40 | S04-4 Decoding Ethanol-Activated Stress Tolerance Pathways and Their Persistence
<u>Kaori Sako</u> ^{1,2} , <u>Daisuke Todaka</u> ² , <u>Motoaki Seki</u> ² (¹ Dep. Adv. Bio., Kindai Univ., ² CSRS, RIKEN) |
| 15:55 | S04-5 Proteins for Chromatin Organization Contribute to Heat Stress Memory
<u>Yilang Li</u> ¹ , <u>Hikaru Sato</u> ¹ , <u>Yuki Hayashi</u> ² , <u>Toshinori Kinoshita</u> ² , <u>Nobutoshi Yamaguchi</u> ³ , <u>Takuya Sakamoto</u> ⁴ , <u>Sachihiro Matsunaga</u> 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 When plants remember the heat: The sweet mechanics of thermomemory
<u>Ashverya Laxmi</u> , <u>Halidev Krishna Botta</u> , <u>Harsha Samtani</u> (National Institute of Plant Genome Research, New Delhi) |
| 16:40 | S04-7 Transcription Factor and Epigenetic Regulator-Mediated Heat Stress Memory in Plants
<u>Nobutoshi Yamaguchi</u> (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	<p>Opening Remarks Kuan-Ju Lu (National Chung Hsing University), Yasuyo Yamaoka (The Catholic University of Korea)</p> <p>Chairperson: Kuan-Ju Lu</p>
14:05	<p>S05-1 Cosmopolitan microalgae: genomic biology and regulation of key players in global carbon cycling <u>Chuan Ku</u> (Institute of Plant and Microbial Biology, Academia Sinica, Taipei, Taiwan)</p>
14:25	<p>S05-2 How cells die matters in microalgae through IRE1-dependent lipid remodeling <u>Yasuyo Yamaoka</u> (Dept. of Biotechnology, The Catholic University of Korea)</p>
14:45	<p>S05-3 Heat Shock Transcription Factor B1 Orchestrates Transcriptional Network for Land Plant Adaptation <u>Ting-Ying Wu</u> (Institute of Plant and Microbial Biology, Academia Sinica)</p>
15:05	<p>S05-4 An acidophilic fungus promotes prey digestion in a carnivorous plant <u>Isheng Jason Tsai</u> (Biodiversity Research Center, Academia Sinica Taiwan)</p> <p>Chairperson: Yasuyo Yamaoka</p>
15:25	<p>S05-5 Plasticity and Evolution of Xylem Cell Identity Revealed by Single-Cell and Spatial Multi-Omics <u>Jo-Wei Allison Hsieh</u>^{1,2}, Te-Lun Mai², Ying-Lan Chen^{3,4}, Ying-Chung Jimmy Lin⁵ (¹Genome Center, University of California, Davis, Davis, CA, USA, ²Department of Life Science, National Taiwan University, Taipei, Taiwan, ³Department of Biotechnology and Bioindustry Sciences, National Cheng Kung University, Tainan, Taiwan, ⁴Graduate Program in Translational Agricultural Sciences, National Cheng Kung University and Academia Sinica, Tainan, Taiwan, ⁵Department of Life Science and Institute of Plant Biology, National Taiwan University, Taipei, Taiwan)</p>
15:45	<p>S05-6 Ribosome as a Signalling Hub: rRNA Modification Modulates Signal Perception Sensitivity in Xylem Differentiation <u>Donghwi Ko</u> (Sainsbury Laboratory, University of Cambridge, UK)</p>
16:05	<p>S05-7 Molecular Mechanisms of Epidermal Reprogramming Triggered by Wounding in Arabidopsis Jung-Min Lee¹, Woo-Taek Jeon¹, Minsoo Han¹, Min-Soo Choi¹, Myung Kwon¹, Kyungyoon Kim², Sujeong Je³, Hoon Jung², Geon Heo¹, Youngsung Joo¹, Yasuyo Yamaoka³, <u>Yuree Lee</u>¹ (¹School of Biological Sciences, Seoul National University, Republic of Korea, ²Research Institute of Basic Sciences, Seoul National University, Republic of Korea, ³Department of Biotechnology, The Catholic University of Korea, Republic of Korea)</p>
16:25	<p>S05-8 A role of phospholipid-binding in regulating the function of Arabidopsis Phosphatidylethanolamine-Binding Proteins (PEBP) <u>Yuki Nakamura</u>^{1,2,5,6}, Ying-Chen Lin^{2,3,4}, Yu-chi Liu², Artik Elisa Angkawijaya¹ (¹RIKEN Center for Sustainable Resource Sciences (CSRS), ²Institute of Plant and Microbial Biology, Academia Sinica, ³Molecular and Biological Agricultural Sciences Program, Taiwan International Graduate Program, Academia Sinica and National Chung Hsing University, ⁴Graduate Institute of Biotechnology, National Chung Hsing University, ⁵Department of Biological Sciences, Graduate School of Science, The University of Tokyo, ⁶Biotechnology Center, National Chung Hsing University)</p>
16:45	<p>Closing Remarks Yasuyo Yamaoka (The Catholic University of Korea), Kuan-Ju Lu (National Chung Hsing University)</p>

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 <u>Michael Lenhard</u> (University of Potsdam, Germany)
14:35	S06-2 Molecular evolution of mechanisms involved in antagonistic pollen-pistil interactions in plants <u>Sota Fujii</u> ^{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 <u>Kaoru Tonosaki</u> (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 <u>Reina Komiya</u> (RIKEN • CSRS)
16:00	S06-5 Molecular antagonisms promoting diversity of the epigenome in natural <i>Arabidopsis thaliana</i> populations <u>Eriko Sasaki</u> (Dept. Biol., Kyushu Univ.)
16:25	S06-6 Transposon-Mediated Environmental Regulation: Catalyst for Adaptive Responses? <u>Leandro Quadrona</u> (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

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| 9:00 | Introduction
Jun Hidema (Chiba University) |
| 9:05 | S07-1 Plant space biology and its application to space farming
<u>Hideyuki Takahashi</u> (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?
<u>Tomomichi Fujita</u> 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 , <u>Jun Hidema</u> 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

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| 10:30 | S07-4 Plant Cell Division space experiment - Elucidation of the effects of the microgravity environment on plant cell division -
<u>Daisuke Tamaoki</u> 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
<u>Kim Johnson</u> 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
<u>Mortimer Jenny</u> ^{1,2,6} , Jens Hauslage ^{2,3} , Sebastian Feles ³ , Tommy Zheng Gong ^{1,2} , Mathew Lewsey ^{1,4,6} , Matthew Gilliam ^{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

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| 9:00 | Opening remarks
Takuya Sakamoto (Kanagawa University) |
| 9:05 | S08-1 Regulation of Plant Chromatin Organization by Actin and Actin-binding Proteins
<u>Noriko Inada</u> ¹ , Tomoko Matsumoto ¹ , Fumiya Nakano ¹ , Yayoi Inui ² , Kota Higashi ³ , Shizue Yoshihara ³ ,
Sachihiko 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
<u>Yangnan Gu</u> (Univ. California, Berkeley, USA) |
| 10:00 | S08-3 Rapid changes in transcriptional activity and chromatin structure during pollen tube growth
<u>Mio K. Shibuta</u> (Fac. of Sci., Yamagata Univ.) |

Chairperson: Noriko Inada

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| 10:30 | S08-4 Thermal signaling in the nucleus: A mechanism of cellular function driven by spontaneous heat production
<u>Kohki Okabe</u> (Grad. Sch. Pharm. Sci., Univ. Tokyo) |
| 11:00 | S08-5 Exploring the functional implications of centromere arrangements in Arabidopsis
<u>Takuya Sakamoto</u> (Fac. Sci., Kanagawa Univ.) |
| 11:20 | S08-6 Chromosomal Organisation of Plant Biosynthetic Gene Clusters
<u>Hans-Wilhelm Nuetzmann</u> (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

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| 9:00 | Opening remarks |
| 9:10 | S09-1 How Minor Shifts in Transcription Factor Networks Generate Cell Fate Asymmetry
<u>Makoto Shirakawa</u> ^{1,2} (1Institute of Plant and Microbial Biology, Academia Sinica, 2JST PRESTO) |
| 9:40 | S09-2 Molecular Basis of the Regulatory System Governing Cell Polarity in Plants
<u>Akira Yoshinari</u> ^{1,2} (1WPI-ITbM, Nagoya Univ., 2JST PRESTO) |
| 10:10 | S09-3 Evolutionary origins and diversification of polar auxin transport in plants
<u>Satoshi Naramoto</u> ^{1,2} (1Fac. Sci., Hokkaido Univ., 2JST PRESTO) |
| 10:40 | Break time |

Chairperson: Makoto Shirakawa

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| 10:50 | S09-4 Mechanistic Analysis of Symmetric Calcium Wave Triggered by Asymmetric Trichome Bending
<u>Mika Nomoto</u> ^{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} (1Centr. Gene Res., Nagoya Univ., 2Grad. Sch. Sci., Nagoya Univ., 3JST PRESTO, 4Div. Sci., Japan Wmn’s Univ., 5Grad. of Agr., Kyushu Univ., 6RIKEN Centr. Sust. Res. Sci., 7Div. Edu., Saitama Univ., 8Comp. Anal. Centr. Sci., Saitama Univ., 9Grad. Sch. Eng., Nagoya Univ., 10JASRI) |
| 11:20 | S09-5 C/N/S circulatory system underlying catabolic recycling of specialized metabolites
<u>Ryosuke Sugiyama</u> ^{1,2,3,4} (1Grad. Sch. Pharm. Sci., Chiba Univ., 2PMSC, Chiba Univ., 3RIKEN CSRS, 4JST PRESTO) |
| 11:50 | General discussion & Closing remarks |

ASPB-JSPB 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 JSPB 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

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| 9:00 | <p>Opening Remark
Ryohei Thomas Nakano (Hokkaido Univ.)</p> |
| 9:02 | <p>S10-1 Cell fate determination and tissue organization in leaf development
<u>Kimmy Ho</u> (Institute of Plant and Microbial Biology, Academia Sinica)</p> |
| 9:25 | <p>S10-2 Multicellular Dynamics of WUS-Expressing Cells During <i>De Novo</i> Shoot Regeneration in <i>Arabidopsis</i>
<u>Yuki Doll</u>, Momoko Ikeuchi (Div. Bio. Sci., Grad. Sch. Sci. Tech., NAIST)</p> |
| 9:42 | <p>S10-3 Barrier Integrity Is Monitored By Gas Diffusion In <i>Arabidopsis</i> Mature Roots
<u>Hiroyuki Iida</u>¹, Isidro Abreu², Jennifer López Ortiz¹, Lucas León Peralta Ogorek^{1,3}, Vinay Shukla², Meeri Mäkelä¹, Munan Lyu¹, Alexey Shapiguzov^{1,4}, Francesco Licausi², Ari Pekka Mähönen¹ (¹FBES., University of Helsinki, ²Dept of Bio., University of Oxford, ³Sch of Biosci., University of Nottingham, ⁴Luke)</p> |

Chairperson: Momoko Ikeuchi

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| 9:59 | <p>S10-4 A novel actin isoform regulates seed size by controlling nuclear movement in <i>Arabidopsis</i> coenocytic endosperm
<u>Tomokazu Kawashima</u> (Department of Plant and Soil Sciences, University of Kentucky, Kentucky USA)</p> |
| 10:16 | <p>S10-5 Emergence of Robust Axis Formation from Stochastic Cell Behaviors in Rice Embryogenesis
<u>Atsuko Kinoshita</u> (Tokyo Metropolitan Univ.)</p> |
| 10:33 | <p>S10-6 The Distributive Germline: A developmental strategy to restrict the spread of new mutations
<u>Brad Nelms</u> (University of Georgia, USA)</p> |
| 10:58 | <p>Closing Remarks
Kent D. Chapman (University of North Texas, ASPB President)</p> |

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	<p>Opening remarks Katsutoshi Tsuda (Nagoya University)</p> <p>Chairperson: Ying-Chung Jimmy Lin</p>
13:35	<p>S11-1 Semi-<i>in vivo</i> analysis of motile sperm–archegonial cell interactions and fertilization-related factors in <i>Cycas revoluta</i> <u>Yukiho Toyama</u>¹, Satohiro Okuda¹, Takamasa Suzuki², Keiko Kano³, Emi Mishiro-Sato³, Shinya Sato³, Yasuko Ito-Inaba⁴, Tetsuya Higashiyama¹ (¹Dept. of Biol. Sci., Grad. Sch. Sci., Univ. Tokyo, ²Coll. Biosci. Biotechnol., Chubu Univ., ³Mol. Struct. Cent., WPI-ITbM, Nagoya Univ., ⁴Fac. Agric., Univ. of Miyazaki)</p>
13:55	<p>S11-2 The phytoytokine CAPE9 and its receptor CAPER1 function on plant systemic stomatal immunity <u>Chi-Hsin Chang</u>, Kai-Tan Cheng, Fan-Wei Lin, Yet-Ran Chen (Agricultural Biotechnology Research Center, Academia Sinica)</p>
14:15	<p>S11-3 Diverse mechanisms of stomatal manipulation by phyllosphere bacteria <u>Rikako Hirata</u> (Grad. Sch. Agr., Kyoto Univ.)</p>
14:35	<p>S11-4 Evolutionarily Conserved Eukaryotic Initiation Factor-Gated Translation Initiation Drives Plant Stress Response <u>Jhen-Cheng Fang</u>¹, Li An Ly¹, Wei Xiong Henry Eo², Chung-Yuan Lin¹, Chun-Jui Li¹, Zhuan Yi Neoh¹, Yu-Sen Wang³, Chin-Mei Lee³, Ting-Ying Wu², Ming-Jung Liu^{1,4} (¹Biotechnology Center in Southern Taiwan, Academia Sinica, Tainan, Taiwan, ²Institute of Plant and Microbial Biology, Academia Sinica, Taipei, Taiwan, ³Department of Life Science, National Taiwan University, Taipei, Taiwan, ⁴Agricultural Biotechnology Research Center, Academia Sinica, Taipei, Taiwan)</p>
14:55	<p>Break</p> <p>Chairperson: Katsutoshi Tsuda</p>
15:05	<p>S11-5 Translation mechanism regulated by SPA kinases in photomorphogenesis and heat stress response <u>Hui-Hsien Chang</u>, Mei-Chun Cheng (Department of Biochemical Science & Technology, National Taiwan University)</p>
15:25	<p>S11-6 Live-imaging and modeling of the leaf primordium of rice <u>Yoshiki Tokuyama</u> (Res. Fac. Agr. Hokkaido U.)</p>
15:45	<p>S11-7 Genetic architecture and molecular biology of heterostyly in common buckwheat <u>Ryoma Takeshima</u> (Department of Biochemistry and Molecular Biology, Saitama University)</p>
16:05	<p>S11-8 Multiplex Genetic Engineering Improves <i>Agrobacterium</i>-mediated Plant Transformation and CRISPR-based Genome Editing <u>Teng-Kuei Huang</u>, 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)</p>
16:25	<p>Closing remarks Ying-Chung Jimmy Lin (National Taiwan University)</p>

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 CO₂ assimilation in plants requires coordinated light and dark reactions. Under fluctuating environments, stomatal closure limits CO₂, 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 O₂ reduction. This symposium presents recent advances on their molecular mechanisms and physiological roles.

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| 13:30 | <p>Opening Remarks
Chikahiro Miyake (Kobe University)</p> <p>Chairperson: Kaori Kozuma</p> |
| 13:40 | <p>S12-1 New insights into the role of cyclic electron transfer in photosynthesis
<u>Matt Johnson</u> (Plants, Photosynthesis & Soil, School of Biosciences, University of Sheffield, Sheffield, S10 2TN, United Kingdom.)</p> |
| 14:10 | <p>S12-2 Redox regulation of photosynthetic electron transport
<u>Anja Krieger-Liszkay</u> (Institute for Integrative Biology of the Cell (I2BC), CEA, CNRS, Université Paris-Saclay, 91198 Gif-sur-Yvette cedex, France)</p> <p>Chairperson: Ginga Shimakawa</p> |
| 14:40 | <p>S12-3 When PSI-Cyclic Electron Transport Peaks: Growth Light Intensity Defines Its Kinetic Mode
<u>Hayato Satoh</u>¹, Arisa Ueda¹, Guy Hanke², Ko Takeuchi³, Kentaro Ifuku³, Ginga Shimakawa¹, Kenichi Morigaki¹, Yuji Suzuki⁴, Amane Makino^{5,6}, Chikahiro Miyake¹ (¹Grad. Agri. Sci., Kobe Univ., ²Sch. Biochem. Chem., QMUL, ³Grad. Agri., Kyoto Univ., ⁴Iwate Univ., Fac. Agri., ⁵Grad. Agri. Sci., Tohoku Univ., ⁶Inst. Excel. Higher Edu., Tohoku Univ.)</p> |
| 15:05 | <p>S12-4 NDH-PSI Supercomplex Ensures Proper Redox State of Plastquinone Pool in Thylakoid Membranes
Kaori Kohzuma, <u>Kentaro Ifuku</u> (Grad. Sch. Agri., Kyoto Univ.)</p> <p>Chairperson: Chikahiro Miyake</p> |
| 15:30 | <p>S12-5 Is photosynthesis just about fixing CO₂?
<u>Ginga Shimakawa</u> (Kobe University)</p> |
| 15:55 | <p>S12-6 Roles of the mitochondrial respiratory chain in photosynthetic induction
<u>Ko Noguchi</u>¹, Tatsuhisa Konishi¹, Yusuke Mizokami¹, Kintake Sonoike² (¹Sch Life Sci, Tokyo Univ Pharm Life Sci, ²Fac Edu Integr Art Sci, Waseda Univ)</p> |
| 16:20 | <p>Closing Remarks
Kentaro Ifuku (Kyoto Univ.)</p> |

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 Seta¹, Kohki Yoshimoto^{1,2} (¹Life Sci., Grad. Sch. Agri., Meiji Univ., ²Dept. Life Sci., Sch. Agri., Meiji Univ.)

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

14:15 : Break

Session 2

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

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

15:40 : Break

Session 3

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

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

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

17:40 : Break

Keynote lecture

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

18:55 : General discussion

19:00 : Closing remarks

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

Contact address:

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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.

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

5th Symposium on Phototropic Prokaryotes

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

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

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

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

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



Chairperson: Yusuke Tsukatani

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

Chairperson: Chihiro Azai

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

23rd Japan plasmodesmata meeting

Date Fri., March 13, 18:30–20:30

Venue Room Y

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

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

Chair: Yusuke Ohba

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

Plant Science Presentation Workshop 2026

“Communicating Your Research Clearly with Graphical Abstracts”

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

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

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

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

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

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

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

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

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

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

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

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

Date Sun., March 15, 16:40–18:40

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

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

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

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

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

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	<p>1aA-01</p> <p>Siphonin enables an effective photoprotective triplet quenching mechanism in green algal light-harvesting complexes</p> <p><u>Ritsuko Fujii</u>^{1,2}, Alessandro Agostini³, Soichiro Seki^{2,4}, Andrea Calcinoni³, Lopa Paul³, Agostino Migliore³, Donatella Carbonera³ (1ReCAP, Osaka Metropolitan Univ., 2Grad. Sch. Sci., Osaka Metropolitan Univ., 3Dept. Chem. Sci., Univ. Padova, 4IPR, Univ. Osaka)</p>	<p>1aB-01</p> <p>Effects of light intensity and light/dark periods on oxalate synthesis pathways in leaves of oxalate-rich plant</p> <p><u>Atsuko Miyagi</u>¹, Wakana Sakuma², Hideki Murayama¹ (1Fac. of Agri., Yamagata Univ., 2Grad. Sch. of Agri., Yamagata Univ.)</p>	<p>1aC-01</p> <p>Investigation of Phenylacyl-flavonoid Biosynthesis in <i>Raphanus spp.</i></p> <p><u>Yanghee Kim</u>, Sayuri Yasukawa, Yuting Liu, Shinichiro Komaki, Mutsuni Watanabe, Takayuki Tohge (Grad. Sch. of Sci. & Tech., NAIST)</p>	<p>1aD-01</p> <p>Developing a Versatile DNA Methylation Editing System in Arabidopsis</p> <p><u>Shunva Hirata</u>¹, Yoko Ikeda², Kappei Kobayashi², Taisuke Nishimura⁴, Hidetaka Kaya³ (1UGAS, Ehime University, 2IPSR, Okayama University, 3Graduate School of Agriculture, Ehime University, 4Graduate School of Engineering, Nagaoka University of Technology)</p>
09:45	<p>1aA-02</p> <p>Analysis of the phycobilisome linker CpeC involved in cyanobacterial adaptation to diverse light environments</p> <p><u>Takako Ogawa</u>¹, Shigeru Kawai², Yu Hirose², Yukako Hihara¹ (1Saitama Univ., 2Toyohashi Tech.)</p>	<p>1aB-02</p> <p>Nitrogen fixation by the newly isolated unicellular cyanobacterium <i>Synechocystis</i> sp. LKSZ1</p> <p><u>Leonardo Ken Okumura</u>¹, Mari Banba², Kazuma Uesaka², Yuichi Fujita², Shinji Masuda¹ (1LST, Science Tokyo, 2Grad. Sch. Bioagri. Sci. Univ. Nagoya)</p>	<p>1aC-02</p> <p>Differential regulation of biliverdin export among organelles during heme metabolism</p> <p><u>Mone Shibata</u>^{1,2}, Keiji Yoshida^{1,2}, Yutaka Kodama^{1,2} (1Ctr. Biosci. Res. Educ., Utsunomiya Univ., 2Grad. Sch. Reg. Dev. Creat., Utsunomiya Univ.)</p>	<p>1aD-02</p> <p>Spatial chromatin analysis of epigenomic state transition in the rice shoot apical meristem using ATAC-seq</p> <p><u>Yurika Morishita</u>¹, Ryosuke Takata², Aya Yoshida², Asuka Higo², Yusuke Miyanari³, Akihito Harada⁴, Hiroyuki Tsuji^{2,5} (1Grad. Sch. Bioagric. Sci., Nagoya Univ., 2Kihara Inst. Biol. Res., Yokohama City Univ., 3NanoLSI Kanazawa Univ., 4Grad. Sch. Med. Sci., 5Biosci. Biotechnol. Center, Nagoya Univ.)</p>
10:00	<p>1aA-03</p> <p>A peripheral antenna required for non-photochemical quenching and Lhex1 abundance in the diatom <i>Chaetoceros gracilis</i></p> <p><u>Jian Xing</u>¹, Minoru Kumazawa^{1,2}, Kentaro Ifuku¹ (1Grad. Sch. Agri., Kyoto Univ., 2Inst. Low Temp. Sci., Hokkaido Univ.)</p>	<p>1aB-03</p> <p>Effects of inorganic nitrogen nutrition on adventitious bud formation from leaves of three <i>Drosera</i> species</p> <p><u>Juse Okamoto</u>¹, Taketo Ishikawa², Shin-ichiro Ito¹, Mayu Inayoshi², Motoki Sato², Koichi Hasegawa², Arisa Yoshioka², Nobuyuki Takatani², Tatsuo Omata², Makiko Aichi² (1Grad. Sch. Biosci. Biotech., Chubu Univ., 2Col. Biosci. Biotech., Chubu Univ)</p>	<p>1aC-03</p> <p>Subcellular distribution and homeostasis of flavin mononucleotide in plants</p> <p><u>Shintaro Ichikawa</u>^{1,2}, Yutaka Kodama^{1,2} (1Ctr. Biosci. Res. Educ., Utsunomiya Univ., 2Grad. Sch. Reg. Dev. Creat., Utsunomiya Univ.)</p>	<p>1aD-03</p> <p>Changes in chromatin accessibility during the floral transition in the shoot apical meristem of rice</p> <p><u>Eri Funayama</u>^{1,2}, Aoi Hosaka³, Hiroko Akashi², Yurika Morishita¹, Kaho Yamaguchi², Aya Yoshida², Haruna Kida², Hideki Yoshida², Jun Ito², Taiji Kawakatsu⁶, Hiroyuki Tsuji⁵ (1Grad. Sch. Bioagric. Sci., Nagoya Univ., 2Kihara Inst. Biol. Res., Yokohama City Univ., 3Nihon BioData Co., 4RIKEN BRC, 5Biosci. Biotechnol. Center, Nagoya Univ.)</p>
10:15	<p>1aA-04</p> <p>Excitation energy landscape of 5 type-I reaction centers</p> <p><u>Akihiro Kimura</u>¹, Hirotaka Kitoh², Shigeru Itoh¹ (1Grad. Sch. Sci., Nagoya Univ., 2Dep. Eng. Mat., Kindai Univ.)</p>	<p>1aB-04</p> <p>GS1;2-Dependent Allometric Plasticity and Population-Level Responses in Rice</p> <p><u>Amane Takayama</u>, Soichi Kojima (Graduate School of Agricultural Science, Tohoku University)</p>	<p>1aC-04</p> <p>Identification of a novel vacuolar transporter involving indole glucosinolates accumulation in Arabidopsis</p> <p><u>Kaichiro Endo</u>¹, Anna Piasecka², Pawel Bednarek², Kenji Yamada¹ (1Malopolska Centre of Biotechnology, Jagiellonian University, Krakow, Poland, 2Institute of Bioorganic Chemistry, Polish Academy of Sciences, Poznan, Poland)</p>	<p>1aD-04</p> <p>Expression regulome of the germline differentiation factor MpBONOBO in the liverwort <i>Marchantia polymorpha</i></p> <p><u>Yoshihiro Yoshitake</u>¹, Kenta Tanaka¹, Haruki Okamoto¹, Ryuichi Nishihama², Shohei Yamaoka¹, Takayuki Kohchi¹ (1Grad. Sch. Biostudies, Kyoto Univ., 2Dept. Appl. Biol. Sci., Fac. Sci. Tech., Tokyo Univ. Sci.)</p>
10:30	<p>1aA-05</p> <p>Theoretical Analysis of Quinone/Chl Bindings to Plant/Bacterial Type-I,-II Reaction Centers; PSI is Unique!</p> <p>Ayumu Takagi¹, Kotaro Tateoka¹, Natuya Kashida², Akihiro Kimura³, <u>Shigeru Itoh</u>³, Hirotaka Kitoh^{1,2} (1Grad. Sch. Kindai Univ., 2Dep. Eng. Mat. Kindai Univ., 3Dept. Physics, Nagoya Univ)</p>	<p>1aB-05</p> <p>Functional analysis of HOMEBOX PROTEIN52 transcription factor involved in root nitrogen responses in Arabidopsis</p> <p><u>Hinako Akaïke</u>, Erina Akioka, Yasuhito Sakuraba, Shuichi Yanagisawa (Agro-Biotech. Res. Center, Grad. Sch. Agri. Life Sci., Univ. Tokyo)</p>	<p>1aC-05</p> <p>Platform of BVOC identification using <i>Arabidopsis thaliana</i></p> <p>Kanako Sekimoto^{1,2}, Ryusuke Sugiyama^{1,3}, Daisuke Fukuyama², Yukiko Ro³, Mika Nomoto^{1,4}, Yasuomi Tada⁴, <u>Yusuke Aihara</u>^{1,5} (1JST-PRESTO, 2Grad. Sch. Sci., Yokohama City Univ., 3Grad. Sch. Sci., Yokohama City Univ., 4Centr. Gene Res., Nagoya Univ., 5Grad. Sch. Sci., Kobe Univ.)</p>	<p>1aD-05</p> <p>Essential Contributions of GmDDM1 to Epigenetic Stability and Seed Development in Soybean</p> <p><u>Ahsen Gers</u>¹, Kana Shiraishi¹, Kaoru Tonosaki², Satoru Okamoto¹, Akito Kaga³, Ryota Kuroda¹, Jun-ichi Matsuoka^{1,4}, Atsushi Toyoda⁵, Taiji Kawakatsu⁶, Chiho Maruko¹, Kazuki Takahashi¹, Keiichi Okazaki¹, Moeko Okada¹, Eigo Fukai¹ (1Grad. Sch. Sci. Tech., Niigata Univ., 2Kihara Inst. Biol. Res., Yokohama City Univ., 3Inst. Crop Sci. (NICS), NARO, 4Cent. Reg. Agr. Res. Cent., NARO, 5Adv. Gen. Cent., NIG, 6Exp. Plant Div., RIKEN BRC)</p>
10:45	<p>1aA-06</p> <p>Roles of carotenoid glycosides in the protection of photosystem II from photoinhibition in the cyanobacterium <i>Synechocystis</i> sp. PCC 6803</p> <p><u>Rattanaporn Songserm</u>¹, Shinichi Takaichi², Haruhiko Jimbo¹, Yoshitaka Nishiyama¹ (1Grad. Sch. Sci. Eng., Saitama Univ., 2Dept. Mol. Microbiol., Tokyo Univ. Agr.)</p>	<p>1aB-06</p> <p>The role of HASTY protein in miRNA dynamics during nutrient deficiency in Arabidopsis</p> <p><u>Asuka Torii</u>, Mailun Yang, Yasuhito Sakuraba, Shuichi Yanagisawa (Agro-Biotech. Res. Center, Grad. Sch. Agri. Life Sci., Univ. Tokyo)</p>	<p>1aC-06</p> <p>Integrated Omics Analysis of Cultivated Soybean Soil under Environmental Stress Conditions</p> <p><u>Suzuka Matsuki</u>¹, Yu Kobayashi², Yui Nose³, Yasunori Ichihashi³, Daichi Nakatani⁴, Fumie Kabashima⁴, Miyako Kusano^{3,5,6} (1Grad. Sch. Life & Earth. Sci., Univ. Tsukuba, 2Under Grad. Sch. Life & Env. Sci., Univ. Tsukuba, 3RIKEN CSRS, 4LECO Japan Co., 5Life and Env. Sci., Univ. Tsukuba, 6T-PIRC, Univ. Tsukuba)</p>	<p>1aD-06</p> <p>Epigenetic defense priming by <i>Lr24</i> modulates post-transcriptional regulation in wheat during leaf rust pathogenesis</p> <p>Uzma Afreen, Kunal Mukhopadhyay, <u>Manish Kumar</u> (Department of Bioengineering and Biotechnology, Birla Institute of Technology, Mesra, Ranchi-835215, Jharkhand, India)</p>

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				
<p>1aE-01 Functional validation of candidate genes associated with heterosis in <i>Arabidopsis thaliana</i> <u>Ryuma Maeda</u>¹, Yuko Wada¹, Wijayanti Putri¹, Kazuaki Utsugi¹, Seiji Takayama², Toshiro Ito¹ (¹NAIST, ²Grad. Sch. of Agri. Life Sci. Tokyo Univ.)</p>	<p>1aF-01 Development of a heterologous expression-based platform for functional analysis of GLRs <u>Chiaki Tatsumi</u>¹, Emi Sato-Ebine¹, Hiraku Suda¹, Masatsugu Toyota^{1,2,3} (¹Dept. Biochem. Mol. Biol., Saitama Univ., ²SunRISE, Suntory Fdn. Life Sci., ³Coll. Plant Sci. Technol., Huazhong Agric. Univ.)</p>	<p>1aG-01 Fragment screening and fragment growing toward INO1 antagonists for reducing phytic acid content in crops <u>Tatsuki Akabane</u>^{1,2}, Satoshi Kamino³, Tomoki Okamura², Kazuyoshi Ikeda^{1,4}, Tomoki Yonezawa^{4,5}, Yugo Shimizu¹, Seiji Nagasaka², Etsuko Katoh⁶, Naoki Hirotsu² (¹R-CCS, RIKEN, ²Grad. Sch. Life Sci., Toyo Univ., ³CRYO SHIP Inc., ⁴Fac. Pharm., Keio Univ., ⁵Lifematics Inc., ⁶Grad. Sch. Food Nutr. Sci., Toyo Univ.)</p>	<p>1aH-01 B4-RAF Kinases are involved in SnRK2-independent osmotic stress response in <i>Physcomitrium patens</i> <u>Maho Mizuno</u>, Izumi Yotsui, Teruaki Taji, Yoichi Sakata (Dept. of Biosci., Tokyo Univ. of Agri.)</p>	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
<p>1aE-02 E Molecular landscape of wound-induced callus: Illuminating stem cell reformation and function through spatial omics <u>Akira Iwase</u>¹, Minne Max¹, Kotaro Torii^{1,2}, Hatsune Morinaka¹, Tetsuya Mori¹, Ayako Kawamura¹, Arika Takebayashi¹, Masami Y. Hirai¹, Keiko Sugimoto¹ (¹RIKEN CSRS, ²RIKEN TRIP-AGRS)</p>	<p>1aF-02 Development of a rhizosphere imaging method: Capturing rhizosphere microorganisms with biological cross-sectional polishing SEM (bioCP-SEM) <u>Kiminori Toyooka</u>, Yuko Saito, Satomi Kojima, Yumi Goto, Mayuko Sato (RIKEN CSRS)</p>	<p>1aG-02 Novel Functions of Peptide Molecules in Environmental Stress Adaptation <u>Akie Shimotohno</u>, Yujuan Du (Nagoya University)</p>	<p>1aH-02 Genetic analysis of the Osmo-sensitive locus in <i>Arabidopsis thaliana</i> accessions <u>Yusuke Murakoshi</u>¹, Kosuke Banba¹, Takahiro Hirano¹, Goro Masuda³, Hirota Ariga², Keisuke Tanaka³, Izumi Yotsui¹, Yoichi Sakata¹, Teruaki Taji¹ (¹Dept. of Biosci., Tokyo Univ. of Agri., ²Res. Cent. of Gen. Res., NARO, ³Nodai Genome Research Center)</p>				09:45
<p>1aE-03 E Morphological and Phenological Characterization of Flowering Traits in French Marigold (<i>Tagetes patula</i> L.) <u>Dewi Sukma</u>¹, Muhamad Aksan Raditya¹, Syarifah Iis Aisyah¹, Krisantini Krisantini¹, Muhamad Syukur¹, Ming-Tsair Chan² (¹Department of Agronomy and Horticulture, Faculty of Agriculture, IPB University, Indonesia, ²Academia Sinica Biotechnology Center in Southern Taiwan, Agricultural Biotechnology Research Center, Taiwan)</p>	<p>1aF-03 E Block-face serial fluorescence microscopy for plant tissue imaging at a cellular level <u>Dongbo Shi</u> (RIKEN CSRS)</p>	<p>1aG-03 Chelation-based iron uptake enhances prolonged heat tolerance in Wheat and <i>Brachypodium</i> <u>Anzu Minami</u>^{1,2}, Yoshihiko Onda¹, Minami Shimizu¹, Yukiko Uehara-Yamaguchi¹, Tomoko Nozoye^{3,4}, Motofumi Suzuki⁵, Keitaro Tanoi⁴, Keiichi Mochida^{1,2,6} (¹RIKEN, CSRS, ²Kihara Institute for Biological Research, Yokohama City University, ³Center for Liberal Arts, Meiji Gakuin University, ⁴Graduate School of Agricultural and Life Sciences, The University of Tokyo, ⁵Aichi Steel Corporation, ⁶School of Information and Data Sciences, Nagasaki University)</p>	<p>1aH-03 Isolation of <i>acquired osmotolerance-defective (aod)</i> mutants in the <i>Arabidopsis acqos</i> background <u>Kenta Tamaki</u>¹, Goro Masuda², Izumi Yotsui¹, Yoichi Sakata¹, Teruaki Taji¹ (¹Dept. of Biosci., Tokyo Univ. of Agri, ²NODAI Genome Research Center)</p>				10:00
<p>1aE-04 Surgical manipulation of barley inflorescence meristem Mari Tanaka¹, Hiroko Akashi¹, <u>Hiroyuki Tsuji</u>^{1,2} (¹Kihara Inst. Biol. Res., Yokohama City Univ., ²Biosci. Biotechnol. Center, Nagoya Univ.)</p>	<p>1aF-04 Development of highly efficient and precise genome editing system using TID-X in rice <u>Shota Muromoto</u>¹, Mumu Kato¹, Miyu Asari¹, Naoki Wada², Keishi Osakabe², Yuriko Osakabe¹ (¹生命理工, ²社会産業理工)</p>	<p>1aG-04 E L-DOPA promotes cadmium tolerance and triggers iron deficiency genes in <i>Arabidopsis thaliana</i> Ching-Yuan Chang, En-Jung Hsieh, <u>Louis Grillet</u> (National Taiwan University, Department of Agricultural Chemistry)</p>	<p>1aH-04 Membrane trafficking factor PEN1 regulates root growth under osmotic stress conditions in <i>Arabidopsis thaliana</i> <u>Miho Kikuchi</u>¹, Hiroto Yoshida², Haruka Otani², Fuminori Takahashi^{1,2} (¹Fac. Adv. Eng., TUS, ²Grad. Sch. Fac. Adv. Eng., TUS)</p>				10:15
<p>1aE-05 Development of PHYTOmap for rice shoot apical meristem <u>Koki Iwama</u>¹, Yurika Morishita¹, Hiroyuki Tsuji^{2,3} (¹Grad. Sch. Bioagric. Sci., Nagoya Univ., ²Kihara Inst. Biol. Res., Yokohama City Univ., ³Biosci. Biotechnol. Center, Nagoya Univ.)</p>	<p>1aF-05 Efficient targeted random mutagenesis of the chloroplast-encoded <i>petA</i> gene in <i>Arabidopsis thaliana</i> <u>Issei Nakazato</u>, Wataru Yamori, Yoshiko Tamura, Reiko Masuda, Shin-ichi Arimura (Grad. Sch. Agri. Life Sci., Univ. Tokyo)</p>	<p>1aG-05 Magnesium enhances the growth-regulatory function of oxidized glutathione in rice and other plant species <u>Satoshi Mochizuki</u>, Ken'ichi Ogawa (RIBS Okayama)</p>	<p>1aH-05 Role of two-component signaling pathway in environmental stress responses of <i>Physcomitrium patens</i> <u>Ryota Waku</u>, Taketo Sasaki, Izumi Yotsui, Teruaki Taji, Yoichi Sakata (Dept. Bioscience, Tokyo Univ. of Agriculture)</p>				10:30
<p>1aE-06 Development of Expansion microscopy for intracellular imaging in the rice shoot apical meristem <u>Yukichi Ishida</u>¹, Yurika Morishita², Koki Iwama², Hiroyuki Tsuji^{3,4} (¹Sch. Agric., Nagoya Univ., ²Grad. Sch. Bioagric. Sci., Nagoya Univ., ³Biosci. Biotechnol. Center, Nagoya Univ., ⁴Kihara Inst. Biol. Res., Yokohama City Univ.)</p>	<p>1aF-06 Precise knock-in of stress-responsive cis-regulatory elements using gene targeting for improving abiotic stress tolerance in plant <u>Daisuke Miki</u> (Shenzhen University of Advanced Technology)</p>	<p>1aG-06 Exogenous GSSG Enhances Phosphate Acquisition Efficiency and Plant Growth <u>Ken'ichi Ogawa</u>, Satoshi Mochizuki, Kenji Henmi (Research Institute Biological Sciences, OKAYAMA (RIBS OKAYAMA))</p>	<p>1aH-06 Analysis of salt-spray stress response in <i>Arabidopsis</i> <u>Yoichi Chiba</u>¹, Yusuke Murakoshi¹, Akito Hosoi², Izumi Yotsui¹, Yoichi Sakata¹, Teruaki Taji¹ (¹Dept. of Biosci., Tokyo Univ. of Agri, ²NODAI Genome Research Center)</p>				10:45

● 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	<p>1aA-07 Insights into the structural evolution of the Phycobilisome from primitive red alga <i>Cyanidioschyzon merolae</i> Yuya Fujita^{1,2}, Soichiro Seki¹, Akihiro Kawamoto^{1,2}, Shigeru Kawai³, Yuu Hirose³, Genji Kurisu^{1,2} (¹UOsaka, Institute for Protein Research (IPR), Japan, ²UOsaka, Grad. Sch. Eng., Japan, ³Toyohashi Univ. of Tech., Grad. Sch. Eng., Japan)</p>	<p>1aB-07 Exploration of Key Genes Underlying Traits for Overcoming Low-Nitrogen Environments in an <i>Arabidopsis thaliana</i> Natural Accession Keina Monda¹, Satoshi Iuchi², Masatomo Kobayashi², Hiroko Matsunaga³, Haruko Takeyama^{3,4,5}, Juntaro Negi¹, Yasuhito Sakuraba⁶, Shuichi Yanagisawa⁶, Koh Iba¹ (¹Dept. Biol., Fac. Sci., Kyushu Univ., ²RIKEN BRC, ³Res. Org. Nano Life Innov., Waseda Univ., ⁴Grad. Sch. Adv. Sci. Eng., Waseda Univ., ⁵Inst. Adv. Res. Biosyst. Dynam., Waseda Res. Inst. Sci. Eng., Waseda Univ., ⁶Grad. Sch. Agri. Life Sci., Univ. Tokyo)</p>		<p>1aD-07 The Regulation of Histone Modification by ACTIN DEPLYMERIZING FACTOR in <i>Arabidopsis thaliana</i> Fumiya Nakano¹, Yayoi Inui², Kouta Higashi³, Shizue Yoshihara³, Sachihiko Matsunaga², Noriko Inada¹ (¹Grad. Sch. Agr., Univ. Osaka. Met, ²Grad. Sch. Fro. Sci., Univ. Tokyo, ³Grad. Sch. Sci., Univ. Osaka. Met)</p>
11:15	<p>1aA-08 Microspectroscopic analysis of photosynthetic proteins preserved in Kaiike-kerogen Risa Kojima¹, Tomohiro Ishikawa², Ryosuke Saito³, Toru Kondo^{1,4} (¹NIBB, ²Dept. of Life Sci. and Tech., Science Tokyo, ³Dept. of Earth Sci., Yamaguchi Univ., ⁴ExCELLS)</p>	<p>1aB-08 LBD-type transcription factors integrate local nitrogen status to optimize nitrogen uptake and metabolism at the systemic level Takatoshi Kiba¹, Hana Takahashi², Yukino Sada², Kota Monden³, Hitoshi Sakakibara² (¹IPSR, Okayama Univ., ²Grad. Sch. Bioagr. Sci. Nagoya Univ., ³Grad. Sch. Nat. Sci. Tech. Shimane Univ.)</p>		<p>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 Fujimoto³, Miki Fujita², Fuminori Takahashi², Keiko Kuwata⁴, Sachihiko Matsunaga^{1,3}, Kazuko Yamaguchi-Shinozaki^{5,6}, Kazuo Shinozaki² (¹Dept. of Integr. Biosci., Univ. Tokyo, ²RIKEN CSRS, ³Dept. of Appl. Biol. Sci., Tokyo Univ. of Sci., ⁴ITbM, Nagoya Univ., ⁵Grad. Sch. Agr. Life Sci., Univ. Tokyo, ⁶Res. Inst. Agr. Life Sci., Tokyo Univ. Agr.)</p>
11:30	<p>1aA-09 High-light acclimation of photosynthetic apparatus in cyanobacteria from extreme environments Shigeru Kawai¹, Keisuke Takamune¹, Takumi Murakami², Takahiro Segawa³, Nozomu Takeuchi⁴, Yuu Hirose¹ (¹Grad. Sch. Tech., Toyohashi Univ. of Tech., ²Sch. Life Sci. and Tech., Inst. Sci. Tokyo, ³Sch. Med., Univ. Yamanashi, ⁴Sch. Sci., Univ. Chiba)</p>	<p>1aB-09 Functional analysis of the transcription factor FBH4 and its target genes in regulating low-nitrogen responsive gene expression in <i>Arabidopsis</i> Miho Sanagi¹, Madoka Ogura², Tomoka Tachibana², Soichi Inagaki³, Junpei Takagi¹, Takeo Sato¹ (¹Fac. Sci., Hokkaido Univ., ²Grad. Sch. Life Sci., Hokkaido Univ., ³Grad. Sch. Sci. Univ. Tokyo)</p>		<p>1aD-09 H3K9 acetylation dynamics orchestrate early anti-herbivore defence in <i>Arabidopsis</i> Ahmed Yusuf^{1,2}, Kota Wakaya², Takuya Sakamoto³, Takuya Uemura², Koudai Okamura², Abdelaziz Ramadan², Akira Nozawa⁴, Takamasa Suzuki⁵, Yayoi Inui⁶, Sachihiko Matsunaga⁶, Tatsuya Sawasaki⁴, Gen-ichi Arimura² (¹RIKEN - CSRS - Cambial Stem Cell System ECL Research Unit, ²Department of Biological Science and Technology, Faculty of Advanced Engineering, Tokyo University of Science, Tokyo, Japan, ³Department of Science, Faculty of Science, Kanagawa University, Yokohama, Japan, ⁴Proteo-Science Center, Ehime University, Matsuyama, Japan, ⁵College of Bioscience and Biotechnology, Chubu University, Kasugai, Japan, ⁶Department of Integrated Biosciences, Graduate School of Frontier Sciences, The University of Tokyo, Kashiwa, Japan)</p>
11:45	<p>1aA-10 Structural and functional characterization of far-red excitons in the LHC from the Eustigmatophyceae alga <i>Trachydiscus minutus</i> Soichiro Seki¹, Lorenzo Cupellini², David Bina^{3,4}, Elena Betti², Petra Urajová², Hideaki Tanaka¹, Tomoko Miyata^{6,7}, Keiichi Namba^{6,7}, Genji Kurisu^{1,7,8}, Tomáš Polívka³, Radek Litvin^{3,4}, Ritsuko Fujii^{9,10} (¹IPR, UOsaka, ²Dipartimento di Chimica e Chimica Industriale, Univ. of Pisa, ³Faculty of Science, Univ. of South Bohemia in České Budějovice, ⁴Czech Academy of Sciences, Biology Centre, Institute of Plant Molecular Biology, ⁵Centre Algatech, Institute of Microbiology, Czech Academy of Sciences, ⁶Grad. Sch. Front. Biosc., UOsaka, ⁷JEOL YOKOGUSHI Res. Alliance Lab., UOsaka, ⁸OTRI, UOsaka, ⁹Grad. Sch. Sci., Osaka Metropol. Univ., ¹⁰Res. Cent. Artificial Photosynth., Osaka Metropol. Univ.)</p>	<p>1aB-10 Molecular Mechanisms Suppressing Plant Immunity under Limited-Sugar Available Conditions Saki Ejima¹, Linnan Jie^{2,3}, Miho Sanagi², Shigetaka Yasuda⁴, Kohji Yamada⁵, Ayumi Sugisaki¹, Junpei Takagi², Mika Nomoto⁶, Xiu-Fung Xin³, Yasuomi Tada⁶, Yusuke Saijo⁴, Takeo Sato² (¹Grad. Sch. Life Sci., Hokkaido Univ., ²Fac. Sci., Hokkaido Univ., ³Inst. Plant Physiol. Ecol., CAS, ⁴Grad. Sch. Sci. Tech., NAIST, ⁵Grad. Sch. Tec., Tokushima Univ., ⁶Center for Gene Res., Nagoya Univ.)</p>		<p>1aD-10 Crosstalk Between DNA Methylation and Histone Modification in <i>Marchantia</i> Riko Kunou¹, Olivier Mathieu², Yoko Ikeda¹ (¹IPSR, Okayama Univ., ²Universite Clermont Auvergne)</p>

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				
<p>1aE-07 The earliest developmental changes in rice shoot apical meristem during the transition <u>Moe Honda</u>¹, <u>Mari Tanaka</u>¹, <u>Wakana Tanaka</u>², <u>Hiroyuki Tsuji</u>^{1,3} (¹Kihara Inst. Biol. Res., Yokohama City Univ., ²Grad. Sch. Integr. Sci. Life, Hiroshima Univ., ³Biosci. Biotechnol. Center, Nagoya Univ.)</p>	<p>1aF-07 Gene delivery into plant mitochondria using peptide-modified single-walled carbon nanotubes <u>Masaki Odahara</u>¹, <u>Simon Law</u>², <u>Maai Mori</u>², <u>Keiji Numata</u>^{1,2} (¹Dept. Eng., Kyoto Univ., ²CSRS, RIKEN)</p>	<p>1aG-07 E Molecular mechanisms underlying foliar urea uptake in Arabidopsis: Insights from transporter mutants and GWAS <u>Raj Kishan Agrahari</u>, <u>Toru Fujiwara</u>, <u>Takehiro Kamiya</u> (Graduate School of Agricultural and Life Sciences, The University of Tokyo)</p>	<p>1aH-07 Roles of SAL1-PAP Retrograde Signaling Pathway in the moss <i>Physcomitrium patens</i> <u>Yosuke Oba</u>, <u>Marcos Takeshi Miyabe</u>, <u>Tomoki Otani</u>, <u>Kojiro Kawata</u>, <u>Shinsaku Ito</u>, <u>Izumi Yotsui</u>, <u>Teruaki Taji</u>, <u>Yoichi Sakata</u> (Dept. Biosci., Tokyo Univ. of Agri)</p>	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
<p>1aE-08 Functional Analysis of CLAVATA2 (CLV2) in Floral Transition in <i>Arabidopsis</i> <u>Chisato Oketani</u>, <u>Takashi Okamoto</u>, <u>Atsuko Kinoshita</u> (Tokyo Metropolitan Univ.)</p>	<p>1aF-08 E Automated plant genetic engineering <u>Matthew Hudson</u> (University of Illinois at Urbana-Champaign)</p>	<p>1aG-08 Investigation of calcium distribution in abscission zones and fruit development <u>Yusaku Noda</u>, <u>Yong-Gen Yin</u>, <u>Kazuyuki Enomoto</u>, <u>Naoto Yamada</u>, <u>Naoki Kawachi</u> (QST Takasaki Institute for Advanced Quantum Science)</p>	<p>1aH-08 Genomic and physiological mechanisms underlying salinity adaptation in quinoa <u>Yasufumi Kobayashi</u>¹, <u>Yasunari Fujita</u>^{1,2} (¹JIRCAS, ²Grad. Sch. Life Environ. Sci., Univ. Tsukuba)</p>				11:15
<p>1aE-09 Comparative Analysis of CCAAT1 cis-element Function in FT Transcriptional Regulation Among Arabidopsis Accessions <u>Aoha Miki</u>¹, <u>Natsumi Ono</u>¹, <u>Satoru Harada</u>², <u>Katsuya Negishi</u>³, <u>Masaki Endo</u>⁴, <u>Kappei Kobayashi</u>¹, <u>Seiichi Toki</u>^{4,5,6,7}, <u>Mitsutomo Abe</u>⁸, <u>Hidetaka Kaya</u>¹ (¹Grad. Sch. Agri., Ehime Univ., ²Fac. Agri., Ehime Univ., ³NIFTS, NARO, ⁴NIAS, NARO, ⁵Fac. Agri., Ryukoku Univ., ⁶Grad. Sch. of Nanobioscience, ⁷Kihara Institute for Biological Research, Yokohama City Univ., ⁸Grad. Sch. Arts and Sci., The Univ. of Tokyo)</p>	<p>1aF-09 Advancement of cassava molecular breeding towards the contribution to carbon neutrality <u>Tomoyuki Takeda</u>¹, <u>Yoshinori Utsumi</u>^{1,2}, <u>Maho Tanaka</u>¹, <u>Chikako Utsumi</u>¹, <u>Akira Iwase</u>³, <u>Arika Takebayashi</u>³, <u>Yoshie Okamoto</u>¹, <u>Kenji Miura</u>⁴, <u>Keiko Sugimoto</u>³, <u>Motoaki Seki</u>^{1,5,6} (¹Plant Genomic Network Research Team, RIKEN CSRS, Japan, ²Faculty of Life Science and Biotechnology, Fukuyama Univ., Japan, ³Cell Function Research Team, RIKEN CSRS, Japan, ⁴Tsukuba-Plant Innovation Research Center, Univ. of Tsukuba, Japan, ⁵Kihara Institute for Biological Research, Yokohama City Univ., Japan, ⁶Graduate School of Science and Engineering, Saitama Univ., Japan)</p>	<p>1aG-09 Ca²⁺ Signaling and Establishment of Auxin Maxima in Bend-Induced Lateral Root Formation in <i>Arabidopsis thaliana</i> <u>Hazumi Akaogi</u>¹, <u>Sorato Yoshida</u>¹, <u>Yuta Takano</u>¹, <u>Jun Mitomo</u>², <u>Kazuo Ebine</u>¹, <u>Masatsugu Toyota</u>^{1,3,4} (¹Dept. Biochem. Mol. Biol., Saitama Univ., ²Dept. Biochem. Mol. Biol., Faculty of Science, Saitama Univ., ³SunRISE, Suntory Fdn. Life Sci., ⁴Coll. Plant Sci. Technol., Huazhong Agric. Univ.)</p>	<p>1aH-09 Analyses of Cation Calcium exchanger genes in salt tolerance of Arabidopsis <u>Tamami Koyama</u>¹, <u>Yuko Nagashima</u>¹, <u>Hirotaaka Ariga</u>², <u>Kohji Nishimura</u>³, <u>Tomoaki Horie</u>⁴, <u>Izumi Yotsui</u>¹, <u>Yoichi Sakata</u>¹, <u>Teruaki Taji</u>¹ (¹Dept. of Biosci., Tokyo Univ. of Agri, ²Research Center of Genetic resources, NARO, ³Faculty of Life and Environmental Science, Shimane University, ⁴Faculty of Textile Science and Technology, Shinshu University)</p>				11:30
<p>1aE-10 Elucidation of regulatory mechanism of FLOWERING LOCUS T (FT) transport using mutant FT protein in <i>Arabidopsis</i> <u>Aki Namekata</u>¹, <u>Kozakai Minami</u>², <u>Mitsutomo Abe</u>¹ (¹Grad. Sch. Art and Sci., The Univ. of Tokyo, ²Grad. Sch. Sci., The Univ. of Tokyo)</p>	<p>1aF-10 E A tightly regulated copper-inducible transient gene expression system in <i>Nicotiana benthamiana</i> incorporating a suicide exon and Cre recombinase <u>Bing-Jen Chiang</u> (Institute of Plant and Microbial Biology, Academia Sinica)</p>	<p>1aG-10 Analysis of calcium dependent touch sensing and signaling mechanism in <i>Arabidopsis</i> <u>Taira Fukui</u>¹, <u>Takuya Uemura</u>², <u>Hiroki Asakawa</u>¹, <u>Kazuo Ebine</u>¹, <u>Masatsugu Toyota</u>^{1,3,4} (¹Dept. Biochem. Mol. Biol., Saitama Univ., ²Dept. Biol. Sci. Technol., Tokyo Univ. Sci., ³SunRISE, Suntory Fdn. Life Sci., ⁴Coll. Plant Sci. Technol., Huazhong Agric. Univ.)</p>	<p>1aH-10 Disruption of the <i>SALT</i> gene enhances salt tolerance of Arabidopsis thaliana accession Lch-0 <u>Takuma Kajino</u>¹, <u>Kaori Uchiyama</u>¹, <u>Yusaku Noda</u>², <u>Kohji Nishimura</u>³, <u>Noriyuki Konishi</u>⁴, <u>Yoshihiro Hase</u>², <u>Tomoaki Horie</u>⁵, <u>Naoto Yamada</u>², <u>Hirotaaka Ariga</u>⁶, <u>Jian Feng Ma</u>⁴, <u>Izumi Yotsui</u>¹, <u>Yoichi Sakata</u>¹, <u>Teruaki Taji</u>¹ (¹Dept. of Biosci., Tokyo Univ. of Agri, ²Takasaki Institute for Advanced Quantum Science, QST, ³Dept. of Life science, Fac. of Life and environmental science, Shimane Univ., ⁴Research Core for Plant Stress Sci., Institute of Plant Sci. and Resources, Okayama Univ., ⁵Div. of Applied Bio., Faculty of Textile Science, Shinshu Univ., ⁶Research center of genetics resource, NARO)</p>				11:45

● 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	<p>1aA-11 </p> <p>Exploring Chlorophyll-Dependent Thylakoid Membrane Biogenesis and Remodeling in The Cyanobacterium <i>Leptolyngbya Boryana</i> <u>Ji Won Kim</u>, Kentaro Usui, Haruki Yamamoto, Yuichi Fujita (Graduate School of Bioagricultural Sciences, Nagoya University)</p>	<p>1aB-11</p> <p>Roles of an ARF-GEF MIN7/BEN1/BIG5 and its interactor HLB1 in the modulation of membrane trafficking in response to C/N stress <u>Kaito Ende</u>¹, Hiroki Matsui², Juna Eda², Miho Sanagi³, Junpei Takagi³, Takeo Sato³ (¹Grad. Sch. Life Sci., Hokkaido Univ., ²Sch. Sci., Hokkaido Univ., ³Fac. Sci., Hokkaido Univ.)</p>		<p>1aD-11 </p> <p>Genome-wide R-loop redistribution in response to pre-mRNA splicing defects in Arabidopsis <u>Youheng Wang</u>¹, Asuka Hirao², Mai Mukai², Seira Nakatsuka¹, Nobuhiro Akiyoshi¹, Misato Ohtani^{1,2,3} (¹Grad Sch Front Sci, Univ Tokyo, ²Grad Sch Sci Technol, NAIST, ³RIKEN, CSRS)</p>
12:15	<p>1aA-12</p> <p>Analysis of the Ancestral-Type Phycobiliprotein Apla in Cyanobacteria <u>Gakuto Nakatsujii</u>¹, Runa Tamagawa², Shigeru Kawai¹, Yuu Hirose^{1,2} (¹Toyohashi Tech. Dept. of Appl. Chem. and Life Sci., ²Toyohashi Tech. Grad. Sch. Eng., Dept. of Appl. Chem. & Life Sci.)</p>	<p>1aB-12</p> <p>Sugar drives chloroplast phosphatidylglycerol biosynthesis to sustain chlorophyll synthesis under nitrogen stress <u>Yushi Yoshitake</u>¹, Keigo Okazaki², Hiroyuki Ohta^{2,3}, Mie Shimojima², Yoichiro Fukao¹ (¹Sch. Life Sci., Ritsumeikan univ., ²Sch. Life Sci. Tech., Inst. Sci. Tokyo, ³Phytolipid technologies)</p>		<p>1aD-12 </p> <p>ABA-Responsive MYB Transcription Factors Regulate Expression of Allergenic Fra Protein During Leaf Development in Strawberry <u>Chonprakun Thagun</u>¹, Yoshinori Fukasawa¹, Tomohiro Suzuki¹, Takahito Nomura¹, Masanori Okamoto¹, Yutaka Kodama^{1,2} (¹C-Bio, Utsunomiya Univ., ²Grad. Sch. Regional Dev. Creativity, Utsunomiya Univ.)</p>

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				
<p>1aE-11 Functional Analysis of the Flowering Regulatory Roles of <i>FT</i>-like Genes <i>NbFTL-3</i> in <i>Nicotiana benthamiana</i> Nariyuki Furukawa¹, Ken-ichi Kurotani², Kappei Kobayashi¹, Michitaka Notaguchi², Hidetaka Kaya¹ (¹Ehime Univ., Grad. Sch. of Agri., ²Kyoto Univ., Grad. Sch. of Science)</p>	<p>1aF-11 DR genes expression controlling system for circumventing the morphological abnormality of transgenic plants Shohei Koyama¹, Tomoko Igawa^{1,2,3} (¹Grad. Sch. Hort., Chiba Univ., ²Plant Mol. Sci. Center, Chiba Univ., ³Res. Center Space Agri. Hort., Grad. Sch. Hort., Chiba Univ.)</p>	<p>1aG-11 3D segmentation of rhizoids of <i>Physcomitrium patens</i> using machine learning and analysis of microgravity effects Naoki Yagihara¹, Takahisa Wakabayashi², Ryohei Yamaura¹, Daisuke Tamaoki³, Hiroyuki Kamachi³, Daisuke Yamauchi⁴, Yoshinobu Mineyuki⁴, Makoto Hoshino⁵, Kentaro Uesugi⁵, Toru Shimazu⁶, Haruo Kasahara⁷, Motoshi Kamada⁸, Tomomi Suzuki⁹, Yuji Hiwatashi¹⁰, Yuko T. Hanba¹¹, Atsushi Kume¹², Tomomichi Fujita¹³, Ichirou Karahara³ (¹Grad. Sch. Sci. Eng., Univ. Toyama, ²Fac. Sci., Univ. Toyama, ³Fac. Sci., Acad. Assemb., Univ. Toyama, ⁴Grad. Sch. Sci., Univ. Hyogo, ⁵JASRI, SPring-8, ⁶Japan Space Forum, ⁷JAMSS, ⁸AES, ⁹JAXA, ¹⁰Sch. Food Ind. Sci., Miyagi Univ., ¹¹Dept. Applied Biol., Kyoto Inst. Technol., ¹²Fac. Agric., Kyushu Univ., ¹³Fac. Sci., Hokkaido Univ.)</p>	<p>1aH-11 E Overexpression of the vacuolar H⁺-pyrophosphate gene, <i>SvHPP</i>, from a halophyte <i>Sporobolus virginicus</i> enhances salt tolerance in <i>Arabidopsis</i> Roksana Aftab¹, Hiromi Suzuki², Yuichi Tada² (¹Grad Sch of Bionics, Tokyo Uni of Tech, ²Sch. of Biosci. and Biotech. Tokyo Uni of Tech)</p>	Symposium S01	Symposium S02	Symposium S03	12:00
<p>1aE-12 Function and tissue specific expression analysis of tomato lipocalins Shoko Kokubo¹, Miku Tomiyasu², Mahiro Matsui², Chikako Fukazawa³, Reiko Motohashi^{1,2,3} (¹GSST., Univ. Shizuoka, ²Grad. Sch. Agr., Univ. Shizuoka, ³Agr., Univ. Shizuoka)</p>	<p>1aF-12 A Versatile Agroinfiltration Platform for Transient Protein Expression Across Medicinal and Phylogenetically Diverse Plants Tsubasa Shoji¹, Jung-Bum Lee², Kenji Miura³ (¹Inst. Natural Med., Univ. Toyama, ²Grad. Sch. Med. Pharm., Univ. Toyama, ³Fac. Life Envir. Sci., Univ. Tsukuba)</p>	<p>1aG-12 Exploring the evolutionary process of plant gravitropism by utilizing the basal land plant, <i>Physcomitrium patens</i> Kentaro Wakayama¹, Kanta Suemitsu¹, Tomomichi Fujita², Satoshi Naramoto^{2,3} (¹Grad. Sch. Life Sci., Univ. Hokkaido, ²Grad. Fac. Sci., Univ. Hokkaido, ³JST PRESTO)</p>	<p>1aH-12 Analysis of posttranslational regulations of CCA1 in response to cold stress Satoshi Kidokoro¹, Naoki Okawa², Fuminori Takahashi^{3,4}, Junya Mizoi², Yuriko Osakabe¹, Kazuo Shinozaki⁴, Kazuko Yamaguchi-Shinozaki^{2,5} (¹Sch. of Life Sci. and Tech., Science Tokyo, ²Grad. Sch. Agr. Life Sci., Univ. Tokyo, ³Faculty of Advanced engineering, Tokyo Univ. of Science, ⁴Center for Sustainable Resource Science, RIKEN., ⁵Inst. Agr. Life Sci., Tokyo Univ. Agr.)</p>	Frontiers in Developing Climate-Resilient and Socially Accepted Plants (9:30-12:30)	Unlocking New Frontiers in Plant Physiology with Mass Spectrometry (9:30-12:30)	Advances in Engineering and Regulation of Plastids and Photosynthesis (9:30-12:30)	12:15

● 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	<p>1pA-01</p> <p>Does the Reddest Fluorescence of Undecamer Far-Red Light Antenna Pc-frLHC in <i>Prasiola crispae</i> come from only one Subunit?</p> <p>Rin Taniguchi^{1,2}, Makiko Kosugi^{3,4}, Jun Minagawa^{3,4}, Shen Ye¹, Yutaka Shibata¹ (1Grad. Sch. Sci., Tohoku Univ., 2DIARE, 3National Institute for Basic Biology, 4Grad. Inst. Adv. Stud., SOKENDAI)</p>	<p>1pB-01</p> <p>Reevaluation of the fatty acid repertoire in <i>Synechocystis</i> sp. PCC 6803</p> <p>Naoki Sato¹, Haruhiko Jimbo², Yoshitaka Nishiyama² (1Grad. Sch. Arts Sci., Univ. Tokyo, 2Grad. Sch. Sci. Eng., Saitama Univ.)</p>	<p>1pC-01</p> <p>Decoding Plant Immune Recognition by Systematic Discovery of PAMP-PRR Interactions</p> <p>Yasuhiro Kadota¹, Bruno Pok Man Ngou¹, Michele Wyler², Marc W Schmid², Takehiro Suzuki¹, Markus Albert³, Naoshi Dohmae¹, Ken Shirasu^{1,4} (1RIKEN, CSRS, Yokohama, Japan, 2MWSchmid GmbH, Glarus, Switzerland, 3University Erlangen-Nuremberg, Erlangen, Germany, 4Grad. Sch. Sci., Univ. Tokyo, Tokyo, Japan)</p>	<p>1pD-01</p> <p>Genomic Characterization of Natsukirari Reveals Candidate Genes for High-Temperature Ripening Tolerance in Rice</p> <p>Kyonoshin Maruyama^{1,2}, Asako Kobayashi³, Fumihiro Nakaoka³, Hiroaki Sakai⁴, Tetsuya Sakurai⁵ (1Biol. Resources Post-harvest Div., JIRCAS., 2Life & Env. Sci., Univ. Tsukuba, 3Fukui Agr. Exp. Stn, 4NARO, 5Multi. Sci. Cluster, Kochi Univ.)</p>
14:15	<p>1pA-02</p> <p>Suppression of Chilling-Induced PSI Photoinhibition by the PSI-NDH Supercomplex</p> <p>Ko Takeuchi¹, Shintaro Harimoto¹, Hayato Sato², Chikahiro Miyake², Kentaro Ifuku¹ (1Grad. Sch. Agri., Univ. Kyoto, 2Grad. Sch. Agri., Univ. Kobe)</p>	<p>1pB-02</p> <p>Metabolic engineering of free fatty acid production in the cyanobacterium <i>Synechococcus elongatus</i> PCC 7942</p> <p>Kotoha Nishimoto¹, Tsubasa Furushima¹, Taro Kadowaki¹, Haruhiko Jimbo¹, Norifumi Yamamoto², Nobuyuki Takatani³, Makiko Aichi³, Kazutaka Ikeda⁴, Tatsuo Omata³, Yoshitaka Nishiyama¹ (1Grad. Sch. Sci. Eng., Saitama Univ., 2Taisei Corp., 3Col. Biosci. Biotech., Chubu Univ., 4Kazusa DNA Res. Inst.)</p>	<p>1pC-02</p> <p>Phylogenomics and structure-guided engineering of immune receptors in plants</p> <p>Ngou Bruno Pok Man¹, Michele Wyler², Marc W Schmid², Takehiro Suzuki¹, Markus Albert³, Naoshi Dohmae¹, Yasuhiro Kadota¹, Ken Shirasu^{1,4} (1RIKEN, CSRS, Yokohama, Japan, 2MWSchmid GmbH, Glarus, Switzerland, 3University Erlangen-Nuremberg, Erlangen, Germany, 4Grad. Sch. Sci., Univ. Tokyo, Tokyo, Japan)</p>	<p>1pD-02</p> <p>Two Distal Cis-Regulatory Elements Determining Expression Pattern of a Rice Floral Repressor <i>Ghd7</i></p> <p>Takumi Kawauchi¹, Yuko Ogo², Hironori Itoh³, Manaki Mimura¹, Takeshi Izawa¹ (1Grad. Sch. Agr. Life Sci., Univ. Tokyo, 2NIVFS, 3NICS)</p>
14:30	<p>1pA-03</p> <p>NON-PHOTO-CHEMICAL QUENCHING7 was involved in the accumulation of core subunits of photosystem II in <i>C. flaveria bidentis</i></p> <p>Yuri Munekage¹, Ai Ishizaki¹, Sayaka Koshi¹, Sota Kintaka¹, Kota Ishibashi¹, Atsushi Takabayashi², Ryouichi Tanaka², Takao Oi³, Kentaro Ifuku⁴ (1Sch. Biol. Env. Sci., Kwansei Gakuin Univ., 2Inst Low Temp Sci, Hokkaido Univ., 3Sch. Eng. Sci., Kochi Univ. Tech., 4Grad. Sch. Agri., Kyoto Univ.)</p>	<p>1pB-03</p> <p>Enhanced cell growth and lipid production through sustained high photosynthetic activity in <i>Nannochloropsis oceanica</i></p> <p>Unto Kaku¹, Haruhiko Jimbo¹, Shinichiro Maeda², Kumiko Okazaki³, Atsushi Sakamoto³, Masako Iwai¹, Hiroyuki Ohta⁴, Yoshitaka Nishiyama¹ (1Grad. Sch. Sci. Eng., Saitama Univ., 2Mazda Motor Corp., 3Grad. Sch. Integr. Sci. Life, Hiroshima Univ., 4Phytolipid Technologies Co. Ltd.)</p>	<p>1pC-03</p> <p>Effector-triggered defense mechanisms restricting bacterial water-soaking under high humidity</p> <p>Shigetaka Yasuda¹, Arullthevan Rajendram¹, Taiga Ishihara¹, Rahul Sk^{2,3}, Akihisa Shinozawa², Yusuke Saijo¹ (1Grad. Sch. Sci. Tech., NAIST, 2Dep. Biosci., Tokyo Univ. Agric., 3NGRC, Tokyo Univ. Agric.)</p>	<p>1pD-03</p> <p>An Investigation of Multiple Transcription Initiation Sites of <i>atp9</i> in <i>Arabidopsis thaliana</i></p> <p>Jingxiu Ji¹, Akihito Mamiya¹, Chang Zhou², Sachi Takenaka¹, Issei Nakazato², Shin-ichi Arimura², Mizuki Takenaka¹ (1Grad. Sch. Sci., Kyoto Univ., 2Grad. Sch. Agric., Univ. Tokyo)</p>
14:45	<p>1pA-04</p> <p>Construction of an artificial light-harvesting system that transfers UV-excited mTurquoise2 fluorescence to PSII</p> <p>Mizuki Ikeda¹, Souta Ishiyama², Yoshifumi Ueno³, Tatsuya Tomo^{2,3} (1Fac. Sci., Tokyo Univ. Sci., 2Grad. Sci., Tokyo Univ. Sci., 3Inst. Arts Sci., Tokyo Univ. Sci.)</p>	<p>1pB-04</p> <p>Effects of Knockouts of Chrysolaminarin Biosynthesis Pathway Genes on Lipid Accumulation in <i>Nannochloropsis oceanica</i></p> <p>Yasuhiro Furuhashi¹, Hiroki Murakami², Shinya Kaneko³, Yasunori Aizawa³, Hiroyuki Ohta^{1,3,4}, Nozomu Sakurai¹ (1Dept. Frontier Res. & Dev., Kazusa DNA Res. Inst., 2Fac. Glob. Interdiscip. Sci. & Innov., Shizuoka Univ., 3Sch. Life Sci. & Technol., Inst. Sci. Tokyo, 4Phytolipid Technologies Co., Ltd)</p>	<p>1pC-04</p> <p>Differential modulation of pattern-recognition receptor signaling preserves plant immunity under phosphate deficiency</p> <p>Natsuki Tsuchida¹, Maxmilyand Leiwakabessy¹, Kota Yamashita², Taishi Umezawa², Yusuke Saijo¹ (1Grad. Sch. Sci and Tech., NAIST, 2BASE, Tokyo Univ. Agric. Tech.)</p>	<p>1pD-04</p> <p>Molecular Mechanisms Underlying Secondary Plasmodesmata Formation Between a Parasitic Plant and Its Host</p> <p>Koh Aoki, Kyo Morinaga, Akihiro Niwa (Grad. Sch. Agric., Osaka Metro. Univ.)</p>
15:00	<p>1pA-05</p> <p>Artificial photosynthetic system constructed from reduced graphene oxide and photosynthetic protein complexes</p> <p>Hiroto Ishii¹, Shunsuke Sone¹, Shota Tanaka¹, Yoshifumi Ueno², Tatsuya Tomo^{1,2} (1Grad. Sch. Sci., Tokyo Univ. Sci., 2Inst. Arts Sci., Tokyo Univ. Sci.)</p>	<p>1pB-05</p> <p>Investigating the role of LDGTS in <i>Nannochloropsis oceanica</i> stress response</p> <p>Arif Agung Wibowo¹, Hiroki Murakami², Yasuhiro Furuhashi¹, Hiroyuki Ohta^{3,4}, Nozomu Sakurai¹ (1Department of Frontier Research and Development, Kazusa DNA Research Institute, 2-6-7 Kazusa-kamatari, Kisarazu 292-0818, Chiba, Japan, 2Faculty of Global Interdisciplinary Science and Innovation, Shizuoka University, 836 Ohya, Suruga-ku, Shizuoka 422-8529, Shizuoka, Japan, 3School of Life Science and Technology, Tokyo Institute of Technology, 4259-B-65 Nagatsuta-cho, Midori-ku, Yokohama 226-8501, Kanagawa, Japan, 4Phytolipid Technologies Co., Ltd. 4259-3 Nagatsuta-cho, Midori-ku, Yokohama 226-8510, Kanagawa, Japan)</p>	<p>1pC-05</p> <p>Mechanism for Phytocytokine-induced Defense Sensitization during Phosphate Starvation in Natural Variation of <i>Arabidopsis thaliana</i></p> <p>Maxmilyand Leiwakabessy, Natsuki Tsuchida, Yusuke Saijo (Nara Institute of Science and Technology)</p>	<p>1pD-05</p> <p>Chromosome-scale Genome Assemblies of Allopolyploid <i>Cuscuta</i> Species Uncover Genomic Signatures of Parasitic Lifestyle and Polyploid Evolution</p> <p>Tenta Segawa¹, Masaki Takagawa², Ryusuke Yokoyama², Kyoko Sato³, Takehiko Itoh⁴, Eiichiro Ono¹ (1Res. Inst. Suntory Global Innovation Center Ltd., 2Grad. Sch. Life Sci., Tohoku Univ., 3Fac. Sci., Acad. Assem., Univ. Toyama, 4Science Tokyo)</p>

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				
<p>1pE-01 E Dissection of the differentiation programs of two distinct idioblast types through the FAMA-WSB-SCAP1 network <u>Yuta Horiuchi</u>¹, Hikari Kitani², Nobutoshi Yamaguchi², Toshiro Ito², Makoto Shirakawa¹ (¹Institute of Plant and Microbial Biology, Academia Sinica, ²Nara Institute of Science and Technology)</p> <p>1pE-02 Analysis of the expression pattern of the auxin-responsive transcription factor FbDOF1A in <i>C. Flaveria bidentis</i> <u>Kaishu Fujiki</u>, Tomoyo Ono, Ken Okudono, Yukimi Taniguchi, Yuri Munekage (Graduate School of Science Technology, Kwansei Gakuin Univ.)</p> <p>1pE-03 Analysis of Auxin Involvement in Rice Early Embryogenesis <i>in vitro</i> <u>Haruka Kumakura</u>¹, Moeko Sato², Hiroyuki Tsuji^{2,3}, Satoshi Naramoto⁴, Takashi Okamoto¹, Atsuko Kinoshita¹ (¹Tokyo Metropolitan University, ²Kihara Institute for Biological Research, Yokohama City University, ³Bioscience and Biotechnology Center, Nagoya University, ⁴Faculty of Science, Hokkaido University)</p> <p>1pE-04 Mechanisms and Functions of PIN-Mediated Auxin Transport in the Moss <i>Physcomitrium patens</i> <u>Kanta Suemitsu</u>¹, Tomomichi Fujita², Satoshi Naramoto^{2,3} (¹Grad. Sch. Life Sci., Hokkaido Univ., ²Fac. Sci., Hokkaido Univ., ³JST, PRESTO)</p> <p>1pE-05 Auxin dynamics in the stem cell region of <i>Marchantia polymorpha</i> <u>Keito Yunoki</u>¹, Satoshi Naramoto^{2,3} (¹Grad. Sch. Life Sci., Hokkaido Univ., ²Fac. Sci., Hokkaido Univ., ³JST, PRESTO)</p>	<p>1pF-01 Efficient genetic transformation by Agrobacterium-stipule base inoculation in peach (<i>Prunus persica</i> L. Batsch) <u>Katsunori Tamura</u>¹, Yosuke Fukamatsu¹, Yujiro Unoki², Kenji Oda¹ (¹Okayama Prefectural Technology Center for Agriculture, Forestry and Fisheries, Research Institute for Biological Sciences, ²Okayama Prefectural Technology Center for Agriculture, Forestry and Fisheries, Agricultural Research Institute)</p> <p>1pF-02 E Ethics of GM Biofuels <u>Tommi Lehtonen</u> (University of Vaasa)</p> <p>1pF-03 E Stakeholder Tensions in an Emerging Field: The case of GM Biofuels <u>Jouni K. Juntunen</u>¹, Mehedi Hasan², Roji Karki² (¹University of Vaasa, School of Technology and Innovations, ²Wärtsilä Oyj)</p>	<p>1pG-01 Analysis of blue light and actin filament-dependent chloroplast movement in <i>Petalonia fascia</i> <u>Tsunami Hijama</u>¹, Kazuhiro Kogame², Masahiro Kasahara³, Fumio Takahashi⁴, Shinya Yoshikawa¹ (¹Grad. Sch. Biosci. Biotech., Fukui Pref. Univ., ²Dep. Sci., Hokkaido Univ., ³Dep. Life Sci., Ritsumeikan Univ., ⁴Dep. Pharmaceutical Sci., Toho Univ.)</p> <p>1pG-02 Analysis of blue light-signaling pathway in guard cell by phosphoproteomics <u>Taku Sakakibara</u>¹, Kyomi Taki¹, Kyohei Kato¹, Kohei Fukatsu¹, Yuki Hayashi¹, Yoshikatsu Matsubayashi¹, Toshinori Kinoshita^{1,2} (¹Grad. Sch. Sci., Univ. Nagoya, ²WPI-ITbM, Univ. Nagoya)</p> <p>1pG-03 Analysis of PP2C.D involvement in stomatal movements under environmental stimuli <u>Kosuke Murakami</u>¹, Yuki Hayashi¹, Yohei Takahashi^{1,2}, Daichi Kinoshita¹, Miya Mizutani³, Yoshikatsu Matsubayashi¹, Toshinori Kinoshita^{1,2} (¹Grad. Sch. Sci., Univ. Nagoya, ²WPI-ITbM, Univ. Nagoya, ³Div. Biol. Sci., NAIST)</p> <p>1pG-04 Functional analysis of SAUR in PP2C.D-mediated dephosphorylation of plasma membrane H⁺-ATPase in guard cells <u>Seiya Kimpara</u>¹, Koji Takahashi¹, Kosuke Murakami¹, Yuki Hayashi¹, Toshinori Kinoshita^{1,2} (¹Grad. Sch. Sci., Univ. Nagoya, ²WPI-ITbM, Univ. Nagoya)</p> <p>1pG-05 Analysis of C1 Raf-like kinase BHP in light-induced stomatal opening <u>Akinori Tange</u>¹, Yuki Hayashi¹, Taku Sakakibara¹, Maki Hayashi², Yoshikatsu Matsubayashi¹, Toshinori Kinoshita^{1,3} (¹Grad. Sch. Sci., Univ. Nagoya, ²Grad. Sch. Life Sci., Tohoku Univ., ³WPI-ITbM, Univ. Nagoya)</p>	<p>1pH-01 Role of Phytochrome in <i>Physcomitrium patens</i> under Low Temperatures <u>Rin Ishikawa</u>¹, Seiya Inoue¹, Tatsunosuke Yamada¹, HIKARU Sugimori¹, Nana Eto¹, Airi Naka¹, Yuzuki Baba¹, Tomoe Jinno¹, Akihisa Shinozawa¹, Daisuke Takezawa², Izumi Yotsui¹, Teruaki Tajiri¹, Yoichi Sakata¹ (¹Dept. Bioscience, Tokyo Univ. of Agriculture, ²Graduate School of Science and Engineering, Saitama University)</p> <p>1pH-02 Phytochrome-mediated cold response involves SnRK2 in the moss <i>Physcomitrium patens</i> <u>Seiya Inoue</u>¹, Rin Ishikawa¹, Tatsunosuke Yamada¹, HIKARU Sugimori¹, Nana Eto¹, Airi Naka¹, Akihisa Shinozawa¹, Daisuke Takezawa², Izumi Yotsui¹, Teruaki Tajiri¹, Yoichi Sakata¹ (¹Dept. of Biosci., Tokyo Univ. of Agri., ²Graduate School of Science and Engineering, Saitama University)</p> <p>1pH-03 Effects of 1,4-naphthoquinone derivatives on the acquisition of cold- and ABA-mediated freezing tolerance in <i>Arabidopsis</i> <u>Sen Inavoshi</u>¹, Kohei Kitawaki¹, Yasuko Ito-Inaba^{1,2}, Takehito Inaba¹ (¹Fac. of Agr., Univ. of Miyazaki, ²Grad. Sch. Life Sci., Tohoku Univ.)</p> <p>1pH-04 E Actin isovariant ACT8 regulates cold stress response in <i>Arabidopsis</i> through modulating GNOM-mediated cellular auxin homeostasis <u>Rahman Abidur</u>^{1,2}, Aya Hanzawa¹, Rahman Arifa¹ (¹UGAS, Iwate University, ²Dept. of Life Sciences, Fac. of Agriculture, Iwate Univ.)</p> <p>1pH-05 Effects of Low Temperature and Plasma Treatment on Germination of Dried <i>Arabidopsis thaliana</i> Seeds <u>Kazuma Maki</u>¹, Kazuo Tsugane², Kiyoshi Tatematsu³, Hidetaka Ito⁴ (¹Grad. Sch. Life Sci., Hokkaido Univ., ²IBBP Center, NIBB, ³Research Enhancement Strategy Office, NIBB, ⁴Fac. of Sci., Hokkaido Univ.)</p>	Symposium S04 Printing 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 adaptation (14:00-17:00)	14:00
							14:15
							14:30
	Bioresources						14:45
							15:00

● 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 <u>Shinya Kosaki</u> , Hiroyuki Mino (Grad. Sch. Sci., Nagoya Univ.)	1pB-06 Characterization of Three NAD Kinases in the Oleaginous Microalga <i>Nannochloropsis Sora Ohashi</i> 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 Comparative analysis of immune responses triggered by two strains of <i>Pseudomonas amygdali</i> pv. <i>tabaci</i> in <i>Nicotiana benthamiana</i> <u>Yuna Nakao</u> , Shinpei Katou (Grad. Sch. Medi. Sci. Techno., Univ. Shinshu)	1pD-06 Involvement of RNA processing/modifying enzymes in thermospermine-mediated regulation of mRNA translation in <i>Arabidopsis</i> <u>Mitsuru Saraumi</u> , F.M. Tomnoy 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 <u>Pi-Cheng Tsai</u> 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 <i>Arabidopsis</i> <u>Takehiro Ito</u> 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 <i>Physcomitrium patens</i> <u>Riku Fukui</u> , Teruaki Taji, Yoichi Sakata, Izumi Yotsui (Dept. of Biosci., Tokyo Univ. of Agri)	1pD-07 Identification of a ribonuclease involved in <i>NIP5;1</i> mRNA cleavage in <i>Arabidopsis</i> <u>Mayuki Tanaka</u> 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 <u>Kyosuke Watanabe</u> , Shen Ye, Yutaka Shibata (Graduate school of science, Tohoku Univ.)	1pB-08 Comparative analysis of phytase activity and thermal stability in three cereal species <u>Rioko Shibusawa</u> ¹ , Etsuko Kato 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 <i>Physcomitrium patens</i> <u>Yoshifumi Kiyono</u> , 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 <u>Jingchan Xie</u> , 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 <i>Flaveria</i> <u>Asuka Nakamura</u> , Mana Kasai, Kota Ishibashi, Yuri Munekage (Grad. Sch. SciTech., Kwansei Gakuin Univ.)	1pB-09 Functional analysis of <i>Arabidopsis</i> Ca ²⁺ /CaM-dependent NAD kinase isoforms with different subcellular localizations <u>Hiroaki Sakaguchi</u> 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 <u>Yi-Feng Chen</u> 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 <i>Arabidopsis</i> <u>Kodai Ishibashi</u> 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 <u>Sota Muraoka</u> 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 <i>Arabidopsis</i> <u>Yasuo Yamauchi</u> 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 <u>Yuji Fujimoto</u> 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 <i>Arabidopsis crr2-2 pgr5-5</i> mutant <u>Yuki Okegawa</u> 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} , <u>Yasuomi Tada</u> ^{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				
<p>1pE-06 The distribution and the function of plant hormone in fern <i>Ceratopteris richardii</i> <u>Yuta Hanada</u>¹, Eiki Kawarabuki¹, Satoshi Naramoto² (¹Sch. Sci. Hokkaido Univ., ²Fac. Sci. Hokkaido Univ.)</p>		<p>1pG-06 Phosphoproteome analyses reveal a primary role of plasma membrane H⁺-ATPase regulation in CO₂-induced stomatal movement in Arabidopsis Kaito Uchihashi², Yoshikatsu Matsubayashi², Koji Takahashi², Toshinori Kinoshita^{1,2}, <u>Yohei Takahashi</u>^{1,2} (¹ITbM, Nagoya U., ²Grad. Sch. Sci., Nagoya U.)</p>	<p>1pH-06 E Ethanol Application Enhances Freezing Stress Tolerance in Arabidopsis and Sugar Beet <u>Daisuke Todaka</u>¹, Kentaro Nakaminami¹, Akihiro Matsui¹, Seishi Ikeda², Thi Nhu Quynh Do^{1,4}, Maho Tanaka¹, Satoshi Takahashi¹, Chieko Torii¹, Junko Ishida¹, Atsushi J. Nagano^{5,6}, Motoaki Seki^{1,3,7} (¹Plant Genomic Network Res. Team, RIKEN CSRS, ²Hokkaido Agri. Res. Center, NARO, ³KIBR, Yokohama City Univ., ⁴AGI, Vietnam, ⁵Bioscience and Biotechnology Center, Nagoya Univ., ⁶Institute for Advanced Biosciences, Keio Univ., ⁷Grad. Sch. Sci. Eng., Saitama Univ.)</p>	Symposium S04 Printing 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
<p>1pE-07 Functional analyses of ROP GDP dissociation inhibitors in <i>Marchantia polymorpha</i> Yu Miyazaki¹, Airi Hayashi², <u>Yuuki Sakai</u>¹, Hirofumi Nakagami³, Kenta C. Moriya¹, Yusuke Aihara¹, Hidehiro Fukaki¹, Kimitsune Ishizaki¹ (¹Grad. Sch. Sci., Kobe Univ., ²Fac. Sci., Kobe Univ., ³MPIPZ)</p>	<p>1pG-07 The new role of stomatal CO₂ response in plant growth and environmental stress tolerance in Arabidopsis <u>Koki Nakano</u>¹, Sinya Sato², Keiko Kano², Emi Mishiro², Toshinori Kinoshita^{1,3}, Yohei Takahashi^{1,3} (¹Grad. Sch. Sci., Univ. Nagoya, ²Molecular Structure Center, WPI-ITbM, Univ. Nagoya, ³WPI-ITbM, Univ. Nagoya)</p>	<p>1pH-07 Enhanced Abiotic Stress Tolerance via Ethanol Treatment in plants: Investigating the Role of Alcohol Dehydrogenase 1 (ADH1) <u>Aki Kawamura</u>^{1,4}, Daisuke Todaka¹, Akihiro Matsui¹, Chieko Torii¹, Naoki Takahashi¹, Motoaki Seki^{1,2,3,4} (¹Plant Genomic Network Research Team, RIKEN CSRS, ²KIBR, Yokohama City Univ., ³Grad. Sch. Sci. Eng., Saitama Univ., ⁴Sch. Agr., Meiji Univ.)</p>	15:30				
<p>1pE-08 E A TONNEAU1-Recruiting Motif (TRM) protein is required for air chamber development in <i>Marchantia polymorpha</i> Ayana Sano¹, Airi Hayashi², Yuuki Sakai³, Kimitsune Ishizaki³, Yoh Sakuma¹, <u>Hirotaaka Kato</u>¹ (¹Grad. Sch. Sci. Eng., Ehime Univ., ²Fac. Sci., Kobe Univ., ³Grad. Sch. Sci., Kobe Univ.)</p>		<p>1pH-08 Genome editing of the <i>Wf1-sm3</i> gene for fructan hydrolysis and impact of fructan accumulation on freezing tolerance in winter wheat <u>Kodai Takemoto</u>¹, Kentaro Sasaki¹, Akira Kawakami², Ryozo Imai¹ (¹Institute of Agrobiological Science, NARO, ²Hokkaido Agricultural Research Center, NARO)</p>	15:45				
<p>1pE-09 CSI Is Essential for Schizogenous Intercellular Space Formation in <i>Marchantia polymorpha</i> <u>Miya Mizutani</u>¹, Isato Iguchi¹, Ryuichi Nishihama², Kimitsune Ishizaki³, Takayuki Kohchi⁴, Taku Demura¹ (¹Div. Biosci., NAIST, ²Dept. of Applied Biol. Sci., Fac. of Sci. Tech Tokyo Univ. of Sci., ³Grad. Sch. Sci., Kobe Univ., ⁴Grad. Sch. of Biostudies, Kyoto Univ.)</p>		<p>1pH-09 Freezing behaviors in <i>Camellia</i> flower buds visualized using MRI <u>Masaya Ishikawa</u>¹, Kazuma Iwasaki², Naoto Momiyama², Naohiro Yagyu², Naoto Fujita², Mai Kudo¹, Mingyi Zu¹, Yasuhiko Terada², Norihisa Matsushita¹, Kenji Fukuda¹ (¹The University of Tokyo, Graduate School of Agricultural and Life Sciences, ²University of Tsukuba, College of Engineering Sciences)</p>	16:00				
<p>1pE-10 E Evolutionary Dynamics of Small Peptide Signaling Systems in Liverworts <u>Chihiro Furumizu</u>^{1,2}, Mari Kondo², Kengo Matsushita² (¹Inst. Agric. Life Sci., Academic Assembly, Shimane Univ., ²Fac. Life Environ. Sci., Shimane Univ.)</p>		<p>1pH-10 The warm temperature insensitive mutant <i>aco3</i> in <i>Arabidopsis thaliana</i> <u>Moe Masumoto</u>¹, Rin Takeuchi², Ryo Takara², Tsuyoshi Furumoto^{1,2} (¹Grad. Agr., Univ. Ryukoku, ²Agr., Univ. Ryukoku)</p>	16:15				
<p>1pE-11 <i>IDD5</i>-mediated regulation of leaf morphogenesis in <i>Physcomitrium patens</i> <u>Ren Yamada</u>¹, Masaki Ishikawa², Mitsuyasu Hasebe², Akiko Kozaki¹ (¹Grad. Sch. Sci., Shizuoka Univ., ²NIBB)</p>		<p>1pH-11 Functional analysis of <i>STTP</i>, a gene whose expression levels are responsive to seasonal temperature changes in <i>Arabidopsis</i> <u>Kenta C. Moriya</u>^{1,2}, Hanako Shimizu¹, Genki Yumoto^{1,3}, Susumu Uehara⁴, Jiro Sugisaka¹, Tomoo Shimada⁵, Ryutaro Tokutsu⁶, Yusuke Aihara², Hidehiro Fukaki², Mika Nomoto⁴, Yoshikatsu Matsubayashi⁷, Yasuomi Tada⁴, Kimitsune Ishizaki², Mie N. Honjo¹, Hiroshi Kudoh¹ (¹Center for Ecol. Res., Kyoto Univ., ²Grad. Sch. Sci., Kobe Univ., ³IMS., Shinshu Univ., ⁴Center for Gene Res., Nagoya Univ., ⁵Grad. Sch. Sci., Kyoto Univ., ⁶Sch. Veterinary Med., Kitasato Univ., ⁷Grad. Sch. Sci., Nagoya Univ.)</p>	16:30				

● 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	<p>1pA-12 Relation between PGRL1 and PGR5 in the green alga <i>Chlamydomonas reinhardtii</i> Hiroko Takahashi¹, Tetsuto Sato², Yuki Ito², Keisuke Yoshida³, Yuki Okegawa⁴, Ryutaro Tokutsu⁵, Yukako Hihara¹ (¹Grad. Sch. Sci. & Eng., Saitama Univ., ²Dep. Biochem. & Mol. Biol., Saitama Univ., ³Lab. Chem. & Life Sci., Inst. Int. Res., Inst. Sci. Tokyo, ⁴Inst. Plant Sci. & Res., Okayama Univ., ⁵Sch. Vet. Med., Kitasato Univ.)</p>		<p>1pC-12  Decoding Long-Distance Immune Signaling of Chitin-Induced Systemic Resistance in Rice Micah Lagat¹, Tomoyuki Furuta¹, Naoki Yamaji¹, Hironori Kaminaka², Hideki Nishimura¹, Yoji Kawano¹ (¹Institute of Plant Science and Resources, Okayama University, Okayama, ²Faculty of Agriculture, Tottori University, Tottori, Japan)</p>	

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				
<p>IpE-12 E From ER Sheets to Shoots: Membrane Remodeling and Control in Moss Prerna Singh^{1,2}, Tomomichi Fujita¹ ¹Faculty of Science, Hokkaido University, ²Institute for the Advancement of Higher Education, Hokkaido University)</p>			<p>IpH-12 Tissue-specific fructan responses during cold acclimation under diurnal temperature fluctuations in wheat Takuma Kikuchi¹, Jan Felix Gehrke², Toshihisa Kotake¹, Daisuke Takahashi¹ ¹Grad. Sch. Sci. Eng., Saitama Univ., ²Dept. Biol., Ulm Univ.)</p>	Symposium S04 Printing 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

● 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	<p>2aA-01</p> <p>Photosynthetic Control Variants Generated in the Cyt <i>b_f</i> Rieske Protein</p> <p>Shin-Ichiro Ozawa¹, Felix Buchert², Michael Hippler^{1,2} (¹Inst. Plant Sci. Res., Okayama Univ., ²Inst. Plant Bio. Biotech., Univ. Münster)</p>	<p>2aB-01 </p> <p>Molecular Characterization and Structural Insights of <i>SiCAD1</i> Gene in Indonesian Foxtail Millet (<i>Setaria italica</i>)</p> <p>Sintha Wahyuning Ardie¹, M Reza Pahlevi², Ramadaniarto Rizqullah², Daisuke Tsugama³ (¹Department of Agronomy and Horticulture, Faculty of Agriculture, IPB University, Indonesia, ²Plant Breeding and Biotechnology Study Program, Graduate School, IPB University, Indonesia, ³Asian Research Center for Bioresource and Environmental Sciences (ARC-BRES), Graduate School of Agricultural and Life Sciences, The University of Tokyo, Japan)</p>	<p>2aC-01</p> <p>Analysis of stomatal immunity against grapevine downy mildew pathogen <i>Plasmopara viticola</i></p> <p>Yoshiharu Mimata¹, Wei Zheng¹, Xuenan Zhang¹, Rao Zhang^{1,2}, Wenxiu Ye¹ (¹IAAS, Peking Univ., ²College of Life Sciences, Qingdao Agricultural Univ.)</p>	<p>2aD-01</p> <p>A functional analysis of the non-photosynthetic chloroplast protein translocator TOC132 in <i>Arabidopsis thaliana</i> guard cells</p> <p>Ryosuke Toyomura, Boseok Song, Sho Yamagaki, Sakura Nishimura, Jo Narimatsu, Koh Iba, Juntaro Negi (Dept. Biol., Fac. Sci., Kyushu Univ.)</p>
09:15	<p>2aA-02 </p> <p>Cytochrome <i>b_f</i> influences linear electron flow through lateral distribution and modulates STT7 activity via a phosphorylation feedback loop</p> <p>Michael Hippler^{1,3}, Affifa Zaem¹, Davide Tamborini², Martin Scholz¹, Wojciech Wietrzynski², Markus Schwarzländer¹, Shin-Ichiro Ozawa³, Ben Engel², Felix Buchert¹ (¹Institute of Plant Biology and Biotechnology, University of Münster, 48143 Münster, Germany, ²Biozentrum, University of Basel, Spitalstrasse 41, 4056 Basel, Switzerland, ³Institute of Plant Science and Resources, Okayama University, Kurashiki, Japan)</p>	<p>2aB-02</p> <p>Critical role of microtubule plus-end regulation for secondary cell wall patterning in protoxylem vessels</p> <p>Eri Kamon¹, Ya Ma², Arata Yoneda³, Taku Demura^{3,4}, Misato Ohtani^{2,3,4,5} (¹Ritsumeikan Univ., ²Grad. Sch. Front. Sci., Univ. Tokyo, ³Grad. Sch. Sci. Tech., NAIST, ⁴RIKEN, CSRS, ⁵Grad. Sch. Sci., Univ. Tokyo)</p>	<p>2aC-02 </p> <p>Cell death-mediated plant immunity against hemibiotrophic fungal pathogen infection</p> <p>Katsuma Yonehara^{1,2}, Naoyoshi Kumakura¹, Benjamin Cole³, Hatsune Morinaka¹, Ayako Kawamura¹, Akira Iwase¹, Keiko Sugimoto¹, Dongbo Shi^{1,5}, Gitta Coaker⁴, Ken Shirasu^{1,2} (¹CSRS, RIKEN, Japan, ²Grad. Sch. Sci., Univ. Tokyo, Japan, ³DOE JGI, Lawrence Berkeley Natl. Lab., USA, ⁴Dept. Plant Pathol., Univ. California, USA, ⁵Inst. Pioneering Research, RIKEN, Japan)</p>	<p>2aD-02</p> <p>Analysis of CO₂-dependent starch metabolism in guard cells and investigation of its regulatory factors</p> <p>Tomoumi Honda, Okuma Reona, Jo Narimatsu, Koh Iba, Juntaro Negi (Dept. Biol., Fac. Sci., Kyushu Univ.)</p>
09:30	<p>2aA-03</p> <p>The low-temperature response of HCO₃⁻ transport activity in <i>Synechococcus elongatus</i> PCC 7942</p> <p>Nobuyuki Takatani, Tatsuo Omata, Makiko Aichi (Col. of Biosci. and Biotech. Chubu Univ.)</p>	<p>2aB-03 </p> <p>Mechanical adaptation of <i>A. thaliana</i> root to sucrose supply</p> <p>Liyu Deng¹, Yunshu Wang², Yuta Nakagawa³, Andres Aguilar Ariza², Tomomichi Fujita⁴, Shumpei Hayashi⁵, Akihiro Isozaki³, Keisuke Goda^{3,6,7}, Hirota Hida⁵, Toru Fujiwara², Marcel Beier⁸ (¹Grad. Sch. Life Science, Hokkaido University, ²Dep. Appl. Biol. Chem., Grad. Sch. Agri. Life Sci., The University of Tokyo, ³Dep. Chem. Grad. Sch. Sci, The University of Tokyo, ⁴Fac. Sci. Hokkaido University, ⁵Dep. Mech. Eng., Grad. Sch. Kobe University, ⁶Dep. Bioeng. Samuelli Sch Eng. University of California, ⁷Inst. Tech. Sci., Wuhan University, ⁸SPMDR Unit, F-REI)</p>	<p>2aC-03 </p> <p>A novel polyketide biosynthetic enzyme complex produces dihydroxyhexanoic acid and regulates turgor pressure in appressoria</p> <p>Naoyoshi Kumakura¹, Takayuki Motoyama¹, Keisuke Miyazawa^{2,3}, Toshihiko Nogawa¹, Katsuma Yonehara^{1,4}, Kaori Sakai⁵, Nobuaki Ishihama¹, Kaisei Matsumori^{3,4}, Pamela Gan¹, Hiroyuki Koshino¹, Takeshi Fukuma^{2,3}, Richard O'Connell⁵, Ken Shirasu^{1,4} (¹RIKEN CSRS, ²Inst. Sci. Eng., Kanazawa Univ., ³WPI-NanoLSI, Kanazawa Univ., ⁴Grad. Sch. Sci., Tokyo Univ., ⁵Univ. Paris-Saclay, INRAE)</p>	<p>2aD-03</p> <p>miRNA pathway mediates maternal inheritance of chloroplast DNA in <i>Chlamydomonas</i></p> <p>Yoshiyuki Nishiyama, Kana Matsumoto, Tomohito Yamasaki (Fac. Sci. & Technol., Kochi Univ.)</p>

● 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	<p>2A-04 Evaluation of CO₂-concentrating mechanisms in the amphibious plant <i>Hygrophila difformis</i> by analysis of photosynthetic O₂ evolution and electron transport rates <u>Genki Horiguchi</u>¹, Ko Noguchi² (¹Agri., Tokyo Univ. Agri. Tech., ²Sch. Life Sci, Tokyo Univ. Pharm. Life Sci.)</p>	<p>2A-04 Structural Features of Arabidopsis TPFLA and their Roles in Exine Formation <u>Kaho Kumazawa</u>¹, Seiya Nishihara¹, Saki Nabetani¹, Nozomi Ueki¹, Kohei Tsuchida¹, Tadashi Kunieda², Haruko Ueda³, Sumie Ishiguro¹ (¹Bio-Agric. Sci., Nagoya Univ., ²Bio. Sci., NAIST, ³Sci. & Eng., Konan Univ.)</p>	<p>2A-04  Transcriptomic Insights into Broad-Spectrum Resistance of Luffa to Field-Isolated Fusarium Wilt Isolates in Taiwan Yu-Xuan Jiang¹, Che-Han Chu¹, Wen-Hsin Chung², <u>Shu-Yun Chen</u>¹ (¹Department of Agronomy, Nantional Chung Hsing University, Taiwan, ²Department of Plant Pathology, Nantional Chung Hsing University, Taiwan)</p>	<p>2A-04 Differential ppGpp Accumulation Drives Distinct Growth through Transcriptomic and Metabolic Reprogramming in Plants <u>Takanari Nemoto</u>¹, Yuto Omata¹, Kazuma Sakoda², Mikiko Kojima³, Hitoshi Sakakibara^{3,4}, Akira Oikawa^{3,5}, Sosuke Imamura², Shinji Masuda¹ (¹Dep. Life Sci. Tech., Science Tokyo, ²Space Environment and Energy Laboratories, NTT, Inc., ³CSRS, RIKEN, ⁴Grad. Sch. Bioagric. Sci., Nagoya Univ., ⁵Grad. Sch. Agric., Kyoto Univ.)</p>
10:00	<p>2A-05 Evaluation of the role of photosynthesis in cotyledon fate determination of the one-leaf plant <i>Monophyllaea</i> <u>Shunji Nakamura</u>¹, Ai Soma², Keitaro Tanoi², Hirokazu Tsukaya¹ (¹Grad. Sch. Sci., Univ. Tokyo, ²Grad. Sch. Agri. Life Sci., Univ. Tokyo)</p>	<p>2A-05  In situ cell wall-cuticle continuum analysis of intact Arabidopsis thaliana organs with attenuated total reflection Fourier transform infrared microspectroscopy <u>Hidemasa Teraoka</u>¹, Shota Saito¹, Naoki Numadate², Yoshimi Oshima³ (¹Grad. Sch. Arts & Sci., Univ. Tokyo, ²Inst. Pure & Applied Sci., Tsukuba Univ., ³Biomanufacturing Process Res. Cent., AIST)</p>	<p>2A-05  Breaking Defenses: Unraveling Effector Diversity in Wheat Leaf Rust Ankita Shree, Priyanka Kumari, Hasnain Raghib Hassan, Manish Kumar, <u>Kunal Mukhopadhyay</u> (Birla Institute of Technology)</p>	<p>2A-05 Chloroplast-localized mechanosensitive channel MSL2 is involved in the osmoregulation of chloroplasts in guard cells <u>Miho Yamahana</u>¹, Atsushi Togaki¹, Chikako Tanaka¹, Kanako Yamasaki¹, Yoko Ishizaki¹, Yuki Sakamoto², Takashi Shiina¹ (¹Fac. Agr., Setsunan Univ., ²Fac. Sci., Shinshu Univ)</p>
10:15	<p>2A-06 Uncovering a novel PyShell component linked to the function of the CO₂-concentrating mechanism in marine diatom <i>Phaeodactylum tricornutum</i> <u>Masakazu Toyoshima</u>¹, Ginga Shimakawa², Yusuke Matsuda¹ (¹Sch. of Biol. and Environ. Sci., KGU, ²Grad. Sch. of Agri. Sci., Kobe Univ.)</p>	<p>2A-06 MYB16-mediated modification of the cell wall-cuticle continuum characterized by chemical structural and transcriptomic analysis <u>Yoshimi Oshima</u>^{1,2}, Tetsuya Hama³, So Taniguchi³, Yuko Takiguchi¹, Shingo Sakamoto¹, Taku Tsuyama^{1,4}, Shigeo S. Sugano¹, Nobutaka Mitsuda¹ (¹BPRC, AIST, ²PRESTO, JST, ³Grad. Sch. Arts & Sci., Univ. Tokyo, ⁴Sch. Agr., Univ. of Miyazaki)</p>	<p>2A-06  Identification and characterization of the effector for the paired NLRs Pit1 and Pit2 <u>Alfino Sebastian</u>¹, Motoki Shimizu², Nobuko Yasuda², Ryohei Terauchi⁴, Fumi Fukada¹, Yoji Kawano¹ (¹Institute of Plant Science and Resources, Okayama University, Japan, ²Iwate Biotechnology Research Center, Japan, ³National Agriculture and Food Research Organization, Japan, ⁴Laboratory of Crop Evolution, Kyoto University, Japan)</p>	<p>2A-06 How is thylakoid membrane lipid synthesis involved in the plastid gene expression? <u>Kosei Noto</u>¹, Risa Uwatoko², Yuki Hagiwara¹, Satoru Niida³, Kurumi Yamada³, Atushi Takabayashi⁴, Koichi Kobayashi⁵, Noriko Nagata², Sho Fujii^{1,3} (¹Grad. Sch. Agric. Life Sci., Hirosaki Univ., ²Grad. Sch. Sci., Japan Women's Univ., ³Fac. Agric. Life Sci., Hirosaki Univ., ⁴ILTS, Hokkaido Univ., ⁵Fac. Lib. Arts Sci. Global Edu., Osaka Metropolitan Univ.)</p>
10:30	<p>2A-07 Localization and function of bestrophin in the marine diatom <i>Phaeodactylum tricornutum</i> <u>Karin Niwa</u>, Minoru Nigishi, Yusuke Matsuda (Grad. Bio. Sci., Uiv. Kwanseigakuin)</p>	<p>2A-07 Histochemical analyses of cell morphogenesis underlying flood tolerance in rice stems <u>Kosuke Mori</u>¹, Rio Ito², Motoyuki Ashikari³, Keisuke Naga³ (¹Grad. Sch. Bio. Sci., Univ. Nagoya, ²Sch. Agr. Sci., Univ. Nagoya, ³Cent. Gen., Univ. Nagoya)</p>	<p>2A-07  Neofunctionalization of the RGF peptide signaling pathway drives haustorial organogenesis in parasitic plants <u>Max Fishman</u>¹, Anne Greifenhagen¹, Takanori Wakatake¹, Anuphon Laohavisit¹, Ryoko Hiroyama¹, Sachiko Masuda¹, Arisa Shibata¹, Satoko Yoshida², Ken Shirasu^{1,3} (¹RIKEN, Center for Sustainable Resource Science, ²Nara Institute of Science and Technology, ³Graduate School of Science, University of Tokyo)</p>	<p>2A-07 Roles of anionic phospholipid PG and anionic glycolipid SQDG during etioplast-to-chloroplast differentiation <u>Akiko Yoshihara</u>¹, Risa Uwatoko², Keiko Kobayashi², Noriko Nagata², Koichi Kobayashi¹ (¹Grad. Sch. Sci., Osaka Metro. Univ., ²Fac. Sci., Japan Women's Univ.)</p>
10:45	<p>2A-08 The function of PtSLC4-6 and PtSLC4-7 as chloroplast HCO₃⁻ transporters in the marine diatom <i>Phaeodactylum tricornutum</i> <u>Miyuu Ninomiya</u>, Kensuke Nakajima, Nawaly Hermanus, Yusuke Matsuda (Grad Bio Sci Univ Kwanseigakuin)</p>	<p>2A-08  Glycosylation-dependent sorting of an arabinogalactan protein SLEEPING BEAUTY mediates apical tip growth in <i>Physcomitrium patens</i> <u>Chao-Yuan Yu</u>¹, Manju Maharjan², Chao-Hsi Liu³, Ooi-Kock Teh¹ (¹Institute of Plant and Microbial Biology, Academia Sinica, ²Department of Plant Physiology, Umeå Plant Science Centre, Umeå University, ³Department of Environmental Engineering, National Cheng Kung University)</p>	<p>2A-08 Strigolactone-Mediated Regulation of Nitrogen Responses and Pigmentation in Soil Filamentous Fungi <u>Shingo Sugino</u>¹, Naoki Kato², Hiroyuki Osada³, Yuichiro Tsuchiya^{1,4} (¹Grad. Sch. Sci., Nagoya Univ., ²Grad. Sch. Agri., Setsunan Univ., ³CSRS, Riken, ⁴ITbM, Nagoya Univ.)</p>	<p>2A-08 Compatibility between Arabidopsis ARC6 and its cyanobacterial homologue in the growth regulation of Arabidopsis <u>Kota Kobayashi</u>¹, Ryota Uto¹, Yasuko Ito-Inaba^{1,2}, Takehito Inaba¹ (¹Fac. Agr., Univ. Miyazaki, ²Grad. Sch. Life Sci., Tohoku Univ.)</p>

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				
<p>2aE-04 E Inferring cell division events from cell geometry: A revision of classical cell division rules <i>Zining Wang</i>¹, <i>Yujie Zhao</i>¹, <i>Yasuhiro Inoue</i>², <i>Atsushi Mochizuki</i>³, <i>Hirokazu Tsukaya</i>¹ (¹Grad. Sch. Sci., Univ. Tokyo, ²Dept. Micro Eng., Kyoto Univ., ³Inst. Front. Life Med. Sci., Kyoto Univ.)</p>	<p>2aF-04 Functional analysis of pistil factors associated with interspecific reproductive barriers in <i>Arabidopsis thaliana</i> <i>Tsukasa Matsuura</i>¹, <i>Yoshinobu Kato</i>¹, <i>Kenta Shirasawa</i>², <i>Kayo Mori</i>¹, <i>Seiji Takayama</i>¹, <i>Sota Fujii</i>^{1,3} (¹Grad. Sch. Agric. Lif. Sci, Univ. Tokyo, ²Kazusa DNA. Res. Inst., ³Suntory Rising Stars Encouragement Program in Life Sciences)</p>	<p>2aG-04 Requirement of <i>glabrous1</i> for the growth-promoting effects of olivine for enhanced weathering <i>Minoru Ueda</i>¹, <i>Daisuke Todaka</i>¹, <i>Satoshi Takahashi</i>¹, <i>Junko Ishida</i>¹, <i>Maho Tanaka</i>¹, <i>Tokihiro Ikeda</i>², <i>Keiko Suzuki</i>³, <i>Misako Miwa</i>⁴, <i>Takeshi Uchiyama</i>⁵, <i>Yasuhiro Ishimaru</i>⁵, <i>Kazuhiro Sayama</i>⁶, <i>Nobuyuki Uozumi</i>⁵, <i>Shigeo Matsuyama</i>⁴, <i>Atsushi J. Nagano</i>^{7,8}, <i>Hidehiko Kikuno</i>⁹, <i>Motoaki Seki</i>^{1,10,11} (¹RIKEN CSRS, ²RIKEN Nishina Center, ³RIKEN CEMS, ⁴Dept. Quantum Sci. & Energy Eng., Grad. Sch. Eng., Tohoku Univ., ⁵Dept. Biomol. Eng., Grad. Sch. Eng., Tohoku Univ., ⁶GZR, AIST, ⁷Biosci. Biotech. Ctr., Nagoya Univ., ⁸IAB, Keio Univ., ⁹TUA Miyako Subtropical Training and Research Farm, ¹⁰KIBR, Yokohama City Univ., ¹¹Grad. Sch. Sci. Eng., Saitama Univ.)</p>	<p>2aH-04 <i>Arabidopsis</i> DMP1 mediates long distance signaling via extracellular vesicles under drought stress conditions <i>Haruka Otani</i>¹, <i>Wakana Inoue</i>¹, <i>Miho Kikuchi</i>², <i>Mayuko Sato</i>³, <i>Kiminori Toyooka</i>³, <i>Takehiro Suzuki</i>³, <i>Naoshi Dohmae</i>³, <i>Fuminori Takahashi</i>^{1,2} (¹Grad. Sch. Fac. Adv. Eng., TUS, ²Fac. Adv. Eng., TUS, ³CSRS, RIKEN)</p>	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
<p>2aE-05 Mechanisms of organ growth via VLCFA-mediated non-cell-autonomous signal from the epidermis <i>Takashi Nobusawa</i>¹, <i>Takehide Kato</i>², <i>Masaaki Umeda</i>², <i>Miyo Terao Morita</i>³, <i>Makoto Kusaba</i>¹ (¹Grad. Sch. Int. Sci. Life, Hiroshima Univ., ²Grad. Sch. Sci. Technol. NAIST, ³NIBB, NINS)</p>	<p>2aF-05 Identification of pollen-side factor interact with pistil pre-zygotic reproductive barrier peptide in <i>Arabidopsis</i> via GWAS <i>Kazuki Hirano</i>¹, <i>Hiroki Miura</i>¹, <i>Takuya T. Nagae</i>², <i>Seiji Takayama</i>¹, <i>Sota Fujii</i>^{1,3} (¹Grad. Sch. Agri. Life Sci., Univ. Tokyo, ²RIKEN CSRS, ³Suntory SunRISE)</p>	<p>2aG-05 A Novel Period-Shortening Small Molecule <i>Hiyori Fujikawa</i>¹, <i>Junichiro Yamaguchi</i>², <i>Hiromi Matsuo</i>¹, <i>Norihito Nakamichi</i>¹ (¹Graduate School of Bioagricultural Sciences, Nagoya University, ²School of Advanced Science and Engineering, Waseda University)</p>	<p>2aH-05 E Improving drought stress tolerance of cotton by using ethanol application <i>Farhan Aziz</i>^{1,2}, <i>Daisuke Todaka</i>¹, <i>Maho Tanaka</i>¹, <i>Satoshi Takahashi</i>¹, <i>Khurram Bashir</i>^{1,2}, <i>Motoaki Seki</i>^{1,3,4} (¹Plant Genomic Network Research Team, RIKEN Center for Sustainable Resource Science, 1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan, ²Department of Life Sciences, Lahore University of Management Sciences, DHA Phase 5, Lahore 54792, Pakistan, ³Kihara Institute for Biological Research, Yokohama City University, 641-12 Maioka-cho, Totsuka-ku, Yokohama, Kanagawa 244-0813, Japan, ⁴Graduate School of Science and Engineering, Saitama University, Saitama, Saitama, 338-8570, Japan)</p>				10:00
<p>2aE-06 Negative control of a master transcriptional regulator for shoot epidermal cell differentiation <i>Shinobu Takada</i>¹, <i>Ayaka Yoshida</i>¹, <i>Hiroyuki Iida</i>^{1,2} (¹Dept. Biol. Sci., Grad. Sch. Sci., Univ. Osaka, ²Organismal and Evolutionary Biology Programme, Faculty of Biological and Environmental Sciences, University of Helsinki)</p>	<p>2aF-06 E A Novel Arabidopsis Protein, POT1, Plays an Important Role in Maintaining the Integrity of PollenTubes <i>Natalia Julia Rzepecka</i>¹, <i>Yoko Ito</i>³, <i>Emi Ito</i>^{3,4,5}, <i>Tomohiro Uemura</i>² (¹Faculty of Core Research, Ochanomizu Univ., ²Graduate School of Humanities and Sciences, Ochanomizu Univ., ³Institute for Human Life Sciences, Ochanomizu Univ., ⁴Division of Cellular Dynamics, NIBB, ⁵Basic Biology Program, Graduate Institute for Advanced Studies, SOKENDAI)</p>	<p>2aG-06 <i>CKL</i> genes control circadian period at higher temperatures <i>Norihito Nakamichi</i>, <i>Mayuko Yamada</i>, <i>Hiromi Matsuo</i>, <i>Akari Maeda</i>, <i>Tomoaki Muranaka</i> (Grad. Sch. Agr., Nagoya Univ.)</p>	<p>2aH-06 Novel stomatal closing compounds dissect the signaling pathway for underlying light-induced stomatal opening and improve drought tolerance in plants <i>Kwangchul Shin</i>¹, <i>Yusuke Aihara</i>^{2,3}, <i>Kohei Fukatsu</i>¹, <i>Shigeo Toh</i>⁴, <i>Kei Murakami</i>⁵, <i>Yuki Hayashi</i>¹, <i>Ayato Sato</i>^{2,6}, <i>Toshinori Kinoshita</i>^{1,2} (¹Grad. Sch. Sci., Nagoya Univ., ²WPI-ITbM, Nagoya Univ., ³Grad. Sch. Sci., Kobe Univ., ⁴Grad. Sch. Agr., Meijo Univ., ⁵Sch. Sci., Kwansei Gakuin Univ., ⁶COMIT, Nagoya Univ.)</p>				10:15
<p>2aE-07 Analysis of the Regulatory Roles of HD-ZIP IV Transcription Factors in Leaf Epidermal Cell-Fate Determination <i>Kenji Nagata</i>¹, <i>Takafumi Miyashita</i>², <i>Akitoshi Iwamoto</i>^{2,3}, <i>Taku Takahashi</i>⁴, <i>Mitsutomo Abe</i>¹ (¹Grad. Sch. Arts and Sci., Univ. Tokyo, ²Grad. Sch. Sci., Kanagawa Univ., ³Dept. Biol. Fac. Sci. Kanagawa Univ., ⁴Grad. Sch. Sci., Okayama Univ.)</p>	<p>2aF-07 Analysis of Ca²⁺ spike in <i>Arabidopsis</i> sperm cells <i>Daigo Ishida</i>¹, <i>Naoya Sugi</i>^{1,2}, <i>Kazuki Motomura</i>³, <i>Kazuo Ebine</i>⁴, <i>Daichi Susaki</i>^{1,5}, <i>Daisuke Maruyama</i>¹ (¹KIBR, Yokohama City Univ., ²RDP • ENS-Lyon, ³Rea. Org. Sci. Tec., Ritsumeikan Univ., ⁴Grad. School. Science. Eng., Saitama Univ., ⁵Dept. Biol. Sci., Fac. Sci., Shizuoka Univ.)</p>	<p>2aG-06 <i>CKL</i> genes control circadian period at higher temperatures <i>Norihito Nakamichi</i>, <i>Mayuko Yamada</i>, <i>Hiromi Matsuo</i>, <i>Akari Maeda</i>, <i>Tomoaki Muranaka</i> (Grad. Sch. Agr., Nagoya Univ.)</p>	<p>2aH-07 Investigating the importance of roots in recovery from hypoxia-induced leaf wilting in <i>Brassica napus</i> <i>Natsumi Takahashi</i>¹, <i>Nozomi Yokouchi</i>¹, <i>Hirokazu Takahashi</i>², <i>Mikio Nakazono</i>², <i>Kanna Izawa</i>¹, <i>Shin-ichi Nakamura</i>¹, <i>Akihisa Shinozawa</i>¹ (¹Dept. Bioscience, Tokyo Univ. Agric., ²Grad. Sch. Bioagric. Sci., Univ. Nagoya)</p>				10:30
<p>2aE-08 E Submergence-Induced Epidermal Cell Chloroplasts Differentiation in <i>Rorippa aquatica</i> <i>Dwi Fajar Sidhiq</i>¹, <i>Shuka Ikematsu</i>^{2,3}, <i>Tomoaki Sakamoto</i>^{2,3}, <i>Seisuke Kimura</i>^{2,3} (¹Grad. Sch. of Life Sci. Kyoto Sangyo Univ., ²Fac. Life Sci., Kyoto Sangyo Univ., ³Center for Plant Sci., Kyoto Sangyo Univ.)</p>	<p>2aF-08 Functional characterization of CRMC, a multi-CNBD cAMP receptor, in <i>Marchantia polymorpha</i> <i>Ranran Iwabuchi</i>¹, <i>Motoki Nakagami</i>¹, <i>Chiaki Yamamoto</i>¹, <i>Tomoyuki Furuya</i>², <i>Fumio Takahashi</i>³, <i>Masahiro Kasahara</i>¹ (¹Grad. Sch. Life Sci., Ritsumeikan Univ., ²Grad. Sch. Sci., Univ. Osaka., ³Faculty Pharma. Sci., Toho Univ.)</p>	<p>2aG-06 <i>CKL</i> genes control circadian period at higher temperatures <i>Norihito Nakamichi</i>, <i>Mayuko Yamada</i>, <i>Hiromi Matsuo</i>, <i>Akari Maeda</i>, <i>Tomoaki Muranaka</i> (Grad. Sch. Agr., Nagoya Univ.)</p>	<p>2aH-08 Analysis of ABA responsive activity in hypoxia-induced aerenchyma forming region in rice roots <i>Momoka Kojima</i>, <i>Akihisa Shinozawa</i>, <i>Kanna Izawa</i>, <i>Shin-ichi Nakamura</i> (Dept. Bioscience, Tokyo Univ. Agric.)</p>	10:45			

● 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	<p>2aA-09 Pyrenoid carbonic anhydrase sorting mechanism <u>Riho Nagamatsu</u>¹, Ginga Shimakawa², Yusuke Matsuda¹ (¹Kwanseigakuin Univ., ²Kobe Univ.)</p>	<p>2aB-09 E Identification of Putative Cell Wall Sensors in <i>Physcomitrium patens</i> <u>Chin-Lien Tseng</u> (Institute of Plant and Microbial Biology, Academia Sinica)</p>	<p>2aC-09 Involvement of cell wall integrity perturbation in induced systemic resistance triggered by root colonization of beneficial fungus <i>Trichoderma atroviride</i> in Arabidopsis <u>Ayae Sakai</u>¹, Aika Tsuneka², Kaoru Ohsawa², Momoko Takagi^{2,3}, Hironori Kaminaka² (¹United Grad. Sch. Agr., Tottori Univ., ²Fac. Agr., Tottori Univ., ³Grad. Sch. Arts and Sci., Univ. Tokyo)</p>	<p>2aD-09 Regulation of chloroplast functions by the TGN-localized SNARE SYP4 <u>Aimi Taura</u>¹, Yoko Ito², Wataru Yamori³, Noriko Nagata⁴, Tomohiro Uemura^{1,2,5} (¹Grad. Sch. Humanities and Sciences., ²IHLS., Ochanomizu Univ., ³Graduate School of Agricultural and Life Sciences, Tokyo Univ., ⁴Department of Chemical and Life Sciences, Faculty of Science, Japan Women's Univ., ⁵Faculty of Core Research, Natural Science Div., Ochanomizu Univ.)</p>
11:15	<p>2aA-10 Identification of the Bass4 Protein Functioning as an Malate Transporter in NADP-ME Type C4 Plants <u>Rin Yokoe</u>¹, Ayaka Azuma², Fuka Iga², Tsuyoshi Furumoto^{1,2} (¹Grad. Agr. Univ. Ryukoku, ²Agr. Univ. Ryukoku)</p>	<p>2aB-10 E A putative cell wall integrity sensor coordinates cell cycle progression in <i>Physcomitrium patens</i> <u>Ooi-Kock Teh</u>, Yadav Bal Govind (Institute of Plant and Microbial Biology, Academia Sinica)</p>	<p>2aC-10 Root commensal bacteria digest immuno-eliciting peptides by secreting extracellular peptidases <u>Yusuke Inagaki</u>¹, Tomohisa Shimasaki¹, Ulla Neumann², Yumiko Makino³, Tomoko Mori³, Sara Christina Stolze⁴, Hirohumi Nagami⁴, Takuya Yoshida^{3,5}, Ryohei Thomas Nakano^{1,4} (¹Fac. of Sci., Hokkaido Univ., ²CeMic, MPIPZ, ³Trans-Omics Facility, NIBB, ⁴MPIPZ, ⁵Basic Biology Program, SOKENDAI)</p>	<p>2aD-10 Role of bZIP transcription factors in <i>Cyanidioschyzon merolae</i> <u>Haruka Saito</u>¹, Kan Tanaka², Toshihide Okajima³, Mitsumasa Hanaoka^{1,4,5} (¹Grad. Sch. Horticul., Chiba Univ., ²Lab. Chem. Life Sci., Science Tokyo, ³SANKEN, Osaka Univ., ⁴Plant Mol. Sch. Cent., Chiba Univ., ⁵Res. Cent. Space Agr. Hort., Chiba Univ.)</p>
11:30	<p>2aA-11 Arabidopsis photorespiration allows for subcellular translocation of glutamine synthetase <u>Shinya Wada</u>¹, Hayato Sato², Keiki Ishiyama¹, Takanori Maruta³, Amane Makino¹, Hiroyuki Ishida¹, Chikahiro Miyake² (¹Grad. Sch. Agri., Tohoku Univ., ²Grad. Sch. Agri., Kobe Univ., ³Grad. Sch. Nat. Sci. Tech., Shimane Univ.)</p>	<p>2aB-11 E Divergent plasmodesmata targeting mechanisms between <i>Marchantia polymorpha</i> and <i>Nicotiana benthamiana</i> <u>Kuan-Ju Lu</u>^{1,4}, Ta Thi Thuy Lihn¹, Hui-Yu Chang¹, Sumanth Mutte^{2,3}, Shiuan-Jie Tsai¹, Yun-Zhen Li¹ (¹Graduate Institute of Biotechnology, National Chung Hsing University, Taiwan, R.O.C., ²MyGen Informatics Private Limited, India, ³MyGen Informatics VOF, Netherlands, ⁴Advanced Plant and Food Crop Biotechnology Center, National Chung Hsing University, Taiwan, R. O. C.)</p>	<p>2aC-11 E Bacterial methionine metabolism plays a role in root-commensal interactions <u>Fiqih Ramadhan</u>¹, Zoe Prockl¹, Jana Hucklenbroich², Silvina Perin², Tomohisa Shimasaki¹, Ryohei Thomas Nakano^{1,2} (¹Fac of Sci, Hokkaido Univ., ²MPIPZ)</p>	<p>2aD-11 Exploring regulatory mechanisms of plastid functions in Arabidopsis roots <u>Sho Fujii</u>¹, Akira Iwase², Noriko Nagata³, Ryuhei Maruoka¹, Reiji Kakizaki¹, Tamao Makino¹ (¹Fac. Agri. Life Sci., Hirosaki Univ., ²CSRS, RIKEN, ³Fac. Sci., Japan Women's Univ.)</p>
11:45	<p>2aA-12 Expressional controls of CCM/pyrenoid components in marine diatoms under major nutrient starvations <u>Momoka Amano</u>¹, Ginga Shimakawa², Yusuke Matsuda¹ (¹Grad. Sch. Sci. Tech., Kwansei Gakuin Univ., ²Grad. Sch. Agric., Kobe Univ.)</p>		<p>2aC-12 E Towards unraveling the role of salicylic acid in executing hypersensitive cell death Keisuke Yoshida², Ai Obayashi², Keigo Tokunaga¹, Eriko Betsuyaku¹, Shunsuke Masuo³, <u>Shige-yuki Betsuyaku</u>¹ (¹Fac. of Agr., Ryukoku Univ., ²Grad. Sch. of Agr., Ryukoku Univ., ³Fac. of Life & Env. Sci./MiCS, Univ. of Tsukuba)</p>	

● 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	<p>2pA-01 Development of a CRISPR interference system in a cyanobacterium, <i>Acaryochloris marina</i> Tohru Tsuchiya (Grad. Sch. Hum. Env. St., Kyoto Univ.)</p>	<p>2pB-01 ⑤ The essential role of xyloglucan in the formation and regulation of plasmodesmata in the moss <i>Physcomitrium patens</i> Phu Thanh Ngo¹, Marcel Pascal Beier^{2,3,4}, Chiyo Jinno^{3,5}, Tomomichi Fujita³ (¹Grad. Sch. Life Sci., Hokkaido Univ., ²Inst. Advan. Hi Edu., Hokkaido Univ., ³Fac. Sci., Hokkaido Univ., ⁴Fukushima Inst. Res. Edu. Innov., ⁵Bio Design Unit, OIST)</p>	<p>2pC-01 ⑤ Enhancing Soil Microbiome Resilience and Carbon Sequestration in Pomelo Orchards via Sod Culture and Biochar Amendments Chao-Li Huang^{1,2}, Chu-Chun Lin², Ying-Hsuan Huang¹ (¹Institute of Tropical Plant Sciences and Microbiology, National Cheng Kung University, Taiwan, ²Graduate Program in Translational Agricultural Sciences, National Cheng Kung University and Academia Sinica, Tainan, Taiwan)</p>	<p>2pD-01 Functional analysis of <i>psbE</i> RNA editing using chloroplast base-editing system in <i>Arabidopsis thaliana</i> Mitsuhiro Matsuo¹, Yuuki Kakimi¹, Yuuta Kondo¹, Junichi Obokata¹, Soichiro Satoh², Issei Nakazato³, Shin-ichi Arimura³ (¹Fac. Agric., Setsunan Univ., ²Grad. Sch. Life Environ. Sci., Kyoto Prefect. Univ., ³Grad. Sch. Agric. Life Sci., Univ. Tokyo)</p>
13:30	<p>2pA-02 Predation-mediated adaptation of Photosynthesis in the Predatory Alga <i>Poteroochromonas malhamensis</i> Haruhiko Jimbo¹, Tomoki Minemura¹, Narumi Toda², Yuko Takizawa³, Yoshito Chikaraishi³, Ryuichi Hirota², Yoshitaka Nishiyama¹ (¹Grad. Sch. Sci. Eng., Saitama Uni., ²Grad. Sch. Integ. Sci. Life, Hiroshima Uni., ³Inst. Low-temp., Hokkaido Univ.)</p>	<p>2pB-02 Functional analysis of β-1,4-glucanases involved in plant grafting Kentaro Okada¹, Yaichi Kawakatsu², Ken-ichi Kurotani³, Toshihisa Kotake⁴, Michitaka Notaguchi^{1,2,3} (¹Biosci. and Biotech. Center, Nagoya Univ., ²College of Horticulture and Forestry, Huazhong Agricultural Univ., ³Grad. Sch. Sci., Kyoto Univ., ⁴Grad. Sch. Sci. Eng., Saitama Univ.)</p>	<p>2pC-02 ⑤ Grapevine phyllosphere pan-metagenomics reveals pan-microbiome structure, diversity, and functional roles in downy mildew resistance Jingyun Jin¹, Xiangfeng Wang¹, Xuenan Zhang¹, Junjie Mei¹, Wei Zheng¹, Linling Guo¹, Haisheng Sun¹, Lili Zhang¹, Chonghui Liu², Wenxiu Ye¹, Li Guo¹ (¹Peking University Institute of Advanced Agricultural Sciences, ²Zhengzhou Fruit Research Institute, Chinese Academy of Agricultural Sciences)</p>	<p>2pD-02 ⑤ PpARC6s Mediate FtsZ-ring Remodeling At The Division Site In <i>Physcomitrium patens</i> Thi Huong Do^{1,2}, Marcel Pascal Beier³, Hiroyoshi Takano⁴, Tomomichi Fujita¹ (¹Hokkaido University, ²Fukushima University, ³Soil and Plant Multi-Dynamics Research Unit, Fukushima Institute for Research, Education and Innovation, ⁴Kumamoto University)</p>
13:45	<p>2pA-03 Function of a Putative Partner-Switching phosphatase Slr2031 in <i>Synechocystis</i> sp. PCC 6803 Keito Tanji, Haruna Kakuta, Yukako Hihara (Grad. Sch. Sci. Eng., Saitama Univ.)</p>	<p>2pB-03 ⑤ Xyloglucan endotransglucosylase/hydrolase family genes enhance plant grafting through callus proliferation Mu Xiong^{1,2}, Ting Zhang¹, Xin Qian¹, Akebaierjiang Kadeer¹, Ken-ichi Kurotani^{2,3}, Zhilong Bie¹, Ling Li¹, Changjin Liu¹, Xiangshuai Wu¹, Michitaka Notaguchi^{1,2,3,4}, Yuan Huang¹ (¹Grad. Sch. Hort. For., Univ. Huazhong Agri., ²Grad. Sch. Bioagri. Sci., Univ. Nagoya, ³Biosci. Biotech. Center., Univ. Nagoya, ⁴Grad. Sch. Sci., Univ. Kyoto)</p>	<p>2pC-03 ⑤ A fungal nitrate-assimilation regulator CtAREA is involved in host protection conferred by plant endophyte <i>Colletotrichum tofieldiae</i> Akito Shiina, Kei Hiruma (Grad. Sch. Arts and Sci., Univ. Tokyo)</p>	<p>2pD-03 Excision of 641kb NUMT (Nuclear Mitochondrial DNA) in <i>Arabidopsis thaliana</i> chromosome 2 Rika Nakajima¹, Yugo Ito¹, Yuyang Zhong¹, Takayoshi Ishii^{2,3}, Shin-ichi Arimura¹ (¹Grad. Sch. Agri. and Life. Sci., Univ of Tokyo, ²Arid Land Research Center (ALRC), Tottori University, ³International Platform for Dryland Research and Education (IPDRE), Tottori University)</p>
14:00	<p>2pA-04 Identification of a factor involved in the redox regulation of DNA-binding activity of the transcription factor RpaB Kousuke Kawarasaki¹, Hidaka Mihata², Kintake Sonoike², Yukako Hihara¹ (¹Grad. Sch. Sci. Eng., Saitama Univ., ²Fac. Edu. Integ. Arts Sci., Waseda Univ.)</p>	<p>2pB-04 ⑤ Chemical screening identified GPM1 as a novel compound enhancing graft adhesion in Fabaceae Qianqian Luo¹, Xueyao Shu¹, Ayato Sato^{2,3}, Yaichi Kawakatsu⁴, Frank Opoku-Agyemang¹, Ken-ichi Kurotani^{4,5}, Michitaka Notaguchi^{1,2,4,6,7} (¹Grad. Sch. Bioagri. Sci., Univ. Nagoya, ²Inst ITbM., Univ. Nagoya, ³COMIT, Univ. Nagoya, ⁴BB Center, Univ. Nagoya, ⁵CSACRA, Univ. Kyoto, ⁶Dept. Botany, Grad. Sch. Sci., Univ. Kyoto, ⁷NKL for Germplasm Innovation, HZAU)</p>	<p>2pC-04 Immune receptor and symbiosis signaling drive iron-dependent beneficial bacterial interactions in rice Kanako Inoue¹, Masako Fujii¹, Masanao Sato², Jewish Dominguez John¹, Yutaka Sato³, Masahiro Nagayasu¹, Yuki Fukumoto¹, Takumi Murakami^{4,5}, Takanori Kobayashi⁶, Kiwamu Minamisawa⁷, Junko Kyoizuka⁷, Yusuke Saijo¹ (¹Div. Biol. Sci., Grad. Sch. Sci. & Technol., Nara Inst. Sci. & Technol. (NAIST), ²Lab. Appl. Mol. Entomol., Div. Appl. Biosci., Res. Fac. Agric., Hokkaido Univ., ³Dept. Genomics & Evol. Biol., Natl. Inst. Genet., ⁴Sch. Life Sci. & Technol., Inst. Sci., Tokyo, ⁵Dept. Informatics, Natl. Inst. Genet., ⁶Res. Inst. Biore. & Biotechnol., Ishikawa Prefect. Univ., ⁷Grad. Sch. Life Sci., Tohoku Univ.)</p>	<p>2pD-04 Re-evaluation of the Mitochondrial Fission Mechanism in <i>Arabidopsis thaliana</i> 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.)</p>

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				
<p>2pE-01 WOX13 suppresses pluripotency acquisition of callus and development of lateral roots <u>Eri Odaira</u>, Momoko Ikeuchi (NAIST)</p> <p>2pE-02 Molecular genetic analysis of shoot regeneration focusing on the SWI2/SNF2 family member BTAF1 Yukino Ogihara-Yoshida¹, Hatsune Morinaka², Akihito Mamiya³, Kuninori Iwamoto¹, Kyoko Ohashi-Ito¹, Akira Iwase², Keiko Sugimoto², Ryou Morikawa¹, Takaaki Yonekura¹, <u>Munetaka Sugiyama</u>¹ (¹Grad. Sch. Sci., Univ. Tokyo, ²CSRS, RIKEN, ³Grad. Sch. Sci., Kyoto Univ.)</p> <p>2pE-03 Tracing the trajectories of cell fate reprogramming of mature somatic cells during shoot regeneration <u>Hatsune Morinaka</u>¹, Kotaro Torii¹, Dongbo Shi¹, Ayako Kawamura¹, Akira Iwase¹, Tetsuya Higashiyama², Munetaka Sugiyama², Keiko Sugimoto^{1,2} (¹CSRS, RIKEN, ²Dept. Biol. Sci., Grad. Sch. Sci., Univ. Tokyo)</p> <p>2pE-04 Plant Pluripotency: BRAHMA-Mediated Epigenetic Priming via H3K27me3 Removal <u>Sachihito Matsunaga</u>¹, Ayaka Horie¹, Hikaru Sato¹, Mariana Diaz³, Takuya Sakamoto² (¹Dept. Integrated Biosci., Grad. Sch. Frontier Sci., Univ. Tokyo, ²Department of Science, Faculty of Science, Kanagawa University, ³Department of Plant and Microbial Biology (IPMB), University of Zurich)</p>	<p>2pF-01 E <i>EMU</i> genes are conserved regulators of egg maturation in two bryophyte lineages <u>Tetsuya Hisanaga</u>¹, Yen-Ting Lu^{1,2}, Yihui Cui¹, Fumiaki Tejima¹, Emiko Yoro^{3,4}, Tatsuaki Goh¹, Keiko Sakakibara³, Keiji Nakajima¹ (¹Grad. Sch. Sci. Tech., NAIST, ²Grad. Sch. Arts and Sci., Univ. Tokyo, ³Dept. Life Sci., Rikkyo Univ., ⁴Grad. Sch. Sci., Univ. of Osaka)</p> <p>2pF-02 BONOBO Induces The Cellular Reprogramming Gene, <i>LAXR</i>, During Germline Differentiation in the Liverwort <i>Marchantia polymorpha</i> <u>Takeru Kumagai</u>¹, Yoshihiro Yoshitake¹, Tomoaki Kajiwar¹, Megumi Iwano¹, Shogo Kawamura¹, Yukiko Yasui¹, Shohei Yamaoka¹, Ryuichi Nishihama², Takayuki Kohchi¹ (¹Grad. Sch. Biostudies, Kyoto Univ., ²Dept. Appl. Biol. Sci., Fac. Sci. Tech., Tokyo Univ. Sci.)</p> <p>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 Watanabe¹, Yuki Tomita¹, Takuya Miyakawa¹, Keisuke Inoue¹, Yoshihiro Yoshitake¹, Kazuo Ebine², Takeshi Nakano¹, Takayuki Kohchi¹, Takashi Araki¹, <u>Shohei Yamaoka</u>¹ (¹Grad. Sch. Biostudies, Kyoto Univ., ²Grad. Sch. Sci. Eng., Saitama Univ.)</p> <p>2pF-04 Study of the asymmetric zygotic division in the <i>Marchantia polymorpha</i> to understand the evolution of body axis formation <u>Yusuke Kimata</u>¹, Akane Fujimori¹, Yue Wang¹, Yosuke Okamura², Minako Ueda¹ (¹Grad. Sch. Life Sci., Tohoku Univ., ²Grad. Sch. Eng., Tokai Univ.)</p>	<p>2pG-01 Impact of Structural Diversity in Novel Cytokinin-like Substances on Their Modes of Action <u>Mika Yoshino</u>¹, Kazuki Miyata¹, Surjana Alicia¹, Mikiko Kojima², Kensuke Kouki¹, Toshio Nishikawa¹, Hitoshi Sakakibara^{1,2} (¹Grad. Sch. Bio. Sci., Nagoya Univ., ²RIKEN CSRS)</p> <p>2pG-02 The role and products of FAS1 in leafy gall forming phytopathogens <u>Kazuki Miyata</u>¹, Mika Yoshino¹, Alicia Surjana¹, Mikiko Kojima², Kensuke Kouki¹, Toshio Nishikawa¹, Hitoshi Sakakibara^{1,2} (¹Grad. Sch. Bio. Sci., Nagoya Univ., ²RIKEN CSRS)</p> <p>2pG-03 E Unravel the physiological role of cZ-type cytokinin during nitrogen deficiency stress <u>Fanny Bellegarde</u>^{1,2}, Graziella Valencia Cong¹, Miki Shibutani¹, Hitoshi Sakakibara^{1,3} (¹Graduate school of Bioagricultural Sciences, Nagoya University, ²Institute for Advanced Research, Nagoya University, ³RIKEN, CSRS)</p> <p>2pG-04 Cytokinin signaling is involved in acclimation responses to mildly elevated temperatures in <i>Marchantia polymorpha</i> <u>Shiori S. Aki</u>¹, Ryuichi Nishihama², Takayuki Kohchi³ (¹Biological and Life Sciences, Faculty of Science and Engineering, Yamato University, ²Department of Applied Biological Science, Faculty of Science and Technology, Tokyo University of Science, ³Graduate School of Biostudies, Kyoto University)</p>	<p>2pH-01 Overexpressing an activated form of potassium transporter ATHAK5 enhance low potassium and salinity tolerance in transgenic Arabidopsis <u>Yuichi Tada</u>, Kohei Watanabe, Yuki Watanabe, Megumi Itakura, Hiromi Suzuki (Sch. Biosci. Biotechnol., Tokyo Univ. Technol.)</p> <p>2pH-02 A Universal Stress Response Enhances Plant Resilience Across Diverse Environments <u>Hiroshi Mori</u>¹, Mika Nomoto^{1,2,3}, Emi Okada¹, Fumika Okamoto¹, Wakako Inoue², Takakazu Matsuura⁴, Yutaka Kodama⁵, Shintaro Ichikawa⁶, Kazuha Mori¹, Tomoko Suzuki^{2,6,7}, Takuya T. Nagac⁷, Yu Saito¹, Sumire Fujiwara⁸, Hiroki Tsutsui⁹, Hiroshi Takagi^{2,10,11}, Takaya Ogawa¹², Akiko Maruyama-Nakashita¹³, Tetsuya Higashiyama^{14,15}, Kiminori Toyooka⁷, Nobutaka Mitsuda⁸, Hirofumi Yoshioka¹², Izumi C. Mori⁴, Yoshiharu Y. Yamamoto¹⁶, Yasuomi Tada^{1,2} (¹Grad. Sch. Sci., Nagoya Univ., ²Centr. Gene Res., Nagoya Univ., ³JST, PRESTO, ⁴Inst. Plant Sci. Resour. (IPSR), Okayama Univ., ⁵Grad. Sch. Reg. Dev. Creat., Utsunomiya Univ., ⁶Fac. Sci., Japan Women's Univ., ⁷RIKEN CSRS, ⁸Bioprod. Res. Inst., Natl. Inst. Adv. Ind. Sci. Technol. (AIST), ⁹Okinawa Inst. Sci. Technol. Grad. Univ. (OIST), ¹⁰Biosci. Biotechnol. Ctr., Nagoya Univ., ¹¹Inst. Adv. Res. (IAR), Nagoya Univ., ¹²Grad. Sch. Bioagric. Sci., Nagoya Univ., ¹³Fac. Agric., Kyushu Univ., ¹⁴Inst. Transformative Bio-Molecules (WPI-ITbM), Nagoya Univ., ¹⁵Dept. Biol. Sci., Grad. Sch. Sci., Univ. Tokyo, ¹⁶Fac. Appl. Biol. Sci., Gifu Univ.)</p> <p>2pH-03 Effects of Anesthetics on Plant Hormone and Ca²⁺ Signaling in Plant Wound Response <u>Moca Iwabuchi</u>¹, Sakuya Hirayama¹, Kyomi Shibata², Emi Yumoto³, Koji Miyamoto^{1,2,3}, Ken Yokawa⁴, Takuma Hagihara⁵, Masatsugu Toyota^{5,6,7}, Masashi Asahina^{1,2,3} (¹Grad. Sch. Sci. & Eng., Teikyo Univ., ²Env. & Biotech. Course, Dept. Integ. Sci. & Eng., Teikyo Univ., ³Adv. Instrum. Anal. Ctr., Teikyo Univ., ⁴Dept. Eng., Kitami Tech Univ., ⁵Grad. Sch. Sci. Eng., Saitama Univ., ⁶SunRISE, Suntory Fdn. LifeSci., ⁷Coll. Plant Sci. Technol., Huazhong Agric. Univ.)</p> <p>2pH-04 E Unveiling Peculiar Alteration of Iron-Cadmium Transport and Accumulation in Rice under Allelopathic L-DOPA Stress <u>Moh Hari Rusli</u>^{1,2}, Louis Grillet^{1,2} (¹Master Program in Global Agriculture Technology and Genomic Science, International College, National Taiwan University, ²Department of Agricultural Chemistry, College of Bioresources and Agriculture, National Taiwan University.)</p>				13:15
							13:30
							13:45
							14:00

● 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	<p>2pA-05 ㊦</p> <p>A Light-Responsive Partner-Switching System Regulating PSI Genes Expression in the Cyanobacterium <i>Synechococcus elongatus</i> PCC 7942</p> <p>Xuan Huang^{1,2}, Hitomi Imamitsu^{1,2}, Kan Tanaka² (¹LST, Science Tokyo, ²CLS, IIR, Science Tokyo)</p>		<p>2pC-05 ㊦</p> <p>A new bacterial model for mutualism and sustainable agriculture reveals distinct yet synergistic roles of immunity and symbiosis signaling in rice</p> <p>Yusuke Saijo, Kanako Inoue, John Jewish A. Dominguez, Sumire Kiritu, Masahiro Nagayasu, Mari Okuda, Fumiaki Inoue (Biol. Sci., Nara Institute of Science and Technology)</p>	<p>2pD-05</p> <p>Poly(A) status of mitochondrial mRNA regulates cellular function in plants</p> <p>Takashi Hirayama¹, Haruko Kaita¹, June-Sik Kim^{1,2}, Munetaka Sugiyama³, Keiichi Mochida^{2,4,5}, Akihito Mamiya⁶ (¹IPSR, Okayama Univ., ²CSRS, RIKEN, ³Grad. Sch. Sci., Tokyo Univ., ⁴KIBR, YCU, ⁵SIDS, Nagasaki Univ., ⁶Grad. Sch. Sci., Kyoto Univ.)</p>
14:30	<p>2pA-06</p> <p>Involvement of RpaA on high light stress response in <i>S. elongatus</i> PCC7942</p> <p>Kotone Saito¹, Hideo Iwasaki², Kan Tanaka³, Mitsumasa Hanaoka^{1,4,5} (¹Grad. Sch. Horticult., Chiba Univ., ²Sch. Adv. Sci. Eng., Waseda Univ., ³Lab. Chem. Life Sci., Tokyo Inst. Tech., ⁴Plant Mol. Sci. Cent., Chiba Univ., ⁵Res. Cent. Space Agr. Hort., Chiba Univ.)</p>		<p>2pC-06 ㊦</p> <p>Bacterial perception of root-derived signals mediates mutualistic associations in rice</p> <p>Zi Tong Heng¹, Kanako Inoue¹, John Jewish A. Dominguez¹, Masahiro Nagayasu¹, Min Fey Chek¹, Taito Matsuda¹, Shunsuke Tomita³, Kiyoshi Mashiguchi², Shinjiro Yamaguchi², Yusuke Saijo¹ (¹Division of Biological Science, Nara Institute of Science and Technology, ²Institute for Chemical Research, Kyoto University, ³Health and Medical Research Institute, National Institute of Advanced Industrial Science and Technology)</p>	<p>2pD-06</p> <p>Analysis of PI3P-reduced mutant reveals phosphoinositide roles on autophagy and membrane trafficking in plant development</p> <p>Shino Goto-Yamada^{1,2}, Andisheh Poormassalehgoo³, Elzbieta Kaniecka³, Xavier Zarza⁴, Kazusato Oikawa^{2,5}, Teun Munnik⁴, Kenji Yamada³, Shoji Mano^{1,2} (¹Lab. Organelle Reg., Natl. Inst. Basic Sci., ²Dept. Basic Biol., Graduate Univ. Advanced Studies, ³MCB, Jagiellonian Univ., ⁴SILS, Univ. Amsterdam, ⁵Dept. Cell Biol., Natl. Inst. Basic Biol.)</p>

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				
<p>2pE-05 The DREAM complex selectively regulates three distinct cell-cycle gene sets via the DNA-binding factors E2F, MYB3R, and TCX <u>Hidekazu Iwakawa</u>¹, Yuji Nomoto¹, Keito Mineta¹, Takamasa Suzuki², Masaki Ito¹ (1Grad. Sch. Nat. Sci. Technol., Kanazawa Univ., 2Col. Biosci. Biotech., Chubu Univ.)</p> <p>2pE-06 Potential Coordinated Regulation of Cell Cycle Genes by the DREAM Complex and FLP <u>Keito Mineta</u>¹, Hidekazu Iwakawa², Moussa Benhamed³, Masaki Ito² (1Grad. Sch. Nat. Sci. Tech., Kanazawa Univ., 2Sch. Bio. Sci. Tech., Kanazawa Univ., 3Université Paris-Saclay)</p>	<p>2pF-05 Discovery of a new plant tissue collaborating with antipodal cells and its function Kentaro Okada¹, Miki Matsumoto¹, Michitaka Notaguchi^{1,2}, <u>Ryushiro Kasahara</u>¹ (1BBC, Nagoya Univ., 2Grad. Sch. Sci., Kyoto Univ.)</p> <p>2pF-06 Morphology of Ohatsuki <i>Ginkgo biloba</i> trees in Tsukude, Shinshiro, Aichi, Japan Tomoka Fujii¹, Ryoma Furuhashi¹, HongQiao Lu¹, Hirofumi Yamashita², Masami Kobayashi³, Yoshie Uchida^{1,4}, Hakuto Kageyama⁴, Kazuhito Inoue^{5,6}, <u>Hide Nobu Uchida</u>^{1,6} (1Dept. Food Business, Nagoya Bunri Univ., 2Dept. Inf. Env. Sci., Kyoto Pref. Univ., 3Dept. Mat. Sci., Univ. Tsukuba, 4Grad. Sch. Environ. Hum. Sci., Meijo Univ., 5Dept. Biochem. Biotechnol., Kanagawa Univ., 6Res. Inst. Integ. Sci., Kanagawa Univ.)</p>	<p>2pG-05 E KL-signaling promotes light-dependent cell division in the Streptophyte algae <i>Closterium peracerosum-strigosum-littorale</i> <u>Hsiang-ting Lee</u>¹, Tomoaki Nishiyama^{2,3}, Junko Kawai⁴, Keiko Sakakibara⁴, Kotaro Nishiyama⁵, Suzuki Taiki⁵, Yusuke Kato⁵, Yoshiya Seto⁵, Junko Kyojuka¹ (1Graduate School of Life Science, Tohoku University, 2School of Science, Academic Assembly, University of Toyama, 3Research Center for Experimental Modeling of Human Disease, Kanazawa University, 4College of Science, Rikkyo University, 5Graduate School of Agriculture, Meiji University)</p> <p>2pG-06 <i>In Vitro</i> Evaluation and Application of Interactions Between the KAI2 Ligand-Signaling Components <u>Keita Tanaka</u>^{1,2}, Jiawang Wu^{1,2}, Yutaro Harada³, Taiki Suzuki³, Yujiao Yan^{1,2}, Yoshiya Seto³, Hiromu Kameoka^{1,2} (1CAS CEMPS, 2CAS-JIC CEPAMS, 3Agric., Meiji Univ.)</p>	<p>2pH-05 A nuclear CobW/WW-domain factor represses the CO₂-concentrating mechanism in the green alga <i>Chlamydomonas reinhardtii</i> <u>Daisuke Shimamura</u>^{1,2}, Junko Yasuda¹, Yosuke Yamahara¹, Hirofumi Nakano¹, Shin-Ichiro Ozawa^{3,4}, Ryutarō Tokutsu^{5,6}, Ayumi Yamagami¹, Tomonao Matsushita⁵, Yuichiro Takahashi⁴, Takeshi Nakano¹, Hideya Fukuzawa^{1,7}, Takashi Yamano^{1,8} (1Grad. Sch. Biostudies, Kyoto Univ., 2RIKEN, CSRS, 3IPSR, Okayama Univ., 4RIIS, Okayama Univ., 5Grad. Sch. Sci., Kyoto Univ., 6Sch. Vet. Med., Kitasato Univ., 7Center for Higher Educational Development, Kyoto Women's Univ., 8CeLiSIS, Kyoto Univ.)</p> <p>2pH-06 Mechanistic analysis of cold plasma-induced promotion of rice seed germination <u>Taiyo Nagamatsu</u>¹, Takamasa Okumura², Shota Sasaki³, Weichen Zeng⁴, Eri Kamon¹, Takeshi Ishimizu^{1,8}, Toshihisa Kotake⁵, Mami Nomura⁶, Tadashi Kunieda⁷, Ryo Ono⁴, Toshiro Kaneko³, Kazunori Koga², Kazuya Ishikawa⁸ (1College of Life Sciences, Ritsumeikan University, 2Faculty of Information Science and Electrical Engineering, Kyushu University, 3Graduate School of Engineering, Tohoku University, 4Graduate School of Frontier Sciences, The University of Tokyo, 5Graduate School of Science & Engineering, Saitama University, 6Faculty of Science, Yamagata University, 7Division of Biological Science, Div. of Biol. Sci., NAIIST, 8R-GIRO, Ritsumeikan University)</p>				14:15
							14:30

● 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	<p>3aA-01</p> <p>Interspecific genomic differences of arbuscular mycorrhizal fungi and periodic patterns observed in asexually produced spores <u>Yuuki Kobayashi</u>¹, Taro Maeda², Sachiko Tanaka³, Tatsuhiro Ezawa⁴, Katsushi Yamaguchi⁵, Takahiro Bino⁶, Yuki Nishimoto⁷, Shuji Shigenobu⁵, Masayoshi Kawaguchi³ (1)Tokyo NODAI Reseach 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)</p>	<p>3aB-01</p> <p>Molecular Dissection of Action Potential-Mediated Rapid Long-Distance Signal Propagation in the non-vascular liverwort <i>Marchantia polymorpha</i> <u>Kazuyuki Kuchitsu</u>¹, Yu Iwamoto¹, Kenshiro Watanabe¹, Kyoka Hashinishi¹, Mateusz Koselski², Renata Welc-Stanowska², Piotr Wasko², Kazimierz Trębacz² (1)Dept. Appl. Biol. Sci., Tokyo Univ. of Science, 2)Maria Curie-Skłodowska Univ., Poland)</p>	<p>3aC-01</p> <p>Enhancing the nodule occupancy rate of N₂O-reducing rhizobia by utilizing symbiotic incompatibility <u>Hanna Nishida</u>¹, Manabu Itakura², Khin Thuzar Win¹, Feng Li³, Kaori Kakizaki², Atsuo Suzuki², Satoshi Ohkubo², Luong Van Duc², Masayuki Sugawara⁴, Koji Takahashi², Matthew Shenton³, Sachiko Masuda⁵, Arisa Shibata³, Ken Shirasu⁵, Yukiko Fujisawa¹, Misa Tsubokura⁶, Hiroko Akiyama⁶, Yoshikazu Shimoda¹, Kiwamu Minamisawa², Haruko Imaizumi-Anraku¹ (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)</p>	<p>3aD-01</p> <p>Nuclear Actin Filaments in Plants <u>Tomoko Matsumoto</u>¹, Atsuya Osaki¹, Takumi Higaki², Noriko Inada¹ (1)Osaka Metropolitan University, Graduate School of Agriculture, 2)Kumamoto University, Graduate School of Advanced Science and Technology)</p>
09:15	<p>3aA-02</p> <p>Establishment of a platform for analyzing vascular differentiation dynamics combining time-course transcriptomics and cell-type deconvolution <u>Yuki Nishimura</u>¹, Makoto Kashima², Shunji Shimadzu^{1,3}, Tasuku Ito¹, Yuki Kondo¹ (1)Grad. Sch. Sci., Univ. Osaka, 2)Fac. Sci., Univ. Toho, 3)VIB, Ghent Univ)</p>	<p>3aB-02</p> <p>A Vascular Calcium Sensor Protein Controls Stomata Movement By Alteration Of Apoplastic Ion Concentration <u>Shunya Saito</u>¹, Takeshi Uchiyama¹, Kosuke Takebayashi¹, Misako Miwa², Sho Toyama², Hirotaka Sugiura³, Wataru Kada³, Shigeo Matsuyama², Fumihito Arai³, Jörg Kudla⁴, Masaru Tsujii¹, Yasuhiro Ishimaru¹, Nobuyuki Uozumi¹ (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)</p>	<p>3aC-02</p> <p>Analysis of shoot growth <i>Lotus japonicus</i> AON-deficient mutant inoculated with AM fungi <u>Momoe Fukase</u>¹, Kensuke Kawade² (1)Fac. Sci., Univ. Saitama, 2)Grad. Sch. Sci., Univ. Saitama)</p>	<p>3aD-02</p> <p>Heterologous expression of high-speed chimeric myosin XI in tomato promotes cytoplasmic streaming and plant growth <u>Jun Obara</u>¹, Takeshi Haraguchi², Kohji Ito², 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.)</p>
09:30	<p>3aA-03</p> <p>Development of transcriptomic biomarkers to independently estimate SA and JA response states and Application to plants under natural herbivore communities <u>Atsuki Tomita</u>^{1,2}, Taro Maeda¹, Natsumi Moriyama (Mori)³, Yasuyuki Nomura³, Yuko Kurita⁴, Makoto Kashima⁵, Shigeyuki Betsuyaku⁶, Yasuhiro Sato⁷, 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)</p>	<p>3aB-03</p> <p>Characterization of the kinase inhibitor AG126 and its derivatives for analyzing PM H⁺-ATPase phosphorylation in guard cells <u>Shogo Kuwayama</u>¹, Koji Takahashi¹, Maki Hayashi², Yuki Hayashi¹, Kohei Fukatsu¹, Yusuke Aihara³, Shinya Sato⁴, Keiko Kano⁴, Emi Mishihiro-Sato⁴, Ayato Sato⁴, 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.)</p>	<p>3aC-03</p> <p>Carbon dynamics of AON-defective <i>Lotus japonicus</i> mutants infected with arbuscular mycorrhizal fungi <u>Manaka Osawa</u>¹, Kensuke Kawade² (1)Fac. Sci., Univ. Saitama, 2)Grad. Sch. Sci., Univ. Saitama)</p>	<p>3aD-03</p> <p>Actin-myosin interactions contribute to the uniformity of xylem cell wall structure through cytoplasmic streaming <u>Saku Kijima</u>¹, Haruko Ueda², Nobutaka Mitsuda¹, Yoshihisa Oda³ (1)AIST, Biomanufact. Process Res. Cent., 2)Konan Univ, Fac. Sci. Eng., 3)Nagoya Univ, Grad Sci)</p>
09:45	<p>3aA-04</p> <p>Construction of a Robust Gene Expression Prediction Model Using Deep Learning with Large-Scale Field Transcriptome Data <u>Dan Ejiu</u>^{1,2}, Soutarou Honda³, Satoshi Ohkubo⁴, Shunsuke Adachi⁵, Koji Iwayama⁶, 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.)</p>	<p>3aB-04</p> <p>Humidity Response Mediated by a Potassium Transporter in Plants <u>Taro Yamanashi</u>¹, Takeshi Uchiyama¹, Tomoko Takagi², Shunya Saito¹, Misako Miwa¹, Sho Toyama¹, Shigeo Matsuyama¹, Takuya Yokokita³, Hidetoshi Kikunaga³, Misaki Shimizu⁴, Yoshiro Saito⁴, Takamasa Suzuki⁵, Noriko Nagata², Mutsumi Yamagami⁶, Yasuhiro Ishimaru¹, Nobuyuki Uozumi¹ (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.)</p>	<p>3aC-04</p> <p>Investigation of the role of <i>CRINKLE</i> during rhizobial infection in <i>Lotus japonicus</i> <u>Akira Akamatsu</u>¹, Aya Shimomura^{1,2}, Tsuneo Hakoyama¹, Shusei Sato³, Masayoshi Kawaguchi⁴, Makoto Hayashi¹ (1)CSRS • RIKEN, 2)Fac. Agri., Saga Univ., 3)Grad. Sch. Life Sci., Tohoku Univ., 4)NIBB)</p>	<p>3aD-04</p> <p>Analysis of a novel factor promoting the microtubule-endoplasmic reticulum interaction <u>Midori Doi</u>, Takema Sasaki, Yoshihisa Oda (Grad. Sch. Sci., Nagoya Univ.)</p>

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				
<p>3aE-01 E Multi-trait phenotypic plasticity of root and its molecular regulatory mechanism in amphibious plant <i>Callitriche palustris</i> <u>Tomo Sato</u>, Hiroyuki Koga, Hirokazu Tsukaya (Grad. Sch. Sci., Univ. Tokyo)</p>	<p>3aF-01 Arabidopsis Root Hair Formation is Regulated by the Root's Light Response via SPA1 <u>Haruki Ichikawa</u>, Ken Yokawa (Kitami Inst. Tech.)</p>	<p>3aG-01 Regulation of senescence initiation through the GREK receptor-like kinase family and pectins <u>Daisuke Funabashi</u>¹, Asuka Higo², Naoyuki Uchida^{1,2} (¹Grad. Sch. Sci., Univ. Nagoya, ²Center for Gene Research, Univ. Nagoya)</p>	<p>3aH-01 E Extreme Environmental Tolerance of <i>Physcomitrium patens</i> Spores in ISS Exposure: A First Step Toward Moss-Based Terraforming <u>Changhyun Maeng</u>¹, Yuji Hiwatashi², Keita Nakamura³, Osamu Matsuda⁴, Hajime Mita⁵, Kaori Yokotani⁶, Shin-ichi Yokobori⁷, Akihiko Yamagishi⁷, Atsushi Kume⁸, Tomomichi Fujita¹ (¹Faculty of Science, Hokkaido University, ²School of Food Industrial Sciences, Miyagi University, ³Graduate School of Food, Agricultural and Environmental Sciences, Miyagi University, ⁴Faculty of Science, Kyushu University, ⁵Department of Life, Environment, and Applied Chemistry, Fukuoka Institute of Technology, ⁶Faculty of Life and Environmental Sciences, University of Tsukuba, ⁷School of Life Sciences, Tokyo University of Pharmacy and Life Sciences, ⁸Faculty of Agriculture, Kyushu University)</p>	Symposium S10 ASPB-ISPP Joint Symposium—Plant resilience and plasticity powered by dynamic cellular responses (9:00–11:00)			09:00
<p>3aE-02 The Role of Polar Auxin Transport in Cell Polarity Establishment in Lateral Root Founder Cells <u>Sanae Kaneta</u>, Tatsuo Kakimoto (Grad. Sch. Sci., Univ. Osaka)</p>	<p>3aF-02 Analysis of light-dependent binding and dissociation between the blue-light receptor LLP and VTC2 <u>Yuka Igawa</u>¹, Yusuke Tachikawa¹, Yuki Urano¹, Tomoyuki Furuya², Fumio Takahashi³, Tatsuya Iwata³, Mineo Iseki³, Noriyuki Suetsugu⁴, Takayuki Kohchi⁵, Masahiro Kasahara¹ (¹Grad. Sch. of Life Sci., Ritsumeikan Univ., ²Grad. Sch. of Sci., Univ. Osaka, ³Faculty Pharma. Sci., Toho Univ., ⁴Grad. Sch. Arts, Sci., Univ. Tokyo, ⁵Grad. Sch. Biostudies, Kyoto Univ.)</p>	<p>3aG-02 Chemical genetics reveals ROS-triggered inter-organ communication for hypocotyl growth in <i>Arabidopsis thaliana</i> <u>Yasuki Kawabata</u>^{1,2}, Mizuki Murao², Asuka Higo², Naoyuki Uchida² (¹Grad. Sch. Sci., Nagoya Univ., ²Ctr. Gene Res., Nagoya Univ.)</p>	<p>3aH-02 Identification of a gene responsible for leaf-color variation in <i>Oxalis corniculata</i> <u>Hideaki Jimura</u>¹, Mitsuhiko Sato¹, Yuta Aoyagi¹, Yuya Fukano², Shinji Kikuchi², Kenta Shirasawa¹ (¹Plant Genome Res., Kazusa DNA Res. Inst., ²Grad. Sch. Hort., Univ. Chiba)</p>				09:15
<p>3aE-03 E Polymerization-mediated SRFR1 condensation in upper lateral root cap cells regulates root growth <u>Jianbin Su</u>, Walter Gassmann (University of Missouri)</p>	<p>3aF-03 Phototropin monitors actual temperature to regulate temperature-dependent chloroplast movement via <i>cis-trans</i> autophosphorylation mode switching <u>Minoru Noguchi</u>¹, Tatsushi Fukushima^{1,2}, Saki Wakasugi^{1,2}, Yutaka Kodama^{1,2} (¹Ctr. Biosci. Res. Educ., Utsunomiya Univ., ²Grad. Sch. Reg. Dev. Creat., Utsunomiya Univ.)</p>	<p>3aG-03 Analysis of a compound that inhibits plant hypocotyl elongation in dark <u>Ayami Nakagawa</u>¹, Keiko Kuwata¹, Shuya Yamada¹, Yumiko Takebayashi², Tsuyoshi Hirota¹, Ayato Sato¹, Naoyuki Uchida³, Hitoshi Sakakibara^{2,4}, Akie Shimotohno¹, Kenichiro Itami^{1,2,5}, Kei Murakami⁶, Keiko Torii^{1,7,8} (¹ITbM, Nagoya Univ., ²RIKEN CSRS, ³Center for Gene Res., Nagoya Univ., ⁴Grad. Sch. Agr. Nagoya Univ., ⁵RIKEN PRI, ⁶Sch. Sci., Kwansai Gakuin Univ., ⁷Dep. of Mol. Biosci., Univ. Texas at Austin, ⁸Howard Hughes Medical Institute)</p>	<p>3aH-03 Analysis of <i>s-heat tolerant (sheat)</i> mutants of <i>Arabidopsis thaliana</i> <u>Asuka Ogawa</u>¹, Mire Yanagihara¹, Goro Masuda², Izumi Yotsui¹, Yoichi Sakata¹, Teruaki Tajiri¹ (¹Dept. of Biosci., Tokyo Univ. of Agri, ²NODAI Genome Research Center)</p>				09:30
<p>3aE-04 Investigation of lateral root development regulation mediated by temporal circadian rhythms <u>Sota Nomoto</u>¹, Takumi Onakado¹, Kosuke Mase¹, Akari Maeda², Satomi Sakaoka¹, Takama Suzuki³, Soichi Inagaki⁴, Todd Michael⁵, Norihito Nakamichi², Hironaka Tsukagoshi¹ (¹Agr., Meijo Univ., ²Grad. Sch. Sci., Nagoya Univ., ³Col. Biosci. Biothec., Chubu Univ., ⁴Dept. of Biol. Sci., Grad. Sch. of Sci., Tokyo Univ., ⁵Salk Institute)</p>	<p>3aF-04 Functional characterization of JAC1, a regulator of chloroplast accumulation response <u>Yuki Inoue</u>¹, Hiroki Irieda², Noriyuki Suetsugu¹ (¹Grad. Sch. of Arts & Sci., Univ. Tokyo, ²Acad. Assembly, Inst. Agric., Shinshu Univ.)</p>	<p>3aG-04 Trajectory of the evolution of SL receptor in parasitic plant <i>Striga hermonthica</i> <u>Mayu Deguchi</u>¹, Jia Xin Yap², Yuichiro Tsuchiya^{1,2} (¹Grad. Sch. Sci., Nagoya Univ., ²ITbM, Nagoya Univ.)</p>	<p>3aH-04 Identification of the causal gene for the <i>sensitive to long-term heat (slol12)</i> mutant of <i>Arabidopsis</i> <u>Haruto Kinoshita</u>¹, Goro Masuda², Izumi Yotsui¹, Yoichi Sakata¹, Teruaki Tajiri¹ (¹Dept. of Biosci., Tokyo Univ. of Agri, ²NODAI Genome Research Center)</p>				09:45

● 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	<p>3aA-05 </p> <p>ATTED-II v13: Expanded Species and PCA-Based Condition Summaries Daffa Aprilio¹, Dalia Khatun¹, <u>Takeshi Obayashi</u>^{1,2} (¹Grad. Sch. Info. Sci., Tohoku Univ., ²WPI-AIMEC, Tohoku Univ.)</p>	<p>3aB-05 </p> <p>Proline-2'-Deoxymugineic Acid, a synthetic phytosiderophore, facilitates the rapid recovery of poplar trees from iron deficiency during early growth <u>May Sann Aung</u>¹, Motofumi Suzuki², Kyoko Toyofuku¹, Atsushi Ogawa¹, Hiroshi Masuda¹ (¹Akita Prefectural University, ²Aichi Steel Corporation)</p>	<p>3aC-05</p> <p>Commonalities during mycorrhizal symbiosis in land plants <u>Akihiro Yamazaki</u>¹, Hector Montero¹, Alexandra Dallaire^{1,2}, Akira Iwase¹, Ayako Kawamura¹, Arika Takebayashi¹, Keiko Sugimoto¹, Uta Paszkowski^{1,3} (¹CSRS, RIKEN, ²Université Laval, ³University of Cambridge)</p>	<p>3aD-05</p> <p>Analysis of a novel ROP signaling branch regulating pit formation in xylem vessels <u>Wataru Kobayashi</u>, Takema Sasaki, Yoshihisa Oda (Nagoya University Graduated School of Science)</p>
10:15	<p>3aA-06 </p> <p>Characterization of prion-like domain-containing proteins in diverse phytoplankton groups <u>Matthew Brown</u>, Yusuke Matsuda (Department of Biosciences, Kwansei Gakuin University)</p>	<p>3aB-06</p> <p>Genome editing of metal transporter genes, <i>OsVIT1</i> or <i>OsYSL9</i>, increased the iron concentration in polished grains of Akitakomachi rice <u>Hiroshi Masuda</u>¹, Katsumi Takahashi¹, Maho Arakawa¹, Takeo Takahashi¹, Takanori Kobayashi², Hiroki Rai¹, Takehiko Matsumoto¹, Takehiro Kamiya³, May Sann Aung¹ (¹Akita Pref. Univ., ²Ishikawa Pref. Univ., ³Grad. Sch. Agri. Life Sci. Univ. Tokyo)</p>	<p>3aC-06</p> <p>Genes with dual functions in arbuscular mycorrhizal symbiosis and other processes Zijie Li^{1,2}, Kenji Fukushima³, <u>Hiromu Kameoka</u>^{1,2} (¹CAS CEMPS, ²CAS-JIC CEPAMS, ³National Institute of Genetics)</p>	<p>3aD-06</p> <p>Exploring the remodeling mechanisms of organelles, the cytoskeleton, and the endomembrane system in sieve elements <u>Yuki Sugiyama</u>^{1,2}, Yoshihisa Oda² (¹IAR, Nagoya Univ., ²Dept. Biol. Sci., Grad. Sch. Sci., Nagoya Univ.)</p>
10:30	<p>3aA-07</p> <p>Enhancement of transcription factor activity by introducing mutations designed based on AI-supported predictions <u>Kentaro Kobayashi</u>¹, Kensuke Yodoya², Koji Nagata¹, Kazuko Yamaguchi-Shinozaki^{1,3}, Junya Mizoi¹ (¹Grad. Sch. Agr. Life Sci., Univ. Tokyo, ²KAGOME CO., LTD., ³Inst. Agr. Life Sci., Tokyo Univ. Agr.)</p>	<p>3aB-07</p> <p>OsIET1 is a node-localized efflux transporter required for iron distribution in rice Jing Che¹, Sheng Huang², Yuting Qu¹, Yuma Yoshioka³, Chiyuri Tomita³, Takaaki Miyaji³, Zhenyang Liu¹, Renfang Shen¹, <u>Naoki Yamaji</u>², Jian Feng Ma² (¹State Key Laboratory of Soil and Sustainable Agriculture, Institute of Soil Science, Chinese Academy of Sciences, Nanjing, ²Institute of Plant Science and Resources, Okayama University, ³Department of Genomics & Proteomics, Advanced Science Research Center, Okayama University)</p>	<p>3aC-07</p> <p>Host Invasion by Parasitic Plants Supported by Dynamic Modulation of Cell Wall Properties <u>Chiharu Ito</u>¹, Tadashi Kunieda¹, Songkui Cui², Taku Demura¹, Satoko Yoshida¹ (¹NAIST, ²CAS, Kunming)</p>	<p>3aD-07</p> <p>A novel function of CDKA in the regulation of light responses <u>Sakuta Miyazaki</u>¹, Natsumi Inoue², Masaki Ishikawa³, Mitsuyasu Hasebe³, Masami Sekine⁴, Tomomichi Fujita² (¹Grad Sch Life Sci, Hokkaido Univ., ²Fac Sci, Hokkaido Univ., ³Div Evol Biol., NIBB, ⁴Fac Bior Envi Sci, Ishikawa Pref Univ.)</p>
10:45	<p>3aA-08 </p> <p>Multi-Pipeline Iterations and Multi-Omics Resolve Annotation Stochasticity and Uncover Extensive Gene Repertoire in Angiosperms Chang-Hung Chen¹, Chia-Chang Lin², Meng-Ting Tsai^{1,3}, Shang-Che Kuo⁴, Chia-Chen Chu^{1,2}, Yung-Chu Yang¹, Yi-Chen Wu¹, Jhong-He Yu¹, Pin-Chien Liou¹, Chen-Wei Hu^{1,2}, Jung-Chen Su⁵, Ying-Hsuan Sun⁶, Jo-Wei Allison Hsieh⁷, Te-Lun Mai², Ying-Lan Chen^{3,8}, <u>Ying-Chung Jimmy Lin</u>^{1,2,4} (¹Institute of Plant Biology, College of Life Science, National Taiwan University, Taipei, Taiwan, ²Department of Life Science, College of Life Science, National Taiwan University, Taipei, Taiwan, ³Department of Biotechnology and Bioindustry Sciences, College of Bioscience and Biotechnology, National Cheng Kung University, ⁴Genome and Systems Biology Degree Program, College of Life Science, Academia Sinica and National Taiwan University, Taipei, Taiwan, ⁵Department of Pharmacy, College of Pharmaceutical Sciences, National Yang Ming Chiao Tung University, Taipei, Taiwan, ⁶Department of Forestry, College of Agriculture and Natural Resources, National Chung Hsing University, Taichung, Taiwan, ⁷Genome Center, University of California, Davis, Davis, CA, USA, ⁸University Center of Bioscience and Biotechnology, National Cheng Kung University, Tainan, Taiwan)</p>		<p>3aC-08 </p> <p>Identification of the Master Regulator Controlling Haustorium Development in the Hemiparasite <i>Phtheirospermum japonicum</i> <u>Ninghui Zhao</u>, Yanmei Li, Lei Xiang, Satoko Yoshida (Graduate School of Science and Technology, NAIST)</p>	<p>3aD-08</p> <p>Visualization of depolymerizing microtubule ends in plant cells using animal-derived EML2-L Yukimi Kitashima¹, Haruka Ono¹, Naoki Minamino², Takashi Hotta³, <u>Takumi Higaki</u>¹ (¹Graduate School of Science and Technology, Kumamoto University, ²Faculty of Science, Fukuoka University, ³Comprehensive Cancer Center, University of New Mexico)</p>

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							
<p>3aE-05 RGF8 peptide is required for orientation switch during early stage of lateral root primordium development Mitsuki Noda¹, Sanae Kaneta², Tatsuo Kakimoto² (¹Sch. Sci., Univ. Osaka, ²Grad. Sch. Sci., Univ. Osaka)</p>	<p>3aF-05 The chloroplast photorelocation movement regulator KAC forms dark-induced condensates Takeshi Higa, Noriyuki Suetsugu (Grad. Sch. Arts and Sci., Univ. Tokyo)</p>	<p>3aG-05 E Exploring the natural variations in strigolactone perception among different <i>Striga hermonthica</i> ecotypes Wen Wei Loh¹, Jia Xin Yap², Kakeru Shioya¹, Yuichiro Tsuchiya^{1,2} (¹Grad. Sch. Sci., Nagoya Univ., ²ITbM, Nagoya Univ.)</p>	<p>3aH-05 Identification of the causal gene in <i>sensitive to long term heat 2</i> (<i>sloh2</i>) mutant of <i>Arabidopsis</i> Haruomi Yoshino¹, Yusuke Murakoshi¹, Ryo Yamaguchi¹, Akito Hosoi², Goro Masuda², Takamasa Suzuki³, Izumi Yotsui¹, Yoichi Sakata¹, Teruaki Tajiri¹ (¹Dept. of Bioscience, Tokyo Univ. of Agriculture, ²NODAI Genome Research Center, ³Dept. of Biological Chemistry, College of Bioscience and Biotechnology, Chubu Univ.)</p>	Symposium S10 ASPB-JSP Joint Symposium—Plant resilience and plasticity powered by dynamic cellular responses (9:00–11:00)			10:00			
<p>3aE-06 Mechanism maintaining the patterned expression of <i>Arabidopsis BEARSKIN1/2</i> in the outer root cap layers Tatsuaki Goh¹, Makoto Yamamoto¹, Yuri Kataoka¹, Koki Ueno¹, Akinori Fujimoto¹, Nobutoshi Yamaguchi¹, Shunsuke Miyashima^{1,2}, Keiji Nakajima¹ (¹Grad. Sch. Sci. Tech., NAIST, ²Inst. Biore. Engr., Ishikawa Pref. Univ.)</p>	<p>3aF-06 Analysis of the mechanism regulating guard cell-specific expression of <i>BLUS1</i>, an essential factor for blue light-dependent stomatal opening Ayuri Yamaguchi¹, Mika Nomoto^{2,3}, Hassan Nadeem⁴, Diwaker Shukla⁴, Yasuomi Tada^{2,3}, Juntao Negi⁵, Makoto Shirakawa^{6,7}, Atsushi Takemiya⁸ (¹Fac. Sci., Yamaguchi Univ., ²Grad. Sch. Sci., Nagoya Univ., ³Cent. Gene Res., Nagoya Univ., ⁴Dept. Bioeng. • UIUC, ⁵Grad. Sch. Sci., Kyushu Univ., ⁶Grad. Sch. Biol. Sci., NAIST, ⁷Academia Sinica, ⁸Grad. Sch. Sci. Tech. Innov., Yamaguchi Univ.)</p>	<p>3aG-06 Regulation of strigolactone biosynthesis by PHR transcription factors in <i>Marchantia paleacea</i> Akiyoshi Yoda¹, Kyoichi Kodama¹, Takahito Nomura², Junko Kyozuka¹ (¹Grad. Sch. of Life Sci., Tohoku Univ., ²Ctr. of Biosci. Res. and Edu., Utsunomiya Univ.)</p>	<p>3aH-06 Elucidating the mechanisms of long-term heat tolerance in <i>Arabidopsis</i> via functional analysis of the <i>sensitive to long-term heat7</i> (<i>sloh7</i>) mutant Ririka Nosuga¹, Akito Hosoi², Takamasa Suzuki³, Izumi Yotsui¹, Yoichi Sakata¹, Teruaki Tajiri¹ (¹Dept. of Biosci., Tokyo Univ. of Agri., ²NODAI Genome Research Center, ³Dept. of Biological Chemistry, College of Bioscience and Biotechnology, Chubu Univ.)</p>							10:15
<p>3aE-07 E Regulatory mechanisms underlying stem cell maintenance in the <i>Arabidopsis</i> root cap Paktraporn Mekloy^{1,2}, Akie Shimotohno¹, Ye Zhang², Masaaki Umeda² (¹ITbM, Nagoya Univ., ²Grad. Sch. Sci. Tech., NAIST)</p>	<p>3aF-07 Photosynthesis-dependent stomatal opening mediated by sugars as mesophyll messengers Eigo Ando¹, Yuki Hayashi¹, Toshinori Kinoshita^{1,2} (¹Dep. Biol. Sci., Div. Nat. Sci., Grad. Sch. Sci., Nagoya Univ., ²WPI-ITbM, Nagoya Univ.)</p>	<p>3aG-07 Studies on the sequence elements responsible for the long-distance transport of mRNAs Takumi Iwata¹, Kentaro Okada², Shiori Nagahara¹, Ken-ichi Kurotani¹, Nobuyoshi Mochizuki¹, Michitaka Notaguchi^{1,2} (¹Grad. Sch. Sci., Kyoto Univ., ²Biosci and Biotech Center, Nagoya Univ.)</p>	<p>3aH-07 Analysis for molecular functions of plant progesterone receptor candidates Yuka Kinugasa¹, Ayumi Yamagami¹, Rira Daibo¹, Ayaka Uebayashi^{2,3}, Setsuko Shimada², Mayumi Iino², Takahito Nomura⁴, Masaaki Sakuta³, Tadao Asami⁵, Takao Yokota⁶, Takeshi Nakano¹ (¹Grad. Sch. Bio., Univ. Kyoto, ²RIKEN, CSRS, ³Grad. Sch. Humanities and Sci., Univ. Ochanomizu, ⁴Ctr. Bio., Univ. Utsunomiya, ⁵KIBR, Yokohama City Univ., ⁶Dept. Bio., Univ. Teikyo)</p>							10:30
<p>3aE-08 Analysis of the effects of haploidization on growth in <i>Arabidopsis thaliana</i> Takafumi Miyashita¹, Suzuka Kikuchi², Munetaka Sugiyama³, Akitoshi Iwamoto^{1,4} (¹Dept. Biol. Sci., Grad. Sch. Sci., Kanagawa Univ., ²Grad. Sch. Sci. and Technol. for Innov., Yamaguchi Univ., ³Dept. Biol. Sci., Grad. Sch. Sci., Univ. Tokyo, ⁴Dept. Biol. Sci., Fac. Sci., Kanagawa Univ)</p>	<p>3aF-08 E Analysis of evolutionary conservation of photosynthesis signaling mechanisms dependent on B4-Raf-like kinases in land plants Shota Yamauchi¹, Hayato Watanabe¹, Tomoki Kuribayashi¹, Hinano Takase², Kota Yamashita², Taishi Umezawa², Ryuichi Nishihama¹ (¹Fac. Sci. Tech., Tokyo Univ. Sci., ²Grad. Sch. BASE, Tokyo Univ. Agri. Tech.)</p>	<p>3aG-08 Elucidation of the catalytic mechanism of ABA2 and identification of its authentic reaction products in ABA biosynthesis Keisuke Fujiyama¹, Sayaka Yamada², Yuri Ozasa², Miu Sato², Mikiko Kojima¹, Yumiko Takebayashi¹, Yuri Kanno¹, Jun Takeuchi^{3,4}, Toshiyuki Ohnishi^{3,4}, Yasushi Todoroki³, Masanori Okamoto¹ (¹CSRS, RIKEN, ²Grad. Sch. Integr. Sci. Technol., Shizuoka Univ., ³Fac. of Agr., Shizuoka Univ., ⁴RIGST, Shizuoka Univ.)</p>	<p>3aH-08 E The U1 snRNP component RBP45D regulates thermomorphogenesis through alternative splicing in <i>Arabidopsis</i> Geeng-Loo Chong, Ping Chang, Hsin-Yu Hsieh, Shih-Long Tu (Institute of Plant and Microbial Biology, Academia Sinica)</p>				10:45			

● 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 <u>Chih-Ling Huang</u> , 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 <u>Noriyuki Konishi</u> , Jian Feng Ma (Okayama Univ. IPSR)		3pD-01 Regulation of NIP5;1 Polar Localization and Boron Transport Mechanism by Myosin XI <u>Haiyang Liu</u> 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 <i>Brassica rapa</i> and <i>B. oleracea</i> <u>Yao-Cheng Lin</u> 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 <u>Masaya Neki</u> 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 <u>Haruka Iwashita</u> 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 <i>Arabidopsis</i> <u>Zhe Zhang</u> ^{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 <i>trans</i> -Golgi network – How does phosphatidylinositol 4-phosphate (PI4P) function in the endomembrane system in plants? <u>Yoko Hasegawa</u> 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 <u>Jun Ge</u> , Namiki Mitani, Jian Feng Ma (IPSR, Okayama Univ.)		3pD-04 Identification and functional significance of novel proteins localized to leaf lipid droplets <u>Takashi L. Shimada</u> ^{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 , <u>Maki Katsuhara</u> 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 , <u>Takashi Yamano</u> ^{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 <u>Newton Chandra Paul</u> 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 <u>Kentarō Tamura</u> 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 <u>Fakhar Uddin Talukder</u> , 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 <u>Shiori Nagahara</u> 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 <u>Taisei Ohyama</u> 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				
		<p>3pG-01 Analysis of crosstalk between ABA and GA via DELLA-GAF1 complex Nozomi Okonagi, Yuki Taninaga, Seitaro Nakabayashi, Yohsuke Takahashi, <u>Jutarou Fukazawa</u> (Grad. Sch. Int. Sci., Hiroshima Univ.)</p> <p>3pG-02 Mechanism of DELLA-mediated transcriptional activation and growth inhibition via histone modification <u>Hiroki Ando</u>¹, Akira Nozawa², Hidetaka Kosako³, Tatsuya Sawasaki², Yohsuke Takahashi¹, Jutarou Fukazawa¹ (¹Grad. Sch. Int. Sci., Hiroshima Univ., ²PROS, Ehime Univ., ³IAMS, Tokushima Univ.)</p> <p>3pG-03 E Role of NITRATE TRANSPORTER 1.5 in regulating auxin distribution in <i>Arabidopsis</i> roots <u>Rubaet Sharmin Ema</u>¹, Hayato Shinonaga¹, Ken-ichiro Hayashi², Masaaki Umeda¹ (¹Grad. Sch. Sci. & Tech., NAIST, ²Department of Bioscience, Okayama Univ. Sci.)</p> <p>3pG-04 The molecular mechanism of brassinosteroid responsive transcriptional activation via the novel factor BIL7 <u>Kaisei Nishida</u>¹, Yusuke Nakamura¹, Ayumi Yamagami¹, Takuya Miyakawa¹, Tadao Asami², Takeshi Nakano¹ (¹Life Sci., Kyoto Univ., ²KIBR, Yokohama City Univ)</p> <p>3pG-05 Functional analysis of TGA transcription factors in the moss <i>Physcomitrium patens</i> <u>Hiroki Takauo</u>, Teruaki Taji, Yoichi Sakata, Izumi Yotsui (Dept. of Biosci., Tokyo Univ. of Agri)</p> <p>3pG-06 E Hyperactivated jasmonic acid signaling enforces plant-microbiome feedbacks in <i>Arabidopsis</i> <u>Tung Tse Lu</u>¹, Miguelito Isip¹, Chiao Jung Han¹, Hung Jui Shih¹, Lai Loi Trinh¹, Silvina Perin², Yu Chun Lin³, Po An Lin³, Ka-Wai Ma^{1,3} (¹Institute of Plant and Microbial Biology, Academia Sinica, Taipei, Taiwan., ²Department of Plant Microbe Interactions, Max Planck Institute for Plant Breeding Research, Cologne, Germany., ³Department of Entomology, National Taiwan University, Taipei, Taiwan.)</p>	<p>3pH-01 Expression of a C-terminal truncated PICL protein in <i>Escherichia coli</i> for the structural analysis of the temperature-sensing protein PICL <u>Shuta Imada</u>¹, Takato Matumoto¹, Arisa Nakamura², Tuyosi Furumoto^{1,2} (¹Agr. Univ. Ryukoku, ²Grad. Sch. Agr., Univ. Ryukoku)</p> <p>3pH-02 The novel thermosensor protein PICL integrates and senses cytosolic redox levels and temperature information <u>Takato Matsumoto</u>, Tsuyoshi Furumoto (Grad. sch. Agri., Univ. Ryukoku)</p>	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
							13:45
							14:00
							14:15
							14:30
							14:45
							15:00
							15:15

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
Sachihiko 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 Ishii¹, Chiyo Noda¹, Eunuchul Kim³, Makio Yokono^{1,2}, Jun Minagawa^{1,2} (¹National Institute for Basic Biology, ²The Graduate University for Advanced Studies, SOKENDAI, ³College 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 Watanabe⁴, Toru Kondo^{1,2,3} (¹SOKENDAI, ²NIBB, ³ExCELLS, ⁴Grad. Sch. of Science, Tokyo Metropolitan Univ.)
- 1P003 **P** Characterization of early light-induced protein (ELIP) in overwintering evergreen leaves of *Taxus cuspidata* and *Euonymus fortunei*
Peiyuan Li^{1,2}, Kanoko Shimohara^{1,2}, Junko Kishimoto¹, Kiyomi Ono¹, Zihao Ye^{1,2,3}, Seiji Akimoto⁴, Atsushi Takabayashi¹, Ryouichi Tanaka¹ (¹Inst Low Temp Sci, Hokkaido Univ, ²Grad Sch Env Sci, Hokkaido Univ, ³Huazhong Agricultural Univ, ⁴Grad 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 Kitao⁴, Takayuki Azuma⁵, Junko Kishimoto¹, Kiyomi Ono¹, Ryouichi Tanaka¹ (¹Inst. Low Temp. Sci., Hokkaido Univ., ²Grad. Sch. Env. Sci., Hokkaido Univ., ³Huazhong Agricultural Univ., ⁴FFPRI, Hokkaido Res. Sta., ⁵Field Sci. Ctr. N. Biosphere, Hokkaido Univ.)
- 1P005 **P** A mutation that enhances PSII water oxidation: mechanistic insights and *in vivo* validation
Ko Imaizumi¹, Shin-ichi Arimura², Taishi Nishimura³, Ryo Nagao^{4,5}, Keisuke Saito^{6,7}, Takeshi Nakano³, Hiroshi Ishikita^{6,7}, Takumi Noguchi⁴, Kentaro Ifuku¹ (¹Grad. Sch. Agric., Kyoto Univ., ²Grad. Sch. Agric. Life Sci., Univ. Tokyo, ³Grad. Sch. Biostudies, Kyoto Univ., ⁴Grad. Sch. Sci., Nagoya Univ., ⁵Fac. Agric., Shizuoka Univ., ⁶RCAST, Univ. Tokyo, ⁷Dept. 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-Smith³, Asako Ishii⁴, Shinsa Kameo^{1,2}, Soichiro Seki⁵, Minoru Kumazawa¹, Genji Kurisu⁵, Ryouichi Tanaka^{1,2}, Makio Yokono⁴, Jun Minagawa⁴, Kazuyoshi Murata³, Akihiro Kawamoto⁵, Atsushi Takabayashi^{1,2} (¹ILTS, Hokkaido Univ., ²Grad. Env. Sci., Hokkaido Univ., ³ExCELLS, NINS, ⁴NIBB, NINS, ⁵IPR, Univ. Osaka)
- 1P007 **P** Development of a Novel Method for Evaluating Cyclic Electron Transport Using Isolated Thylakoids Based on pH Changes
Keiichiro Tanigawa¹, Kazuhiko Sugimoto², Masaru Kono³, Wataru Yamori¹, Ichiro Terashima² (¹Grad. Sch. Agri., the Univ. Tokyo, ²Natl. Chung Hsing Univ., ³Astrobiology Center, Natl. Inst. Nat. Sci.)
- 1P008 Enhanced Photosynthetic Efficiency of Freshwater Cyanobacteria in Seawater Cultivation
Kaisei Kurosaki¹, Masahiro Karikomi², Takashi Osanai¹ (¹Fac. Agr., Meiji Univ., ²Grad. 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 Wang¹, Yipeng Wang¹, Toshiyuki Shinoda², Tatsuya Tomo², Seiji Akimoto¹ (¹Grad. Sch. Sci., Kobe Univ., ²Grad. Sch. Sci., Tokyo Univ. Sci.)
- 1P010 **P** Light-responsive proton translocation across the cytoplasmic membranes regulates intracellular pH and metabolism in cyanobacteria
Akito Machida¹, Akane Echigo², Kumiko Kondo³, Toru Hisabori^{3,4,5}, Shinji Masuda¹ (¹Dept. Life Sci. & Tech., Science Tokyo, ²Dept. Life Sci. & Tech., Tokyo Inst. Tech., ³Lab. Chem. & Life Sci., IIR, Tokyo Inst. Tech., ⁴Res. Inst. Integr. Sci., Kanagawa Univ., ⁵SOKENDAI)
- 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 Mukouyama¹, Mayuko Oshiumi², Hisako Kawai-Kubota³, Rimi Koyama¹, Naoki Mizusawa^{1,4} (¹Fac. Biosci. Appl. Chem., Hosei Univ., ²Grad. Sch. Sci. Eng., Hosei Univ., ³Fac. Sci., Yamagata Univ., ⁴Res. Micro-Nano Tech, Hosei Univ.)

- IP016 Isolation and characterization of an active dimeric photosystem II complex that retains three extrinsic proteins from *Synechocystis* sp. PCC 6803
Mayuko Oshiumi¹, Kazuna Tanemura¹, Hisako Kawai-Kubota², Rimi Koyama³, Naoki Mizusawa^{1,3,4} (¹Grad. Sch. Sci. Eng, Hosei Univ., ²Fac. Sci., Yamagata Univ., ³Fac. Biosci. Appl. Chem., Hosei Univ., ⁴Res. Micro-Nano Tech, Hosei Univ.)
- IP017 Changes in Time-Resolved Fluorescence Spectra of Land Plants, Induced by an Excitation Laser with Different Intensities
Sakura Iga¹, Seiji Akimoto^{1,2} (¹Fac. Sci. Kobe Univ., ²Grad. Sch. Sci. Kobe Univ.)
- IP018 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.)
- IP019 Marimo (*Aegagropilum brownii*) Spherical Aggregates Are Nearly Anoxic Under Calm Conditions: Field Dissolved Oxygen Measurements and Reoxygenation Responses
Masaru Kono^{1,2}, Keisuke Yoshida², Yoichi Oyama³ (¹ABC, ²Dept. Life Sci & Tech., Science Tokyo, ³Kushiro City Board of Education)
- IP020 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.)
- IP021 Charge separation reaction proceeding in the core complex of photosynthetic reaction center from the green sulfur bacterium *Chlorobaculum tepidum*
Tomomi Inagaki¹, Takeru Kawakami², Kazuki Terauchi¹, Chihiro Azai² (¹Graduate School of Life Sciences, Ritsumeikan University, ²Graduate of Science and Engineering, Chuo University)
- IP022 Structural changes caused by replacing Ca with Yb in the manganese cluster of photosystem II
Takeru Kanda¹, Yoshiki Nakajima², Jian-Ren Shen² (¹Graduate School of Environmental, Life, Natural Science and Technology, Okayama University, ²Research Institute for Interdisciplinary Science, Okayama University)
- IP023 Structural basis of formate-induced inhibition on the acceptor side of photosystem II
Ayana Nishitani¹, Jian-Ren Shen², Ryo Nagao³, Yoshiki Nakajima² (¹Department of Biology Faculty of Science, Okayama University, ²Research Institute for Interdisciplinary Science, Okayama University, ³Faculty of Agriculture, Shizuoka University)
- IP024 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 Ulfat¹, Habib-ur-Rehman Athar², Sarah Ambreen², Hazem M. Kalaji³ (¹Lahore College for Women University, Lahore, Pakistan, ²Bahauddin Zakria University, Multan, Pakistan, ³Warsaw University of Life Sciences SGGW, Warsaw, PL)
- IP025 Contribution of the mitochondrial respiratory chain to sustaining the CO₂ assimilation rate
Tatsuhisa Konishi, Yusuke Mizokami, Ko Noguchi (Grad. Sch. Life Sci., Univ. Pharm. and Life Sci.)
- IP026 The Plastid Terminal Oxidase (PTOX) participates in stomatal dynamics regulation in *Arabidopsis thaliana*
Pablo Ignacio Calzadilla^{1,2}, Clara Sotos¹, Giles N. Johnson², Anja Krieger-Liszky¹ (¹Institute for Integrative Biology of the Cell (I2BC), Université Paris-Saclay, CEA, CNRS, Gif-sur-Yvette cedex 91198, France., ²Department of Earth and Environmental Sciences, Faculty of Science and Engineering, University of Manchester, Manchester M13 9PT, United Kingdom.)
- IP027 Development of a Measurement and Data Analysis System for Photosynthetic Electron Transport
Kazuhiko Sugimoto, Ichiro Terashima (Inst. Mol. Biol., National Chung Hsing University)
- IP028 Investigation of PIF1's role in redox regulation of chloroplast NDH activity
Kenta Miura¹, Minami Murai¹, Ko Imaizumi¹, Keisuke Yoshida², Toru Hisabori^{3,4}, Kaori Kohzuma¹, Kentaro Ifuku¹ (¹Grad. Sch. Agric., Kyoto Univ., ²CLS, Science Tokyo, ³SOKENDAI, ⁴Kanagawa Univ.)
- IP029 Redox-Based Deactivation of Photosynthetic Enzymes: Emerging Mechanisms and Implications
Keisuke Yoshida¹, Yuka Fukushi¹, Jun Inaba¹, Masaru Kono^{1,2}, Toru Hisabori^{3,4} (¹CLS, Sci. Tokyo, ²ABC, ³SOKENDAI, ⁴Kanagawa Univ.)
- IP030 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 Nakamura¹, Woei-Jiun Guo² (¹RIKEN Center for Sustainable Resource Science (CSRS), Yokohama, Japan, ²Department 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 ¹⁴C tracing and RNA-seq
Ai Soma¹, Ryohei Sugita², Yuko Kurita¹, Natsuko I. Kobayashi¹, Tomoko. M Nakanishi¹, Keitaro Tanoi^{1,3} (¹Graduate School of Agricultural and Life Sciences, The University of Tokyo, ²Radioisotope Research Center, Nagoya University, ³Fukushima 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 Kondo², Tomohisa Hasunuma^{1,3,4,5} (¹EGBRC, Kobe Univ., ²Grad. Sch. Eng. Sci. RCSEC, ³Grad. Sch. Sci. Technol. Innov., Kobe Univ., ⁴CSRS, Riken, ⁵Grad. Sch., Eng., Kobe Univ.)
- 1P036 Comparative analysis of hydrogen productivity in cyanobacterial mutants with alternative nitrogenase expression
Takeshi Sato^{1,2}, Souhei Taniguchi³, Kazuhito Inoue^{1,2} (¹Res. Inst. Integr. Sci., Kanagawa Univ., ²Dept. Biochem. Biotech., Kanagawa Univ., ³Dept. Biol. Sci., Kanagawa Univ.)

■ Specialized (secondary) metabolism

- 1P037 **P** Discovery of *O*-Methyltransferase Genes Involved in Asarone Biosynthesis in *Acorus calamus* L.
Oyundari Ganbat¹, Bolortuya Ulziibat², Takumi Ogawa¹, Takao Koeduka³, Atsushi Okazawa¹ (¹Graduate School of Agriculture, Osaka Metropolitan University, ²Department of Research and R&D Policy, Mongolian Academy of Sciences, ³Graduate School of Science and Technology for Innovation, Yamaguchi University)
- 1P038 **P** Characterization of tomato high sugar mutant *hs1*
Misaki Kobayashi¹, Shaoze Yuan¹, Islam M. Y. Abdellatif^{1,2}, Siyan Xu¹, Tohru Ariizumi^{1,3}, Hiroshi Ezura^{1,3}, Kenji Miura^{1,3} (¹Grad. Sci. Life & Earth Sci., Univ. Tsukuba, ²Univ. Minia, ³Tsukuba-Plant Innovation Research Center)
- 1P039 **P** Dynamic Cluster Evolution and Conserved Regulatory Control of Diterpene Biosynthesis Across the *Oryzoideae*
Youning Liu¹, Shiho Tomiyama¹, Ikuya Motegi¹, Naoki Yamamoto², Koji Miyamoto³, Yoshimasu Tsujii⁴, Hiroyasu Furuumi⁵, Yutaka Sato⁵, Masaki Mori⁶, Hideaki Nojiri¹, Kazunori Okada¹ (¹Graduate School of Agricultural and Life Sciences, the University of Tokyo, Tokyo, Japan, ²College of Life Science, China West Normal University, Nanchong, China, ³Graduate School of Science and Engineering, Teikyo University, Utsunomiya, Japan, ⁴Faculty of Applied Bioscience, Tokyo University of Agriculture, Tokyo, Japan, ⁵National Institute of Genetics, Mishima, Japan, ⁶Institute of Agrobiological Sciences, NARO, Tsukuba, Japan)
- 1P040 Analysis of the Process of Cellular “Metabolic” Differentiation in *Catharanthus roseus*
Mai Uzaki¹, Ayako Kawamura¹, Hatsune Morinaka¹, Matt Stata², Kotaro Yamamoto³, Rhee Seung², Keiko Sugimoto¹, Masami Y. Hirai^{1,4} (¹RIKEN CSRS, ²Plant Resilience Institute, Michigan State University, ³Sch. Sci., Yokohama City Univ., ⁴Grad. 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 Oshima¹, Emi Yumoto², Koji Miyamoto^{1,2} (¹Grad. Sch. Sci. Eng. Teikyo Univ., ²Adv. Instrum. Anal. Cent., Teikyo Univ.)
- 1P043 Exploring the potential of rice allelopathy on sustainable agriculture
Meng-Chun Lin¹, Feng-Yin Su¹, Yu-Ting Su¹, Yi-Jhen Hong¹, You-Ming Liu², Kazunori Okada² (¹Department of Agronomy, National Chiayi University, ²Agro-Biotechnology Research Center, the University of Tokyo)
- 1P044 Production of β -Amyrin Using a Transient Expression System in *N. benthamiana*
Mei Takasugi¹, Yuriko Nagai², Much Z. Fanani³, Hikaru Seki^{3,4}, Kenji Miura^{1,2} (¹Bio. Sci., Univ. Tsukuba, ²T-PIRC, Univ. Tsukuba, ³Grad. Sch. Eng., Univ. Osaka, ⁴OTRI, Univ. Osaka)

- 1P045 [Cancelled]
- 1P046 Establishment of a distribution atlas of triterpenoid saponins in *Luffa aegyptiaca*
Sakura Masuda¹, Takumi Ogawa^{1,2}, Naoya Ogawa³, Kentaro Takahama³, Atsushi Okazawa^{1,2} (¹Sch. Agric., Osaka Met. Univ., ²Grad. Sch. Agric., Osaka Met. Univ., ³Tech. Center, Nagoya Univ.)
- 1P047 Phytochemical characterization of *Ludisia discolor* roots and stems and evaluation of their antioxidant and anti-inflammatory properties
Cheng-Sin Lin¹, Tsong-Long Hwang², Sio-Hong Lam³, Wen-Chieh Tsai¹ (¹Inst. Trop. Plant Sci. & Microbiol., Natl. Cheng Kung Univ., Tainan, Taiwan, ²Grad. Inst. Health Ind. Tech., Coll. Human Ecol., Chang Gung Univ. Sci. & Tech., Taoyuan, Taiwan, ³Dept. 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 Aono¹, Sasiprapa Samsri², Rungaroon Waditee-Sirisattah², Hakuto Kageyama¹ (¹Grad. Sch. Env. Hum. Sci., Meijo Univ., ²Chulalongkorn Univ.)
- 1P050 Functional Characterization of GlcHMS326, a Novel Mycosporine-Like Amino Acid from a Cyanobacterium *Gloeocapsa* sp. BRSZ
Erika Katayama¹, Taiki Aono¹, Tomoki Tsuboi¹, Samsri Sasiprapa², Waditee-Sirisattha Rungaroon², Hakuto Kageyama¹ (¹Grad. Sch. Env. Hum. Sci., Meijo Univ., ²Chulalongkorn 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 Ota¹, Yuma Yoshioka², Kohji Nishimura³, Mihoko Takenoya⁴, Hiromitsu Tabeta⁵, Mikiko Kojima⁵, Muneo Sato⁵, Shinji Masuda⁶, Masami Y. Hirai⁵, Hitoshi Sakakibara^{5,7}, Takaaki Miyaji^{2,8}, Tatsuru Masuda⁴, Takayuki Shimizu¹ (¹Faculty of Science, Nara Women's University, ²Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama University, ³Faculty of Life and Environmental Sciences, Shimane University, ⁴Graduate School of Arts and Sciences, The University of Tokyo, ⁵RIKEN Center for Sustainable Resource Science, ⁶Department of Life Science and Technology, Institute of Science Tokyo, ⁷Graduate School of Bioagricultural Sciences, Nagoya University, ⁸Advanced 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 Takeuchi³, Fabian Hollmann⁴, Stephan Clemens⁴ (¹Meiji Gakuin University, Center for Liberal Arts, ²The University of Tokyo, Department of Global Agricultural Sciences, Laboratory of Plant Biotechnology, ³The University of Tokyo, Graduate School of Agricultural and Life Sciences, Department of Biomaterial Sciences, ⁴University of Bayreuth, Department of Plant Physiology, Bayreuth, Germany)
- 1P054 Spatiotemporal analysis of calcium transport into tomato fruits using real-time ⁴⁵Ca monitoring
Takuma Hirashima¹, Yusuke Shikanai¹, Yong-Gen Yin², Nobuo Suzui², Mitsutaka Yamaguchi², Yuto Nagao², Akihiro Saito¹, Naoki Kawachi^{2,3}, Kyoko Higuchi¹ (¹Tokyo University of Agriculture, ²The Takasaki Institute for Advanced Quantum Science, National Institutes for Quantum Science and Technology (QST), ³Fukushima 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 Chiu¹, Cheng-Da Tsai¹, Jih-Yi Wang¹, Alastair J. McGinness², Satomi Kanno³, Verena Kriechbaumer², Tzu-Yin Liu^{1,4} (¹Institute of Bioinformatics and Structural Biology, College of Life Sciences and Medicine, NTHU, ²Endomembrane Structure and Function Research Group, School of Biological and Medical Sciences, Oxford Brookes University, Headington, Oxford OX3 0BP, UK, ³Institute for Advanced Research, NAIAS, Nagoya University, Fro-cho, Chikusa-ku, Nagoya, Japan, ⁴Department 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 Tsay² (¹Molecular and Cell Biology, Taiwan International Graduate Program, Academia Sinica, National Defense Medical University, Taipei 114201, Taiwan, ²Institute of Molecular Biology, Academia Sinica, Taipei 11529, Taiwan)

■ Organelles/Cytoskeleton/Endomembrane system

- IP057 **P** Functional characterization of a root cap-specific myosin XI in *Arabidopsis thaliana*
Kohei Tachibana^{1,2}, Keigo Ito², Yusaku Inaba², Syun Ohata², Akiho Kibukawa², Yukinori Nishigami³, Tatsuaki Goh⁴, Keiji Nakajima⁴, Motoki Tominaga^{1,2} (¹Fac. Educ. Integrated Arts. Sci., Bio., Waseda Univ., ²Grad. Sch., Adv. Sci. Eng., Waseda Univ., ³Res. Inst. Elec. Sci., Hokkaido Univ., ⁴Grad. Sch. Sci. Tech., NAIST)
- IP058 **P** Functional analysis of Syntaxin 6-like protein in vascular plants (SYLK) localized to the Golgi apparatus
Sara Tode¹, Emi Ito^{2,3}, Yoko Ito⁴, Yutaro Shimizu⁵, Wataru Yamori⁶, Naoya Katsuhama⁶, Kei Hiruma⁷, Akihiko Nakano^{8,9}, Tomohiro Uemura^{1,10} (¹Grad. Sch. Humanities and Sciences, Ochanomizu Univ., ²Division of Cellular Dynamics, National Institute for Basic Biology, ³The Department of Basic Biology, SOKENDAI, ⁴IHLS., Ochanomizu Univ., ⁵LBM, UMR5200 CNRS/Bordeaux Univ., ⁶ISAS, Univ. Tokyo, ⁷Grad. Sch. Arts and Sciences, Univ. Tokyo, ⁸Science Tokyo, Institute of Integrated Research, ⁹Faculty of Core Research, Natural Science Div., Ochanomizu Univ., ¹⁰Faculty of Core Research, Natural Science Div., Ochanomizu Univ.)
- IP059 **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)
- IP060 **P** Roles of the Sec1/Munc18 protein VPS45 and the Qa-SNARE protein SYP4 in auxin-related development in *Arabidopsis thaliana*
Kosuke Ogita¹, Narumi Fukasawa¹, Ruian Wang¹, Tomohiro Uemura², Hirokazu Tanaka¹ (¹Life Sci, Grad. Agriculture, Meiji Univ., ²Natural Sci Div, Core Research, Ochanomizu Univ.)
- IP061 **P** Integrated Pipeline for Pyrenoid Biogenesis: Combining Live Imaging, Computational Modeling, and AI-Driven Screening
Koujiro Matsuo¹, Takashi Yamano^{1,2} (¹Graduate School of Biostudies, Kyoto University, ²Center for Living Systems Information Science (CeLISIS), Kyoto University)
- IP062 **P** Analysis of the regulatory mechanism of chloroplast development by a brassinosteroid signaling factor BPG4 via its disulfide bond
Chihiro Ujihara¹, Shunshu Ri¹, Takao Ohashi¹, Ryo Tachibana², Ayumi Yamagami¹, Takuya Miyakawa¹, Takeshi Nakano¹ (¹Grad. Sch. Biostudies, Kyoto Univ., ²University of Cambridge)
- IP063 Fruits quality and photosynthesis related genes analysis of *BPG4-KO* tomato; BPG4 is a chloroplast regulating factor in Brassinosteroid signaling
Shunshu Ri¹, Chihiro Ujihara¹, Ryo Tachibana², Ayumi Yamagami¹, Magdalena Rossi³, Koichi Sugimoto⁴, Hiroshi Ezura⁴, Takeshi Nakano¹ (¹Grad. sch. Biostudies., Kyoto univ., ²Univ. Cambridge, ³Univ. San Paulo, ⁴Grad. sch. Bioindustrial Sci., Tsukuba univ.)
- IP064 Introduction of regiospecific bacterial heme oxygenases into *Arabidopsis hyl-1* supports the retrograde heme signaling hypothesis
Mihoko Takenoya¹, Takayuki Shimizu², Keita Miyake¹, Tatsuru Masuda¹ (¹Grad. Sch. Arts Sci., Univ. Tokyo, ²Fac. Div. Nat. Sci., Nara Women's Univ.)
- IP065 Functional analysis of a heme specific transporter localized at chloroplast envelope membrane in *Marchantia polymorpha*
Mihoko Takenoya¹, Noriyuki Suetsugu¹, Takayuki Shimizu², Yingxi Chen¹, Yuuma Yosioka⁷, Takaaki Miyaji^{3,7}, Koji Nishimura⁴, Hitoshi Sakakibara^{5,6}, Mikiko Kojima⁵, Yumiko Takebayashi⁵, Masami Y. Hirai⁵, Hiromitsu Tabeta⁵, Muneo Sato⁵, Keita Miyake¹, Tatsuru Masuda¹ (¹Grad. Sch. Arts Sci., Univ. Tokyo, ²Fac. Div. Nat. Sci., Nara Women's Univ., ³Grad. Sch. Med. Dent Pharm Sci., Okayama Univ., ⁴Fac. Life. Env. Sci., Shimane Univ., ⁵Cen. Sus. Sci., RIKEN, ⁶Grad. Sch. Bioagri Sci., Nagoya Univ., ⁷Adv Sci Res Ctr, Okayama Univ.)
- IP066 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)
- IP067 *Marchantia* DPD1-MutS protein degrades organelle DNA in *Arabidopsis* pollen
Tsuneaki Takami, Wataru Sakamoto (IPSR, Okayama Univ.)
- IP068 The SGR1 G139S mutation suppresses multiple phenotypes of the *egy1* mutant
Yuki Karasaki, Kenta Maezaka, Yang Fee Kim, Yusuke Kato (Fac. Agric., Setsunan Univ.)
- IP069 Intracellular distribution and differentiation status of plastids in rice gametes and developing zygotes
Riho Tomishima¹, Yumi Goto², Aya Satoh¹, Mayuko Sato², Moe Honda³, Hiroyuki Tsuji^{3,4}, Kiminori Toyooka², Takashi Okamoto¹ (¹Grad. Sch. Sci., Tokyo Metropolitan Univ., ²RIKEN CSRS, ³KIBR., Yokohama City Univ., ⁴Biosci. Biotech Ctr., Nagoya Univ.)
- IP070 The role of osmoregulation of amyloplasts in gravity sensing in *Arabidopsis thaliana*
Atsushi Togaki¹, Chikako Tanaka¹, Kanako Yamasaki¹, Yuki Sakamoto², Yoko Ishizaki¹, Takashi Shina¹ (¹Fac. Agric., Setsunan Univ., ²Fac. Sci., Shinshu Univ)

■ Cell wall

- 1P071 **P** Survey of Novel Transcription Factors Regulating Tension Wood Formation in Hybrid Aspen
Mizuho Kanie¹, Katsuhiro Tokita², Ryosuke Sano², Taku Demura², Naoki Takata³, Misato Ohtani^{1,2} (¹Grad. Sch. Sci., Univ. Tokyo, ²Grad. Bio., NAIIST, ³Forest 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 Sato¹, Soichiro Nagano², Yoshihiko Nanasato¹, Ken-ichi Konagaya¹, Toru Taniguchi¹, Naoki Takata¹ (¹Forest Bio Res. Cent., For. Forest Prod. Res. Inst., ²Forest 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 Kao⁵, Chen-Wei Hu³, Ray Wang³, Shang-Che Kuo⁶, Ming-Ren Yen³, Pin-Chien Liou⁷, Yi-Chi Ho⁷, Chia-Chen Chu⁵, Shuotian Huang^{1,2}, Jiao Liu^{1,2}, Lixia Zhang^{1,2}, Chia-Chen Wu⁸, Yi-Jyun Luo⁹, Quanzi Li¹⁰, Chuan-Chih Hsu¹¹, Chao-Li Huang¹², Jung-Chen Su¹³, Mei-Chun Tseng⁷, Ying-Lan Chen^{14,15}, Te-Lun Mai³, Ying-Chung Jimmy Lin^{3,5,6} (¹College of Forestry, Fujian Agriculture and Forestry University, ²Chinese Fir Engineering Technology Research Center of the State Forestry and Grassland Administration, ³Department of Life Science, College of Life Science, National Taiwan University, ⁴The Genome Center, University of California, ⁵Institute of Plant Biology, College of Life Science, National Taiwan University, ⁶Genome and Systems Biology Degree Program, National Taiwan University and Academia Sinica, ⁷Institute of Chemistry, Academia Sinica, ⁸School of Forestry and Resource Conservation, National Taiwan University, ⁹Biodiversity Research Center, Academia Sinica, ¹⁰National Key Laboratory for Development and Utilization of Forest Food Resources, Zhejiang A&F University, ¹¹Institute of Plant and Microbial Biology, Academia Sinica, ¹²Institute of Tropical Plant Sciences and Microbiology, National Cheng Kung University, ¹³Department of Pharmacy, National Yang Ming Chiao Tung University, ¹⁴Department of Biotechnology and Bioindustry Sciences, National Cheng Kung University, ¹⁵Graduate Program in Translational Agricultural Sciences, National Cheng Kung University)
- 1P075 Functional analysis of Trihelix transcription factors involved in xylem vessel formation in Arabidopsis
Hinata Masukagami¹, Ya Ma¹, Akira Mine³, Misato Ohtani^{1,2} (¹Grad. Sch. Front. Sci., Univ. Tokyo, ²Grad. Sch. Sci., Univ. Tokyo, ³Grad. Sch. Agri., Univ. Kyoto)
- 1P076 Functional analysis of reactive oxygen species in the early stages of ectopic vascular formation
Yusuke Ohba^{1,2}, Li Jiuyi², Keita Matsuoka¹, Yuki Kondo³, Kazuyuki Kuchitsu⁴, Shinobu Satoh⁵, Hiroaki Iwai^{5,6}, Masashi Asahina^{1,7} (¹Dept. Biosci, Teikyo Univ., ²Gard. Sch. Sci. and Tech., Univ. Tsukuba, ³Grad. Sch. Sci. Dept. Bio. Sci., Osaka Univ., ⁴Dept. appl. Bio. Sci., Tokyo Univ. Sci., ⁵Fac. Life and Env. Sci., Univ. Tsukuba, ⁶Bio. Tokai Univ., ⁷Adv. Inst. anal. Ctr., Teikyo Univ.)
- 1P077 Development of an *In Vitro* Grafting Method for Interfamily and Vegetable Grafts
Yaichi Kawakatsu¹, Hafiz Muhammad Nasir¹, Abdul Rasool Ataei¹, Michitaka Notaguchi^{1,2,3,4}, Munenori Kitagawa¹ (¹Huazhong Agricultural University, College of Horticulture and Forestry Sciences, ²Bioscience and Biotechnology Center, Nagoya University, ³Graduate School of Bioagricultural Sciences, Nagoya University, ⁴Department 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 Kurotani¹, Masashi Asahina^{2,3}, Michitaka Notaguchi¹ (¹Grad. School. Sci., Kyoto Univ., ²Env. & Biotech., Dept. Integ. Sci. & Eng., Teikyo Univ., ³Adv. 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 Tseng¹, Wei-Han Fang¹, Tzu-Chuan Huang¹, Chia-Ming Lee³, Bi-Chang Chen³, Wei-Chen Chu⁴, Shen-Long Tsai², Chin-Min Kimmy Ho¹ (¹Institute of Plant and Microbial Biology, Academia Sinica, Nangang, Taipei, Taiwan, ²Department of Chemical Engineering, National Taiwan University of Science and Technology, Taipei, Taiwan, ³Research Center for Applied Sciences, Academia Sinica, Nangang, Taipei, Taiwan, ⁴Institute 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)

- IP081 **P** A novel CLE peptide cooperates with TDIF signalling to regulate cambium stem cell fate in *Arabidopsis*
Hui Cao^{1,2}, Dongbo Shi¹ (¹RIKEN Yokohama Campus, ²University of Potsdam)
- IP082 Regulation of secondary vascular formation during taproot thickening in sugar beet
Toshiaki Kozuka¹, Srisuthep Namthip¹, Yuma Shimizu¹, Masashi Asahina^{2,3}, Yosuke Kuroda⁴, Masaki Ito¹ (¹Inst. Sci. & Eng., Kanazawa Univ., ²Env. & Biotech., Dept. Integ. Sci. & Eng., Teikyo Univ., ³Adv. Inst. Anal. Ctr., Teikyo Univ., ⁴HARC/NARO)
- IP083 **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.)
- IP084 Flowering Regulation mediated by the RABH1 group in *Involving Arabidopsis thaliana*
Asaki Sato¹, Emi Ito^{2,3,4}, Yoko Ito², Tomohiro Uemura^{1,2,5} (¹Grad. Humanities and Sciences, Univ. Ochanomizu, ²IHLS., Ochanomizu Univ., ³Division of Cellular Dynamics, NIBB, ⁴Basic Biology Program, Graduate Institute for Advanced Studies, ⁵Faculty of Core Research, Natural Science Div., Ochanomizu Univ., Department of Life Science, Ochanomizu University)
- IP085 The role of auxin in developmental changes caused by mechanical forces exerted on the floral primordium of *Arabidopsis thaliana*
Amika Kanda¹, Akitoshi Iwamoto^{1,2} (¹Dept. Biol. Sci., Grad. Sch., Sci., Kanagawa Univ., ²Dept. Biol. Sci., Fac. Sci., Kanagawa Univ.)
- IP086 Development of an Experimental System for Single-Nucleus RNA-Seq and Single-Cell Resolution Three-Dimensional Imaging Analysis of Barley Shoot Apex
Ryota Takeda¹, Jun Ito¹, Yuko Nomura¹, Nao Sato¹, Atsuko Hirota², Makoto Hayashi², Tohaku Seki², Yosuke Sasai², Ping Kao², Keiko Sugimoto², Daisuke Saisho³, Hiroshi Hisano³, Tomoki Uchino⁴, Shuhei Nasuda⁴, Kaoru Tonosaki¹, Tetsu Kinoshita¹, Kana Amagai⁵, Makoto Kashima⁵, Hiroyuki Tsuji^{1,6} (¹Kihara Inst. Biol. Res., Yokohama City Univ., ²CSRS, RIKEN., ³IPSR, Okayama Univ., ⁴Grad. Sch. Agric., Kyoto Univ., ⁵Fac. Sci., Toho Univ., ⁶Biosci. Biotechnol. Center, Nagoya Univ.)
- IP087 Single-cell resolution imaging of barley inflorescences where three meristems develop simultaneously without bracts
Ryouta Mitsuishi¹, Jun Ito¹, Yuko Nomura¹, Ryota Takeda¹, Hiroyuki Tsuji^{1,2} (¹Kihara Inst. Biol. Res., Yokohama City Univ., ²Biosci. Biotechnol. Center, Nagoya Univ.)
- IP088 *De novo* Induction of Meristem-like Structures by Gall-Inducing Midge in *Aster scaber*
Asumi Fujimoto¹, Akiteru Maeno², Tomoaki Sakamoto^{3,4}, Seisuke Kimura^{3,4}, Seiji Takeda^{1,5}, Norihiro Ohtsubo¹ (¹Grad. Sch. Life Environ. Sci., Kyoto Pref. Univ., ²Cell Architecture Laboratory, NIG., ³Faculty of Life Sciences, Kyoto Sangyo Univ., ⁴Center for Plant Sciences, Kyoto Sangyo Univ., ⁵Faculty of Science and Engineering, Yasuda Women's Univ.)
- IP089 **P** The mechanism of tomato fruit set regulated by jasmonate localization in ovule
Yukako Nomura¹, Yoshihito Shinozaki², Taiji Kawakatsu³, Mikiko Kojima⁴, Yumiko Takebayashi⁴, Hitoshi Sakakibara⁵, Hiroshi Ezura^{2,6}, Tohru Ariizumi^{2,6} (¹Graduate School of Life and Environmental Sciences, University of Tsukuba, Japan, ²Faculty of Life and Environmental Sciences, University of Tsukuba, Japan, ³Institute of Agrobiological Sciences, National Agriculture and Food Research Organization, Japan, ⁴RIKEN Center for Sustainable Resource Science, Japan, ⁵Graduate School of Bioagricultural Sciences, Nagoya University, Japan, ⁶Tsukuba Plant Innovation Research Center, University of Tsukuba, Japan)
- IP090 **P** Indispensable Roles of RBOH-mediated ROS Production Orchestrating Development and Morphogenesis in *Marchantia polymorpha*
Yuto Yamashita¹, Yuki Hagiwara¹, Kenji Hashimoto¹, Mizuki Ogawa¹, Seigo Hoshino¹, Hidemasa Suzuki², Megumi Iwano³, Toshiki Ishikawa⁴, Ryuichi Nishihama¹, Kazuyuki Kuchitsu¹ (¹Department of Applied Biological Science, Tokyo University of Science, Noda, Japan, ²Graduate School of Life Sciences, Tohoku University, Sendai, Japan, ³Graduate School of Biostudies, Kyoto University, Kyoto, Japan, ⁴Graduate School of Science and Engineering, Saitama University, Saitama, Japan)
- IP091 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)
- IP092 **P** Evolutionarily conserved RLF, a cytochrome *b₅*-like heme-binding protein, regulates organ development across land plants
Kentaro P. Iwata¹, Takayuki Shimizu², Hiromitsu Tabeta³, Yuuki Sakai¹, Tomoyuki Furuya⁴, Hinatamaru Fukumura¹, Yuki Kondo⁴, Masami Y. Hirai³, Tatsuru Masuda⁵, Kimitsune Ishizaki¹, Hidehiro Fukaki¹ (¹Grad. Sch. of Sci., Kobe Univ., ²Fac. Sci., Nara Women's Univ., ³RIKEN CSRS, ⁴Grad. Sch. of Sci., Univ. of Osaka, ⁵Grad. Sch. of Arts and Sci., Univ. of Tokyo)
- IP093 Molecular functional differentiation of three subgroups of BZR/BES transcription factors in *Marchantia polymorpha*
Tomoyuki Furuya¹, Shohei Nosaki^{2,3}, Yuki Takabatake¹, Masahiro Kasahara⁴, Yuki Kondo¹ (¹Grad. Sch. Sci., Univ. of Osaka, ²Inst. of Life and Env. Sci., Univ. of Tsukuba, ³T-PIRC, Univ. of Tsukuba, ⁴College Sch. Sci., Ritsumeikan Univ.)

- 1P094 The developmental roles of TALE homeobox transcription factors KNOX2 and BELL in hornworts
Kazune Ezaki¹, Tomoaki Nishiyama², Keiko Sakakibara¹ (¹College of Sci., Rikkyo Univ., ²Sch. of Sci., Univ. of Toyama)
- 1P095 Regulation of sex-determination gene expression associated with the transition of sexual reproductive systems in liverworts
Yukiko Yasui¹, Yuka Umeya¹, Yuki Akimoto¹, Eita Shimokawa¹, Masaki Shimamura², Takayuki Kohchi¹ (¹Grad. Sch. Biostudies, Kyoto Univ., ²Grad. 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} (¹SOKENDAI, ²National 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 Motoshige¹, Haruka Mine¹, Aya Iwaki^{1,2}, Emi Hainiwa², Shohei Yamaoka², Yutaka Kodama³, Shota Yamauchi¹, Takayuki Kohchi², Ryuuichi Nishihama¹ (¹Dept. Appl. Biol. Sci., Fac. Sci. Tech., Tokyo Univ. Sci., ²Grad. Sch. Biostudies., Kyoto Univ., ³Cent. Bio., Utsunomiya Univ.)
- 1P099 Plantlet regeneration from female gametophytes and immature embryos of *Podocarpus macrophyllus*
Yasunori Ohmiya¹, Yoshihisa Hosoi² (¹Forest Tree Breeding Center, FFPRI, ²Forestry 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 Sasaki^{1,2}, Shoji Segami^{3,4}, Dongbo Shi², Noriko Takeda-Kamiya², Hatsune Morinaka², Ayako Kawamura², Arika Takebayashi², Akira Iwase², Kiminori Toyooka², Mitsuyasu Hasebe^{3,4}, Keiko Sugimoto^{1,2} (¹Univ. Tokyo, Dep. Biol. Sci., ²CSRS, RIKEN, ³NIBB, ⁴SOKENDAI)
- 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 Nakahashi¹, Hikaru Sato¹, Nodoka Handa¹, Yuki Sakamoto², Takuya Sakamoto³, Sachihiko Matsunaga¹ (¹Dept. Integr. Biosci., Grad. Sch. Front. Sci., Univ. Tokyo, ²Fac. Sci., Univ. Shinshu, ³Fac. Sci., Univ. Kanagawa)
- 1P104 Studies on the *VAH* Gene Negatively Influencing Stemness in *Arabidopsis*
Ryuji Tsugeki¹, Yoko Ikeda², Hitoshi Mori^{3,4}, Yuta Aoyagi⁵, Hideki Hirakawa⁶ (¹Grad. Sch. Sci., Kyoto Univ., ²IPSR, Okayama Univ., ³Grad. Sch. Bioagric. Sci., Nagoya Univ., ⁴Grad. Sch. Food Agric. Sci., ⁵Kazusa DNA Res. Inst., ⁶Grad. Sch. Agri., Kyushu Univ.)
- 1P105 Embryogenesis of the family Lentibulariaceae with novel body plans
Ao Masuda¹, Mitsuyasu Hasebe², Natsu Katayama¹ (¹Grad. Sch. Sci., Univ Tokyo, ²NIBB)
- 1P106 **P** Morphological characterization of glandular trichomes and neck strip
Shaouxuan 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 Fang¹, Hiroaki Mano², Tomoaki Nishiyama³, Shuji Shigenobu⁴, Mitsuyasu Hasebe^{2,5}, Chao-Li Huang^{1,6} (¹Graduate Program in Translational Agricultural Sciences, National Cheng Kung University and Academia Sinica, Tainan, Taiwan, ²Division of Evolutionary Biology, National Institute for Basic Biology, Aichi, Japan, ³School of Science, Academic Assembly, University of Toyama, Toyama, Japan, ⁴Laboratory of Evolutionary Genomics, National Institute for Basic Biology, Aichi, Japan, ⁵Basic Biology Program, SOKENDAI (The Graduate University for Advanced Studies), Kanagawa, Japan, ⁶Institute 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)

- IP110 **P** ZYP1 Mediates Synaptonemal Complex Assembly and Ensures Crossover Assurance in Maize
Tzu-Han Huang^{1,2}, Chung-Ju Rachel Wang¹ (¹Institute of Plant and Microbial Biology, Academia Sinica, Taipei, Taiwan, ²Institute of Plant Biology, National Taiwan University, Taipei, Taiwan)

■ Reproduction

- IP111 **P** Molecular Study of Substrate Specificities and Inhibitor Recognition of *Petunia* S-RNases
Yu Wang¹, Yoshinobu Kato¹, Shuhei Kusano², Shinya Hagihara², Seiji Takayama¹, Sota Fujii¹ (¹University of Tokyo, ²RIKEN)
- IP112 **P** Comparative transcriptomic analysis reveals why endosperm does not develop in *Phalaenopsis* orchids
 Hai Nguyen Nguyen Thanh¹, Ming-Bang Huang¹, Ming-Tsair Chan^{1,2}, Masaru Ohme-Takagi¹ (¹CBB, NCKU., ²ABRC, Academia Sinica)
- IP113 **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)
- IP114 Comparing floral induction by salicylic and benzoic acid in duckweed plants, *Wolffiella hyalina*
Minako Isoda¹, Sayaka Maki², Tokitaka Oyama³, Masahiro Kanaoka² (¹Fac. Sci. Eng., Yasuda Women's Univ., ²Fac. Life Environ. Sci., Prefectural Univ. Hiroshima, ³Grad. Sch. Sci., Kyoto Univ.)
- IP115 Auxin triggered orchid ovary post-pollination morphology
Ming-Bang Huang¹, Nguyen Thanh Hai Nguyen¹, Masaru Ohme Takagi¹, Ming-Tsair Chan² (¹College of Bioscience and Biotechnology, National Cheng Kung University, ²ABRC, Academia Sinica)
- IP116 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)
- IP117 Search of new mechanisms regulating self-incompatibility on the stigma side in Brassicaceae
Hitomi Ogama¹, Hatsune Tasaka¹, Yuka Kimura¹, Seiji Takayama¹, Sota Fujii^{1,2} (¹Grad. Sch. Agric. Lif. Sci, Univ. Tokyo, ²Suntory Rising Stars Encouragement Program in Life Science)

■ Plant hormones/Signaling molecules

- IP118 **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)
- IP119 **P** Effects of root-derived genetic factors on shoot growth in *Arabidopsis thaliana* accessions
Kota Monden¹, Takatoshi Kiba², Ryo Tabata³, Takushi Hachiya⁴ (¹Grad. Sch. Nat. Sci. & Tech., Shimane Univ., ²IPSR, Okayama Univ., ³Sch. Agri., Meiji Univ., ⁴ICSR, Shimane Univ.)
- IP120 **P** Jasmonates induce seed germination of root parasitic plants
Taiki Suzuki¹, Kotaro Nishiyama², Michio Kuruma¹, Tomoya Ishikawa¹, Marco Burger³, Koji Miyamoto⁴, Wendi Jiang¹, Hanae Kaku², Hiromu Tsuzuki⁵, Naoki Kitaoka⁵, Hideyuki Matsuura⁵, Yoshiya Seto² (¹Grad. Sch. Agriculture, Meiji Univ., ²Sch. Agriculture, Meiji Univ., ³Salk Institute for Biological Studies, ⁴Fac. Science and Engineering, Teikyo Univ., ⁵Sch. Agriculture, Hokkaido Univ.)
- IP121 **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 Ting², Wan-Hsing Cheng¹ (¹Institute of Plant and Microbial Biology, Academia Sinica, ²Institute of Plant Biology, National Taiwan University)
- IP122 **P** GA-related compounds regulate plant growth by modulating cytokinin levels in *Marchantia polymorpha*
Takuya Segawa¹, Shogo Kawamura¹, Eita Shimokawa¹, Rui Sun^{1,2}, Shohei Yamaoka¹, Mikiko Kojima³, Masanori Okamoto³, Yoshihiro Yoshitake¹, Takayuki Kohchi¹ (¹Grad. Sch. Biostudies, Kyoto Univ., ²Institute for Chemical Research, Kyoto Univ., ³RIKEN Center for Sustainable Resource Science)
- IP123 **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)
- IP124 **P** Mode of action and the effects of a compound that increase both jasmonic acid and salicylic acid in *Arabidopsis*
Mizuki Ogawa¹, Sota Ogawa¹, Seigo Hoshino¹, Kentaro Namiki¹, Kaisei Chujo¹, Manami Awano¹, Nobutaka Kitahata^{1,2}, Yuhō Saito¹, Hiroshi Abe³, Tadao Asami^{2,4}, Seisuke Kimura⁵, Kenji Matsui⁶, Kouji Kuramochi¹, Kazuyuki Kuchitsu¹ (¹Dept. Appl. Biol.

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

- IP125 Screening of Novel Phloem-mobile Polypeptides
Nanami Yamaguchi, Mari Ogawa-Ohnishi, Yoshikatsu Matsubayashi (Grad. Sch. Sci., Univ. Nagoya)

■ Photoreceptors/Photoresponses

- IP126 **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)
- IP127 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)
- IP128 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)
- IP129 Functional Study of FIN219 and NPH3 Interaction in Arabidopsis Phototropism
Chia-Cheng Yen, Hsu-Liang Hsieh (National Taiwan University Institute of Plant Biology)
- IP130 Phosphoproteomic identification of novel phototropin phosphorylation substrates
Natsune Yukawa¹, Rio Goto², Saashia Fuji¹, Hinano Takase³, Hassan Nadeem⁴, Diwakar Shukla⁴, Taishi Umezawa³, Atsushi Takemiya¹ (¹Grad. Sch. Sci. Tech. Yamaguchi Univ., ²Fac. Sci. Yamaguchi Univ., ³Grad. Sch. BASE, Tokyo Univ. Agri. Tech., ⁴Dept. Bioeng., UIUC)
- IP131 Phosphorylation of a sucrose phosphate synthase by the group B4 Raf-like kinase MpPRAF in *Marchantia polymorpha*
Hayato Watanabe¹, Shota Yamauchi¹, Akida Jahan¹, Hinano Takase², Kota Yamashita², Taishi Umezawa², Ryuichi Nishihama¹ (¹Dept. Appl. Biol. Sci., Fac. Sci. Tech., Tokyo Univ. Sci., ²Grad. Sch. BASE, Tokyo Univ. Agri. and Tech.)
- IP132 Analysis of phosphorylation of translation initiation factor-binding proteins by the group B4 Raf-like kinase MpPRAF in *Marchantia polymorpha*
Tomohiro Kanazawa¹, Shota Yamauchi¹, Akida Jahan¹, Eri Koide², Takayuki Kohchi², Ryuichi Nishihama¹ (¹Dept. Appl. Biol. Sci., Fac. Sci. Tech., Tokyo Univ. Sci., ²Grad. Sch. Biostudies., Kyoto Univ.)
- IP133 An Inexpensive Benchtop Solar Simulator for the Study of Phototropism in Plants and Algae
Andy Crofts^{1,2}, Chizuru Honda¹ (¹Akita International University, Department of International Liberal Arts, ²Akita Prefectural University, Department of Biological Production)

■ Environmental response A/Physiological responses

- IP134 The effects of environmental pH on nutritropism
Haruki Murata (Graduate School of Agricultural and Life Sciences, The University of Tokyo)
- IP135 Molecular mechanisms in the root gravitropism regulation of the Brassinosteroids signaling factor BIL8
Kaname Narumi¹, Ayumi Yamagami¹, Shinn Suzuki¹, Tadao Asami², Takeshi Nakano¹ (¹Grad. Sch. Biostudies, Kyoto Univ., ²KIBR, Yokohama City Univ)
- IP136 **P** Mutation of a Ribosomal Protein (UL13X) Mediated Root Growth Defects under Calcium Deficiency in *Arabidopsis thaliana*
Yicong Chen¹, Arpna Kumari¹, Hirofumi Fukuda^{1,2}, Naoyuki Sotta^{1,3}, Toru Fujiwara¹ (¹The Faculty of Agriculture, The University of Tokyo, ²National Agriculture and Food Research Organization, ³Department of Agricultural Biology, Osaka Metropolitan University)
- IP137 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 Agrahari², Toru Fujiwara², Takehiro Kamiya² (¹Tokyo College of Biotechnology, ²Department of Applied Biological Chemistry, The University of Tokyo, Japan)
- IP138 **P** Effect of High pH on Iron Acquisition in Rice
Tomoki Okamura¹, Keita Takahashi¹, Akiko Watanabe², Sayaka Kudo², Yuta Hasegawa², Seiji Nagasaka^{1,2} (¹Grad. Sch. Life Sci., Toyo Univ., ²Dept. Life Sci., Toyo Univ.)

- IP139 **P** Analysis of light- and photosynthesis-dependent phosphorylation of plasma membrane H⁺-ATPase in plant
Xin Yu¹, Toshinori Kinoshita^{1,2} (¹Graduate School of Science, Nagoya University, ²Institute of Transformative Bio-Molecules, Nagoya University)
- IP140 Light-off signals flower-opening in the night-blooming Ipomoea nil QX909
Sumiko Kaihara¹, Soya Nakaga², Eiji Nitasaka³ (¹blank, ²Fac. Agr., Niigata-U, ³Fac. Sci., Kyushu-U)
- IP141 Enhancement of lettuce growth by lighting control synchronized with lunar rhythm
Kyosuke Kawai (TOYOTA BOSHOKU CORPORATION)
- IP142 Functional characterization of plasma membrane H⁺-ATPase in guard cells using GFP-tagged AHA1
Takeharu Koyasu¹, Koji Takahashi¹, Kohei Fukatsu¹, Yutaka Kodama², Toshinori Kinoshita^{1,3} (¹Grad. Sch. Sci., Nagoya Univ., ²C-Bio, Utsunomiya Univ., ³ITbM, Nagoya Univ.)
- IP143 S-Glutathionylation of Histone H2B At Cys⁴⁰ Regulates SPL-Dependent Flowering via BZR1–PIF4 Signaling in *Oncidium* Under High Ambient Temperature
Senthil Kumar Rajendran^{1,2}, Kai-Wun Yeh², Ching-Hui Yeh¹ (¹Department of Life Science, National Central University, Zhongli, Taoyuan, Taiwan R.O.C, ²Institute of Plant Biology, National Taiwan University, Taipei, Taiwan R.O.C)
- IP144 **P** Analysis on the circadian oscillatory mechanism independent of the KaiC phosphorylation rhythm
Maho Arakawa¹, Yoriko Murayama¹, Daichi Itaki¹, Kumiko Miwa², Moe Mimura¹, Remi Kameshima¹, Yohko Kitayama², Takao Kondo², Hideo Iwasaki¹ (¹Grad. Sch., Adv. Sci., Waseda Univ., ²Grad. Sch. Sci., Univ. Nagoya)
- IP145 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

- IP146 *Marchantia polymorpha* partially relies on MpRAD51B to maintain resistance to DNA-damaging treatments
Mika Teranishi¹, Ayako Sakamoto² (¹Graduate School of Life Sciences, Tohoku University, ²Department of Quantum-Applied Biosciences, QST)
- IP147 Role of protein disulfide isomerase PDII;1 in actin structures in *Oryza sativa* root cells
Yayoi Onda¹, Suzuka Otagawa², Tomoya Okino², Daiki Nagata² (¹Grad. Sch. Agr., Ehime Univ., ²Fac. Agr., Ehime Univ.)
- IP148 Prediction of the higher-order structure of Strontium transport proteins in *Arabidopsis thaliana*
Takeshi Nagata, Icchi Nakagawa, Mio Onoe, Takanobu Sakamoto (Setsunan University)
- IP149 Analysis of Fe Accumulation and Localization By Ti in *Arabidopsis thaliana* For Lunar Agriculture
Kazuki Indo¹, Tokuma Oiwa², Takeshi Nagata² (¹setsunan univercity graduate school of science and engineering life science, ²setsunan univercity paculty of science and engineering)
- IP150 Increase Phosphorus Utilization Efficiency in *Synechocystis* sp. PCC 6803
Rinsei Negishi, Naohiro Hososaka, Tatsunori Hiyoshi, Norihiro Sato (Tokyo University of Pharmacy and Life Sciences)
- IP151 Strategy for Exploring *cis*-elements involved in water-responsive expression of *CYP707A3* in *Arabidopsis*
Chihiro Maruyama^{1,2}, Sotaro Katagiri¹, Chisato Oshima^{1,3}, Yuri Kanno¹, Yumiko Takebayashi¹, Keisuke Fujiyama¹, Yuanjie Weng¹, Tetsuo Kushiro³, Masanori Okamoto^{1,2} (¹RIKEN • CSRS, ²Yokohama City Univ., ³Meij Univ.)
- IP152 Role of Mycosporine-like Amino Acids in Salt Stress Tolerance Mechanisms of Cyanobacteria
Tomoki Tsuboi, Hakuto Kageyama (Grad. Sch. Env. Hum. Sci. Meijo Univ.)
- IP153 **P** The temperature-dependent diversity of photosynthetic activity in bryophytes
Shoma Yoshimoto¹, Fumino Maruo², Makiko Kosugi³, Satoshi Imura^{4,5}, Chihiro Azai¹ (¹Faculty of Science and Engineering, Chuo Univ., ²New Field Pioneering Div. Toyota Boshoku Corp., ³National Institute for Basic Biology, ⁴National Institute of Polar Research, ⁵The Graduate University for Advanced Studies (SOKENDAI))
- IP154 Cysteine-rich peptide that regulates salt-induced xylem gap formation
Yu Okumura¹, Naoyuki Uchida² (¹Grad. Sch. Sci., Nagoya Univ., ²Ctr. Gene Res., Nagoya Univ.)
- IP155 Analysis of stress granule formation in *Arabidopsis* heat shock factor mutants
Yuzuki Nishi¹, Shiyu Shimoyama¹, Mei Ichikawa², Yukiko Yamamoto², Takahito Takei^{2,3}, Nobutoshi Yamaguchi⁴, Takahiro Hamada^{1,2} (¹Grad. Sch. Sci. and Eng., Okayama Univ. of Sci., ²Fac. of Sci., Okayama Univ. of Sci., ³BPRC, AIST, ⁴Grad. Sch. Sci. and Tec., NAIST)

- IP156 Galactolipid synthesis suppress cell death under zinc starvation
Kanato Ohe¹, Yoichiro Fukao¹, Yushi Yoshitake² (¹Grad. Sch. Life Sci., Ritsumeikan Univ, ²Sch. Life Sci., Ritsumeikan Univ)
- IP157 **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.)
- IP158 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 Kuribayashi¹, Hikaru Sato^{1,2}, Satoru Fujimoto³, Kazuo Shinozaki², Sachihiko Matsunaga¹ (¹Grad. Sch. Frontier Sci., Univ. Tokyo, ²RIKEN, CSRS, ³Tokyo Univ. of Sci., Dept. of Appl. Biol. Sci.)
- IP159 Cross-species analysis of ABA-induced phosphosignaling landscapes in rice, soybean, and *Arabidopsis*
Hinano Takase¹, Sotaro Katagiri², Takuma Ide¹, Aina Nagano¹, Haruki Sakurai³, Hana Kokubo⁴, Taiki Yanagisawa⁴, Masanori Okamoto², Taishi Umezawa^{1,3,4} (¹Graduate School of Bio-Applications and Systems Engineering, Tokyo University of Agriculture and Technology, ²RIKEN Center for Sustainable Resource Science (CSRS), ³Graduate School of Advanced Interdisciplinary Science, Tokyo University of Agriculture and Technology, ⁴Faculty of Agriculture, Tokyo University of Agriculture and Technology)
- IP160 Evaluation of soybean drought response using the Crop-Type automated phenotyping system CRIPPS
Miki Fujita¹, Yukari Nagatoshi², Yasunari Fujita^{2,3}, Kazuo Shinozaki¹ (¹RIKEN CSRS, ²JIRCAS, ³Tsukuba U.)
- IP161 **P** Low Concentration Ethanol Enhances Growth and Yield in Soybean: Evidence of Genotype Dependent Chemical Priming
Selwan Abdelhakam¹, Islam Abdellatif², Saki Igarashi¹, Daisuke Todaka³, Motoaki Seki^{3,4}, Kenji Miura^{1,2} (¹Degree Program in Life and Earth Sciences, University of Tsukuba, ²University of Tsukuba, ³Tsukuba-Plant Innovation Research Center, University of Tsukuba, ⁴Plant Genomics Network Research Team, RIKEN Center for Sustainable Resource Science, ⁴Kihara Institute for Biological Research, Yokohama City University)
- IP162 **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-Noguchi², Yoshihiro Ohmori³, Takehiro Kamiya², Toru Fujiwara² (¹Grad. Sch. Univ. Tokyo, ²Department of Applied Biological Chemistry, Graduate School of Agricultural and Life Sciences, The University of Tokyo, ³Agricultural Bioinformatics Research Unit, Graduate School of Agricultural and Life Sciences, The University of Tokyo)
- IP163 **P** Small Disordered Proteins Enable Rapid Cellular Protection Against Cold Stress
Arriel Fadhilah¹, Yutaro Okumura¹, Shin-ichiro Kidou^{1,2} (¹Graduate School of Science, Nagoya City University, ²Research Center for Biological Diversity, Nagoya City University)
- IP164 Physiological Effects of Long-term High Temperatures and High Humidity Conditions on *Solanum lycopersicum* cv. Micro-Tom
Takumi Morokuma¹, Lia Ooi^{1,2} (¹Research, Technology & Value Creation Division, Nagase Viita Co., Ltd., ²Faculty of Environmental, Life, Natural Science and Technology, Okayama Uni., Japan)
- IP165 The GREK receptor-like kinase family defines the leaf senescence window in *Arabidopsis*
Asuka Higo¹, Tamami Kamiya², Naoyuki Uchida¹ (¹Center for Gene Research, Nagoya Univ., ²Grad. Sch. Sci., Nagoya Univ.)
- IP166 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.)
- IP167 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)
- IP168 Functional Analysis of the Glutamate Receptor-Like (GLR) Ion Channel in *Marchantia polymorpha* and its Role in Ca²⁺ Signaling
Kyoka Hashinishi¹, Yuki Kamiya¹, Yushin Tsuruda¹, Yu Iwamoto¹, Kenshiro Watanabe¹, Kenji Hashimoto¹, Daisuke Yamada², Akiyoshi Saitoh², Kazuyuki Kuchitsu¹ (¹Department of Biological Sciences, Tokyo University of Science, ²Faculty of Pharmaceutical Sciences, Tokyo University of Science)
- IP169 Large-scale salt tolerance evaluation and population genetic analysis using *Arabidopsis thaliana* accessions
Yuki Harada¹, Kousuke Hanada², Izumi Yotsui¹, Yoichi Sakata¹, Teruaki Tajiri¹ (¹Dept. of Biosci., Tokyo Univ. of Agri, ²Dept. Biosci. Bioinfo., Kyutech)
- IP170 **P** A novel quinone inhibitor suppresses haustorium induction in Orobanchaceae parasitic plants
Saori Suga¹, Ryoga Inoue¹, Shogo Wada¹, Yumiko Shirano², Natsumi Aoki¹, Anuphon Laohavisit², Takamasa Suzuki³, Ayato Sato^{2,4}, Satoko Yoshida¹ (¹Bioscience., NAIST, ²ITbM., Univ. Nagoya, ³Grad. Biological Chemistry., Univ. Chubu, ⁴COMIT., Univ. Nagoya)

- IP171 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.)
- IP172 Functional analysis of *Arabidopsis* GRF6 that represses drought stress responses
Akari Umezawa¹, Junki Maeya¹, Ami Omata¹, Fuminori Takahashi^{1,2} (¹Grad. Sch. Fac. Adv. Eng., TUS, ²Fac. Adv. Eng., TUS)
- IP173 Functional analysis of *Arabidopsis* *NADK2* gene in response to water stress
Akiyoshi Kawaoka¹, Ryosuke Hashimoto², Satoshi Kidokoro¹, Keishi Osakabe², Yuriko Osakabe¹ (¹Sch. of Life Sci. & Tech., Inst. of Sci. Tokyo, ²Grad. Sch. of Tech., Ind. & Soc. Sci., Tokushima Univ.)
- IP174 **P** *Marchantia Polymorpha* Heat Shock Transcription Factor B Orchestrates Transcriptional Networks for Land Plant Adaptation
Huan-Chi Tien^{1,2,3,4}, Thalimaraw Lavakau¹, Kuan-Hung Lin¹, Ming-Ren Yen¹, Hsiu-Ru Yang¹, Ting-Ying Wu^{1,2,3,4} (¹Institute of Plant and Microbial Biology, Academia Sinica, Taipei, Taiwan, ²Molecular and Biological Agricultural Sciences Program, Taiwan International Graduate Program, Chung-Hsing University and Academia Sinica, Taipei, Taiwan, ³Graduate Institute of Biotechnology, National Chung-Hsing University, Taichung, Taiwan, ⁴Biotechnology Center, National Chung-Hsing University, Taichung, Taiwan)
- IP175 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.)
- IP176 Role of the HOMEODOMAIN GLABROUS in the DNA damage response in *Arabidopsis*
Toshiki Wada, Naoki Takahashi (Grad. Sch. Agri., Meiji Univ.)
- IP177 Role of gibberellin catabolism in stem cell regeneration in *Arabidopsis* roots
Miyu Isozaki, Toshiki Wada, Naoki Takahashi (Sch. Agri., Meiji Univ.)
- IP178 **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)
- IP179 **P** Rice Reproductive RNA Mechanisms in Response to Environmental Stress
Ryusei Sone^{1,2}, Reina Komiya¹ (¹RIKEN, CSRS, ²The University of Tokyo, Graduate School of Agriculture and Life Sciences)
- IP180 **P** Ecotype-Specific Sensitivity to DNA Methylation Inhibitors in *Arabidopsis*
Xin Sun, Hidetaka Ito, Atushi Kato (Hokkaido University, Morphology and Function Laboratory III)
- IP181 **P** Salt-Driven Cell Cycle Activation in Synchronized Cells of *Mesembryanthemum crystallinum*
Phan Thuy Tien Nguyen¹, Yuri Kondo¹, Sakae Agarie² (¹Graduate School of Bioresource and Bioenvironmental Sciences, Kyushu University, 744, Motooka, Nishi-ku, Fukuoka 819-0395, Japan, ²Faculty of Agriculture, Kyushu University, W5-444, 744, Motooka, Nishi-ku, Fukuoka 819-0395, Japan)
- IP182 Screening CRISPR-Edited Plant Biosensors of Detecting Phosphate Deficiency
Ming-Liang Yeh¹, Chin-Wen Chiu², Tat-Heng Lam², Choun-Sea Lin³, Chiu Chi-Chou¹, Ming-Jung Liu^{1,2} (¹Institute of Tropical Plant Sciences and Microbial Biology, NCKU, Tainan, Taiwan, ²Biotechnology Center in Southern Taiwan, Academia Sinica, Tainan, Taiwan, ³Agricultural Biotechnology Research Center, Academia Sinica, Taipei, Taiwan)
- IP183 **P** Identification of Transcription Factors for CAM Carbon Fixation Genes
Yuri Kondo¹, Tien Nguyen Phan Thuy¹, Sakae Agarie² (¹Graduate School of Bioresource and Environmental Sciences, Kyushu University, ²Graduate School of Agriculture, Kyushu University)
- IP184 **P** SALT OVERLY SENSITIVE 1 Na⁺/H⁺ antiporter operates in mature root zone and is a major contributor to root Na⁺ exclusion
Tomoki Nagata¹, Ryohei Sugita², Takaaki Ogura¹, Natsuko I. Kobayashi¹, Yuko Kurita¹, Lana Shabala³, Sergey Shabala³, Keitaro Tanoi^{1,4} (¹Grad. Sch. Agr. & Life Sci., Univ. Tokyo, ²Radioisotope Res. Ctr., Nagoya Univ., ³Sch. Biol. Sci., Univ. Western Australia, ⁴Fukushima Inst. Res., Educ. & Innov. (F-REI))
- IP185 **P** Elucidation of mechanisms underlying plant response to heat-drought combination regulated by ELM2-Domain Protein in *Arabidopsis*
Rita Rose Chacko¹, Mai Nagaya¹, Hee Yong Lee¹, Nobuhiro Suzuki² (¹Grad. Sch. Sci. Tech. Sophia. University, ²Fac. Sci. Tech. Sophia University)
- IP186 **P** Desiccation-induced dynamics of free water in bryophytes
Miyu Tanabe¹, Fumino Maruo², Makiko Kosugi³, Satoshi Imura^{4,5}, Chihiro Azai¹ (¹Faculty of Science and Engineering, Chuo Univ., ²New Field Pioneering Div. Toyota Boshoku Corp., ³National Institute for Basic Biology, ⁴National Institute of Polar Research, ⁵The Graduate University for Advanced Studies (SOKENDAI))

- 1P187 **P** Mechanistic Analysis of *ONSEN* Activation under Heat Stress and Identification of Novel Transcriptional Regulators
Zhiyu Ge¹, Hidetaka Ito² (¹Grad. Sch. Life Sci., Hokkaido Univ., ²Grad. Sch. Sci., Hokkaido Univ.)
- 1P188 **P** *Serendipita indica* volatiles mitigate cadmium uptake and toxicity in Plants
Naresh Singh Yengkhom^{1,2} (¹Academia Sinica, Biotechnology Center in Southern Taiwan, ²National 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 Choi¹, Takeru Iwama¹, Misaki Kobayashi¹, Abdellatif Islam^{1,2}, Hiroshi Ezura^{1,2}, Kenji Miura^{1,2} (¹Grad. Sci. Life & Earth Sci., Univ. Tsukuba, ²Tsukuba-Plant Innovation Research Center)
- 1P190 **P** **Isolation and Identification** of halotolerant-PGPR enhancing salt tolerance of *Arabidopsis*
Hibiki Watanabe¹, Kousuke Yamamoto², Izumi Yotsui¹, Yoichi Sakata¹, Teruaki Taji¹ (¹Dept. of Biosci., Tokyo Univ. of Agri, ²Dept. 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-Kamada¹, Katsushi Yamaguchi³, Shuji Shigenobu³, Jun Minagawa^{1,2} (¹Department of Environmental Photobiology, National Institute for Basic Biology, ²Basic Biology Course, The Graduate University for Advanced Studies, SOKENDAI, ³Trans-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 Suzuki¹, Chinatsu Sumi², Rio Shimizu², Makoto Fujiwara¹ (¹Fac. Sci. Tech., Sophia University, ²Grad. 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 Kuroe¹, Nanami Sakata¹, Yoshiteru Noutoshi¹, Kazuhiro Toyoda¹, Hirofumi Nakagami², Yuki Ichinose¹, Hidenori Matsui¹ (¹Grad. Environ. & Life Sci., Okayama Univ., ²MPIPZ)
- 1P195 **P** A Protease-like Effector Mediates Maize Susceptibility to Smut Fungi
Minh-Quang Chau^{1,2,3}, Lay-Sun Ma^{1,2,4} (¹Institute of Plant and Microbial Biology, Academia Sinica, Taipei 11529, Taiwan, ²Molecular and Biological Agricultural Sciences Program, Taiwan International Graduate Program, National Chung Hsing University and Academia Sinica, Taipei 11529, Taiwan, ³Graduate Institute of Biotechnology, National Chung-Hsing University, Taichung 402, Taiwan, ⁴Biotechnology 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 Ujimatsu¹, Paweł Bednarek², Kei Hiruma¹ (¹Grad. Sch. Art. and Sci., UTokyo, ²IBCH, PAS)
- 1P198 **P** Collaborative Regulation of PR1 Processing by Apoplastic Proteases Balances Growth and Immunity in Maize
Yu Han Lin^{1,2}, Lay-Sun Ma¹ (¹Institute of Plant and Microbial Biology, Academia Sinica, ²Institute 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} (¹Institute of Plant and Microbial Biology, Academia Sinica, Taipei, Taiwan, ²Molecular and Biological Agricultural Sciences Program, Taiwan International Graduate Program, Chung-Hsing University and Academia Sinica, Taipei, Taiwan, ³Graduate Institute of Biotechnology, National Chung-Hsing University, Taichung, Taiwan, ⁴Biotechnology Center, National Chung-Hsing University, Taichung, Taiwan)
- 1P200 **P** Hunting for oxidatively modified proteins involving in plant immune responses by redox proteomics
Yuta Hino¹, Miki Yoshioka¹, Akira Ashida¹, Maurizio Camagna¹, Daigo Takemoto¹, Kenya Tanaka², Hirofumi Yoshioka¹ (¹Grad. Sch. Bioagr. Sci., Nagoya Univ., ²EGBRC, 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 Nomezbe Nxumalo¹, Yi-Ting Chen¹, Nguyen Thanh Hai Nguyen¹, Ming-Tsair Chan², Masaru Ohme-Takagi¹ (¹National Cheng Kung University, ²ABRC, Academia Sinica)
- 1P203 **P** Possible involvement of retrograde signaling in SALICYLIC ACID INDUCTION DEFICIENT2-mediated plant immunity
Tsuyoshi Kitada¹, Wakana Harada², Ai Obayashi², Shunsuke Masuo³, Shigeyuki Betsuyaku² (¹Grad. Sch. Agr., Ryukoku Univ., ²Fac. Agr., Ryukoku Univ., ³Fac. of Life & Env. Sci./MiCS, Univ. of Tsukuba)
- 1P204 **P** Effects of growth-phase-dependent metabolisms in *Pseudomonas* sp. Y132 on duckweed growth
Tomoya Nozaki¹, Masahiro Okanami², Makoto Kashima³, Shogo Ito¹, Tokitaka Oyama¹ (¹Grad. Sch. Sci., Univ. Kyoto, ²Grad. Sch. BOST, Univ. Kindai, ³Fac. 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 Li¹, Allison Vanek^{2,3}, Michael Axtell^{2,3}, Satoko Yoshida¹ (¹Grad. Sch. Sci., Nara Institute of Science and Technology, Nara, Japan, ²Huck Institutes of the Life Sciences, The Pennsylvania State University, University Park, Pennsylvania, United States of America, ³Department 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 Lin¹, Nai-Hua Ye³, Ming-Yuan Lee³, Chao-Li Huang^{1,2} (¹NCKU-AS Graduate-Program in Translational Agriculture Sciences, NCKU, Taiwan, ²Institute of Tropical Plant Sciences and Microbiology, NCKU, Taiwan, ³Ch Biotech R&D Co., Ltd)
- 1P210 N-Glycosylation Fine-Tunes Smut Fungal Effector-PMEI Interactions in a Coevolutionary Arms Race
Chibbhi Kumarasamybaskar^{1,2,3}, Ee Yang Teoh¹, Minh-Quang Chau^{1,2,3}, Wei-Lun Tsai¹, Ooi-Kock Teh¹, Lay-Sun Ma^{1,2,4} (¹Institute of Plant and Microbial Biology, Academia Sinica, Taipei 11529, Taiwan, ²Molecular and Biological Agricultural Sciences Program, Taiwan International Graduate Program, National Chung Hsing University and Academia Sinica, Taipei 11529, Taiwan, ³Graduate Institute of Biotechnology, National Chung-Hsing University, Taichung 402, Taiwan, ⁴Biotechnology Center, National Chung Hsing University, Taichung 402, Taiwan)
- 1P211 Postfire resilience of soil bacterial communities in two *Pinus* species with contrasting fire adaptations
Yen-Ju Chen¹, Ching-An Chiu², Chao-Li Huang^{1,3} (¹Institute of Tropical Plant Sciences and Microbiology, National Cheng Kung University, Tainan, Taiwan, ²Department of Forestry, National Chung Hsing University, Taichung, Taiwan, ³Graduate 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 Lin¹, Hao-Jen Huang², Chao-Li Huang^{1,3} (¹Institute of Tropical Plant Sciences and Microbiology, National Cheng Kung University, Tainan, Taiwan, ²Department of Life Sciences, National Cheng Kung University, Tainan, Taiwan, ³Graduate 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 Shinya¹, Toshihisa Kotake², Yuka Fujiwara¹, Yuko Hojo¹, Kiwamu Hyodo¹, Akio Tani¹, Yoshihisa Yoshimi^{2,3}, Tatsuya Fujiki⁴, Raja Hasnain Ahmad⁴, Toshiki Nokami⁴, Hanae Kaku⁵, Naoto Shibuya⁵, Ivan Galis¹ (¹IPSR, Okayama Univ., ²Grad. Sch. Sci. Eng., Saitama Univ., ³Fac. Biology-Oriented Sci. Technol., Kindai Univ., ⁴Fac. Eng., Tottori Univ., ⁵Sch. 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 Cheng², Erh-Min Lai¹ (¹Institute of Plant and Microbial Biology, Academia Sinica, ²Institute of Plant Biology, National Taiwan University)
- 1P218 Analysis of transcriptomic response of Arabidopsis roots to interaction with endophytes
Tomasz Oleszkiewicz¹, Subhankar Bera¹, Atsushi J. Nagano^{2,3}, Rafał Ważny¹, Piotr Rozpądek¹, Kenji Yamada¹ (¹MCB, Jagiellonian Univ., ²BBC, Nagoya Univ., ³IAB, Keio Univ.)
- 1P219 Impact of *Rhodopseudomonas palustris* PS3 on tomato growth, soil health and soil microbiota composition
Sook-Kuan Lee¹, Ming-Shu Chiang², Zeng-Yei Hseu³, Chih-Horng Kuo⁴, Chi-Te Liu^{3,5,6} (¹Department of Horticulture, National Chung Hsing University, Taichung, Taiwan, ²Department of Agronomy, National Taiwan University, Taipei, Taiwan, ³Department of Agricultural Chemistry, National Taiwan University, Taipei, Taiwan, ⁴Institute of Plant and Microbial Biology, Academia Sinica, Taipei, Taiwan, ⁵Institute of Biotechnology, National Taiwan University, Taipei, Taiwan, ⁶Agricultural 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 Ushio¹, Aimi Watanabe¹, Kotomi Takahashi¹, Keitaro Yashiro¹, Dai Okuyama¹, Kazama Toida¹, Takashi Shimokawa², Hideo Iwasaki^{1,3} (¹Grad. ASE., Univ. Waseda, ²Inst. Quantum Science and Technology, QST, ³metaPhorest)
- 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 Fukuda², Toshihiro Sakamoto³, Yoshihiro Kawahara⁴, Ken Naito⁵, Taiji Kawakatsu^{6,7}, Jun-ichi Yonemaru^{1,2}, Daisuke Ogawa² (¹Res. Cen. Agri. Info. Tech., NARO, ²Inst. Crop. Sci., NARO, ³Inst. Agro-Env. Sci., NARO, ⁴Res. Cen. Adv. Anal., NARO, ⁵Res. Cen. Genet. Resour., NARO, ⁶Inst. Agrobio. Sci., NARO, ⁷RIKEN BRC)
- 1P224 Genome sequencing of Arabis stelleri, a sand beach-inhabiting species close to Arabidopsis
Tatsuaki Hirano¹, Kazuki Sugekawa¹, Kousuke Hanada², Yoshiharu Y. Yamamoto^{1,3,4} (¹Grad. Sch. Nat. Sci. Tech, Gifu Univ., ²Grad. Sch. Eng., Kyutech, ³Fac. Appl. Biol. Sci, Gifu Univ., ⁴RIKEN CSRS)
- 1P225 Genetic engineering of the enzymes involved in carotenoid biosynthesis in *Euglena*
Vicki Nishinarizki^{1,2}, Iman Permana Maksum^{2,3}, Shun Tamaki⁴, Anzu Minami^{1,5}, Keiichi Mochida^{1,5,6,7}, Toto Subroto^{2,3} (¹RIKEN, CSRS, ²Faculty of Mathematics and Natural Sciences, Universitas Padjadjaran, ³Research Center for Molecular Biotechnology and Bioinformatics, Universitas Padjadjaran, ⁴Department of Biological Science, Faculty of Sciences and Engineering, Yasuda Women's, ⁵Kihara Institute for Biological Research, Yokohama City University, ⁶RIKEN BZP, ⁷School 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 Oshima¹, Hikaru Sato¹, Megumi Matsuoka¹, Mio K. Shibuta², Takuya Sakamoto³, Nanami Ito¹, Tatsuaki Goh⁴, Yuko Sato⁵, Hiroshi Kimura⁶, Sachihiko Matsunaga¹ (¹Dept. Integrated Biosci., Grad. Sch. Frontier Sci., Univ. Tokyo, ²Fac. Sci., Yamagata Univ., ³Dept. Sci., Fac. Sci., Kanagawa Univ., ⁴Div. Biol. Sci., Grad. Sch. Sci. Tech., NAIST, ⁵MIB, Kyushu Univ., ⁶IIR, Science Tokyo)
- 1P228 Imaging analysis of histone acetylation in different cell types of *Arabidopsis thaliana*
Misaki Toriawa¹, Takuya Sakamoto¹, Shigeru Hanamata^{1,2}, Mio K. Shibuta³, Yuko Sato⁴, Hiroshi Kimura⁵, Sachihiko Matsunaga⁶ (¹Fac. Sci., Kanagawa Univ., ²Fac. Pharm. Sci., Tokyo Univ. Sci., ³Fac. Sci., Yamagata Univ., ⁴Med. Inst. Bioreg., Kyushu Univ., ⁵Cell Biol. Center, Instit. Innov. Res., Science Tokyo, ⁶Grad. Sch. Sci., Univ. Tokyo)

- 1P229 Effect of boron conditions on chromatin structures and gene expression profiles in *Arabidopsis* cultured cells
Ayane Komatsu¹, Shigeru Hanamata^{1,2}, Shimpei Uraguchi^{3,4}, Yudeki Nakamura³, Masako Kiyono³, Takuya Sakamoto¹ (¹Fac. Sci., Kanagawa Univ., ²Fac. Pharm. Sci., Tokyo Univ. Sci., ³Dep. Public Health., Sch. Pharm., Kitasato Univ., ⁴Grad 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 m⁶A writer complex
Takumi Noyori¹, Shusei Mori^{1,2}, Hiroshi Watanabe¹, Soichi Inagaki¹ (¹Dept. Biol. Sci., Grad. Sch. Sci., Univ. Tokyo, ²Dept. Plant Sci., Univ. Cambridge)
- 1P232 Elucidation of the Epigenetic Growth Control Mechanism of *met1* mutants
Hisashi Iitsuka, Yuho Itabashi, Naoya Sugi, Miyako Kusano, 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 Liao¹, Chin-Min Ho², Keqiang Wu¹ (¹Institute of Plant Biology, National Taiwan University, ²Institute 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 Su¹, Ching-Han Chang², Hao-Jen Huang^{1,2} (¹Dept. Life Sci., Natl. Cheng Kung Univ., ²Grad. 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, Chiayi, Taiwan)
- 1P239 **P** BASIC PENTACYSSTEINES 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 differentiation
Yusei Yanagiya¹, Toshihiro Arae², Misato Ohtani^{1,2} (¹Grad. Sch. Front. Sci., Univ. Tokyo, ²Grad. Sch. Sci., Univ. Tokyo)
- 1P242 Development of efficient regeneration system for resource crops by transcriptional activation using CRISPR-dCas9
Jo Nishimura¹, Jun Sakaguchi¹, Miki Takehara¹, Satoshi Kidokoro¹, Keishi Osakabe², Yuriko Osakabe¹ (¹Sch. of Life Sci. & Tech., Science Tokyo., ²Grad. 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 Takeuchi¹, Toshiaki Ishikawa², Toshihiro Arae¹, Munetaka Sugiyama³, Misato Ohtani^{1,3,4,5} (¹Grad. Sch. Front. Sci., Univ. Tokyo, ²Grad. Sch. Sci. Eng., Saitama Univ., ³Grad. Sch. Sci., Univ. Tokyo, ⁴Div. Bio. Sci., NAIST, ⁵CSRS, 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 14-3-3 ω to promote root growth
Freta Kirana Balladona^{1,2} (¹Graduate Program of Translational Agricultural Sciences, National Cheng Kung University, Taiwan, ²Academia 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 Aprilio¹, Akane Kitamura², Atsushi Okazawa³, Yutaka Tamaru^{4,5}, Takeshi Obayashi^{1,2} (¹Graduate School of Information Sciences, Tohoku University, ²Advanced Institute of Marine Ecosystem Change (WPI-AIMEC), Tohoku University, ³Department of Agricultural Biology, Graduate School of Agriculture, Osaka Metropolitan University, ⁴Green X-tech Research Center, Green Goals Initiative, Tohoku University, ⁵Department 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 Trinh¹, Ka-Wai Ma^{1,2} (¹Institute of Plant and Microbial Biology, Academia Sinica, Taipei, Taiwan, ²Molecular 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 Fang¹, Tzu-Chuan Huang¹, Chun-Ping Yu², Chynthia Devi Hartono^{1,3}, Chin-Min Kimmy Ho¹ (¹Institute of Plant and Microbial Biology, Academia Sinica, Taipei, Taiwan, ²Research Center for Information Technology, Academia Sinica, Taipei, Taiwan, ³Department 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 Nishiyama¹, Haruka Kimura¹, Ayato Sato^{2,3}, Makoto Shirakawa⁴, Yoshiya Seto¹ (¹Sch. Agri., Meiji Univ., ²WPI-ITbM, Nagoya Univ., ³COMIT, Nagoya Univ., ⁴IPMB, 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 Sweet¹, Wei-Jia Liu¹, May Htet Aung¹, Chih-Hang Wu^{1,2,4} (¹Institute of Plant and Microbial Biology, Academia Sinica, Taipei 115201, Taiwan, ²Molecular and Biological Agricultural Sciences Program, Taiwan International Graduate Program, National Chung Hsing University and Academia Sinica, Taipei 115201, Taiwan, ³Graduate Institute of Biotechnology, National Chung Hsing University, Taichung 402202, Taiwan, ⁴Biotechnology 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 corollata*)
Koya Ito¹, Reiko Kogishi¹, Sayaka Shindo¹, Rina Shimo¹, Yukiko Shimbo¹, Maki Ohtsubo¹, Keisuke Matsui², Kenichi Suzuki², Koichi Tomomatsu², Norihiro Ohtsubo¹ (¹Grad. Sch. Life Environ. Sci., Kyoto Pref. Univ., ²Suntory Flowers, Ltd.)
- 1P252 Development and use of cloning system for problematic genes
Yuta Iwamoto¹, Wang Junhao², Hideaki Nojiri², Takushi Hachiya¹, Yutaka Sato³, Kazunori Okada², Tsuyoshi Nakagawa¹ (¹Cent. Integ. Res. Sci., Shimane Univ., ²Agro-Biotech. Res. Cent. Grad. Sch. Agr. Life Sci., Univ. Tokyo, ³Plant 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 Yu¹, Yu-Ling Hung¹, Chi-Ling Huang¹, Jia-Ling Guo¹, Sae Anada², Keisuke Inoue^{2,3}, Takashi Araki², Shih-Shun Lin¹ (¹Institute of Biotechnology, National Taiwan University, ²Graduate School of Biostudies, Kyoto University, ³CeLiSIS, Kyoto University)
- 1P255 Boosting CRISPR Power in Moss: Dual-gRNA and Polycistronic Designs Enable Large, Multiplex Gene Deletions
Elena Kozgunova^{1,2} (¹Graduate School of Science, Nagoya University, ²Institute 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 Komagata¹, Chisato Watarai¹, Kimiyo Sage-Ono¹, Masaki Endo², Seiichi Toki^{2,3}, Tsubasa Yano⁴, Teruhiko Terakawa⁴, Michiyuki Ono¹ (¹T-PIRC, Univ. Tsukuba, ²NIAS, NARO, ³Ryukoku Univ., ⁴Inplanta 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 Chen¹, Po-Ching Wang² (¹National Taiwan University, Department of Forestry and Resource Management, ²National Chiayi University, Department of Landscape Architecture)

■ Photosynthesis

- 2P001 Adaptation of energy transfer in red alga *Porphyridium Purpureum* to different green light intensities
Hidetaka Kurachi¹, Shimpei Aikawa², Seiji Akimoto¹ (¹Grad. Sch. Sci., Kobe Univ., ²JIRCAS)
- 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 Kitamura¹, Jian Xing², Minoru Kumazawa³, Atsushi Takabayashi³, Kentaro Ifuku^{1,2} (¹Fac. Agri., Kyoto Univ., ²Grad. Sch. Agri., Kyoto Univ., ³Inst. Low Temp. Sci., Hokkaido Univ.)
- 2P004 Efficient Quenching by Phosphorylated Lhcb1-Enriched PSI-PSII Megacomplexes Formed in Thylakoid Membranes of Iron-Deficient Barley
Akihiro Saito¹, Suzuha Hirayama¹, Miku Arakaki¹, Kai Nakano¹, Makio Yokono², Yusuke Shikanai¹, Kyoko Higuchi¹ (¹Dept. Agric. Chem., Fac. Appl. Biosci., Tokyo Univ. Agric., ²Div. 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 Tsukatani¹, Arisa Nishihara², Chihiro Azai³, Masaru K. Nobu¹ (¹JAMSTEC, ²AIST, ³Fac. 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 crispera*
Hibika Umehara^{1,2}, Makiko Kosugi^{1,2}, Jun Minagawa^{1,2} (¹Natl. Inst. Basic Biol., ²SOKENDAI)
- 2P010 Far-red light absorption and excitation energy transfer mechanism in the far-red light-harvesting antenna protein complex in a green alga, *Prasiola crispera*
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} (¹Nat. Inst. Basic Biol., ²Grad. Inst. Adv. Stu., SOKENDAI, ³Dep. App. Chem., Univ. Tokyo, ⁴Res. Cent. Adv. Sci. Tech., Univ. Tokyo, ⁵Res. Cent. Integ. Molecul. Sys., Inst. Molecul. Sci., ⁶Grad. Sch. Engin. Sci., Univ. Osaka)
- 2P011 Redox Regulation of PPK-Regulatory Proteins from *Arabidopsis thaliana*
Subaru Nishide^{1,2}, Keisuke Yoshida^{1,2} (¹Laboratory for Chemistry and Life Science, Institute of Integrated Research, Institute of Science Tokyo, Yokohama Japan, ²School 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., Kwansai Gakuin Univ)
- 2P013 Correlation between the intercellular CO₂ concentration and the heat dissipation during phase transition in CAM plants
Shunki Kawata¹, Naoki Ohishi², Shin Kore-eda¹ (¹Grad. Sch. Sci. and Eng., Saitama Univ., ²Dept. 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 Chan¹, Ming-Yang Ho^{1,2} (¹Department of Life Science, National Taiwan University, ²Institute 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 Chen², Hsiu-An Chu³, Ming-Yang Ho^{1,2} (¹Institute of Plant Biology, National Taiwan University, ²Department of Life Science, National Taiwan University, ³Institute of Plant and Microbial Biology, Academia Sinica)
- 2P017 Effectiveness of Protamine in the Cell Harvesting Process of *Synechocystis* sp. PCC 6803
Kokone Sato¹, Michiyo Honda², Takashi Osanai¹ (¹Sch. Agr., Univ. Meiji, ²Sch. Sic., Univ. Meiji)
- 2P018 Significance of Acetate Metabolism in Cyanobacteria
Yuka Soga¹, Masahiro Karikomi², Takashi Osanai¹ (¹Agri., Univ. Meiji, ²Grad. Sch. Agri., Univ. Meiji)

- 2P019 Analysis of the effect of polysulfide on chloroplast biogenesis in *Arabidopsis thaliana*
Otoa Matsui¹, Shingo Kasamatsu², Yousuke Seto³, Satoru Watanabe⁴, Tomohiko Tsuge⁵, Hideshi Ihara², Tatsuru Masuda⁶, Takayuki Shimizu¹ (¹Graduate School of Humanities and Sciences, Nara Women's University, ²Graduate School of Science, Osaka Metropolitan University, ³Cancer Chemotherapy Center, JFCR, ⁴Faculty of Life Sciences, Tokyo University of Agriculture, ⁵Institute for Chemical Research, Kyoto University, ⁶Graduate School of Arts and Sciences, The University of Tokyo)
- 2P020 Functional analysis of chloroplast formation factors in early branching cyanobacteria
Shota Suzuki¹, Wataru Sakamoto², Toshihiko Eki^{1,3}, Shigeru Kawai¹, Yuu Hirose^{1,3} (¹Toyohashi Tech. Grad. Sch. Eng., Dept. of Appl. Chem. & Life Sci., ²Okayama Univ. Inst. of Plant Sci. & Resources, ³Toyohashi 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 Atsuzawa², Egi tritya Apdila³, Yasuko Kaneko², Koichiro Awai³, Masaru K. Nobu⁴, Yusuke Tsukatani⁵, Shigeaki Ehira¹ (¹Grad. Sch. Sci, Tokyo Metropolitan Univ, ²Grad. Sch. Sci Eng., Saitama Univ., ³Grad. Sch. Sci. Tec., Shizuoka Univ., ⁴XSTAR., JAMSTEC, ⁵BGC., JAMSEC)
- 2P022 Intracellular thiol modifications of transcription factors responsive to polysulfide and reactive oxygen species in photosynthetic bacteria
Otoha Takeda¹, Masaru Hashimoto², Shingo Kasamatsu³, Tatsuru Masuda⁴, Takayuki Shimizu¹ (¹Faculty of Science, Nara Women's University, ²Graduate School of Agricultural and Life Sciences, The University of Tokyo, ³Graduate School of Science, Osaka Metropolitan University, ⁴Graduate School of Arts and Sciences, The University of Tokyo)
- 2P023 Functional Analysis of Polysulfide- and ROS-Sensing Transcriptional Regulators in Purple Photosynthetic Bacteria
Shuxian Wang¹, Yosuke Seto², Yutaro Kumagai³, Masaru Hashimoto⁴, Shintaro Maeno⁵, Yasuhiro Gotoh⁶, Tetsuya Hayashi⁷, Tatsuru Masuda⁸, Takayuki Shimizu¹ (¹Graduate School of Humanities and Sciences, Nara Women's University, ²Cancer Chemotherapy Center, JFCR, ³Department of Life Science and Biotechnology, AIST, ⁴Graduate School of Agriculture and Life Science, The University of Tokyo, ⁵Organization for Research Initiatives, Yamaguchi University, ⁶Advanced Genomics Center, NIG, ⁷Graduate School of Medical Sciences, Kyushu University, ⁸Graduate 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 Ikushima¹, Nanako Kanno², Shigeru Kawai³, Shinsuke Shiget², Tatsuru Masuda⁴, Christiane Dahl⁵, Takayuki Shimizu¹ (¹Faculty of Science, Nara Women's University, ²Department of Chemistry, School of Science, Kwansei Gakuin University, ³Department of Applied Chemistry and Life Science, Toyohashi University of Technology, ⁴Graduate School of Arts and Sciences, The University of Tokyo, ⁵Institut für Mikrobiologie & Biotechnologie, Rheinische Friedrich-Wilhelms-Universität Bonn)
- 2P025 Photosynthetic analyses of the double mutants of TRXf and chloroplast-localized eukaryotic TXRs in *Marchantia polymorpha*
Taichi Sugiyama¹, Yuuki Sakai², Masaru Kono^{1,3}, Kimitsune Ishizaki², Keisuke Yoshida¹ (¹CLS, Sci. Tokyo, ²Grad. Sch. Sci. Kobe Univ., ³ABC)
- 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 Harada¹, Ken Yamamoto¹, Hitoshi Tamiaki² (¹Dept. Med. Biochem., Kurume Univ. Sch. Med., ²Grad. Sch. Life Sci., Ritsumeikan Univ.)
- 2P028 Synergistic Co-utilization of Malate and Succinate Enhances Photofermentative H₂ 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 Seo¹, Kazuhito Inoue², Hirofumi Komori³ (¹Inst. Mat. Sci., Kanazawa Univ., ²Dep. Biochem. Biotech., Kanagawa Univ., ³Fac. 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 Kishie¹, Daisuke Takagi² (¹Grad. Sch. Agric., Setsunan Univ., ²Fac. Agric., Setsunan Univ.)

- 2P032 Physiological and Transcriptomic Characterization of a Nitrogen-Insensitive Variety from the World Rice Core Collection
Honoka Kurikawa¹, Keisuke Kutsuwada¹, Tomoko Nishizawa², Mikiko Koizumi², Makoto Kobayashi², Takanari Tanabata³, Atsushi Fukushima^{4,5}, Miyako Kusano^{2,6,7} (¹Grad. Sch. Life and Envi Sci., Univ. Tsukuba, ²CSRS., RIKEN, ³Sci. & Tech., Univ. Chitose Inst. Sci. and Tech., ⁴Life and Envi Sci., Univ. Kyoto Pref, ⁵R-IH., RIKEN, ⁶Life and Envi Sci., Univ. Tsukuba, ⁷T-PIRC)
- 2P033 Dynamics of Triacylglycerol Accumulation during Seed Development in Soybean and *Arabidopsis thaliana*
Yuta Ihara¹, Yuki Nakamura^{1,2} (¹CSRS, RIKEN, ²Grad. Sch. Sci., Univ. Tokyo)
- 2P034 Functional analysis of phosphocholine in *Arabidopsis* roots
Moe Ito^{1,2}, Van C. Nguyen², Artik Elisa Angkawijaya², Misako Kato¹, Yuki Nakamura^{2,3} (¹Graduate School of Science, Ochanomizu University, ²RIKEN CSRS, ³Department 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 Monden¹, Daisuke Otomaru¹, Takamasa Suzuki², Tsuyoshi Nakagawa³, Takushi Hachiya³ (¹Graduate School of Natural Science and Technology, Shimane University, ²College of Bioscience and Biotechnology, Chubu University, ³Department 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 Hamada¹, Kenichi Uchida², Takao Yokota², Takahito Nomura¹ (¹Ctr. for Biosci. Res. and Edu., Utsunomiya Univ., ²Fac. of Sci. and Eng., Teikyo Univ.)
- 2P037 Characterization of sterol metabolic enzymes in *Physcomitrium patens*
Rin Nakamura¹, Masaharu Mizutani², Takahito Nomura¹ (¹Ctr. for Biosci. Res. and Edu., Utsunomiya Univ., ²Grad. 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 subcellular 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 (Institute of Molecular and Cellular Biology, National Taiwan University)
- 2P042 Effects of elicitors on the levels of cysteine sulfoxide derivatives in *Allium* species
Shimpei Kawaguchi¹, Kanako Murata¹, Ayuna Kisanuki¹, Takashi Asano², Mami Yamazaki^{1,3}, Naoko Yoshimoto^{1,3} (¹Grad. Sch. Pharm. Sci., Chiba Univ., ²Sch. Pharm., Iwate Med. Univ., ³Plant Mol. Sci. Cent, Chiba Univ.)
- 2P043 Identification and functional analysis of beta-substituted alanine synthases in garlic
Mio Takeda¹, Mami Yamazaki^{1,2}, Naoko Yoshimoto^{1,2} (¹Grad. Sch. Pharm. Sci., Chiba Univ., ²Plant Mol. Sci. Cent., Chiba Univ.)
- 2P044 Aluminum resistance in *Eucalyptus camaldulensis* with knockdown of hydrolysable tannin biosynthesis
Ko Tahara¹, Mitsuru Nishiguchi¹, Hideyuki Ito^{2,3}, Haruna Uemori^{3,4}, Yuji Iwaoka³, Hiromi Yamashita³, Toshiyuki Murakami⁴, Chihiro Oda-Yamamizo¹ (¹FFPRI, ²National Institutes of Biomedical Innovation, Health and Nutrition, ³Grad. Sch. Okayama Prefectural Univ., ⁴Maruzen 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 Fukayama¹, Takumi Ogawa¹, Kenji Miura², Manabu Horikawa³, Atsushi Okazawa¹ (¹Grad. Sch. Agric., Osaka Met. Univ., ²Fac. Sch. Life Environ. Sci., Univ. Tsukuba, ³Bioorg. 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 Lau², Yuko Makita³, Fetrina Oktavia⁴, Tomoko Kuriyama⁶, Minami Matsui^{5,6} (¹Keio University, Division of Biology, ²Universiti Sains Malaysia, ³Mebashi Institute of Technology, ⁴Indonesian Rubber Research Institute, ⁵Yokohama City University, ⁶RIKEN 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 Akiyama¹, Arisa Nakae¹, Tsukasa Mikawa¹, Bubwoong Kang¹, Masaharu Mizutani¹, Tsubasa Shoji²
 (1Grad. Sch. Agric. Sci., Kobe Univ., 2INM, 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. Kobayashi¹, Ayako Nishizawa-Yokoi², Yusaku Noda³, Naoto Yamada³, Naoki Kawachi^{3,4}, Koichi Ito⁵, Keitaro Tano^{1,4}
 (1Grad. Sch. Agri. Life Sci., Univ. Tokyo, 2NARO, 3QST, 4F-REI, 5Grad. Sch. Front. Sci., Univ. Tokyo)
- 2P051 Nitrate transporter NRT1.11/1.12 affect leaf angle in *Arabidopsis*
Yiyi Juan^{1,2}, Po-Kai Hsu¹, Yi-Fang Tsay¹ (1Institute of molecular biology, Academia Sinica, 2Department of Agronomy, National Taiwan University)
- 2P052 CO₂ 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 Onishi¹, Noriya Hayashi¹, Hirotaka Inuma¹, Toshiki Mori², Atsushi Kaido¹, Toshihiro Watanabe¹, Zhihang Feng³, Takehiro Kamiya³, Toru Fujiwara³, Yuta Hiragori¹, Satoshi Naito¹, Hitoshi Onouchi¹ (1Grad. Sch. Agr., Hokkaido Univ., 2Sch. Agr., Hokkaido Univ., 3Grad. 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 Nakata¹, Taiga Hagimoto¹, Akira Nozawa², Tatsuya Sawasaki², Jian Feng Ma³, Toshinori Kinoshita⁴, Shin-ichiro Inoue¹
 (1Grad. Sch. Sci. Eng., Saitama Univ., 2PROS, Ehime Univ., 3IPSR, Okayama Univ., 4ITbM, 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 Kazama¹, Keisuke Igarashi², Kinya Toriyama² (1Grad. Sch. Biores. Bioenviron. Sci., Kyushu Univ., 2Grad. Sch. Agri. Sci., Tohoku Univ.)
- 2P056 On Gene Expression in Plant Mitochondria: Transcription and RNA editing
 Jingchan Xie¹, Jingxiu Ji¹, Akihito Mamiya¹, Chang Zhou², Tenghua Wang¹, Sachi Takenaka¹, Issei Nakazato², Shin-ichi Arimura², Mizuki Takenaka¹ (1Grad. Sch. Sci., Kyoto Univ., 2Grad. Sch. Agric., Univ. Tokyo)
- 2P057 Functional analysis of plant AOX in mitochondrial thermogenesis
Shungo Higashi¹, Takashi Fukada¹, Yasuko Ito-Inaba², Noriko Inada¹ (1Osaka Metropolitan Univ., Schl. Of Agri, 2Fac. 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 Komatsu¹, Ryotaro Kitayama¹, Ryota Suzuki¹, Sota Izumi¹, Mayu Ito¹, Arisa Masuko¹, Takahiro Ni¹, Eri Kondo¹, Masafumi Hidaka¹, Mao Suganami², Masanori Izumi³, Shinya Wada¹, Hiroyuki Ishida¹ (1Grad. Sch. Agri. Sci., Tohoku Univ., 2IFeS, Fac. Food Agri. Sci., Fukushima Univ., 3CSRS, Riken)
- 2P060 Structural analysis of the peroxisomal ATP-dependent protease LON2, a regulator of autophagy
 Wataru Tsuchiya¹, Keiko Yokoi¹, Masato Akutsu¹, Satomi Inaba-Inoue², Toshio Moriya², Toshiya Senda², Shino Goto-Yamada³, Akira Kato⁴, Noritoshi Inagaki¹ (1NARO/RCAA, 2KEK/SBRC, 3NIBB/Lab. Organelle Reg., 4Niigata 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 Takiura¹, Jun Obara², Motoki Tominaga³ (¹Sch. Edu, Sci., Bio., Waseda Univ., ²Grad. Sch., Adv. Sci. Eng., Waseda Univ., ³Educ. 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 Nakamura¹, Satoshi Naramoto², Yoshikatsu Sato³, Yuji Hiwatashi⁴ (¹Grad. Sch. Food, Agricul. Environ. Sci., Miyagi Univ., ²Grad. Sch. Life Sci., Hokkaido Univ., ³ITbM, Nagoya Univ., ⁴Sch. Food, Agricul. Environ. Sci., Miyagi Univ.)
- 2P064 Elucidating the role of MPB2C in cortical microtubule nucleation
Yuto Yamazumi¹, Noriyoshi Yagi², Masayoshi Nakamura² (¹Grad. Sch. Sci., Univ. Nagoya, ²Grad. 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 Sagawa¹, Satomi Tai², Sawa Mizuguchi¹, Kazuo Ebine³, Takashi Ueda³, Hirokazu Tanaka¹ (¹Dept. Life Sci. Agriculture, Meiji Univ., ²Grad. Sch. Sci., Osaka Univ., ³Division 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
Ruihan Wang, Kosuke Ogita, Hirokazu Tanaka (Meiji Univ. Grad. School of Agri.)
- 2P071 Observation of Plasmodesmata Formation During Grafting
Nao Nakamigawa¹, Chika Otake¹, Yoko Ito², Tomohiro Uemura^{1,2} (¹Grad. Sch. Humanities and Sciences, Ochanomizu Univ., ²IHLS., Ochanomizu Univ.)
- 2P072 Localization Analysis of PDLP1 and PDLP5 Using Super-Resolution Live Imaging
Chika Otake¹, Nao Nakamigawa¹, Yoko Ito², Masayoshi Nakamura³, Shiori Nagahara⁴, Michitaka Notaguchi⁴, Tomohiro Uemura^{1,5} (¹Grad. Sch. Life Sci., Ochanomizu Univ., ²Human Life, Ochanomizu Univ., ³Grad. Sch. Sci. & Engr., Saitama Univ., ⁴Grad. Sch. Sci., Kyoto Univ., ⁵Fac. of Core Recr., Ochanomizu Univ.)

■ Cell wall

- 2P073 Cell wall integrity in mechanosensing shapes wound-induced regeneration patterns
Shunenn 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 *Sphagnum palustre*
Tadashi Kunieda^{1,2}, Suguru Aiba¹, Natsune Nakamura¹, Taku Demura^{1,2} (¹Div. of Biol. Sci., NAIST, ²CDG, NAIST)
- 2P076 Analysis of the effects of varieties of white light source on sturdy stem formation in *Arabidopsis thaliana*
Koshiro Hatanaka¹, Momoka Ohashi², Daisuke Takahashi², Toshiya Yokoyama³, Kazuhiko Nishitani³, Takuya Sakamoto³, Mariko Asaoka³ (¹Grad. Fac. Sci., Kanagawa Univ., ²Grad. Sch. Sci. Eng., Saitama Univ., ³Fac. Sci., Sci., Kanagawa Univ.)
- 2P077 Identification and molecular characterisation of pollen-derived cutin-degrading enzymes
Mengyi Xu¹, Yoshinobu Kato¹, Seiji Takayama¹, Sota Fujii^{1,2} (¹Grad. Sch. Agri. Life Sci., Univ. Tokyo, ²Suntory SunRISE)
- 2P078 Effects of glucosylation of haustorium inducing factors on haustorium induction in parasitic plants
Moe Takahashi¹, Lei Xiang¹, Shoko Inaba², Bing Xie¹, Takayuki Tohge³, Yuki Tobimatsu⁴, Satoko Yoshida¹ (¹NAIST, Plant Symbiosis, ²Kansai Gakuin Uni., ³NAIST, Plant Secondary Metabolism, ⁴Kyoto Uni.)
- 2P079 β -Galactoglucosylmannan is involved in cell adhesion in tomato fruit
Yoshihisa Yoshimi^{1,2}, Li Yu², Konan Ishida², Rosalie Cresswell^{2,3}, Raymond Wightman⁴, Georgina Lindop⁵, Karin Müller⁵, William Willats⁶, Paul Dupree^{2,3}, Paul Dupree² (¹Fac. Bio.-Ori. Sci. Tech, Kindai Univ., ²Dept. Biochem., Univ. Cambridge, ³Dept. Phys., Warwick Univ., ⁴Sainsbury Lab., Univ. Cambridge, ⁵Cam. Adv. Imag. Cent., Univ. Cambridge, ⁶Sch. Nat. Env. Sci., Newcastle Univ.)

■ Development/Morphogenesis

- 2P080 The Role Of The Phloem Specific NAC Transcription Factor In The Phloem Development
Shinnosuke Kajiwara¹, Tatsuo Kakimoto¹, Yuki Kondo¹, Pingping Qian^{1,2} (¹Graduate School of Science, The University of Osaka, ²Graduate 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-Ito¹, Marino Mori¹, Kuninori Iwamoto¹, Hiroo Fukuda² (¹Grad. Sch. Sci., The Univ. of Tokyo, ²Akita Prefectural Univ.)
- 2P083 *LSH4/LSH10* mediated root growth regulation downstream of VLCFA signaling under high ambient temperature
Nanami Yasui¹, Yuta Uemura¹, Rena Kasahara¹, Rika Sasaki¹, Takamasa Suzuki², Hironaka Tsukagoshi¹ (¹Grad. Sch. Agr. Meijo Univ., ²Coll. Biosci. & Biotech. Chubu Univ.)
- 2P084 Elucidation of a novel molecular mechanism of plant growth induced by root zone cooling
Yuri Hachisuka¹, Yuta Uemura¹, Rena Kasahara¹, Takamasa Suzuki², Hironaka Tsukagoshi¹ (¹Grad. Sch. Agr. Meijo Univ., ²Coll. 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 Sonoda¹, Kazuhiro Ito¹, Takamasa Suzuki², Takumi Higaki³, Hidehiro Fukaki⁴, Kousuke Hanada⁵, Koh Iba¹, Kensuke Kusumi¹ (¹Grad. Sch. Sci., Kyushu Univ., ²Col. Biosci. Biotech., Chubu Univ., ³Kumamoto Univ., FAST, ⁴Grad. Sch. Sci., Kobe Univ., ⁵Dep. Biosci. Bioinform., Kyutech.)
- 2P087 A Novel Circadian Clock Transcriptional Complex Regulating Lateral Root Development
Ayano Kato¹, Sota Nomoto¹, Syunsaku Yamamoto¹, Takumi Ohnakado¹, Kosuke Mase¹, Satomi Sakaoka¹, Takamasa Suzuki², Soichi Inagaki³, Yasuomi Tada⁴, Yoshikatsu Matsubayashi⁵, Norihito Nakamichi⁶, Hironaka Tsukagoshi¹ (¹Agr., Meijo Univ., ²Col. Biosci. Biothech., Chubu Univ., ³Grad. Sch. of Sci., Tokyo Univ., ⁴Cent. Gene Res., Nagoya Univ., ⁵Grad. Sch. Sci., Nagoya Univ., ⁶Grad 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 Mase¹, Honomi Mizuno¹, Keigo Nakamura¹, Koki Tomida¹, Nanari Furukawa¹, Shiho Ueno¹, Sesshu Takagi¹, Kanau Sato¹, Satomi Sakaoka¹, Takamasa Suzuki², Soichi Inagaki³, Atsushi Morikami¹, Hironaka Tsukagoshi¹ (¹Faculty of Agr., Univ. Meijo, ²Biosci. Biotech., Univ. Chubu, ³Grad. Sch. Sci., Univ. Tokyo)
- 2P089 CLE46 Peptide Signal in Wound-induced Root Regeneration in *Arabidopsis*
Tatsuya Ito¹, Hiroo Fukuda^{2,3}, Satoshi Endo² (¹Grad. Sch. Bioenviron. Sci., Kyoto Univ. Adv. Sci., ²Fac. Bioenviron. Sci., Kyoto Univ. Adv. Sci., ³Akita 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 Nakano², Takahito Takei², Saku Kijima², Sumire Fujiwara², Shigeo S. Sugano^{1,2} (¹TUS, Sci. Tech., ²AIST BPRC)
- 2P093 Investigating Genetic Factors Affecting Differential Stomatal Patterns of *Callitriche palustris* and *Callitriche deflexa*
Jiyang Kim¹, Yuki Doll², Tomoki Kamimura¹, Hiroyuki Koga¹, Hirokazu Tsukaya¹ (¹Grad. Sch. Sci., Univ. Tokyo, ²Div. 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 Koga⁴, Teruki Kameyama², Atsuko Hirota¹, Yushiro Fuji¹, Muneo Sato¹, Makoto Hayashi¹, Keiichi Mochida¹, Hirokazu Tsukaya⁴, Ali Ferjani², Masami Y. Hirai^{1,5} (¹RIKEN CSRS, ²Department of Biology, Tokyo Gakugei University, ³IPSR, Okayama University, ⁴Department of Biological Sciences, Graduate School of Science, The University of Tokyo, ⁵Department 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 Kawamoto¹, Sayuri Ando¹, Yasuhiro Kamei², Misako Saita², Yasunori Machida³, Chiyoko Machida¹, Shoko Kojima¹ (¹Grad. Sch. Biosci. and Biotech., Chubu Univ, ²NIBB, ³Grad. Sch. Sci., Nagoya Univ)
- 2P096 Initiation of asexual reproduction by the AP2/ERF gene *GEMMIFER* in *Marchantia polymorpha*
Go Takahashi¹, Saori Yamaya², Tomohiro Kiyosue², Yuki Hirakawa¹ (¹Grad. Sch. Integr. Sci. Life, Univ. Hiroshima, ²Grad. 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 Chao¹, Su-Chiung Fang^{1,2}
 (¹Agricultural Biotechnology Research Center, Academia Sinica, ²Biotechnology 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 Hata¹, Yui Kuroda¹, Seisuke Kimura^{1,2} (¹Life Sci., Kyoto Sangyo Univ., ²Center for Plant Sci., Kyoto Sangyo Univ.)
- 2P101 Rapid Ca²⁺ 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 Nomoto¹, Hiroto Takatsuka², Keisuke Yamada¹, Masaki Ito¹ (¹Sch. Biol. Sci. Tech., Kanazawa Univ., ²Faculty Div. Nat. Sci., Nara Women's Univ.)
- 2P105 Exploring the evolutionary background of the cell size regulator SCL28 in moss
Rihoko Senga¹, Toshinari Takahashi¹, Yuji Nomoto², Masaki Katagiri¹, Hidekazu Iwakawa², Takumi Nishiuchi³, Masaki Ishikawa^{4,5}, Mitsuyasu Hasebe^{4,5}, Rumiko Kofuji², Masaki Ito² (¹Grad. Sch. Nat. Sci. & Tech., Kanazawa Univ., ²Sch. Biol. Sci. & Tech., Kanazawa Univ., ³ReCEMHD., Kanazawa Univ., ⁴Div. Evol. Biol., Natl. Inst. Basic Biol., Japan, ⁵Basic 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 Katagiri¹, Poyu Chen², Hidekazu Iwakawa², Takumi Nishiuchi³, Akira Nozawa⁴, Masaki Ito² (¹Grad. Sch. Nat. Sci. & Tech., Kanazawa Univ., ²Sch. Biol. Sci. & Tech., Kanazawa Univ., ³ReCEMHD, Kanazawa Univ., ⁴PROS, 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 Osada¹, Sohta Nakamura², Naoya Kamamoto¹, Katsuyoshi Matsushita¹, Yue Wang², Minako Ueda², Yusuke Kimata², Koichi Fujimoto¹ (¹Graduate School of Integrated Sciences for Life, Hiroshima University, ²Graduate 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 Takagi¹, Ryohei Oguchi², Takamasa Suzuki³, Yuki Yoshida¹, Motoyuki Shimizu¹, Masafumi Ito⁴, Hironaka Tsukagoshi¹
 (¹Grad. Sch. Agr. Meijo Univ., ²Sch. Agr. Meijo Univ., ³Coll. Biosci. & Biotech. Chubu Univ., ⁴Fac. 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 Sakai², Takamasa Suzuki³, Akihiko Nakano⁴, Tetsuya Higashiyama^{1,2} (¹Grad. Sch. Sci., The Univ. Tokyo, ²Sch. Sci., Nagoya Univ., ³Dept. Bio. Chem., Chubu Univ., ⁴RAP, RIKEN)
- 2P114 Understanding and Overcoming Interspecific Barriers in Pollen Tube Attraction
Takuya T. Nagae¹, Hidenori Takeuchi², Keisuke Matsuda³, Shiori Nagahara⁴, Yoko Mizuta^{5,6}, Tetsuya Higashiyama⁷ (¹RIKEN, CSRS, ²Grad. Sch. Arts & Sci., Univ. Tokyo, ³Grad. Sch. Med. Sci., Kyushu Univ., ⁴Grad. Sch. Sci., Kyoto Univ., ⁵Inst. Adv. Res., Nagoya Univ., ⁶ITbM (WPI), Nagoya Univ., ⁷Grad. 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 Sato¹, Nobuhiro Akiyoshi¹, Yuki Kondo², Tomoyuki Furuya², Keiko Sakakibara¹ (¹Dept. Life Sci., Rikkyo Univ., ²Grad. Sch. Sci., Univ. of Osaka)
- 2P116 Identification of a novel RLCK subfamily involved in the reproductive process
Riko Inoue¹, Ryo Noguchi², Sho Tanaka², Shigeo S. Sugano³, Takahito Takei^{2,3}, Daisuke Maruyama⁴, Takahiro Hamada^{1,2} (¹Fac. of Life Sci., Okayama Univ. of Sci., ²Fac. of Sci., Okayama Univ. of Sci., ³BPRC, AIST, ⁴KIBR, Yokohama City Univ.)
- 2P117 Elucidation of embryo-to-endosperm communication through analysis of embryo development-dependent *LBD35*
Yi-Ting Chen¹, Yilin Zhang², Hironori Takasaki², Nguyen Thanh Hai Nguyen¹, Tomokazu Kawashima³, Ming-Tsair Chan^{1,4}, Masaru Takagi¹ (¹Graduate Program of Translational Agricultural Sciences, National Cheng Kung University, Tainan, Taiwan, ²Graduate School of Science and Engineering, Saitama University, Saitama, Japan, ³Department of Plant and Soil Science, University of Kentucky, United States, ⁴Agricultural Biotechnology Research Center, Academia Sinica Biotechnology Center in Southern Taiwan, Taiwan)
- 2P118 Induction of endosperm development without fertilization in *Oryza sativa*
Nguyen Thanh Hai Nguyen¹, Yoshimi Oshima², Yi-Ting Chen¹, Nobutaka Mitsuda², Masaru Takagi¹ (¹National Cheng Kung University – Academia Sinica Graduate-Program in Translational Agriculture Sciences, Tainan, Taiwan, ²Biomanufacturing Process Research Center, National Institute of Advanced Industrial Science and Technology (AIST), Ibaraki, Japan)
- 2P119 *MAC1* and *AMI* 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 To¹, Wen-Chieh Tsai¹, You-Yi Chen², Shao-Ting Lin¹ (¹Inst. of Tropical Plant Sciences and Microbiology, NCKU, Tainan City, 701, Taiwan., ²Grad 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 Huang¹, Yu-Heng Lin², Amit Dhingra³, I-Chun Pan¹ (¹Department of Horticulture, National Chung Hsing University, ²Taichung District Agricultural Research and Extension Station, MOA, ³Department 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 Katsuta¹, Shun Takeno^{2,3}, Shota Tanaka^{2,3}, Keiya Kaga^{1,7}, Kazuma Ohata¹, Ayumi Yamagami¹, Takuya Miyakawa¹, Shoji Segami⁴, Yasumitsu Kondo², Naoshi Domae², Kei Tsuzuki³, Yoshiya Seto³, Tetsuo Kushiro³, Masayoshi Maeshima⁵, Tadao Asami⁶, Takeshi Nakano¹ (¹Grad. Sch. Biostudies., Univ. Kyoto, ²RIKEN, CSRS, ³Grad. Sch. Agriculture, Univ. Meiji, ⁴NIBB, ⁵Grad. Sch. Bioagricultural Sciences, Univ. Nagoya, ⁶KIBR, Yokohama City Univ., ⁷Grad. 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 Kobayashi¹, Kang Xu², Emi Yumoto⁴, Masashi Asahina^{3,4}, Ken-ichiro Hayashi⁵, Hidehiro Fukaki⁶, Masaaki Watahiki⁷ (¹Grad. Life. Sci., Hokkaido Univ., ²Sch. Agri. Biol., Shanghai Jiao Tong Univ., ³Env. & Biotech., Dept. Integ. Sci. & Eng., Teikyo Univ., ⁴Adv. Inst. Anal. Center, Teikyo Univ., ⁵Dept. Biosci., Okayama Univ. Sci., ⁶Grad. Sch. Sci., Kobe Univ., ⁷Fac. Sci., Hokkaido Univ.)
- 2P124 Biosynthetic pathway of a natural auxin, phenylacetic acid, in Arabidopsis
Haruki Iwama¹, Kaisei Maruyama², Akie Watanabe², Takemoto Agui², Shunsuke Watanabe³, Zhao Yunde⁴, Ken-ichiro Hayashi⁵, Mitsunori Seo^{6,7}, Masanori Okamoto⁷, Hiroyuki Kasahara^{2,7} (¹Fac. Agri., Tokyo Univ. Agri. Tech., ²Grad. Sch. Agri., Tokyo Univ.

- Agri. Tech., ³Fac. Sci. Eng., Yasuda Women's Univ., ⁴UCSD, ⁵Dept of Biosci., Okayama Univ. Sci., ⁶TBRC, Univ. Ryukyus., ⁷RIKEN CSRS)
- 2P125 Analysis of the Regulatory Mechanism of Early Hypocotyl Growth Mediated by the Interaction Between BIL1 and ABA-Responsive Transcription Factors
Natsuki Futagami¹, Nobutaka Mitsuda², Ayumi Yamagami¹, Takuya Miyakawa¹, Takeshi Nakano¹ (¹Grad. Sch. Bio., Univ. Kyoto, ²AIST)
- 2P126 Analysis for the BR signaling factor BIL7 function and interactome
Asuma Kubono¹, Kaisei Nishida¹, Senri Nakamura¹, Ayumi Yamagami¹, Takuya Miyakawa¹, Tadao Asami², Takeshi Nakano¹ (¹Grad. Sch. Biostudies., Kyoto Univ., ²KIBR, Yokohama)
- 2P127 The role of BIN2 phosphorylation in regulating the activity of the BR signaling factor BIL7
Senri Nakamura¹, Kaisei Nishida¹, Yusuke Nakamura¹, Ayumi Yamagami¹, Takuya Miyakawa¹, Takehiro Suzuki², Naoshi Dohmae², Akira Nozawa³, Tatsuya Sawasaki³, Tadao Asami⁴, Takeshi Nakano¹ (¹Grad. Sch. Biostudies., Kyoto University, ²CSRS, Riken, ³PROS, Ehime University, ⁴KIBR, Yokohama City Univ.)
- 2P128 Evolution and functional diversification of plant auxin metabolic genes
Takemoto Agui¹, Yuki Suganuma¹, Risayo Mizutani¹, Masaki Shimamura², Ken-ichiro Hayashi³, Hiroyuki Kasahara^{1,4} (¹Grad. Sch. Agric., TUAT, ²Grad. Sch. Integr. Sci. Life, Hiroshima Univ., ³Dept. Biosci., Okayama Univ. Sci., ⁴CSRS, RIKEN)
- 2P129 Functional Analysis of Group C Raf-like Kinases in *Marchantia*
Hana Kokubo¹, Hinano Takase², Shota Yamauchi³, Ryuichi Nishihama³, Taishi Umezawa² (¹Department of Biological Production, Tokyo University of agriculture and Technology, ²Graduate School of Bio-Applications and Systems Engineering, Tokyo University of agriculture and Technology, ³Department 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 Katagiri¹, Daisuke Fukuhara², Keisuke Fujiyama¹, Hijiri Fujioka³, Yukihiko Sugimoto³, Masanori Okamoto^{1,4} (¹CSRS, RIKEN, ²C-Bio • Utsunomiya Univ., ³Kobe Univ., ⁴Yokohama City Univ.)
- 2P131 A method to quantify plant hormones from very small tissues
Yumiko Takebayashi¹, Hiromi Suzuki^{1,2}, Masami Y. Hirai¹, Mitsunori Seo^{1,3} (¹RIKEN, CSRS, ²School of Bioscience and Biotechnology, Tokyo University of Technology, ³Tropical Biosphere Research Center, University of the Ryukyus)
- 2P132 High-throughput comprehensive phytohormone analysis and quantification using LC-MS/MS
Mikiko Kojima¹, Yumiko Takebayashi¹, Masanori Okamoto¹, Masami Y. Hirai¹, Hitoshi Sakakibara^{1,2} (¹RIKEN CSRS, ²Grad. 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 Zhao¹, Kei Suzuki², Kiyoshi Mashiguchi¹, Shinjiro Yamaguchi¹ (¹ICR, Univ. Kyoto, ²Grad. 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 Characterization of Transport Mechanism and Physiological Functions of Tomato KNOTTED1 mRNA
Sirui Liu, Munenori Kitagawa (Coll. Hort. & For., HZAU)
- 2P137 Genome-wide Identification of Mobile mRNAs Based on a Conserved Sequence
Shioto Ishihara¹, Ken-ichi Kurotani¹, Shiori Nagahara¹, Tomomi Suzuki¹, Kentaro Okada², Takumi Iwata¹, Nobuyoshi Mochizuki¹, Michitaka Notaguchi^{1,2} (¹Grad. Sch. Sci., Kyoto Univ, ²Biosci. and Biotech. Center, Nagoya Univ.)
- 2P138 Functional analysis of ABI5-related bZIP transcription factors in *Marchantia polymorpha*
Amane Shibuya¹, Yuta Kidokoro¹, Daisuke Takezawa², Teruaki Taji¹, Yoichi Sakata¹, Izumi Yotsui¹ (¹Dept. of Biosci., Tokyo Univ. of Agri, ²Graduate 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 Hou¹, Su-Chiung Fang², Jhun-Chen Chen², Hua-Chen Chang¹, I-Chian Chen¹ (¹Department of Life Sciences, National University of Kaohsiung, Kaohsiung, Taiwan, ²Biotechnology 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 Tsay² (¹Department of Life Science, National Taiwan University, ²Institute 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 Functional 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 Yang¹, Wen-Chien Lu¹, Jo-Chi Hung², Swee-Suak Ko², Tzyy-Jen Chiou¹ (¹Agricultural Biotechnology Research Center, Academia Sinica, Taipei, Taiwan, ²Biotechnology 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 Dohi¹, Mirai Matsuoka¹, Satoshi Sano² (¹Fac. Life Env. Sci., Kyoto Pref. Univ., ²Grad. 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 Dissecting The Functional And Regulatory Roles Of Heat Shock Proteins in Rice Seed Germination
Chinghui Yeh, Shawjye Wu, Senthil Kumar Rajendran (Department of Life Sciences, NCU, Taiwan)
- 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 Wu¹, Sim Lin Lim², Shu-Hsing Wu¹ (¹Institute of Plant and Microbial Biology, Academia Sinica, ²Biodiversity Research Center, Academia Sinica)
- 2P157 Uncovering Plant Transcription Factors Control Membrane Lipid Remodeling Under Phosphate Starvation in *Arabidopsis*
Jiratorn Meethongantamas^{1,2}, Kai-Lun Yeh², Yu-Tung Wang², Nobutaka Mitsuda³, You-Yi Chen¹, Wen-Chieh Tsai¹, Sumire Fujiwara³, Masaru Ohme-Takagi^{1,3}, Chuan-Ming Yeh^{2,3,4} (¹Institute of Tropical Plant Sciences and Microbiology, National Cheng Kung University, Tainan, Taiwan, ²Institute of Molecular Biology, National Chung Hsing University, Taichung, Taiwan,

- ³Biomufacturing and Process Research Center, National Institute of Advanced Industrial Science and Technology (AIST), Tsukuba, Japan, ⁴Advanced Plant and Food Crop Biotechnology Center, National Chung Hsing University, Taichung, Taiwan)
- 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 Kondo¹, Mami Nampei¹, Tanee Sreewongchai², Akihiro Ueda¹ (¹Graduate School of Integrated Sciences for Life, Univ. Hiroshima, ²Faculty 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 Okumura¹, Arriel Fadhilah¹, Shin-ichiro Kidou^{1,2} (¹Grad. Sch. Sci., Nagoya City Univ., ²Research 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 Wu¹, Kuang-Yu Cheng¹, Wei-Yung Hsu¹, Ichiro Terashima¹, Sumire Fujiwara², Nobutaka Mitsuda², Masaru Ohme-Takagi^{2,3}, Chuan-Ming Yeh^{1,2,4} (¹Institute of Molecular Biology, National Chung Hsing University, Taichung, Taiwan, ²Biomufacturing and Process Research Center, National Institute of Advanced Industrial Science and Technology (AIST), Tsukuba, Japan, ³Institute of Tropical Plant Sciences and Microbiology, National Cheng Kung University, Tainan, Taiwan, ⁴Advanced 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 Ito¹, Makoto Kashima², Tokitaka Oyama¹ (¹Department of Botany, Division of Biological Sciences, Graduate School of Science, Kyoto University, ²Faculty 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 Yeh¹, Yu-Wen Hsu¹, Su-Hui Liu¹, Pin-Hui Sung², Ichiro Terashima¹, Chuan-Ming Yeh^{1,3,4} (¹Institute of Molecular Biology, National Chung Hsing University, Taichung, Taiwan, ²Kaohsiung District Agricultural Research and Extension Station, Ministry of Agriculture, Pingtung, Taiwan, ³Advanced Plant and Food Crop Biotechnology Center, National Chung Hsing University, Taichung, Taiwan, ⁴Biomufacturing 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 Lai¹, Yoshimi Nakano², Nobutaka Mitsuda², Masaru Ohme-Takagi^{2,3}, Ichiro Terashima¹, Chuan-Ming Yeh^{1,2,4} (¹Institute of Molecular Biology, National Chung Hsing University, Taichung, Taiwan, ²Biomufacturing and Process Research Center, National Institute of Advanced Industrial Science and Technology (AIST), Tsukuba, Japan, ³Institute of Tropical Plant Sciences and Microbiology, National Cheng Kung University, Tainan, Taiwan, ⁴Advanced 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}, Takahiro Kobayashi¹, Kazuyuki Kuchitsu² (¹Res. Inst. Biores. Biotech., Ishikawa Pref. Univ., ²Dept. 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 Yokota¹, Hirotaka Ariga², Kanna Izawa¹, Izumi Yotsui¹, Yoichi Sakata¹, Teruaki Taji¹ (¹Dept. of Biosci., Tokyo Univ. of Agri, ²National 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 in ascorbate levels in *Opuntia* (prickly pear cactus) in response to environmental stresses
Qiaochu Wang¹, Shuusuke Kawachi², Misaki Ito², Kazuya Yoshimura^{1,2} (¹Dept. Biol. Chem., Coll. Biosci. Biotech., Chubu Univ., ²Dept. 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 Oxylinp KODA Improves Drought Tolerance in Lettuce (*Lactuca sativa*)
Toki Nakamura¹, Mineyuki Yokoyama², Naoto Kawakami², Hirokazu Ohno³, Hiromi Suzuki⁴, Yuichi Tada⁴ (¹Grad. Sch. Bio., Tokyo Univ. of Tech., ²Sch. Agri., Meiji Univ., ³Maruzen Pharmaceuticals Co., Ltd, ⁴Sch. Bio., Tokyo Univ. of Tech.)
- 2P177 Photoresponse Mechanisms under Monochromatic High-light Conditions in *Acaryochloris marina* MBIC 11017
Kanta Watanabe¹, Keita Miyake², Tatsuru Masuda^{1,2} (¹Grad, Sch, Sci., Univ. Tokyo, ²Grad, Sch, Arts Sci., Univ. Tokyo)
- 2P178 Plasmid Shuffling Supports Light Environment Adaptation in *Acaryochloris marina*
Keita Miyake¹, Tomonori Kashimoto³, Chikahiro Matsumoto³, Ryosuke Hasama⁶, Mayuko Sato⁴, Kiminori Toyooka⁴, Yu Kanesaki⁵, Wataru Iwasaki², Rei Narikawa⁶ (¹Grad, Sch, Arts Sci., Univ. Tokyo, ²Grad, Sch, Frontier Sci., Univ. Tokyo, ³Dep, Bio Sci, Faculty Sci., Shizuoka Univ, ⁴RIKEN., CSRS, ⁵Grad, Sch, Health Sci., Gunma Univ, ⁶Dep, Bio Sci, Grad, Sch, Sci., Tokyo Metropolitan Univ)
- 2P179 Alterations in oxidative stress responses in *Arabidopsis thaliana* high-polyploids
Suzuka Kikuchi¹, Futa Oura², Daiki Ito³, Takafumi Miyashita⁴, Hiroyuki Koga⁵, Kanae Nishii⁶, Akitoshi Iwamoto³ (¹Grad. Sch. Sci. and Technol. for Inov., Yamaguchi Univ., ²Fac. Agric., Yamaguchi Univ., ³Fac. Sci., Kanagawa Univ., ⁴Grad. Sch. Sci., Kanagawa Univ., ⁵Grad. Sch. Sci., Univ. Tokyo, ⁶Res. 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 Yeh¹, Su-Hui Liu¹, Chi-Luan Wen², Ichiro Terashima¹, Chuan-Ming Yeh^{1,3,4} (¹Institute of Molecular Biology, National Chung Hsing University, Taichung, Taiwan, ²Seed and Seedling Testing Section, Taiwan Seed Improvement and Propagation Station, Ministry of Agriculture, Taichung, Taiwan, ³Advanced Plant and Food Crop Biotechnology Center, National Chung Hsing University, Taichung, Taiwan, ⁴Biomufacturing 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 Wakazaki³, Yumi Goto³, Mayuko Sato³, Kiminori Toyooka³ (¹Organization for Research Promotion, Tohoku Univ., ²Grad. Sch. Life Sci, Tohoku Univ., ³RIKEN CSRS)
- 2P183 Investigation of candidate genes involved in the alleviation of salt stress by silicon dioxide nanoparticles in rice
Ryoichi Araki^{1,2}, Hidetoshi Miyazaki³, Ping An⁴ (¹Fac. Edu., Wakayama Univ., ²Ctr. Food Agric. Res. Edu., Wakayama Univ., ³Sci. Res. Unit, The Glob. Environ. Forum, ⁴Arid 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 Lin¹, Nobuhiro Tanaka², Kiyoshi Yamazaki¹, José M. Pardo³, Francisco Javier Quintero³, Imelda Mendoza³, Hideki Takanashi¹, Yoshihiro Ohmori¹, Takehiro Kamiya¹, Toru Fujiwara¹ (¹Grad. Sch. Agr. Life Sci., Univ. Tokyo, ²Inst. Crop. Sci., NARO, ³Inst. Plant Biochem. & Photosynth, CSIC–Univ. of Seville, Spain)
- 2P186 Elucidation of morphological regulation mechanism of curly leaf in parsley
Shinnosuke Ishino¹, Eri Kamon¹, Takeshi Ishimizu^{1,2}, Kazuya Ishikawa² (¹College of Life Sciences, Ritsumeikan University, ²R-GIRO, Ritsumeikan University)

- 2P187 Ethanol application enhances drought stress tolerance in cabbage
Shunsuke Adegawa^{1,2}, Daisuke Todaka¹, Junko Ishida¹, Maho Tanaka¹, Tomoyuki Takeda¹, Farhan Aziz¹, Motoaki Seki^{1,2,3} (¹Plant Genomic Network Research Team, RIKEN Center for Sustainable Resource Science, ²Graduate School of Science and Engineering, Saitama University, Saitama, ³Kihara Institute for Biological Research, Yokohama City University)
- 2P188 Analysis of quantitative trait loci associated with photosynthetic adaptation to iron deficiency in barley
Karin Irie¹, Soichiro Matsuoka¹, Takehiro Kobayashi¹, Mayuko Furuhashi¹, Nobuhiro Tanaka², Yusuke Shikanai¹, Akihiro Saito¹, Kyoko Higuchi¹ (¹Grad. Sch. Appl. Biosci., Tokyo Univ. Agri., ²Inst. Crop. Sci, NARO)
- 2P189 Functional analysis of rice small Heat Shock Proteins (sHSPs) under heat stress conditions
Minaho Aramaki¹, Toyohiro Tanaka¹, Yuki Kojima¹, Junya Mizoi², Fuminori Takahashi^{1,3} (¹Grad. Sch. Fac. Adv. Eng., TUS, ²Grad. Sch. Agr. Life Sci., Univ. Tokyo, ³Fac. 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 Adu¹, Yoshihiro Ohmori², Toru Fujiwara¹, Akifumi Shimizu³, Hiroaki Hayashi⁴ (¹Grad. Sch. SCI., Univ. of Tokyo, ²Agricultural Bioinformatics Research Unit, The University of Tokyo, ³School of Environmental Science, University of Shiga Prefecture, ⁴Hayashi 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 Inui¹, Yoji Okabe¹, Hayato Ozaki¹, Shinichiro Maruyama¹, Kazuhide Tsuneizumi², Tsuyoshi Takeshita^{1,3}, Mayuko Sato⁴, Kiminori Toyooka⁴, Tomoko Abe², Sachihiko Matsunaga¹ (¹Grad. Sch. of Front. Sci., Univ. of Tokyo, ²RIKEN Nishina Center for Accelerator-Based Science, ³Graduate School of Human and Environmental Studies, Kyoto University, ⁴RIKEN Center for Sustainable Resource Science)
- 2P193 Isolation and genetic analyses of *salt overly tolerant4* and *6* mutants of *Arabidopsis*
Tomoyo Ohashi¹, Akito Hosoi², Izumi Yotsui¹, Yoichi Sakata¹, Teruaki Tajiri¹ (¹Dept. of Biosci., Tokyo Univ. of Agri., ²Nodai Genome Research Center)
- 2P194 Analysis of molecular functions of brassinosteroid signaling factor BIL7 in environmental stress resistance
Shogo Kitayama¹, Kaisei Nishida¹, Ayumi Yamagami¹, Tadao Asami², Takeshi Nakano¹ (¹Grad. Sch. Bio., Univ. Kyoto, ²KIBR, Yokohama City Univ)
- 2P195 Identification of the locus responsible for the long-term heat tolerance of *Arabidopsis thaliana* Berg-1
Asumi Kitashima¹, Goro Masuda², Izumi Yotsui¹, Yoichi Sakata¹, Teruaki Tajiri¹ (¹Dept. of Biosci., Tokyo Univ. of Agri, ²Nodai 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 Kobayashi¹, Miki Fujita³, Takuya Ogata¹, Yukari Nagatoshi¹, Yasuo Yasui⁴ (¹JIRCAS, ²Grad. Sch. Life Environ. Sci., Univ. Tsukuba, ³RIKEN CSRS, ⁴Grad. 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 Yang¹, Chin-Yu Wu², Chwan-Yang Hong¹ (¹Department of Agricultural Chemistry, National Taiwan University, Taipei, Taiwan, ²Department 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 Wakil Sulemana, Moeka Fujita, Li Hongqiao, Akiko Maruyama (Kyushu University)
- 2P200 Potential Involvement of PIF4 Protein Interactions in NO₂-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 PHYLL1
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 Shu¹, Anuphon Laohavisit², Takamasa Suzuki³, Yasuhiro Kadota¹, Ken Shirasu¹ (¹Plant Immunity Group, CSRS, RIKEN, ²Institute of Transformative Bio-Molecules, Nagoya University, ³Department of Biological Chemistry, Chubu University)
- 2P204 Unraveling the role of a lncRNA near plant immune receptor gene *SNCI*
Takuma Horimoto¹, Misaki Chino¹, Tokuji Tsuchiya², Hiroshi Uchiyama¹ (¹Grad. Sch. Bioresource Sci., Nihon Univ., ²The Sainsbury Laboratory, Norwich, UK)
- 2P205 Expression Analysis of Defense-Related Genes in *Arabidopsis thaliana* Treated with Fermented Botanical Product (FBP)
Yuri Mizuno¹, Ryota Kato², Shigeyuki Betsuyaku², Kotaro Fujioka¹, Hideto Torii¹ (¹Manda Fermentation Co. Ltd., ²Fac. Agric., Ryukoku Univ.)
- 2P206 Elucidation of plant-herbivore interactions mediated by VOCs in plant immunity
Miyu Watanabe¹, Kazuha Mori¹, Hiroshi Mori¹, Liu Zhang², Rintaro Moriyama², Ryosuke Sugiyama^{3,4}, Shinya Ariyasu¹, Osami Shoji¹, Kenji Matsui⁵, Akiko Maruyama², Kanako Sekimoto^{4,6}, Mika Nomoto^{1,4,7}, Yasuomi Tada^{1,7} (¹Grad. Sch. Sci., Nagoya Univ., ²Grad. Sch. Agr., Kyusyu Univ., ³Grad. Sch. Pharm. Sci., Chiba Univ., ⁴JST, PRESTO, ⁵Grad. Sch. Sci. Tech. Innov., Yamaguchi Univ., ⁶Grad. Sch. Nanobiosci., Yokohama City Univ., ⁷Centr. 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 Utami¹, Atsushi Suwa², Atsushi Minami², Kei Hiruma¹ (¹Grad. Sch. Arts and Sci., Univ. Tokyo, ²Dept. Chem., Science Tokyo)
- 2P209 Expression analysis of *NIN* in *Lotus japonicus* treated with spermine
Moe Shinozaki¹, Sho Okamoto², Kensuke Kawade² (¹Fac. Sci., Univ. Saitama, ²Grad. Sch. Sci., Univ. Saitama)
- 2P210 Analysis of Symbiotic Responses to Nitrogen-Fixing Bacteria in the Strawberry Rhizosphere
Miyabi Sakata¹, Marika Umetsuki¹, Yoshikazu Shimoda², Sachiko Isobe³, Hideki Hirakawa⁴, Kenta Shirasawa⁵, Takashi Soyano⁶, Masayoshi Kawaguchi⁶, Takuya Suzaki⁷, Akiyoshi Tominaga⁸, Shigeru Hanano⁹, Shusei Sato⁹, Toshiki Uchiumi¹, Mitsutaka Fukudome¹ (¹Grad. Sch. Sci. and Eng., Univ. Kagoshima, ²Inst. Agrobiol. Sci., NARO, ³Grad. Sch. Agri. Life Sci., Univ. of Tokyo, ⁴Grad. Sch. Biores. and Bioenviron., Univ. Kyushu, ⁵Kazusa DNA Res. Inst., ⁶NIBB, ⁷Life Environ Sci., Univ. Tsukuba, ⁸Fac. Agric., Univ. Shizuoka, ⁹Grad. Sch. Life Sci., Univ. Tohoku)
- 2P211 Unraveling CEP2 Upstream Signaling and the Role of Tomato ECIPI 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 Tanaka¹, Takashi Soyano^{1,2}, Masayoshi Kawaguchi^{1,2} (¹Divi. Symb. Sys., NIBB, ²School of Life Science, SOKENDAI)
- 2P213 Functional Analysis of Caffeate O-methyltransferase in Root Nodule Symbiosis
Yuki Ueuchi¹, Akito Hase¹, Shoko Inaba¹, Akira Akamatsu², Naoya Takeda¹ (¹Grad. Sch. of Sci. and Eng., Univ. Kwansai Gakuin, ²CSRS)
- 2P214 Function of trehalase in autotrophic plant–fungal interactions
Takaya Tominaga¹, Risa Sasaki¹, Ayae Sakai², Hironori Kaminaka³ (¹Grad. Sch. Sci. and Tech., NAIST, ²United Grad. Sch. Agr., Tottori Univ., ³Fac. Agr., Tottori Univ.)
- 2P215 Identification of biosynthesis enzymes for Myc-LCOs, key signaling molecules in arbuscular mycorrhizal symbiosis
Daiki Sano¹, Rin Mamiya¹, Taro Maeda², Atsushi J. Nagano², Satoshi Kondo³, Shoko Inaba¹, Akira Akamatsu⁴, Naoya Takeda¹ (¹Grad. Sch. of Sci. and Eng., Univ. Kwansai Gakuin, ²Univ. Keio, ³Toyota Conpon Research Institute, ⁴RIKEN • CSRS)
- 2P216 Model-guided microbiome engineering for crop resilience
Shinichi Yamazaki^{1,2}, Masaru Nakayasu³, Keiko Kanai³, Rie Mizuno³, Rumi Kaida⁴, Sachiko Masuda², Arisa Shibata², Ken Shirasu², Atsushi J. Nagano^{5,6}, Yoshiharu Fujii⁴, Akifumi Sugiyama³, Yuichi Aoki^{1,7} (¹ToMMo, Tohoku Univ., ²CSRS, RIKEN, ³RISH, Kyoto Univ., ⁴Tokyo Univ. of Agri. Tech., ⁵BBC, Nagoya Univ., ⁶IAB, Keio Univ., ⁷GSIS, 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 Chang¹, Minh-Quang Chau^{1,2}, Lay-Sun Ma¹ (¹Institute of Plant and Microbial Biology, Academia Sinica, Taipei, Taiwan, ²Molecular 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 Fukudome¹, Asuka Ikuta², Mika Nomura², Toshiki Uchiumi¹ (¹Grad. Sch. of Sci. and Eng. Kagoshima Univ., ²Fac. of Agri. Kagawa Univ.)
- 2P221 Unipolar polysaccharide-mediated attachment of the N₂O-reducing bacterium *Bradyrhizobium ottawaense* SG09 to plant roots
Yudai Takeguchi¹, Ryota Shibuya¹, Momoi Kondo², Natsuki Yamamoto², Eriko Betsuyaku², Manabu Itakura³, Kiwamu Minamisawa³, Masayuki Sugawara⁴, Shigeyuki Betsuyaku² (¹Graduate School of Agriculture, Ryukoku University, ²Faculty of Agriculture, Ryukoku University, ³Graduate School of Life Sciences, Tohoku University, ⁴Department 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 Murata¹, Mikihito Noguchi¹, Keitaro Fukushima², Hirokazu Toju³ (¹Grad. Sch. Sci., Univ. Kyoto, ²Sch. Food & Agri., Univ. Fukushima, ³Grad. Sch. Bio., Univ. Kyoto)
- 2P223 Analysis of Biotic Interactions Influenced by Phenylethanoid Glycosides Exuded from *Orobanche minor*
Masahiko Otani¹, Yui Onodera¹, Haruka Ohno², Ryota Suzuki³, Tomohiko Harada³, Shun Hashimoto³, Masaru Bamba⁴, Kotaro Nishiyama¹, Shusei Sato³, Yoshiya Seto^{1,2} (¹Sch. Agri., Meiji. Univ., ²Grad. Sch. Agri., Meiji. Univ., ³Grad. Sch. Life Sci., Tohoku Univ., ⁴Fac. 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 Tanaka¹, Chikako Shimoshige¹, Li-Yen Lin¹, Zhihang Feng¹, Hirotomo Ohba², Yoko Masuda^{1,3}, Keishi Senoo^{1,3}, Yoshihiro Ohmori¹, Toru Fujiwara¹ (¹Grad. Sch. Agr. Life Sci., Univ. Tokyo, ²Niigata Agr. Res. Inst., ³CRIIM, Univ. Tokyo)
- 2P227 Functional Analysis of Actin Depolymerizing Factors in the Response to Brassicaceae Anthracnose
Miku Ohashi¹, Sakura Aoki¹, Takashi L. Shimada², Takashi Ueda³, Masaaki Umeda⁴, Noriko Inada¹ (¹Sch. of Agri., Osaka Metropolitan Univ., ²Grad. Sch. of Horticult., Chiba Univ., ³NIBB, ⁴Adv. 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. halleri* 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 Li¹, Liang-He Chen², Yu-Shin Nai^{1,3}, Shih-Shun Lin² (¹Doctoral Program in Microbial Genomics, National Chung Hsing University and Academia Sinica, Taiwan, ²Institute of Biotechnology, National Taiwan University, Taipei, Taiwan, ³Department of Entomology, National Chung Hsing University, Taichung City, Taiwan)
- 2P231 Comparative analysis of spatial arrangement of chromosomal domains among *Arabidopsis* ecotypes
Kento Yano¹, Natsumaro Kutsuna², Takuya Sakamoto¹ (¹Grad. Sci., Kanagawa Univ, ²LPIXEL 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 Fernandez⁵, Penelope Perkins-Veazie^{4,5}, Brandon Le⁶, Xu Li^{3,4}, Tzung-Fu Hsieh^{3,4}, Jer-Young Lin^{1,2}
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- 2P233 Suppressor analysis of the *Arabidopsis droll* 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 Lin¹, Sim Lin Lim², Shu-Hsing Wu¹ (¹Institute of Plant and Microbial Biology, Academia Sinica, ²Biodiversity 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 MpDCL4 Generates Both miRNA-like and siRNA Species to Regulate Male Gamete Differentiation in *Marchantia polymorpha*
Yu-Ling Hung (Institute of Biotechnology, National Taiwan University)
- 2P238 MAC3A and MAC3B regulate the alternative splicing of RNA-binding proteins in flowering time regulation
Yun-Tung Ly¹, Hsin-Yu Hsieh², Wen Dar Lin², Shih-Long Tu², Chin-Mei Lee¹ (¹Institution of Plant Biology, National Taiwan University, Taipei, Taiwan, ²Institute 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 Zhang¹, Lukasz Szewc^{2,3}, Mateusz Bajczyk², David Bielewicz⁴, Kei Yura^{5,6,7}, Miku Odoi¹, Cyrose Suzie Silvosa-Millado^{1,8}, Mariko Kato¹, Marta Garcia-León⁹, Vicente Rubio⁹, Mika Nomoto¹⁰, Yasuomi Tada¹⁰, Tsuyoshi Furumoto¹¹, Zofia Szwejkowska-Kulinska², Dorothee Staiger³, Takashi Aoyama¹, Artur Jarmolowski², Tomohiko Tsuge¹ (¹ICR/Grad. Sch. Sci., Kyoto Univ., ²Inst. Mol. Biol. Biotech., Adam Mickiewicz Univ., ³Biology, Bielefeld Univ., ⁴WCAT, ⁵Grad. Sch. Humanit. Sci., Ochanomizu Univ., ⁶Ctr. Interdiscip. AI and Data Sci., Ochanomizu Univ., ⁷Sch. Adv. Sci. Eng., Waseda Univ., ⁸DBSES, Univ. Philippines Mindanao, ⁹CNB-CSIC, ¹⁰Ctr. Gene Res., Nagoya Univ., ¹¹Sch. 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 Rubio⁵, Shiori S. Aki⁶, Mariko Kato¹, Tomohiko Tsuge¹ (¹ICR/ Grad. Sch. Sci., Kyoto Univ., ²DBSES, CSM, Univ. Philippines Mindanao, ³Grad. Sch. Humanit. Sci., Ochanomizu Univ., ⁴Sch. Adv. Sci. Eng., Waseda Univ., ⁵CNB-CSIC, ⁶Biol. 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 wobbleU₃₄ modifications in mcm^s2U tRNAs impairs rRNA biosynthesis, growth, and development in *Arabidopsis thaliana*
Yumi Nakai¹, Yukio Kurihara², Yuko Makita³, Gorou Horiguchi⁴, Kosei Iwabuchi⁵, Akiko Harada⁵, Masato Nakai⁶, Takato Yano¹
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- 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} (¹Agricultural Biotechnology Research Center, Academia Sinica, Taipei, Taiwan, ²Biotechnology Center in Southern Taiwan, Academia Sinica, Tainan, Taiwan, ³Department 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} (¹Biotechnology Center in Southern Taiwan, Academia Sinica, ²Agricultural Biotechnology Research Center, Academia Sinica, 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} (¹Institute of Tropical Plant Sciences and Microbiology, National Cheng Kung University, Tainan, Taiwan, ²Biotechnology Center in Southern Taiwan, Academia Sinica, Tainan, Taiwan, ³Agricultural 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 Lo¹, Keiko Kano¹, Jiun-Jie Shie², Emi Mishiro-Sato¹, Akira Yoshinari¹, Wolf B. Frommer^{1,4}, Masayoshi Nakamura^{1,3} (¹ITbM, Nagoya University, ²Institute of Chemistry, Academia Sinica, ³Dept. Biochem. Mol. Biol., Saitama U., ⁴Heinrich Heine University)
- 2P253 Functional analysis of *Prochlorococcus* 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 Guo¹, Jia-Zhen Yu¹, Phuong Anh Tran¹, Christian Møller², Shih-Shun Lin¹ (¹Institute of Biotechnology, National Taiwan University, Taipei, Taiwan, ²Department 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 Lee¹, Tze-Ching Chan¹, Bo-Han Hou¹, Ho-Ming Chen^{1,2} (¹Agricultural Biotechnology Research Center, Academia Sinica, Taiwan, ²Bioinformatics Program, Taiwan International Graduate Program, National Yang Ming Chiao Tung University, Academia Sinica, Taiwan, ³Institute 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} (¹Trans-Omics Facility, NIBB, ²Basic Biology Program, SOKENDAI)
- 2P257 A database for exploring transcriptomic effects of chemical and genetic perturbations
Haying Lee^{1,2}, Hiroki Yagi³, Ayato Sato⁴, Atsushi J. Nagano^{2,5} (¹Faculty of Agriculture, Ryukoku Univ., ²Bioscience and Biotechnology Center, Nagoya Univ., ³Sch Vet Med, Kitasato Univ., ⁴WPI-ITbM, Nagoya Univ., ⁵IAB, Keio University)
- 2P258 MiRiQ3.0: an updated database for *in silico* screening of rice mutants
Takahiko Kubo¹, Yoshiyuki Yamagata¹, Takehiko Ogura¹, Hiroaki Matsusaka¹, Atsushi Toyoda², Yutaka Sato², Toshihiro Kumamaru¹ (¹Fac. Agr. Kyushu Univ., ²National 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 Sakamoto¹, Yukiko Shimbo¹, Noriko Ohnuma², Yuriko Ikeda¹, Tsubasa Yano³, Maki Ohtsubo¹, Kimitoshi Sakaguchi², Takashi Kasai², Teruhiko Terakawa³, Kazuyoshi Fujita⁴, Seiji Takeda^{1,5}, Norihiro Ohtsubo¹ (¹Grad. Sch. Life Environ. Sci., Kyoto Pref. Univ., ²Miyoshi & Co., Ltd., ³Inplanta Innovations Inc., ⁴Miyoshi Agritech & Co., Ltd., ⁵FSE, Yasuda Women's Univ.)
- 2P260 Development of efficient and accurate prime editing system in plants
Ayako Nishizawa-Yokoi¹, Keiko Iida¹, Akiko Mori¹, Miho Takemura², Yutaro Shuto³, Ryoya Nakagawa³, Osamu Nureki³, Seiichi Toki^{4,5} (¹Inst. Agrobiol. Sci. s, NARO, ²Res. Inst. Biores. Biotech., Ishikawa Pref. Uni, ³Grad. Sch. Sci., Univ. Tokyo, ⁴Grad. Sch. Nanobiosci., Yokohama City Univ., ⁵Fac. 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 growth
Marcel Pascal Beier¹, Liyu Deng², Fernando Arteaga Arteaga³ (¹Soil Plant Multi-Dyn. Res. Unit, Fukushima Inst. Res. Edu. Innov., ²Hokkaido Univ., ³Nat. 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 Hart², Nathan Kelso², Sadie Barber², Michael Moeller² (¹Kanagawa Uni, ²Roy. Bot. Gard. Edinburgh)
- 2P266 Development of cellulose structure-based hydrogels aimed at application in plant cultivation
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- 2P267 Development and Research Support of Plant Hormone Analysis
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- 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)

