The 61st Annual Meeting of the Japanese Society of Plant Physiologists

https://jspp.org/annualmeeting/61/

The 61st Annual Meeting of the Japanese Society of Plant Physiologists in Osaka has cancelled all related committees, related meetings, including the banquet. The 61st Osaka Annual Meeting of the Japanese Society of Plant Physiologists and the conference presentation is deemed to have been held upon publication of the conference abstract.

Date: March 19 (Thur) through March 21 (Sat), 2020

Venue: Suita Campus, Osaka University

1-1 Yamadaoka, Suita, Osaka 565-0871, Japan
https://www.osaka-u.ac.jp/en/access/index.html#suita

Banquet: Hotel Hankyu International

19-19, Chayamachi, Kita-ku,Osaka,530-0013, Japan
https://global.hankyu-hotel.com/hankyu-international/

Organizing Committee

Chairperson: Toshiya Muranaka
Vice-Chairperson: Tatsuo Kakimoto
General Affairs: Hikaru Seki / Miho Kitazawa / Yuki Sakamoto / Hiroyuki Kajiura / Kenji Osabe / Kazuo Harada
Accounting: Shuhei Yasumoto
Banquet: Atushi Okazawa / Shuhei Yasumoto
Program Committee: Hikaru Seki (Chairperson)
Tasuo Kakimoto / Miho Kitazawa / Yuki Sakamoto / Nobukazu Shitan / Hiroshi Shimizu / Shingo Takagi / Yoshihiro Toya / Masakazu Toyoshima / Masato Nakai / Akiko Harada / Koichi Fujimoto / Fumio Matsuda / Masahiro Mizutani / Yube Yamaguchi
Venue: Yoshihiro Toya / Hirozo Oh-oka / Atsushi Okazawa / Kenji Osabe / Genji Kurisu / Nozomu Koizumi / Miho Kitazawa / Hiroshi Shimizu / Toyoshima Masakazu / Akiko Harada / Kazuo Harada / Kazuhito Fujiyama / Fumio Matsuda / Yube Yamaguchi
Nursery: Tatsuo Kakimoto / Akiko Harada / Yube Yamaguchi
Mixer: Kajiura Hiroyuki / Eiichiro Fukusaki
Presentations by High School Students: Tatsuo Kakimoto / Miho Kitazawa / Takeharu Nagai / Fumio Matsuda

Conference Secretaria

Nakanishi Printing Co., Ltd.
Shimodachiuri-Ogawa, Kamigyo-ku, Kyoto 602-8048, Japan
FAX: +81-75-415-3662 E-mail: jspp2020@nacos.com

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1. General Information

1-1. Important Notice

1) About spread of the novel coronavirus infection

There is a concern about the spread of the novel coronavirus infection in Japan. The 61st Annual Meeting of the Japanese Society of Plant Physiologists in Osaka will be held on March 19th to 21th, where many people will come together, so please make sure that each participant keeps coughing etiquette and frequent hand washing at the annual meeting.

2) Program and Abstract Book (see also section 1-8.)

- No program booklet is provided at the meeting site. However, for the convenience of the participants, we are considering distributing a simple bound program at the meeting site.
- The program and abstracts are accessible electronically using iOS/Android Apps, which will be available after March 12 (Thur).
- The PDF file for the Abstract Book is also available at the meeting website.
- The Apps and Abstract Book are available only for those who have completed their registration to attend this meeting.

3) Registration of attendance (see also section 1-3.)

- For those who have completed their registration, please do not forget to bring the postcard for name tag, which will be sent at the beginning of March. For those with the postcard, no on-site registration is required; just take a name tag holder at the entrance.
- Early-bird registration has been closed. Those who have not registered online need to register on site.

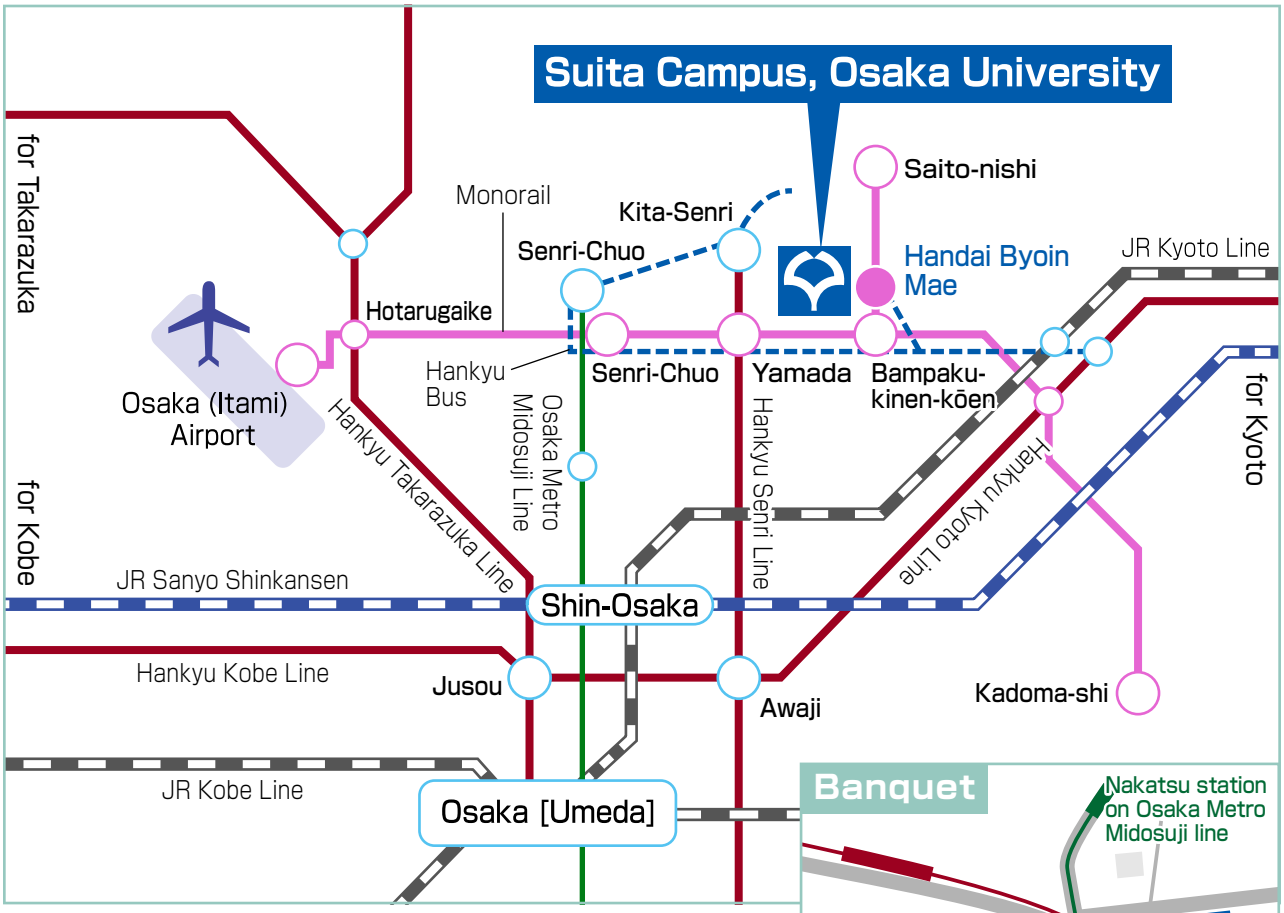
4) Poster presentations [see also section "1-7. *1) General Presentations* 3. Poster presentations"]

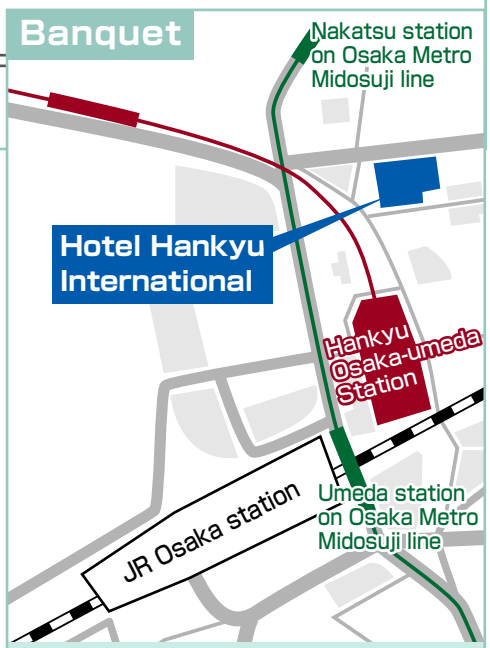
- Poster discussions are scheduled on Day 1 (poster numbers beginning with PF) and Day 3 (poster numbers beginning with PL). On Day 2, those presenting on Day 1 should remove their posters at 9:00–12:00, and those presenting on Day 3 should mount their posters at 14:00–17:00.
- On both Day 1 and Day 3, presenters of odd- and even-numbered posters should be in front of their boards during the first half and second half of the discussion time, respectively (Please refer to the programs).

About the Meeting Logo

The logo of the 61st Annual Meeting of JSPP at Osaka was designed by Pramesti Istiandari (PhD course student, Graduate School of Engineering, Osaka University) who is a Student Member of JSPP combining the symbol of Osaka "Osaka Castle" and the flower of Osaka Prefecture "Ume (Japanese apricot or plum)" as a motif. Ume-no-Hana (Blossom of Ume) is not only a flower of Osaka Prefecture, but is also related to the authority of the new era "Reiwa" and the plum blossom poems in Man Yoshu (the oldest extant collection of Japanese Waka (poetry in Classical Japanese)). We welcome everyone who is coming to Osaka for the first annual meeting with the meeting logo of "Ume".

1-2. Venue and Access





- 3-minute walk from the Chayamachiguchi ticket gate on **Hankyu Osaka-umeda Station**
- 3-minute walk from **Nakatsu station on Osaka Metro Midosuji line**
- 10-minute walk from Midosujiguchi on **JR Osaka station**.

10-minute walk from Monorail Handai Byoin Mae station

By Shinkansen:
From Shin-Osaka station, take Osaka Metro Midosuji Line bound for "Senri-Chuo", getting off at the last station, Senri-Chuo. Transfer to Monorail Senri-Chuo station for "Kadoma-shi", change trains at Bampaku-kinen-kōen for "Saito-nishi", getting off Handai Byoin Mae station

By Airplane:
From Osaka Airport station, take Monorail for "Kadoma-shi", change trains at Bampaku-kinen-kōen for "Saito- nishi", getting off Handai Byoin Mae station

Others

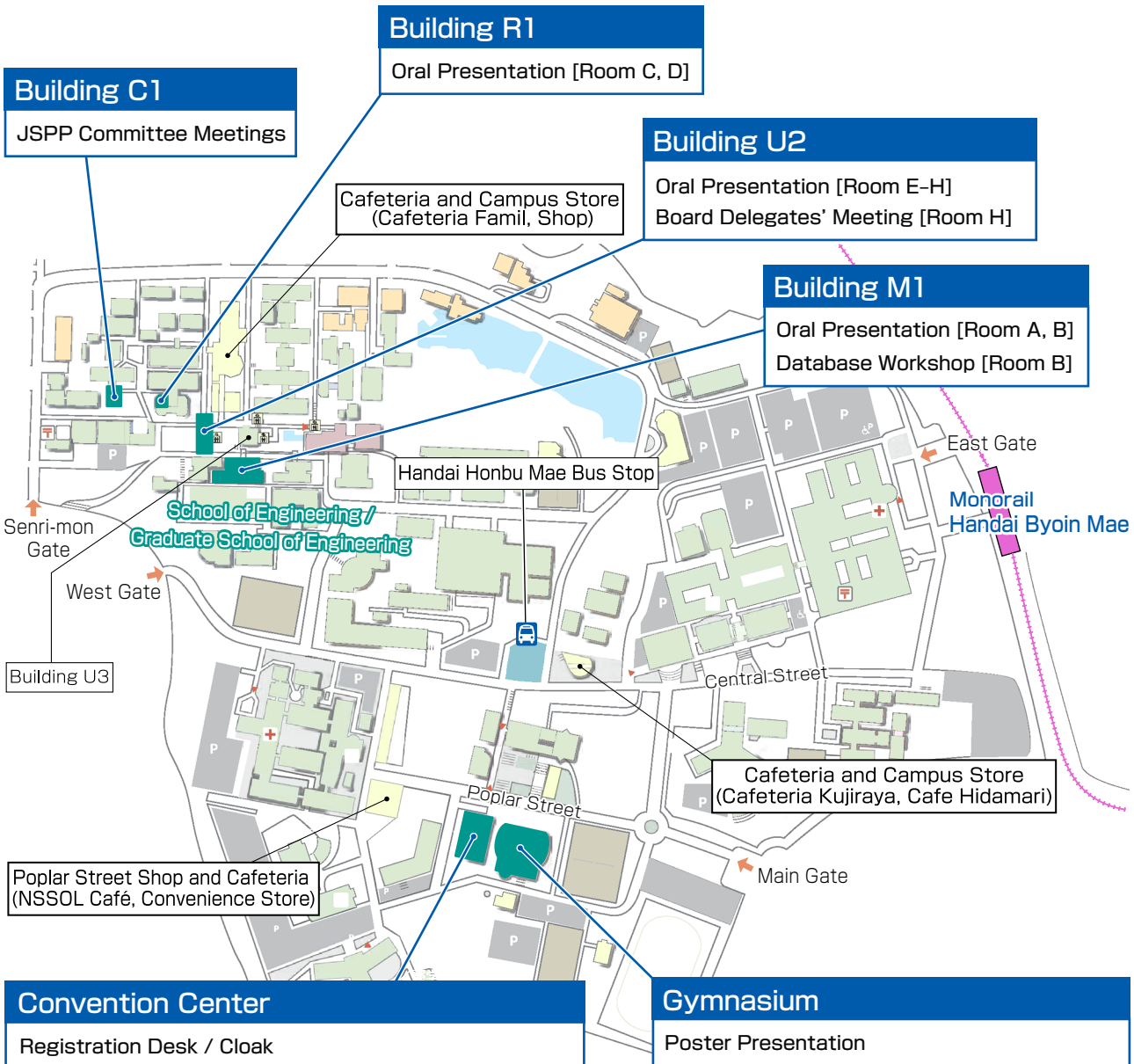
Hankyu Senri Line

Going right (east exit) after existing the ticket gate of the station, Kita-Senri, and crossing the footbridge. Please follow the sign. It is about 15-minute walk to Senri-mon gate.

Hankyu Bus

For Handai Honbu Mae or Ibaraki Mihogaoka from Senri-Chuo, getting off at Handai Honbu Mae bus stop

Guide map (Osaka University, Suita Campus)

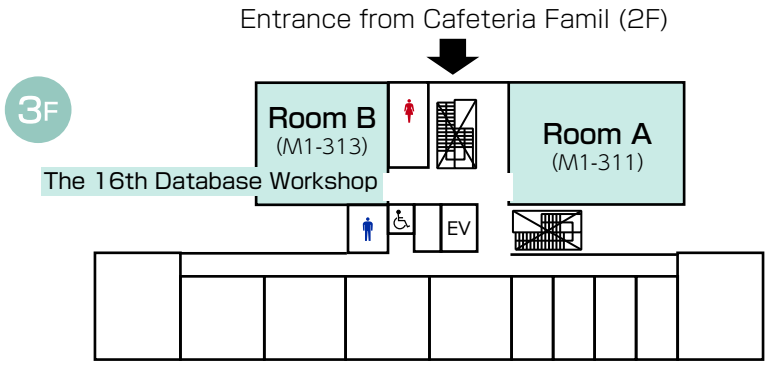


Opening hours of university cafeteria

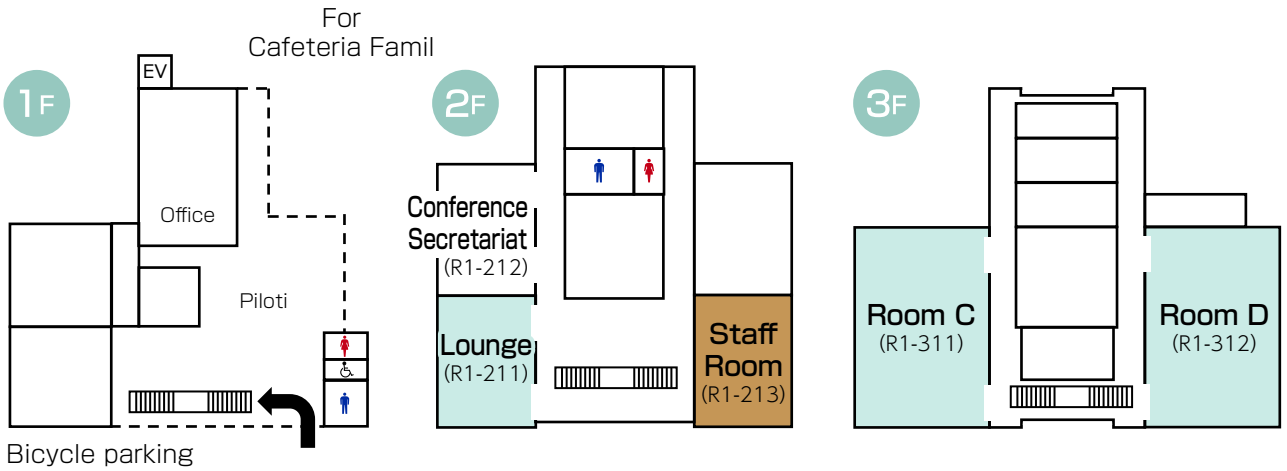
Shop / Cafeteria Name	Venue	Type	March 19, Thur	March 20, Fri National holiday	March 21, Sat
NSSOL Café	nearby the Convention Center or Gymnasium	Cafeteria	11:00–14:30	11:30–13:30	close
7-Eleven		Convenience Store	8:00–21:00	8:00–16:00	8:00–21:00
Cafeteria Famil	nearby Building R1, U2, M1	Cafeteria (available halal food menu)	11:00–20:00	11:00–14:00	11:00–14:00
Shop		Bread, Boxed lunch, drink, stationery	8:00–20:00	10:00–15:00	11:00–14:00
Cafeteria Kujiraya	nearby Handai Honbu Mae Bus Stop	Cafeteria	8:00–20:00	close	8:00–14:30
Cafe Hidamari		Cafeteria	11:00–15:00	close	close

Conference Room

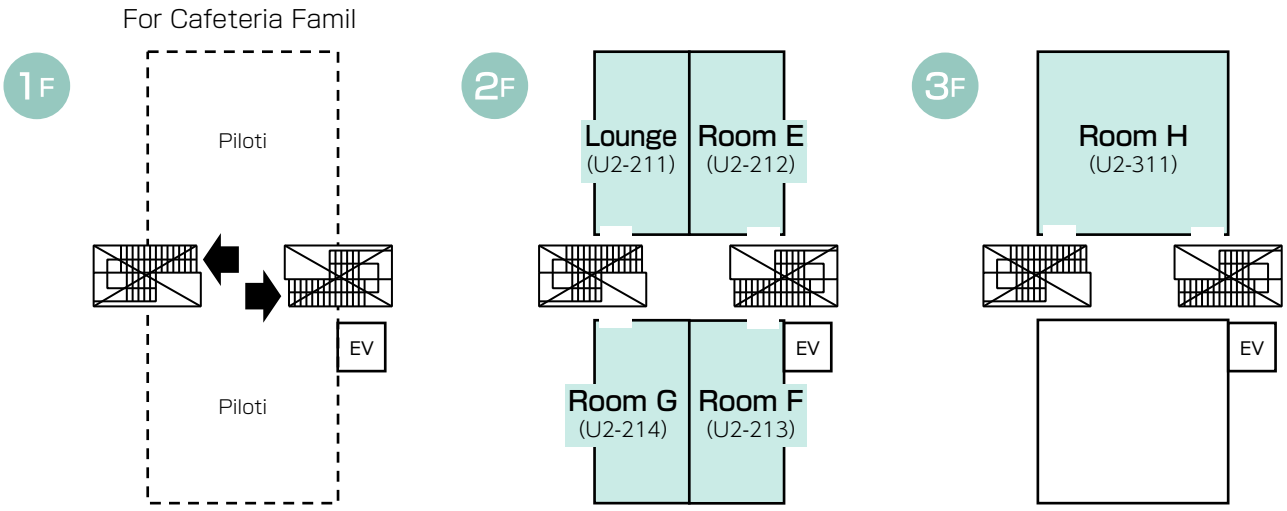
Building M1



Building R1

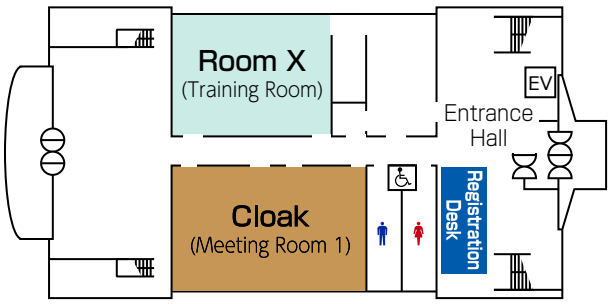


Building U2



Convention Center

1階



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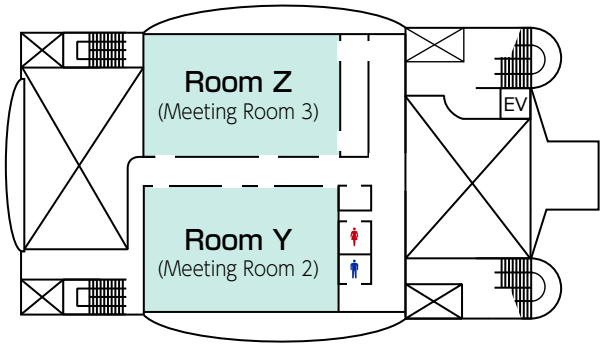

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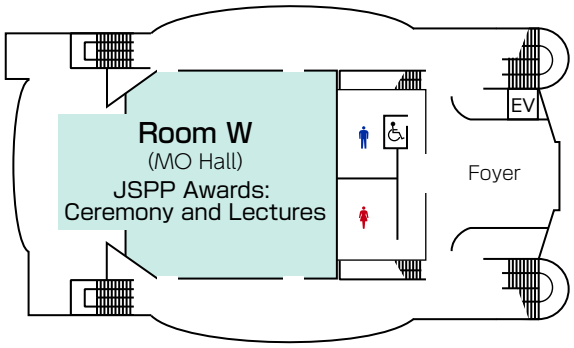
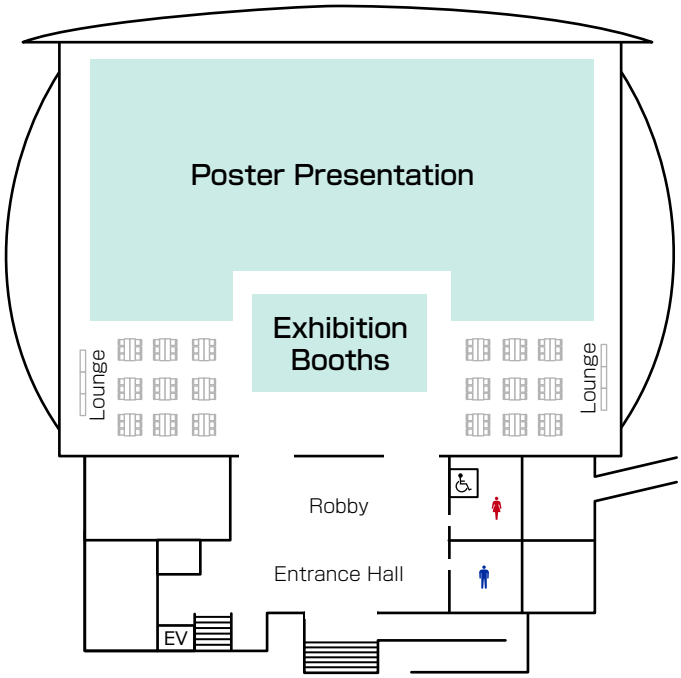


Gymnasium



1-3. Registration of Participants

1) The registration desk will be open from 8:30 on March 19 (Thur) at the Convention Center.
2) **Those who have completed their online registration**: Bring the postcard for the name tag sent to you in the beginning of March, and you do not need to visit the registration desk. We will also distribute name tag holders in the oral presentation area as the registration desk and the oral presentation area are apart.
3) **On-site registration**: Visit the on-site registration desk and pay the fees shown below.

	On-site registration fee (including fee for online access to the Abstract Book)	Banquet fee
JSPP Members	JPY 11,000 (tax free)	JPY 10,000 (tax included)
JSPP Student Members	JPY 6,000 (tax free)	JPY 8,000 (tax included)
Non-JSPP members	JPY 14,000 (tax included)	JPY 10,000 (tax included)

4) The registration desk may be congested shortly before the start of sessions on Day 1. Those who will register on-site and those who did not bring their name tags are requested to visit the desk in plenty of time.
5) Undergraduate students and junior- and high-school students and leading teachers can attend this Meeting free of charge regardless of their JSPP membership. Please see "Registration" on the meeting website. Although these participants cannot access the online Abstract Book, they can download the program from the meeting website.
6) Always wear your name tag on your chest at the venue. The Meeting Committee will check your name tag.

1-4. Lunch

Although Friday, March 20 is a national holiday during the annual meeting period, the cafeteria, shops and other facilities in Suita Campus will be temporarily open. More information will be provided later.

1-5. Cloakroom

The cloakroom is located on Convention Center and is open during the following hours. Please collect your luggage by the closing hour of each day as belongings will not be kept overnight. Please do not include valuables in your luggage.

Day 1: March 19 (Thur) 8:30–19:00
Day 2: March 20 (Fri) 8:30–18:30
Day 3: March 21 (Sat) 8:30–17:30

1-6. Nursery Service

An on-site nursery service is available during the Meeting. For this service, reservation is required beforehand. Please contact the Conference Secretariat for details. The application deadline is Wednesday, February 26, 2020.

1-7. Notes for Presenters

When preparing figures and tables for your presentation, please refer to the website "Color Universal Design (CUD) —How to make figures and presentations that are friendly to colorblind people—" (http://jfly.iam.u-tokyo.ac.jp/color/).

1) General Presentations

1. Qualification of presenters

   In accordance with JSPP Article 7(3), 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 presentations

   The type of presentation (poster or oral presentation) is decided by the program committee to meet the requests at the time of application, but if you select "Either will do." at the time of application, please make sure to confirm the type of presentation through the program before proceeding with the preparation.

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.

   <Posting and removing posters>

   - Those making presentation in the first half of the Annual Meeting (marked with PF at the beginning of the abstract number) should mount their posters from 9:00 to 12:00 on Day 1 and remove them anytime from 9:00 to 12:00 on Day 2. Any posters remaining after this period will be removed by the Meeting Committee.
   - Those making presentation in the second half of the Annual Meeting (marked with PL at the beginning of the abstract number) should mount their posters from 14:00 to 17:00 on Day 2 and remove them by 17:00 on Day 3. Any posters remaining after this period will be removed by the Meeting Committee.

   <Poster discussion time>

   - The poster discussion for those making presentations in the first half of the Annual Meeting is on Day 1, while it is on Day 3 for those making presentations in the second half. The poster discussion times are as follows.
   - For presentations in the first half: 17:00–18:30 on Day 1.
   - For presentations in the second half: 13:00–14:30 on Day 3.
   - On both Days 1 and 3, presenters of odd- and even-numbered posters should be in front of their boards during the first and second half of the poster discussion time, respectively

4. Oral presentations

   - Slides used in oral presentations should be in English. Prepare a brief summary slide in English at the end.
   - Each presentation is a 15-min slot, a talk for 12 min and discussion for 2 min 30 sec, followed by a 30-sec interval for the next speaker. To keep the session on time, please strictly follow the time limits.
   - There is no preview room in this time. The presentation room is open 15 minutes before the each session begins. Please check you slides in the presentation room if you need.
   - Only PC projectors can be used. The recommended resolution is 1024 × 768 (aspect ratio 4:3). Set the resolution of your PC to 1024 × 768.
   - The Annual Meeting Committee does not provide PCs for presenters. Presenters should bring their own PC. Also, presenters should ask their colleagues if assistance is required in operating instruments and devices.
   - Presenters should take the Next Presenter's seat and open files for presentation in their PC before the end of the previous presentation.
   - Connect the PC directly to the external monitor using the cables at the desk for the speaker. To avoid troubles, the input switch box will not be used in this annual meeting.
   - A mini D-sub 15-pin connector cable is used for the connection. If special adapters are required, please provide them by yourself.
   - After the presentation, disconnect the connector and return it to its original position for the next presenter.

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 "4. Oral presentations" above or ask the organizers of your symposium for details.

1-8. Access to Abstract Book Using Application Software

Application software to access the Abstract Book from compatible mobile terminals, such as smartphones and tablets, will be distributed. The software will be available for iOS and Android, and can be downloaded from the App Store or Google Play. The software will be downloadable after March 12 (Thur). The password will be provided by e-mail before March 12. Only the participants of the Annual Meeting, except for those described in section 1-3. 5) above, can access the Abstract Book.

1-9. Free Wireless LAN Service

Free wireless LAN connection is available at the venue. Note that the number of access is not limited, but it may be difficult to connect at some locations and in some situations. Use the information on wireless LAN connection printed on the postcard sent to those who completed their registration online. Participants who have completed their on-site registration will receive information on wireless LAN connection at the reception desk for on-site registration. Eduroam will be also available at the venue.

1-10. Notes for Chairpersons

Please come to the assigned session at least 15 minutes before the starting time and notify the staff of your attendance. Please assign a chairperson to each presentation prior to the Annual Meeting.

No microphone for members of the audiences will be available in some small rooms. If the question is difficult to hear, you can ask the questioner to repeat it with a loud voice or you can repeat the question with your microphone. Moreover, ensure that the session proceeds on-time.

1-11. Patents

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

1-12. Prohibitions

It is strictly prohibited to photograph the contents of presentations with cameras, videos, or mobile phones, or to make recordings without permission from the presenter.

1-13. Contact Information and Bulletin Board

- Contact to the Conference Secretariat

  For questions to the Annual Meeting Committee, send an e-mail to jspp2020@nacos.com.
- Bulletin board

  Messages to participants will be posted on the bulletin board near the reception desk at the entrance. Announcements will not be made at the venue. The bulletin board is also open to participants for mutual communication; feel free to post your messages.

1-14. Mixer

The mixer will be held from 18:30 on Day 1 (March 19) at the Gymnasium . All participants are encouraged to attend the mixer.

2. Contents of the Annual Meeting

2-1. Banquet

A banquet will be held at the Hotel Hankyu International from 19:00 on Day 2 (March 20). There will be several shuttle buses from the annual meeting place to the hotel. On-site registration for the banquet is accepted at the reception desk.

Hotel Hankyu International
19-19, Chayamachi, Kita-ku,Osaka,530-0013, JAPAN
https://global.hankyu-hotel.com/hankyu-international/

2-2. JSPP Awards Ceremony and Award Lectures

Date and time: Day 2, March 20 (Fri) 16:15–18:00
Venue: Room W1
Please see the program p.14 for details.

2-3. Symposia

Fifteen symposia will be held in this Meeting. For the content and purpose of each symposium, please refer to the Meeting website (https://jspp.org/annualmeeting/61/e_greeting.php). Please see p.15 for the program.

Day 1, March 19 (Thur) 9:30–12:30

♦ **S01** Japan-Taiwan Joint Symposium: Front lines of post-transcriptional gene regulation in environmental responses
♦ **S02** Towards a unified understanding of local/systemic signaling and beyond in plant wound and immune responses
♦ **S03** Molecular basis of long-distance signaling in plants
♦ **S04** Molecular mechanism of cell proliferation and reprogramming —the chromatin perspective and beyond—

Day 1, March 19 (Thur) 13:45–16:45

♦ **S05** The highly specialized plant organs and cells —Its function and evolution—
♦ **S06** Frontiers of research on embryo and endosperm development: Induction of artificial apomixis
♦ **S07** Secret life of chloroplasts: from development to degradation

Day 2, March 20 (Fri) 8:45–11:45

♦ **S08** Frontiers of growth and development in grasses explored by young researchers
♦ **S09** Two sides of auxin actions on stem cells
♦ **S10** Understanding plant developmental processes along spatiotemporal axes

Day 2, March 20 (Fri) 13:00–16:00

♦ **S11** Development and application of plant manipulation strategy: towards the design of optimized crop production
♦ **S12** Dynamic photosynthetic responses to fluctuating light
♦ **S13** New Trends in Plant Chemical Research by the Interconnection between Chemical Biology and Metabolite Chemistry.

Day 3, March 21 (Sat) 8:45–11:45

♦ **S14** Higher-order functions in plant endomembrane system
♦ **S15** From plant physiology to biotechnology

2-4. The 16th Database Workshop

Date and time: Day 1, March 19 (Thur) 13:45–16:45

Venue: Room B

Organizers: Kentaro Yano (Meiji Univ.)

Please see p.30 for the program.

2-5. Special Program: "Research Presentations by High School Students"

With the aim of enhancing interest in plant science and life science among high school students who will play an active role in the next generation, a special program: "Research Presentations by High School Students" will also be held during the Annual Meeting. It is expected that many high school students will participate in the special program and make active discussion. Many high school students are expected to participate in the program this year. Awards will be given to high school students on a competitive basis. Also, this year an information exchange meeting will be held between the presenters and the regular meeting participants to provide a chance for high school students to discuss research and education with faculty members, researchers, and graduate students to facilitate their research and education. All are encouraged to participate in the information exchange meeting, and award ceremony. The abstracts of poster presentations by high school students will be distributed as a separate supplement.

Time and date: 9:30–16:30, Saturday, March 21, Day 3

Venue: Presentation; Gymnasium of Osaka University, Suita Campus,
Discussion with Meeting Participants and Award Ceremony; Room Y and Room Z, Convention Center

Sponsor: Committee of the 61st Annual Meeting of the Japanese Society of Plant Physiologists

9:30–10:10	Registration and poster setup
10:10–10:20	Opening ceremony
10:30–12:00	Core time of poster presentations with odd abstract numbers (poster presentation, question-and-answer session)
12:00-13:00	Lunch
13:00–14:30	Core time of poster presentations with even abstract numbers (poster presentation, question-and-answer session)
14:30–14:45	Removal of posters and moving to the venue for Discussion with Meeting Participants and Award Ceremony
14:45–15:45	Information exchange meeting (consultation and discussion regarding research and education with faculty members, researchers, and graduate students)
16:00–16:30	Award ceremony

2-6. Luncheon Seminars

Registration is not required, but distribution of lunch box will be on a first-come-first-served basis. Please see p.31 for the program and contents.

♦ *PCP* Luncheon Seminar "Making an impact with PCP in 2020"

Date and time: Day 1, March 19 (Thur) 12:40–13:30

Venue: Room H

Organizer: *PCP* Editors Committee, Sponsor: Oxford University Press

♦ **Promega Luncheon Seminar "Application of the Automated Nucleic Acid Purification and Bioluminescence Peptide-tag Technologies"**

Date and time: Day 1, March 19 (Thur) 12:40–13:30

Venue: Room Y

Sponsor: Promega KK

♦ **Illumina K.K. Luncheon Seminar**

Date and time: Day 2, March 20 (Fri) 12:00–12:50

Venue: Room Y

Sponsor: Illumina K.K.

♦ **OLYMPUS CORPORATION Luncheon Seminar**

Date and time: Day 2, March 20 (Fri) 12:00–12:50

Venue: Room Z

Sponsor: OLYMPUS CORPORATION

♦ **Luncheon Seminar on Gender Equality — Why are there so few female researchers in Japan? Considerations based on a large questionnaire survey for 18,000 researchers. —**

Date and time: Day 3, March 21 (Sat) 12:00–12:50

Venue: Room Y

Sponsor: JSPP Gender Equality Committee

2-7. Satellite Meetings

Please see p.36 for the programs.

♦ **The 22th Plant Organelle Workshop**

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

Venue: Nambu Yoichiro Hall, Graduate School of Science, Osaka University (Toyonaka Campus)

Representative Organizer: Yoshiki Nishimura (Kyoto University)

Cellular organelles play key roles in the development, function, homeostasis, and environmental adaptation of plants. This workshop provides an opportunity for plant scientists of various disciplines to exchange latest findings, ideas, and relevant techniques regarding plant organelles, and for communication and discussion. Invited speakers will address topics, including chloroplasts, mitochondria, other cellular organelles, and whole plants from the molecular level to the environmental level.

This workshop is free to all participants, but they are encouraged to register on our website. People who wish to join the mixer after the talk session should register at our website below by Wednesday, March 11. Beer, soft drinks, and food will be provided at the cost of 4,500 yen per person (4,000 yen for graduate and undergraduate students).

Contact addresses: Masato Nakai, E-mail: nakai@protein.osaka-u.ac.jp

Yusuke Kato, E-mail: ykato@okayama-u.ac.jp

Web site: http://www.rib.okayama-u.ac.jp/OWS/

♦ **5th Workshop on Photosynthetic Bacteria**

Date and time: The day before the Meeting, March 18 (Wed) 12:30–18:00

Venue: Room U2-312

Organizers: Dr. Jiro Harada (Kurume University School of Medicine), E-mail: jiro_harada@med.kurume-u.ac.jp

Dr. Yusuke Tsukatani (Japan Agency for Marine-Earth Science and Technology), E-mail: tsukatani@jamstec.go.jp

Dr. Chihiro Azai (Ritsumeikan University), E-mail: cazai@fc.ritsumei.ac.jp

Anoxygenic photosynthetic bacteria are now subjects for various fields of studies including biochemistry, molecular biology, structural biology, biophysics, bioorganic chemistry, microbial ecology, etc. This workshop invites speakers talking their latest achievements and provides new insights into studies on anoxygenic photosynthetic bacteria through discussion. Registration fee is free. After the workshop, we will have a banquet (fee: about 4,500 yen). To resister the workshop and/or banquet, please fill the Entry Form (https://forms.gle/XRCyjzLysSmBHy2K6) (deadline, 03/06/2020). We are expecting your participation.

♦ The 38th Meeting of the Japanese Society for Young Plant Physiologists

Date and time: Day 1, March 19 (Thur) 18:30–20:00

Venue: Room E

Organizers: Rumi Amano (Kyoto Sangyo University), Tatsuya Nobori (Salk Institute)

This meeting offers young scientists and students the opportunity to exchange information and discuss topics related to research and career development. We invited two speakers to share their own stories with us. No registration required to participate in this meeting. Meal boxes will be provided at the meeting upon request. There will be an after meeting gathering with the speakers and participants. Please register for the meal boxes and/or the gathering at https://forms.gle/2Rc6LcPmK2XekQfB6 by March 11. More details are available on the meeting website (http://www.cc.kyoto-su.ac.jp/~i1659019/wakatenokai.html).

Contact addresses: Rumi Amano: i1659019@cc.kyoto-su.ac.jp
Tatsuya Nobori: tnobori@salk.edu

♦ The 4nd Meeting of Plant Mathematical Modeling

Date and time: Day 1, March 19 (Thur) 18:30–20:00

Venue: Room F

Organizers: Munetaka Sugiyama (University of Tokyo), Hironori Fujita (Astrobiology Center / NIBB), Takaaki Yonekura (University of Tokyo)

This meeting is aimed at gathering together researchers and students interested in mathematical models in plant science regardless of whether they are experimental researchers, theorists, beginners, or experienced, and to exchange information and deepening friendship. It is also aimed at building a community in this research field, and is planned to be held continuously at annual meetings of JSPP and BSJ. This time we will have a short course of computer programming and simulation of simple mathematical models of the reaction-diffusion system with Wolfram Programming Lab (https://lab.open.wolframcloud.com/objects/wpl/GetStarted.nb), a free on-line platform where Mathematica can be used. This meeting is open to all participants. Please feel free to join us with your computer. For more details, please see http://www.nibb.ac.jp/miyakohp/asari/htdocs/?page_id=57

♦ 15th Plant membrane symposium

Date and time: Day 1, March 19 (Thur) 18:40–20:00

Venue: Room G

Organizers (in alphabetic order): Maki KATSUHARA (Okayama University), Izumi MORI (Okayama University), Yoshiyuki MURATA (Okayama University), Yoshiji OKAZAKI (Osaka Medical College), Shingo TAKAGI (Osaka University)

Prof. Tetsuro MIMURA (Former President of JSPP) will provide the talk summarizing his study of plant membrane biology. This meeting is free to all audience and registration is not required.People who wish to join the mixer (Near Kita-senri Station, 15–20 min on foot from the venue, ¥5,000–6,000) are required to register by e-mail to Maki Katsuhara with title “Joining the mixer for 15th plant membrane symposium” until May, 5th (Thur).

Contact address: Maki Katsuhara, kmaki@okayama-u.ac.jp

2-8. JSPP Committee Meetings

The day before the meeting, Wed, March 18

9:00–17:00	[C1 Bld. C1-111]	PCP Editors and Advisory Editorial Board Meeting
PM	[C1 Bld. C1-112]	Public Relations Committee Meeting
PM	[Room H]	Directors' and managers' Meeting
Late afternoon	[Room H]	Board of Delegates' Meeting

Day1, Thur., March 19

Lunch time	[C1 Bld. C1-111]	JSPP Awards Committee Meeting
Lunch time	[C1 Bld. C1-112]	GMO Working Group Meeting

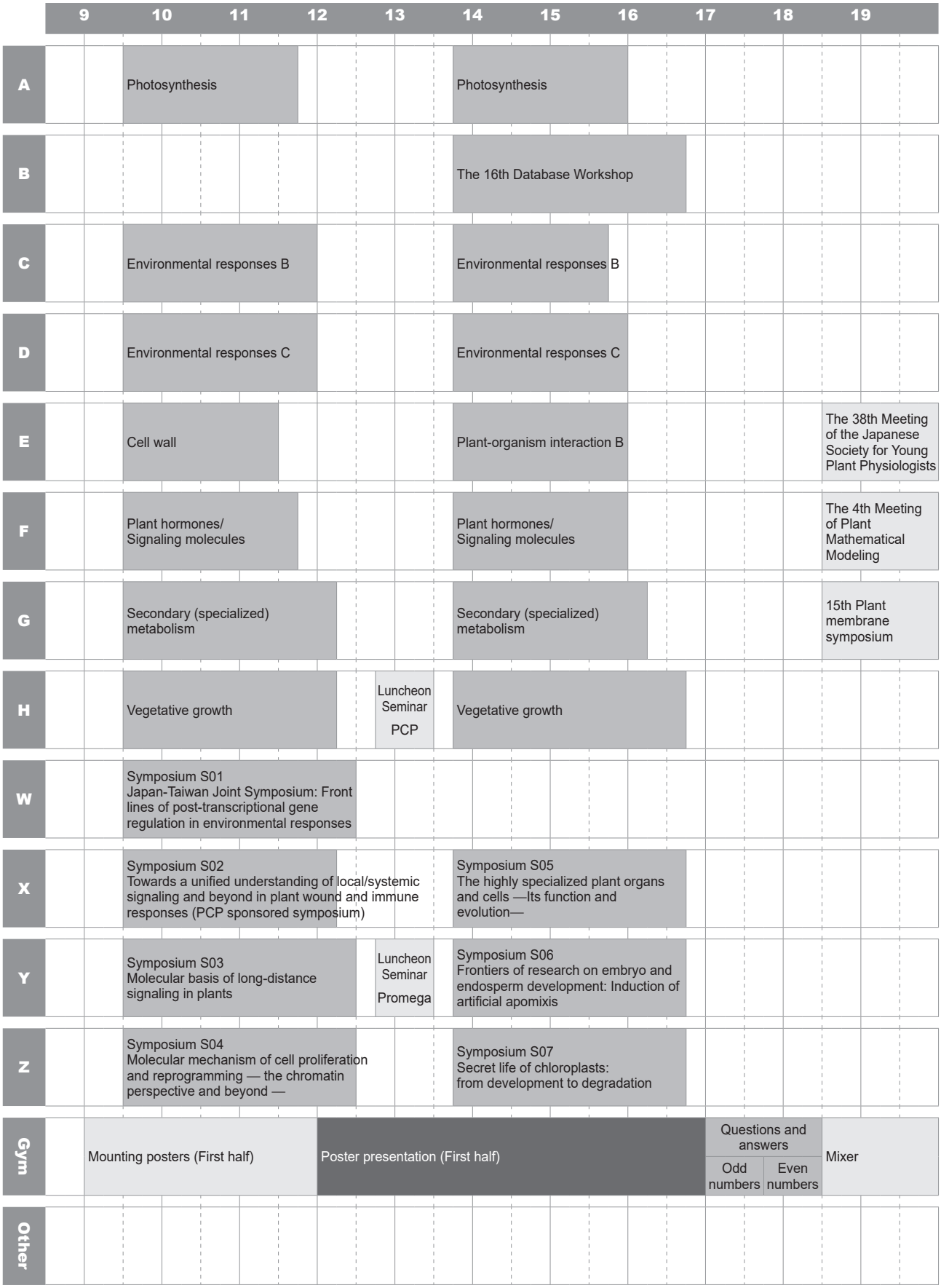
Day2, Fri., March 20

Lunch time	[C1 Bld. C1-111]	Gender Equality Committee Meeting
Lunch time	[C1 Bld. C1-112]	Gathering of Science Advisors and Public Relations Committee Members

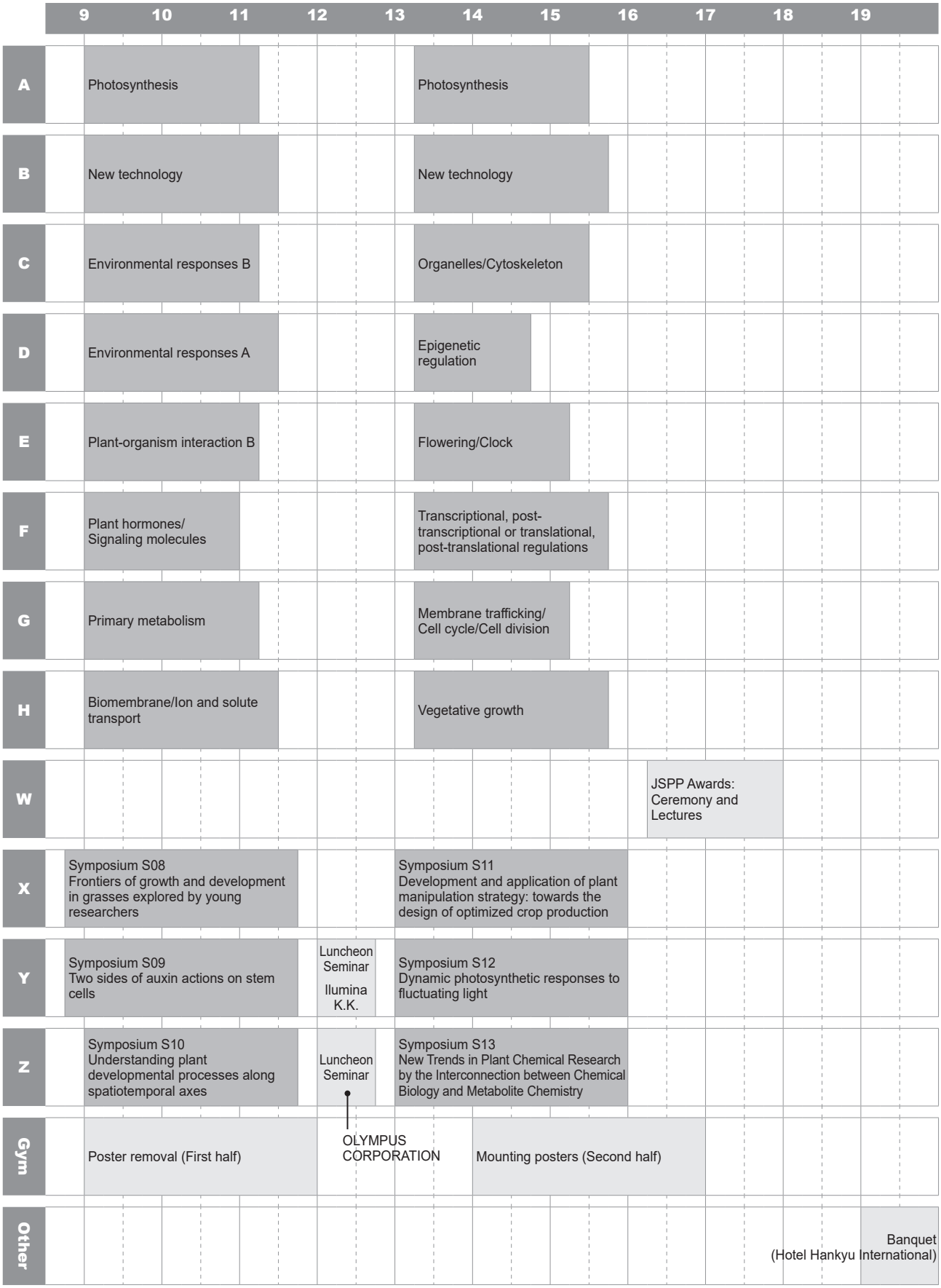
Day3, Sat., March 21

Lunch time	[C1 Bld. C1-111]	International Committee Meeting
Late afternoon	[C1 Bld. C1-111]	Annual Meeting Committee Meeting

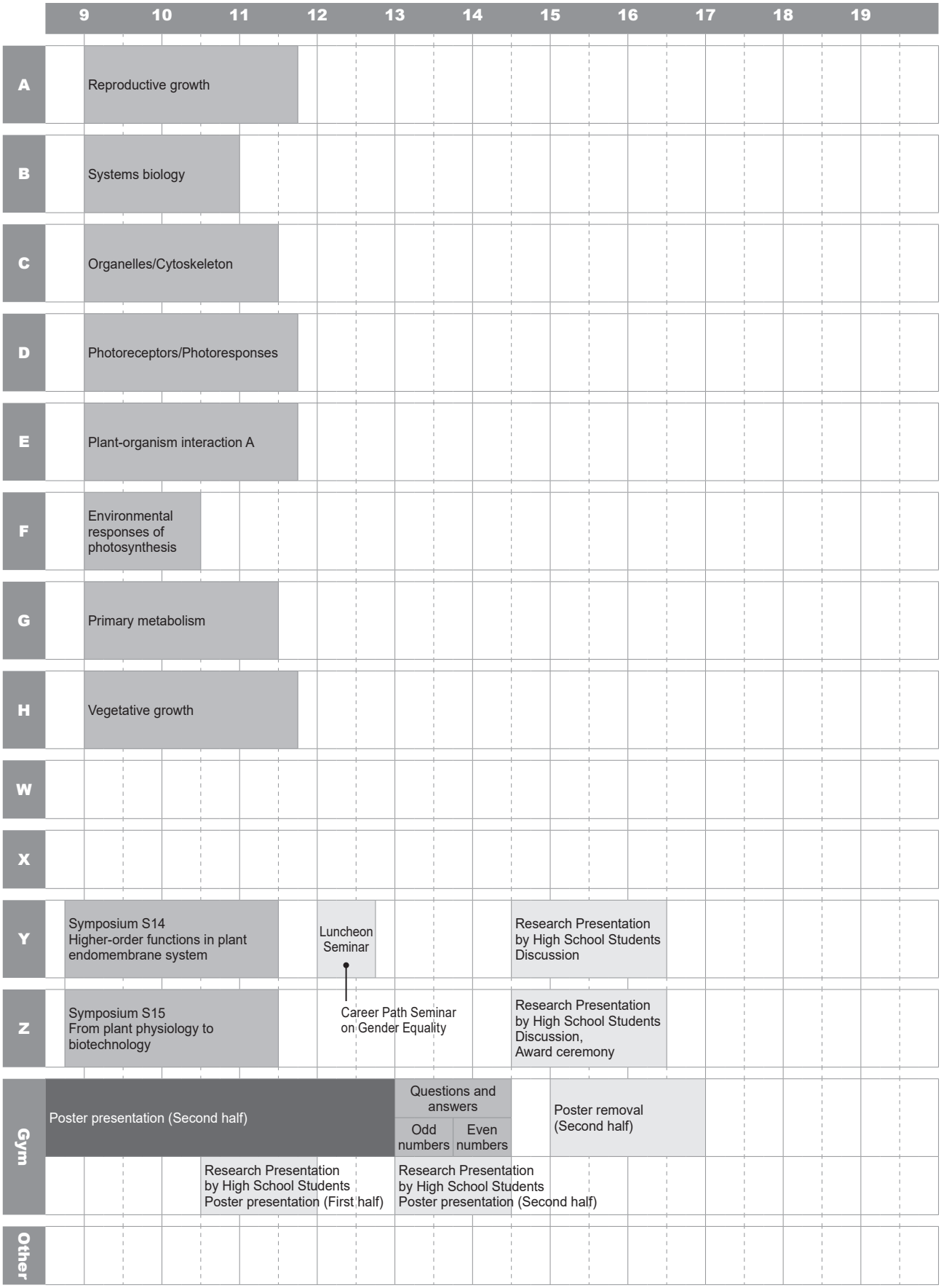
Time table Day 1, Thur., March 19



Time table Day 2, Fri., March 20



Time table Day 3, Sat., March 21



Fri., March 20, 16:15–18:00 Room W

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

16:15	Reports on Selection Process	Chairpersons of Award Committee
16:30	JSPP Award, JSPP Young Investigator Awards, PCP Award and PCP Top Cited Paper Award	JSPP President
16:40	Honorary Membership Award Masahiro Sugiura (Nagoya Univ.) Mitsuo Nishimura (Kyushu Univ.)	JSPP President

Award Lectures

Language: Japanese

16:50 A01 JSPP Award
"Development of an infrastructure for *Lotus japonicas* and studies on systemic regulation of symbiosis"
Masayoshi Kawaguchi (National Institute for Basic Biology.)

17:10 A02 JSPP Young Investigator Award
"Plant responses to complex natural environments captured by field transcriptomics"
Atsushi J. Nagano (Fac. Agr., Ryukoku Univ.)

17:25 A03 JSPP Young Investigator Award
"New insights into the biology of stomatal guard cells"
Juntaro Negi (Dept. Biol., Fac. Sci., Kyushu Univ.)

17:40 A04 PCP Award
Shigeyuki Betsuyaku, Shinpei Katou, Yumiko Takebayashi, Hitoshi Sakakibara, Nobuhiko Nomura, and Hiroo Fukuda (2018)
"Salicylic Acid and Jasmonic Acid Pathways are Activated in Spatially Different Domains Around the Infection Site During Effector-Triggered Immunity in Arabidopsis thaliana"
Plant Cell Physiol. 59(1): 8–16
Shigeyuki Besuyaku (Fac. Life & Env. Sci., Univ. Tsukuba.), et al.

Thur., March 19, 9:30–12:25 Room W

Japan-Taiwan Joint Symposium: Front lines of post-transcriptional gene regulation in environmental responses

Language: English

Organizers: Misato Ohtani (The University of Tokyo, Japan)
Shih-Long Tu (Academia Sinica, Taiwan)

09:30		Opening remarks
09:35	**S01-1**	Crosstalk between light signaling and pre-mRNA splicing Chueh-Ju Shih[1,2,3], Bou-Yun Lin[1,2], Hsin-Yu Hsieh[1], Shih-Long Tu[1,2,4] ([1]Institute of Plant and Microbial Biology, Academia Sinica, Taiwan, [2]Molecular and Biological Agricultural Sciences Program, Taiwan International Graduate Program, Chung-Hsing University and Academia Sinica, Taiwan, [3]Graduate Institute of Biotechnology, National Chung-Hsing University, Taiwan, [4]Biotechnology Center, National Chung-Hsing University, Taiwan)
10:00	**S01-2**	snRNP biogenesis-mediated environmental adaptation in plants Misato Ohtani[1,2,3] ([1]Grad. Sch. Front. Sci., Univ. Tokyo, Japan, [2]Div. Biol. Sci., NAIST, [3]CSRS, RIKEN, Japan)
10:25	**S01-3**	Widespread exon junction complex footprints in the RNA degradome mark mRNA degradation before steady-state translation Ho-Ming Chen (Agricultural Biotechnology Research Center, Academia Sinica, Taiwan)
10:50	**S01-4**	Boron-dependent translation of a borate transporter *BOR1* and its significance for adaptation to boron nutrient availability Kyoko Miwa (Grad. Sch. Environ. Sci., Hokkaido Univ., Japan)
11:15	**S01-5**	Lost in translation? The determinants of the translational control and their impacts on plant gene expression Ya-Ru Li, Ming-Jung Liu (Agricultural Biotechnology Research Center (ABRC), Academia Sinica, Taiwan)
11:40	**S01-6**	Reproductive system via microRNA producing secondary siRNAs in a photoperiodic environment Reina Komiya[1,2] ([1]Okinawa Institute of Science and Technology Graduate University (OIST), Japan, [2]JST, PRESTO, Japan)
12:05		Discussion Discussion leader: Tzyy-Jen Chiou (Agricultural Biotechnology Research Center, Academia Sinica, Taiwan)
12:20		Closing remarks

Thur., March 19, 9:30–12:10 Room X

PCP PLANT & CELL PHYSIOLOGY OXFORD UNIVERSITY PRESS

PCP sponsored symposium

Towards a unified understanding of local/systemic signaling and beyond in plant wound and immune responses

Language: English

Organizers: Masatsugu Toyota (Dept. Biochem. & Mol. Biol., Saitama Univ.)
Shigeyuki Betsuyaku (Fac. Life & Sci., Univ. Tsukuba)

● Chairperson: Masatsugu Toyota

09:30 Opening remarks
Miki Matoba (Oxford Univ. Press)

09:32 Opening remarks
Masatsugu Toyota (Dept. Biochem. & Mol. Biol., Saitama Univ.)

09:35 **S02-1** Spatiotemporal dynamics of the salicylate and jasmonate signaling pathways regulating plant immune and wound responses
Shigeyuki Betsuyaku[1,2] ([1]Fac. Life & Env. Sci., Univ. Tsukuba, [2]MiCS, Univ. Tsukuba)

10:00 **S02-2** Spatial coordination of plant immunity at the organism level
Kenichi Tsuda[1,2] ([1]Huazhong Agricultural University, [2]Max Planck Institute for Plant Breeding Research)

10:25 **S02-3** Signal exchanges between parasitic plants and host plants to establish plant-plant connection
Satoko Yoshida (NAIST, Bioscience)

● Chairperson: Shigeyuki Betsuyaku

10:50 **S02-4** Rain induces a novel layer of plant immunity through trichome as a mechano-sensor
Mamoru Matsumura[1], Mika Nomoto[1,2], Tomotaka Itaya[1,2], Yuri Aratani[3], Mizuki Iwamoto[4], Takamasa Suzuki[5], Shigeyuki Betsuyaku[4,6], Steven H. Spoel[7], Masatsugu Toyota[3], Yasuomi Tada[1,2] ([1]Div. of Bio. Sci., Grad. Sch. of Sci., Nagoya Univ., [2]Cent. for Gene Res., Nagoya Univ., [3]Grad. Sch. of Sci and Eng., Saitama Univ, [4]Grad. Sch. of Life and Environ. Sci., Univ. of Tsukuba, [5]Col. of BioSci. and Biotech., Chubu Univ., [6]Fac. of Life and Environ. Sci. MiCS, Univ. of Tsukuba, [7]Inst. of Mol. Plant Sci., Sch. of Biol. Sci., Univ. of Edinburgh)

11:15 **S02-5** How plants perceive airborne signals in the shape of volatile organic compounds
Kenji Matsui (Grad. Sch. of Sci. & Tech. for Innov., Yamaguchi Univ.)

11:40 **S02-6** Calcium-based intra- and inter-plant communication system
Masatsugu Toyota (Dept. Biochem. & Mol. Biol., Saitama Univ.)

12:05 Closing remarks
Shigeyuki Betsuyaku (Fac. Life & Sci., Univ. Tsukuba)

Thur., March 19, 9:30–12:30 Room Y

Molecular basis of long-distance signaling in plants

Language: English

Organizers: Hitoshi Sakakibara (Nagoya Univ.)
Koh Aoki (Osaka Pref. Univ.)

● Chairperson: Koh Aoki

09:30 Opening remarks
Hitoshi Sakakibara

09:35 **S03-1** Importance of cytokinin systemic transport for fine-tuning of plant growth
Hitoshi Sakakibara (Grad. Sch. Bioagric. Sci., Nagoya Univ.)

10:00 **S03-2** Sieve Tube Structure Function Relations
Michael Knoblauch, Alex Howell, Winfried Peters, Britteny Wager, Yan Liu, Grayson Ostermeyer (Washington State University)

10:30 **S03-3** Shoot-root communication underlying the control of nitrogen homeostasis in plants
Yoshikatsu Matsubayashi (Grad. Sch. Sci., Nagoya Univ.)

11:00 **S03-4** Toward understanding the molecular mechanism of florigen transport in *Arabidopsis* shoot apex
Mitsutomo Abe (Grad. Sch. Arts and Sci., Univ. Tokyo)

● Chairperson: Hitoshi Sakakibara

11:20 **S03-5** Study on mobile mRNAs in plants
Michitaka Notaguchi (Bioscience and Biotechnology Center, Nagoya University)

11:50 **S03-6** Visualizing and evaluating long-distance phloem transport of photoassimilates by the PETIS and $^{11}CO_2$ tracer
Yong-Gen Yin (Takasaki Advanced Radiation Research Institute, QST)

12:10 **S03-7** Differential regulation of RNA unloading from phloem
Koh Aoki, Subhankar Bera, Kohki Shimizu (Grad. Sch. Life Environ. Sci., Osaka Pref. Univ.)

12:25 Closing remarks
Koh Aoki

Thur., March 19, 9:30–12:30 Room Z

Molecular mechanism of cell proliferation and reprogramming — the chromatin perspective and beyond —

Language: English

Organizers: Keiko Sugimoto (RIKEN CSRS)
Sachihiro Matsunaga (Tokyo University of Science)

● Chairperson: Sachihiro Matsunaga

09:30 **S04-1** Factors linking cell proliferation, genome replication and chromatin dynamics
Crisanto Gutierrez (Centro de Biologia Molecular Severo Ochoa, CSIC)

10:10 **S04-2** Single-cell dissection of regenerating plant roots
Kenneth David Birnbaum[1,2], Bruno Guillotin[1,2] ([1]New York University, Center for Genomics and Systems Biology, [2]New York University, Department of Biology)

10:50 **S04-3** Healing the damage: stress-induced cellular reprogramming in plants
Keiko Sugimoto (RIKEN CSRS)

● Chairperson: Keiko Sugimoto

11:20 **S04-4** Epigenetic priming for plant regeneration
Sachihiro Matsunaga[1], Mio Shibuta[1], Megumi Matsuoka[1], Soichi Inagaki[2], Yayoi Inui[1], Takamasa Suzuki[3], Kaoru Sugimoto[1], Tetsuji Kakutani[2], Takuya Sakamoto[1] ([1]Dept. Biol. Appl. Sci., Fac. Sci. Tech., Tokyo Univ. Sci., [2]Dept. Biol. Sci., Grad. Sch. Biol. Sci., Univ. Tokyo, [3]Dept. Biol. Chem., Chubu Univ.)

11:50 **S04-5** Building beauty: the role of cell division and differentiation during petal patterning
Edwige Moyroud (The Sainsbury laboratory, University of Cambridge)

Co-sponsored by Scientific Research on Innovative Areas "Integrative system of autonomous environmental signal recognition and memorization for plant plasticity"

Thur., March 19, 13:45–16:40 Room X

The highly specialized plant organs and cells — Its function and evolution —

Language: English

Organizers: Makoto Shirakawa (NAIST)
Naoki Takahashi (NAIST)

13:45 Opening remarks

● Chairperson: Naoki Takahashi

13:50 **S05-1** Dissection of the molecular mechanism of root hair morphogenesis in Arabidopsis
Masa H. Sato[1] ([1]Grad. Sch. of Life and Envirn. Sci., Kyoto Pref. Univ., [2]Kyoto Prefectural University)

14:10 **S05-2** Microtubule dynamics regulated by a plant-specific protein family, CORD
Takema Sasaki[1,3], Hiroo Fukuda[2], Yoshihisa Oda[1,3] ([1]Dept. Gene Func. Phen., NIG, [2]IFI, Univ. Tokyo, [3]Dept. Genet., SOKENDAI)

14:30 **S05-3** Transcriptional Atlas of Idioblast Myrosin Cells; A Factory for the Mustard Oil Bomb
Makoto Shirakawa, Toshiro Ito (Grad. Sch. Sci. Tec., NAIST)

14:50 **S05-4** Endodermal cell differentiation and apoplastic barrier formation
Takehiro Kamiya (Grad. Sch. Agr. Life Sci., Univ. Tokyo)

15:10 Break

● Chairperson: Makoto Shirakawa

15:15 **S05-5** Regulatory mechanism of stem cell maintenance in *Arabidopsis* roots
Naoki Takahashi, Masaaki Umeda (Grad. Sch. Sci. Tec., NAIST)

15:35 **S05-6** Root cap morphogenesis and function in the immune system
Shunsuke Miyashima[1], Kei Hiruma[1,2], Keiji Nakajima[1] ([1]Grad. Sch. Sci. Tec., NAIST, [2]JST PRESTO)

15:55 **S05-7** Calcium ion mediated memory system in the carnivorous plant *Dionaea muscipula*
Hiraku Suda[1,2], Mitsuyasu Hasebe[1,2] ([1]Div. Evol. Biol., NIBB, [2]Sch. Sci., SOKENDAI)

16:15 **S05-8** Invention and diversity of stomata in land plants
Tomoo Shimada (Grad. Sch. Sci., Kyoto Univ.)

16:35 General Discussion

Thur., March 19, 13:45–16:45 Room Y

Frontiers of research on embryo and endosperm development: Induction of artificial apomixis

Language: English

Organizers: Miho Ikeda (Saitama Univ)
Masaru Ohme-Takagi (Saitama Univ)

13:45 opening remarks
Masaru Ohme-Takagi

● Chairperson: Hironori Takasaki

13:50 **S06-1** Shedding light on sporogenesis in Arabidopsis
Arp Schnittger (University of Hamburg)

14:20 **S06-2** Initiation of zygotic development and fertilization-independent egg cell division in rice
Takashi Okamoto (Dept. Biol. Sci., Tokyo Met. Univ.)

14:50 **S06-3** Molecular mechanisms of endosperm initiation in flowering plants
Duarte Figueiredo (University of Potsdam)

● Chairperson: Miho Ikeda

15:20 **S06-4** Identification of the lifeline gateway within a plant ovule, required for transferring important substances to seeds
Ryushiro Kasahara (Fujian Agriculture and Forestry University)

15:50 **S06-5** Regulatory mechanisms of nutrient supply necessary for embryogenesis
Hironori Takasaki[1], Miho Ikeda[1], Zhang Yilin[1], Shingo Sakamoto[2], Daisuke Maruyama[3], Nobutaka Mitsuda[2], Tetsu Kinoshita[3], Masaru Ohme-Takagi[1,2] ([1]Graduate School of Science and Engineering, Saitama University, [2]Bioproduction Research Institute, National Institute of Advanced Industrial Science and Technology, [3]Kihara Institute for Biological Research, Yokohama City University)

16:13 **S06-6** Role of imprinted genes in relation to sexual and asexual endosperm development in rice
Kaoru Tonosaki[1], Tetsu Kinoshita[2] ([1]Faculty of Agr., Iwate Univ., [2]KIBR, Yokohama City Univ.)

16:43 Closing remarks
Miho Ikeda

**Co-sponsored by The Advanced Low Carbon Technology Research and Development Program (ALCA)
MEXT KAKENHI, Grant-in-Aid for Scientific Research on Innovative Areas—The Birth of New Plant Species—**

Thur., March 19, 13:45–16:45 Room Z

Secret life of chloroplasts: from development to degradation

Language: Japanese

Organizers: Juntaro Negi (Kyushu Univ.)
Yoshiki Nishimura (Kyoto Univ.)

13:45 Opening remarks
Juntaro Negi

● Chairperson: Juntaro Negi

13:50 **S07-1** The dynamic division cycle of chloroplast nucleoids
Yoshiki Nishimura[1], Yusuke Kobayashi[1,2], Osami Misumi[3] ([1]Lab. of Plant Mol. Genet., Dep. of Bot., Kyoto Univ., [2]Grad. Sch. of Sci. and Tech., Ibaraki Univ., [3]Grad. Sch. of Sci. and Tech. for Innovation, Yamaguchi Univ.)

14:10 **S07-2** Chloroplast biogenesis starts with lipids
Koichi Kobayashi (Fac. Arts Sci., Osaka Pref. Univ.)

14:30 **S07-3** Protective response of photosynthesis
Ryutaro Tokutsu (NIBB)

14:50 **S07-4** Chloroplast peptide exporter and organellar homeostasis
Kenji Nishimura (Sch. Sci. and Tech., Kwansei Gakuin Univ.)

15:10 Short break

● Chairperson: Yoshiki Nishimura

15:20 **S07-5** A new perspective on the mechanism of chloroplast development in guard cells
Juntaro Negi (Dept. Biol., Fac. Sci., Kyushu Univ.)

15:40 **S07-6** A novel regulation in chloroplast movements
Eiji Gotoh (Fac. Agr., Kyushu Univ)

16:00 **S07-7** Fate of chloroplasts: the degradation process by autophagy
Sakuya Nakamura[1], Masanori Izumi[1,2] ([1]CSRS, Riken, [2]PRESTO, JST)

16:20 **S07-8** Plastidology Begins: A new horizon for evolutionary biology after the flood of genome sequence information
Shinichiro Maruyama (Grad. Sch. Life Sci., Tohoku Univ.)

16:40 Closing remarks
Yoshiki Nishimura

Co-sponsored by New photosynthesis

Fri., March 20, 8:45–11:35 Room X

Frontiers of growth and development in grasses explored by young researchers

Language: Japanese

Organizers: Katsutoshi Tsuda (NIG)
Wakana Tanaka (Hiroshima Univ.)

● Chairperson: Wakana Tanaka

08:45 Opening remarks
Katsutoshi Tsuda

08:50 **S08-1** Post-translational regulation of a KNOX transcription factor in rice
Katsutoshi Tsuda[1,2], Ken-ichi Nonomura[1,2] ([1]National Institute of Genetics, Plant Cytogenetics Lab, [2]Graduate University for Advanced Studies)

09:15 **S08-2** Functional analysis and genetic interaction among the genes involved in the plastochron regulation of rice
Manaki Mimura (National Institute of Genetics, Plant Cytogenetics)

09:40 **S08-3** Antagonistic mechanism of internode elongation in rice
Keisuke Nagai, Motoyuki Ashikari (Nagoya University, Bioscience and biotechnology center, Plant Gene Function)

10:05 Break

● Chairperson: Katsutoshi Tsuda

10:15 **S08-4** Genetic mechanism underlying axillary meristem formation in rice
Wakana Tanaka[1,2], Hiro-Yuki Hirano[2] ([1]Grad. Sch. Integr. Sci. Life, Hiroshima Univ., [2]Grad. Sch. Sci., Univ. Tokyo)

10:40 **S08-5** Evolution of the homeobox genes controlling grain number in Triticeae
Shun Sakuma (Faculty of Agriculture, Tottori University)

11:05 **S08-6** Environment-Dependent Root Developmental Processes Common in Various Poaceae Species
Takaki Yamauchi[1,2], Mikio Nakazono[3], Nobuhiro Tsutsumi[2] ([1]JST PRESTO, [2]Grad. Sch. Agric. Life Sci., Univ. Tokyo,, [3]Grad. Sch. Bioagric. Sci., Nagoya Univ.)

11:30 Closing remarks
Wakana Tanaka

Fri., March 20, 8:45–11:41 Room Y

Two sides of auxin actions on stem cells

Language: Japanese

Organizers: Ryuichi Nishihama (Grad. Sch. Biostudies, Kyoto Univ.)
Masaki Ishikawa (NIBB)

08:45 Opening remarks
Ryuichi Nishihama

● Chairperson: Ryuichi Nishihama

08:50 **S09-1** Two sides of auxin actions in lateral root formation
Hidehiro Fukaki (Grad. Sch. Sci., Kobe Univ.)

09:13 **S09-2** Ambivalence of auxin functions in floral meristem determinacy
Toshiro Ito (Grad. Sch. Sci. Tech., NAIST)

● Chairperson: Masaki Ishikawa

09:36 **S09-3** Induction of Somatic Embryogenesis, Auxin and Transcription Factors
Miho Ikeda, Tsubasa Yamagata, Jun Nakayama, Masaru Ohme-Takagi (Grad. Sch. Sci., Saitama Univ.)

09:59 **S09-4** Spatio-temporal Regulation of Phytohormone during Tissue-reunion Process in Incised Plant Tissue
Masashi Asahina[1,2], Shinobu Satoh[3] ([1]Dept. Biosci., Teikyo Univ., [2]Adv. Instrum. Anal. Cent., Teikyo Univ., [3]Life & Environ Sci., Univ. Tsukuba.)

10:22 **S09-5** Relationship between stem cell-ness and low auxin-responsiveness in *Marchantia polymorpha*
Ryuichi Nishihama, Takayuki Kohchi (Grad. Sch. Biostudies, Kyoto Univ.)

● Chairperson: Ryuichi Nishihama

10:45 **S09-6** Role of auxin in stem cell formation in *Physcomitrella patens*
Masaki Ishikawa[1,2], Tsuyoshi Aoyama[1], Mitsuyasu Hasebe[1,2] ([1]Div. Evo. Biol., NIBB, [2]Sch. Life Sci., SOKENDAI)

11:08 **S09-7** Maintenance of genome integrity through controlling chromatin structure
Shiori S Aki, Masaaki Umeda (Grad. Sch. Sci. Tech., NAIST)

11:31 General Discussion

Co-sponsored by Scientific Research on Innovative Areas, a MEXT Grant-in-Aid Project for FY2017-2021 "Principles of pluripotent stem cells underlying plant vitality"

Fri., March 20, 9:00–11:40 Room Z

Understanding plant developmental processes along spatiotemporal axes

Language: English

Organizers: Tatsuaki Goh (NAIST)
Akane Kubota (NAIST)

09:00 Opening remarks
Tatsuaki Goh

● Chairperson: Akane Kubota

09:05 **S10-1** Periodic cellular behaviors during root cap maturation and detachment
Tatsuaki Goh, Kaoru Sakamoto, Shunsuke Miyashima, Keiji Nakajima (Grad. Sch. Sci. Tech., NAIST)

09:30 **S10-2** Auxin-dependent root gravitropism in *A. thaliana* and its potential contribution to the local adaptation
Takehiko Ogura[1], Christian Goeschl[2], Daniele Filiault[2], Santosh Satbhai[2], Wolfgang Busch[1] ([1]SALK Institute for Biological Studies, [2]GMI-Gregor Mendel Institute)

09:55 **S10-3** Distribution of two phospholipids specifies a dynamic plasma membrane domain for re-orientation of root hair tip growth
Hiromasa Shikata[1,2], Naoki Yanagisawa[3], Yoshikatsu Sato[3], Tetsuya Higashiyama[3,4], Claus Schwechheimer[5] ([1]Div. of Plant Environmental Response, NIBB, [2]PRESTO, JST, [3]ITbM, Nagoya Univ., [4]Grad. Sch. Sci., The Univ. of Tokyo, [5]Chair of Plant Systems Biology, Tech. Univ. of Munich)

● Chairperson: Tatsuaki Goh

10:20 **S10-4** Morphology, dynamics, and function of unique membrane surrounding sperm plasma membrane
Daisuke Maruyama[1], Rie Izumi[1], Hidenori Takeuchi[2], Tetsuya Higashiyama[2,3], Tetsu Kinoshita[1], Kazuki Motomura[4] ([1]Kihara Inst. Biol. Res., Yokohama City Univ., [2]ITbM, Nagoya Univ., [3]Grad. Sch. Sci., The Univ. of Tokyo, [4]Ritsumeikan Glob. Innov. Res. Org., Ritsumeikan University)

10:45 **S10-5** Origination of the circadian clock system in stem cells regulates cell differentiation
Kotaro Torii[1], Keisuke Inoue[1], Takashi Araki[1], Motomu Endo[2] ([1]Grad. Sch. Biostudies, Univ. Kyoto, [2]NAIST)

11:10 **S10-6** Quantitative Live imaging of plant organogenesis
Daniel Kierzkowski[1], Constance Le Gloanec[1], Jerome Burkiewicz[1], Sylvia Silveira[1], Hana Bertand[1], Richard Smith[2], Anne-Lise Routier-Kierzkowska[1] ([1]IRBV, University of Montreal, [2]John Innes Center, Norwich Research Park)

11:35 Closing remarks
Akane Kubota

Sponsored by Grant-in-Aid for Scientific Research on Innovative Areas 'Periodicity and its Modulation in Plants'

Fri., March 20, 13:00–16:00 Room X

Development and application of plant manipulation strategy: towards the design of optimized crop production

Language: Japanese

Organizers: Masanori Izumi (RIKEN)
Ayako Yokoi (NARO)
Kei Hiruma (NAIST)

● Chairperson: Kei Hiruma

13:00 **S11-1** Opening remarks
Chloroplast degradation processes as a manipulation target to improve photosynthesis
Masanori Izumi[1,2] ([1]CSRS, RIKEN, [2]PRESTO, JST)

13:25 **S11-2** Development of novel chemical tools for uncoupling of plant hormone bioactivities
Yousuke Takaoka[1,2], Mana Iwahashi[1], Andrea Chini[3], Hiroaki Saito[4], Yasuhiro Ishimaru[1], Syusuke Egoshi[1], Nobuki Kato[1], Maho Tanaka[5], Khurram Bashir[5], Motoaki Seki[5], Roberto Solano[3], Minoru Ueda[1,6] ([1]Grad. Sch. Sci., Tohoku Univ., [2]JST-PREST, [3]Spanish National Center for Biotechnology, [4]BDR, RIKEN, [5]CSRS, RIKEN, [6]Grad. Sch. Life Sci., Tohoku Univ.)

13:50 **S11-3** Precise genome editing via homologous recombination in plants
Ayako Nishizawa-Yokoi[1,2], Seiichi Toki[1,3] ([1]Inst. Agrobiol. Sci., NARO, [2]PRESTO, JST, [3]Kihara Inst. Biol. Res., Yokohama City Univ.)

● Chairperson: Ayako Yokoi

14:15 **S11-4** Improving the photosynthetic rate under fluctuating light environment in rice (*Oryza sativa* L.)
Yu Tanaka[1,2] ([1]Graduate School of Agriculture, Kyoto University, [2]JST PRESTO)

14:40 **S11-5** Exploration of molecules involved in pollen-pistil recognition for upgrading breeding programs
Sota Fujii[1,2] ([1]Grad Sch Agric Life Scie, University of Tokyo, [2]JST PRESTO)

● Chairperson: Masanori Izumi

15:05 **S11-6** Understanding mechanisms of plant growth promotion provided by a root-associated bacterial and fungal community
Kei Hiruma[1,2] ([1]NAIST. Bio, [2]JST PRESTO)

15:30 **S11-7** Are microbiomes controllable? Frontiers in science of interactions
Hirokazu Toju[1,2] ([1]Center for Ecological Research, Kyoto University, [2]PRESTO, JST)

15:55 Closing remarks

JST PRESTO Creation of next-generation fundamental technologies for the control of biological phenomena in field-grown plants

Fri., March 20, 13:00–16:00 Room Y

Dynamic photosynthetic responses to fluctuating light

Language: English

Organizer: Ichiro Terashima (Science, U. Tokyo)

● Chairperson: Ichiro Terashima

13:00 **S12-1** NPQ: the mechanism and effectiveness
Alexander Ruban (School of Biological and Chemical Sciences, Queen Mary University of London)

13:30 **S12-2** The role of thylakoid proton antiport via KEA3 in the regulation of photosynthesis
Ute Armbruster (MPI of Molecular Plant Physiology)

14:00 **S12-3** Roles of far-red light in efficient photosynthesis in fluctuating light
Masaru Kono[1], Wataru Yamori[2], Ichiro Terashima[1] ([1]Biol. Sci., Grad. Sch. Sci., Univ. Tokyo, [2]Grad. Sch. Agri. and Life Sci., Univ. Tokyo)

14:30 **S12-4** Evaluation of functional LHCI size and a relationship between LHCI and PSI photoinhibition in rice leaves
Daisuke Takagi[1], Kentaro Ifuku[2], Amane Makino[1] ([1]Graduate School of Agricultural Science, Tohoku University, [2]Graduate School of Biostudies, Kyoto University)

15:00 **S12-5** Dynamic photosynthesis and the environment: [CO_2], salinity and humidity
Elias Kaiser (Horticulture and Product Physiology, Wageningen University)

15:30 **S12-6** Alterations to leaf transcriptome and proteome of Arabidopsis plants growing under fluctuating light
Shizue Matsubara[1], Stefan Niedermaier[1], Anthony Bolger[2], Vladimir Benes[3], Bjoern Usadel[1,2], Eva Farre[4], Pitter Huesgen[1], Trang Schneider[1,5] ([1]Research Centre Juelich, [2]RWTH Aachen University, [3]EMBL Heidelberg, [4]Michigan State University, [5]Heinrich Heine University Duesseldorf)

Co-sponsored by Grant-in-Aid for Scientific Research on Innovative Areas “New Photosynthesis”

Fri., March 20, 13:00–16:00 Room Z

New Trends in Plant Chemical Research by the Interconnection between Chemical Biology and Metabolite Chemistry

Language: Japanese

Organizers: Takeshi Nakano (Kyoto Univ.)
Masami Hirai (RIKEN)

13:00		Opening remarks Takeshi Nakano

● Chairperson: Kazufumi Yazaki

13:10	**S13-1**	Metabolomic And Molecular Genetic Approaches for Understanding of Plant Metabolic Physiology Masami Yokota Hirai (RIKEN CSRS)
13:35	**S13-2**	Identifications of structures and functions of widely spreading acylspermidine Tadao Asami (Grad Sch Agr Life Sci, U Tokyo)
14:00	**S13-3**	Molecular Basis of Metabolic and Functional Diversity of Triterpenoid Saponins in Plants Hikaru Seki (Grad. Sch. Eng., Osaka Univ.)
14:25		Break

● Chairperson: Hideo Nakashita

14:35	**S13-4**	Chemical biology to reveal molecular mechanisms of plant growth Takeshi Nakano (Grad. Sch. Biostudies., Kyoto Univ.)
15:00	**S13-5**	Plant chemicals shape the rhizosphere Akifumi Sugiyama, Masaru Nakayasu, Kazufumi Yazaki (RISH, Kyoto Univ.)
15:25	**S13-6**	Construction of a reference to unknown metabolites for the discovery of unused plant derived specialized metabolites Nozomu Sakurai (National Institute of Genetics, Bioinformation & DDBJ Center)
15:50		General Discussion Masami Hirai

Sat., March 21, 8:45–11:35 Room Y

Higher-order functions in plant endomembrane system

Language: Japanese

Organizers: Tomohiro Uemura (Ochanomizu University)
Erika Isono (University of Konstanz)

● Chairperson: Erika Isono

08:45 Opening remarks
Tomohiro Uemura

08:50 **S14-1** Biological significance of the ER morphogenesis in plants
Haruko Ueda, Ikuko Hara-Nishimura (Fac. Sci. Engin., Konan Univ.)

09:10 **S14-2** A Golgi-released subpopulation of the TGN mediates constitutive and pathogen-inducible protein secretion in Arabidopsis
Tomohiro Uemura (Graduate School of Humanities and Sciences, Ochanomizu University)

09:30 **S14-3** Organelle dynamics and membrane trafficking during spermatogenesis in Marchantia polymorpha
Takashi Ueda[1,2] ([1]National Institute for Basic Biology, [2]SOKENDAI)

09:50 **S14-4** Cytoskeleton dynamics for polarized cell wall deposition
Yoshihisa Oda[1,2] ([1]National Institute of Genetics, [2]SOKENDAI)

● Chairperson: Tomohiro Uemura

10:10 **S14-5** Endosomal transport processes and autophagy
Erika Isono (University of Konstanz (Germany))

10:30 **S14-6** Developmental regulation of plant development by TGN-localized trafficking components
Hirokazu Tanaka[1], Yuki Matsuura[2], Kosuke Ogita[1], Narumi Fukasawa[1], Arisa Ushiro[1], Tatsuo Kakimoto[2] ([1]Sch. Agr., Meiji Univ., [2]Grad. Sch. Sci., Osaka Univ.)

10:50 **S14-7** Endomembrane system for polar localization and degradation of boric acid transport proteins
Junpei Takano (Osaka Pref. Univ.)

11:10 **S14-8** Ubiquitylation on membrane trafficking component involved in plant adaptation to environmental stresses
Takeo Sato, Yoko Hasegawa, Yongming Luo, Junji Yamaguchi (Fac. Sci. and Grad. Sch. Life Sci., Hokkaido Univ.)

11:30 Closing remarks
Erika Isono

Sat., March 21, 8:45–11:45 Room Z

From plant physiology to biotechnology

Language: Japanese

Organizers: Atsushi Okazawa (Grad. Sch. Life Environ. Sci., Osaka Pref. Univ.)
Hiroyuki Kajiura (ICBiotech, Osaka Univ.)

08:45 Opening remarks
Atsushi Okazawa

● Chairperson: Hiroyuki Kajiura

08:50 **S15-1** UV-B response analysis of plants toward production of useful metabolites by LED
Atsushi Okazawa (Grad. Sch. Life Environ. Sci., Osaka Pref. Univ.)

09:20 **S15-2** Utilization of cyanobacterial light-inducible switch for metabolic engineering
Yoshihiro Toya, Sebastian Tommi Tandar, Sachie Senoo, Hiroshi Shimizu (Dept. Bioinfo. Eng., Grad. Sch. IST, Osaka Univ)

09:50 **S15-3** Elucidation of molecular mechanism of natural rubber biosynthesis offers a new perspective on next generation plant biotechnology
Seiji Takahashi (Grad. Sch. Eng., Tohoku Univ.)

10:20 Break

● Chairperson: Atsushi Okazawa

10:30 **S15-4** Elucidation of the accumulation mechanisms and the functions of plant-derived high molecular weight biopolymers
Hiroyuki Kajiura (ICBiotech, Osaka University)

11:00 **S15-5** Development of a high expression system for foreign genes based on knowledge obtained from translational state analysis of endogenous mRNA
Ko Kato, Shotaro Yamasaki (Grad. Sch. Sci. Tech., NAIST)

● Chairpersons: Atsushi Okazawa, Hiroyuki Kajiura

11:30 General discussion

Thur., March 19, 13:45–16:45 Room B

The 16th Database Workshop

Language: Japanese

Organizer: Kentaro Yano (Sch. of Agri., Meiji Univ.)

● Chairperson: Kentaro Yano

13:45 **D01-1** The 16th Database workshop: The current status of bio-databases in plant science
Toshiharu Endo[1], Maasa Kanno[1], Bihe Kong[1], Shun Ohki[1], Shizuka Koshimizu[1], Hajime Ohyanagi[1,2], Kentaro Yano[1] ([1]Bioinformatics lab., Sch. of Agri., Meiji Univ., [2]King Abdullah University of Science and Technology (KAUST), Computational Bioscience Research Center (CBRC))

14:05 **D01-2** The algorithms and research applications of a deep learning method "Graph Neural Network" for graph data structures
Eli Kaminuma (Tokyo Med. and Dent. Univ.)

15:15 **D01-3** Potential applicability of deep learning in plant science; novel interpretations on images and DNAs
Takashi Akagi (Okayama Univ.)

Co-sponsored by "Determining principles in the birth of new plant species"

Day 1, Lunch time | **Luncheon Seminar**

Thur., March 19, 12:40–13:30 Room H

PCP
PLANT & CELL PHYSIOLOGY

PCP Luncheon Seminar
"Making an impact with PCP in 2020"

Language: English

In an increasingly competitive global research and publishing landscape, making an impact with your work has never been more important. In this luncheon seminar we talk about what PCP is doing to give its authors the best possible publishing experience and widest international exposure, as well as what you — the author — can do to ensure your work reaches the right people and receives the recognition it deserves.

Symposium outline:

a) PCP in 2020: Editorial board developments and future plans (from the new EIC)
b) The importance of self-promotion
c) How to increase the impact of your research

The audience will be given the opportunity to ask questions to the PCP Editors and editorial staff during and at the end of the presentations.

*The first 150 attendees are served a box lunch and a bottle of tea. No prior registration is required.

Thur., March 19, 12:40–13:30 Room Y

Promega Luncheon Seminar

Application of the Automated Nucleic Acid Purification and Bioluminescence Peptide-tag Technologies

Sponsor: Promega KK

Promega provide the Luciferase Bioluminescence Technologies and Nucleic Acid Purifcation Technologies as unique tools for Life Science research. In this seminar, we will introduce the newly developed applications using these technologies for plant physiology.

*The frst 100 attendees are served a box lunch and a bottle of tea. No prior registration is required.
*This seminar will be conducted in Japanese.

Promega KK

1) The robust RNA extraction from multifarious plant samples

Speaker: Atsushi Nagano (Department of Plant Life Science, Ryukoku University)

Abstract: The robust RNA extraction from multifarious plant samples is important to perform field transcriptomics and other large-scale studies. I will talk about some troubles and tips in such studies with a large number of samples.

2) High sensitive protein detection system - Adaptation of HiBiT technology to plants and quantification of transcription factors

Speaker: Yoshihiro Yoshitake (Laboratory of Plant Molecular Biology, Graduate School of Biostudies, Kyoto University)

Abstract: We have been working on elucidating the common mechanism of photoperiod response in plants, using one of the bryophytes, *Marchantia polymorpha*.

Under this research, we developed a quantitative system for HiBIT fusion protein in plants and succeeded a quantifcation of photoperiod-dependent degradation patterns of transcription factor (TF). In this presentation, I would like to introduce trial and error of the research for the quantifcation of TF proteins and the usefulness of HiBIT technology.

Web site: www.promega.jp

Day 2, Lunch time | Luncheon Seminar

Fri., March 20, 12:00–12:50 Room Y

Illumina K.K. Luncheon Seminar

Language: Japanese

Sponsor: Illumina K.K.

Speaker 1:

Applications of the Illumina-based NGS technologies in plant genomics

Dr. Keiichi Mochida, RIKEN, Center for Sustainable Resource Science

High-throughput sequencing has already become a vital tool for plant science and crop breeding. We have applied Illumina sequencing platforms for various applications to analyze genome and transcriptome in model plants, crops, and microalgae. In this seminar, we showcase our practical examples with Illumina sequencers such as NovaSeq 6000 and iSeq100. Regarding NovaSeq 6000, the largest production-scale sequencer, we demonstrate our results of large-scale sequencing in field transcriptome analysis and population-scale exome-sequencing in crop species such as barley. We also introduce our daily-use applications with iSeq100, the smallest bench-top sequencer, such as targeted-amplicon sequencing to analyze genetic variation in specific genes and small-scale test-run to check sequencing libraries. Throughout the presentation, we also highlight a range of applications with various library preparation methods that are compatible to the Illumina sequencing.

Speaker 2:

The usefulness of Illumina next generation sequencing platforms, from plants' genome reference construction to marker assisted selection

Shuang Li, Applied Genomics Specialist, Illumina K.K.

At of the end of 2018, more than 13,000 Illumina next-generation sequencers have been installed in various areas worldwide. In agriculture field, applications and NGS equipment can be selected to suit multiple purposes, ranging from reference genome construction and linkage analysis to marker assisted selection. In this session, the usefulness of whole genome sequencing on NovaSeq6000 will be introduced. And sequencing service provider, such as Takara Bio Inc., is able to reduce the sequencing cost significantly by using NovaSeq6000. Their services will also be mentioned in this session. In addition, the release of desktop sequencer iSeq100 is largely reducing the initial investment cost for applications such as amplicon sequencing. iSeq100 is being used as a replacement for Sanger sequencers or as test run for large-scale sequencing.

*The first 100 attendees are served with a box lunch and a bottle of tea.
No prior registration is required.

illumina®

Fri., March 20, 12:00–12:50 Room Z

OLYMPUS CORPORATION Luncheon Seminar

Live imaging of intracellular patterning — with Olympus confocal technologies —

Speaker: Yoshihisa Oda, Ph.D.

Department of Gene Function and Phenomics, National Institute of Genetics

Introduction of FV3000 confocal microscope and new high-performance objective

Speaker: Makoto Kato, OLYMPUS CORPORATION

Language: Japanese

Sponsor: OLYMPUS CORPORATION

FV3000 Confocal Laser Scanning Microscope

Next Generation FLUOVIEW for the Next Revolutions in Science

The FLUOVIEW FV3000 series of confocal laser scanning microscopes meets some of the most difficult challenges in modern science. Featuring the high sensitivity and speed required for live cell imaging as well as deep tissue observation, the FV3000 confocal microscope enables a wide range of imaging modalities, including macro-to-micro imaging, super resolution microscopy, and quantitative data analysis. Choose between upright and inverted microscope frames suited for a range of life science applications, including developmental biology, stem cell research, electrophysiology, cancer research, slide imaging, and more.

*The first 100 attendees are served a box lunch and a bottle of tea. No prior registration is required.

OLYMPUS

Day 3, Lunch time | Luncheon Seminar

Sat., March 21, 12:00–12:50 Room Y

Luncheon Seminar on Gender Equality

Why are there so few female researchers in Japan? Considerations based on a large questionnaire survey for 18,000 researchers.

Language: Japanese

Guided by Dr. Michiko Bando (National Institute of Public Health) and Dr. Reiko Motohashi (Shizuoka University)

Have you ever had a question why there are few female professors in Japan, though there are many female graduate students in laboratories? If the number of female researchers is really few in the Japanese academic professions, why is it so? Is it because fewer female students seek for jobs in Japanese universities? If so, what are the reasons why they give up seeking for these jobs?

In this seminar, we will try to find out the reasons why there are few female researchers in the Japanese academic professions by discussing the results of the large-scale survey for 18,000 researchers conducted by the Japan Inter-society liaison association committee for promoting equal participation of men and women in science and engineering in 2016. The results will be explained and commented by Dr. Michiko Bando, who conducted their statistical analysis, and Dr. Reiko Motohashi, who was a former committee member, and is familiar with the background.

This seminar will be held in an interactive style where participants answer quizzes and questions. Participants are advised to bring a smartphone or other devices that can connect to the Internet, whenever possible. Nevertheless, anyone without those devices are also welcome to join the seminar. The seminar will be held in Japanese.

A bento-box lunch will be provided for 100 participants. (These lunches will be served in exchange of a lunch coupon, 70 of which will be distributed at the reception of the meeting from 8:30 on the day of seminar and the rest is available at Room Y before the seminar. The coupons are distributed on a first come, first served basis.)

Wed., March 18, 12:30–18:00 Room U2-312

5th Workshop on Photosynthetic Bacteria

Language: Japanese

Organizers: Chihiro Azai (Ritsumeikan University)
Yusuke Tsukatani (JAMSTEC)
Jiro Harada (Kurume University School of Medicine)

12:30	Registration
13:00	Opening remarks Jiro Harada
13:05	"Detecting chlorophyll fluorescence on habitable exoplanets" Kenji Takizawa (Astrobiology Center, NINS)
13:35	"Genome-scale metabolic modeling and FBA simulation of photosynthetic electron transport in cyanobacteria" Masakazu Toyoshima (Department of Bioinformatic Engineering, Graduate School of Information Science and Technology, Osaka University)
13:55	"Scenario of rebooting synthetic cyanobacterial genome in Bacillus subtilis BEST7613" Satoru Watanabe (Department of Bioscience, Tokyo University of Agriculture)
14:25	Coffee break
14:50	"Diversity of the light-harvesting complexes in extremophilic purple phototrophic bacteria" Seiu Otomo (Ibaraki University)
15:20	"Extension of Light-harvesting Ability and Photocurrent Generation by Purple Bacterial Light-Harvesting/Reaction Center Complexes" Takehisa Dewa (Department of Life Science and Applied Chemistry, Graduate School of Engineering, Nagoya Institute of Technology)
15:50	"Signal transduction mechanism of light sensor protein PYP: Interaction dynamics between PYP and its downstream protein" Kim Suhyang (Graduate School of Science, Kyoto University)
16:10	Discussion Yusuke Tsukatani
18:00	Get together

Entry Form: https://forms.gle/XRCyjzLysSmBHy2K6 (Dead line: 06/03/2020)

Wed., March 18, 13:00–18:50
Nambu Yoichiro Hall, Graduate School of Science, Osaka University (Toyonaka Campus)

The 22th Plant Organelle Workshop
— Metamorphosing paradigms in organelle biology —

Language: Japanese

Organizers (*in alphabetical order*): Masanori Izumi (RIKEN), Yusuke Kato (Okayama University), Kensuke Kusumi (Kyushu University), Masato Nakai (Osaka University), Yoshiki Nishimura (Kyoto University), Junichi Obokata (Kyoto Prefectural University), Atsushi Takabayashi (Hokkaido University), Tomohiro Uemura (Ochanomizu University)

13:00	Opening remarks
Session 1	
13:05	PSI-PSII megacomplex in green lineage Makio Yokono (Nippon Flour Mills Co., Ltd.), Atsushi Takabayashi (Hokkaido University), Seiji Akimoto (Kobe University)
13:40	Functional and structural insights into an evolution of photosynthetic light harvesters Ryo Nagao (Okayama University)
14:15	Break
Session 2	
14:25	Formation of chloroplast-associated organelle zones Masanori Izumi (RIKEN)
15:00	Molecular mechanism of mitophagy Tomotake Kanki (Niigata University)
15:35	Importance of maintaining homeostasis by selective/non-selective autophagy in plants Kohki Yoshimoto (Meiji University)
16:10	Break
16:20	Dynamics of protein sorting zones on the TGN in plant Tomohiro Uemura (Ochanomizu University)
16:55	Cisternal maturation dynamics of the trans-Golgi network in budding yeast Takuro Tojima (RIKEN)
17:30	Break
Keynote lecture	
17:40	Endomembrane-mediated survival strategies in plants Ikuko Nishimura (Konan University)
18:40	General discussion
18:50	Closing remarks
19:15	Mixer

This workshop is open to all interested participants, but online registration in advance is encouraged.
(http://www.rib.okayama-u.ac.jp/OWS/).
Contact address: Masato Nakai: nakai@protein.osaka-u.ac.jp
Yusuke Kato: ykato@okayama-u.ac.jp

Thur., March 19, 18:30–20:00 Room E

The 38th Meeting of the Japanese Society for Young Plant Physiologists

Language: Japanese

Organizers: Rumi Amano (Kyoto Sangyo University)
Tatsuya Nobori (Salk Institute)

18:30	Opening remarks by Organizers
18:40	Molecular system for flexible regulation of cell proliferation and differentiation in plants ~Or, how to understand what is plants in my own way ~ Dr. Misato Ohtani (The University of Tokyo)
19:10	Genome editing: development of CRISPR-Cas and its supporting technologies in plants Dr. Shigeo Sugano (National Institute of Advanced Industrial Science and Technology)
19:40	Discussion

This meeting offers young scientists and students the opportunity to exchange information and discuss topics related to research and career development. We invited two speakers to share their own stories with us.

No registration required to participate in this meeting.

Meal boxes will be provided at the meeting upon request. There will be an after meeting gathering with the speakers and participants. Please register for the meal boxes and/or the gathering at https://forms.gle/2Rc6LcPmK2XekQfB6 by March 11.

More details are available on the meeting website (http://www.cc.kyoto-su.ac.jp/~i1659019/wakatenokai.html).

Contact addresses: Rumi Amano: i1659019@cc.kyoto-su.ac.jp
Tatsuya Nobori: tnobori@salk.edu

Thur., March 19, 18:30–20:00 Room F

The 4th Meeting of Plant Mathematical Modeling

Language: Japanese

Organizers: Munetaka Sugiyama (University of Tokyo)
Hironori Fujita (Astrobiology Center / NIBB)
Takaaki Yonekura (University of Tokyo)

This meeting is aimed at gathering together researchers and students interested in mathematical models in plant science regardless of whether they are experimental researchers, theorists, beginners, or experienced, and to exchange information and deepening friendship. It is also aimed at building a community in this research field, and is planned to be held continuously at annual meetings of JSPP and BSJ. This time we will have a short course of computer programming and simulation of simple mathematical models of the reaction-diffusion system with Wolfram Programming Lab (https://lab.open.wolframcloud.com/objects/wpl/GetStarted.nb), a free on-line platform where Mathematica can be used. This meeting is open to all participants. Please feel free to join us with your computer. For more details, please see http://www.nibb.ac.jp/miyakohp/asari/htdocs/?page_id=57.

Thur., March 19, 18:40–20:00 Room G

15th Plant membrane symposium

Language: Japanese

Organizers (in alphabetic order): Maki Katsuhara (Okayama University)
Izumi Mori (Okayama University)
Yoshiyuki Murata (Okayama University)
Yoshiji Okazaki (Osaka Medical College)
Shingo Takagi (Osaka University)

18:40	Opening: Organizers
18:45	"I have learned everything from plant electrophysiology" Tetsuro Mimura (Kobe University)
19:30	General Discussion

Mixer (see below)

Prof. Tetsuro Mimura (Former President of JSPP) will provide the talk summarizing his study of plant membrane biology.

This meeting is free to all audience and registration is not required.

People who wish to join the mixer (Near Kita-senri Station, 15–20 min on foot from the venue, ¥5,000–6,000) are required to register by e-mail to Maki Katsuhara with title "Joining the mixer for 15th plant membrane symposium" until March, 5th (Thu).

Contact address: Maki Katsuhara kmaki@okayama-u.ac.jp

General Presentations

Program of Oral Presentations

- Each presentation is 12-min talk and 2-min 30-sec discussion, allowing a 30-sec interval for speaker changes in a 15-min slot. To keep the session on time, please strictly concern the time limits.

1st Bell	10 min	
2nd Bell	12 min	End of Talk
3rd Bell	14 min 30 sec	End of Discussion

- Before the presentation, please check your slides

- Chairpersons are requested to come to the assigned sessions at least 15 minutes before the start time, and to notify the staff of your attendance. Please assign a chairperson to each presentation prior to the Annual Meeting.

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

● Day 1, Thur., March 19, AM (9:30–12:15)

Time	Room A	Room B	Room C	Room D	Room E
	Photosynthesis		Environmental responses B	Environmental responses C	Cell wall
09:30	1aA01 Cryo-EM structure of a diatom PSI-FCPI supercomplex Ryo Nagao[1], Koji Kato[1], Kentaro Ifuku[2], Takehiro Suzuki[3], Minoru Kumazawa[4], Ikuo Uchiyama[5], Yasuhiro Kashino[6], Naoshi Dohmae[3], Seiji Akimoto[7], Jian-Ren Shen[1], Naoyuki Miyazaki[8,9], Fusamichi Akita[1,10] ([1]RIIS, Okayama University, [2]Graduate School of Biostudies, Kyoto University, [3]RIKEN, [4]Faculty of Agriculture, Kyoto University, [5]NIBB, [6]Graduate School of Life Science, University of Hyogo, [7]Graduate School of Science, Kobe University, [8]IPR, Osaka University, [9]TARA, University of Tsukuba, [10]JST PRESTO)		1aC01 Marchantia Tubulin Kinase MpPHS1 is Required for Morphological Changes under Osmotic Stress Shinichiro Komaki[1], Hideyuki Takahashi[1], Yuji Mizubayashi[1], Aki Takegawa[1], Kazui Bando[1], Ryuichi Nishihama[2], Takayuki Kohchi[2], Takashi Hashimoto[1] ([1]Grad. Sch. Sci., NAIST, [2]Grad. Sch. Biostudies, Kyoto Univ.)	1aD01 The isolation of *picl* as a novel moderate high temperature-insensitive mutant Arisa Nakamura, Takumi Tamura, Narumi Okazaki, Tsuyoshi Furumoto (Faculty of Agriculture, Ryukoku University)	1aE01 Properties and physiological importance of bifunctional UDP-glucose 4-epimerases in Arabidopsis Akira Umezawa[1], Rina Matsumura[2], Yu Hikita[2], Daisuke Takahashi[1], Yoichi Tsumuraya[1], Toshihisa Kotake[1] ([1]Graduate School of Science and Engineering, Saitama University, [2]Faculty of Science, Saitama University)
09:45	1aA02 Structural study of phycocyanin complex in phycobilisome by cryo-electron microscopy Keisuke Kawakami[1], Tasuku Hamaguchi[2], O Yuhei Tahara[3], Junko Shiomi[3], Daisuke Kosumi[4], Nobuo Kamiya[5] ([1]ReCAP, Osaka City Univ., [2]Harima Inst., Riken, [3]Chemi. Sch. Sci., Osaka City Univ., [4]Pul. Pow. Sci., Kumamoto Univ., [5]OCARINA, Osaka City Univ.)		1aC02 Transcriptional regulation of cuticular wax accumulation in response to dehydration in Arabidopsis Kaoru Urano[1], Kyonoshin Maruyama[2], Yoshimi Ohshima[3], Shingo Sakamoto[3], Toshiki Ishikawa[4], Maki Kawai-Yamada[4], Mayuko Sato[1], Kiminori Toyooka[1], Kazuko Yamaguchi-Shinozaki[5], Kazuo Shinozaki[1] ([1]CSRS, RIKEN, [2]Bio. Res. Div., JIRCAS, [3]Bio. Res. Inst., AIST, [4]Grad. Sch. Sci. Eng., Saitama Univ., [5]Grad. Sch. Agri. Life Sci., Univ. Tokyo)	1aD02 E Oligouridylate binding protein 1b (UBP1b) involved in heat stress adaptation though mRNA protection Kentaro Nakaminami[1], Cam Chau Nguyen Thi[1,2], Akihiro Matsui[1], Motoaki Seki[1,2,3] ([1]RIKEN, CSRS, [2]Yokohama City University, Kihara Inst. for Biol. Res., [3]RIKEN, CPR)	1aE02 Characterization of ERF group IIId/e transcription factor for primary cell wall formation in plant Shingo Sakamoto, Nobutaka Mitsuda (Bioprod., AIST)
10:00	1aA03 Excitonic couplings in type-I reaction centers of Heliobacteria and Photosystem I Hirotaka Kitoh[1], Yasuteru Shigeta[2], Shigeru Itoh[3], Akihiro Kimura[3] ([1]JST PRESTO, [2]Cent. for Comp. Sci. Univ. of Tsukuba, [3]Grad. Sch. of Sci. Nagoya Univ.)		1aC03 Functional analysis of chloroplast-localized NAD kinase2 in plant drought stress responses Yuriko Osakabe[1], Ryosuke Hashimoto[1], Atsuko Miyagi[2], Yuji Sawada[3], Muneo Sato[3], Kohji Yamada[1], Masami Yokota Hirai[3], Maki Kawai-Yamada[2], Keishi Osakabe[1] ([1]Tokushima Univ. Fac. of Biosci. and Bioind., [2]Grad. Sch. Sci. Eng., Saitama Univ., [3]RIKEN CSRS)	1aD03 Contribution of ROS scavenging system in short-term or long-term heat stress of *Arabidopsis thaliana* Masaaki Ono, Kotaro Nakamura, Izumi Yotsui, Yoichi Sakata, Teruaki Taji (Dept. of Bioscience, Tokyo Univ. of Agriculture)	1aE03 Analysis of GH17 members regulating engulfment of the generative cell into the vegetative cell in *Arabidopsis* Kazuo Ebine[1,2], Shohei Yamaoka[3], Takashi Ueda[1,2] ([1]Div. Cellular Dynamics, NIBB, [2]Sch. Life Sci., SOKENDAI, [3]Grad. Sch. Biostudies, Kyoto Univ.)
10:15	1aA04 Structural and spectroscopic characteristics of photosystem I complex with chlorophyll *f* Toshiyuki Shinoda[1], Koji Kato[2], Ryo Nagao[2], Seiji Akimoto[3], Jian-Ren Shen[2], Fusamichi Akita[2,4], Naoyuki Miyazaki[5,6], Tatsuya Tomo[1] ([1]Fac. Sci., Tokyo Univ. Sci., [2]RIIS., Okayama Univ., [3]Grad. Sch. Sci., Kobe Univ., [4]PRESTO, JST, [5]IPR., Osaka Univ., [6]TARA., Tsukuba Univ.)		1aC04 Arabidopsis B3-MAPKKKs are positive regulators of subclass III SnRK2 in osmostress signaling Goro Masuda[1], Shohei Katsuta[1], Hyeokjin Bak[1], Akihisa Shinozawa[2], Yoshiaki Kamiyama[3], Taishi Umezawa[3], Daisuke Takezawa[4], Izumi Yotsui[1], Teruaki Taji[1], Yoichi Sakata[1] ([1]Dept Bio, Tokyo Univ. Agric, [2]NODAI Genome Research Center, [3]Agric BASE, Tokyo Univ. Agric. Tech, [4]Inst. for Env. Sci. and Tech., Saitama Univ.)	1aD04 Isolation and genetic analyses of long-term heat-stress sensitive mutants of *Arabidopsis thaliana* Ryo Tsukimoto, Kazuho Isono, Izumi Yotsui, Yoichi Sakata, Teruaki Taji (Dept. of Bioscience Tokyo Univ. of Agriculture)	1aE04 Effects of boron deprivation on mechanical strength of Arabidopsis root cell walls Daisuke Umeki, Masaru Kobayashi (Grad. Sch. agriculture., Univ. Kyoto)
10:30	1aA05 Fluorescence heterogeneity in chlorophyll-*f* containing photosystem I observed by single molecule spectroscopy Takanori Kobayashi[1], Rin Taniguchi[1], Yutaka Shibata[1], Toshiyuki Shinoda[2], Tatsuya Tomo[2], Shen Ye[1] ([1]Graduate School of Science Tohoku University, [2]Faculty of Science, Tokyo University of Science)		1aC05 Dissecting genetic variation in osmotolerance among *Arabidopsis thaliana* accessions Kosuke Banba, Izumi Yotsui, Yoichi Sakata, Teruaki Taji (Dept. Of Bioscience Tokyo Univ. of Agriculture)	1aD05 Dissecting variations in heat tolerance among *Arabidopsis thaliana* accessions grown on soil Kiyohito Sato, Kotaro Nakamura, Izumi Yotsui, Yoichi Sakata, Teruaki Taji (Dept. of Bioscience Tokyo Univ. of agriculture)	1aE05 PUB-ARM type E3 Ligase NOPPERABO1 Is Required for the Intercellular Space Formation via Cell Wall Remodeling in Land Plants Miya Mizutani[1], Yuki Hayashi[1], Christian Ganser[2], Takayuki Uchihashi[1,2], Kimitsune Ishizaki[3,4], Ryuichi Nishihama[3], Toshinori Kinoshita[1,4], Takayuki Kohchi[3], Tetsuya Higashiyama[1,5], Masahiro Kanaoka[1] ([1]Grad. Sch. Sci., Nagoya Univ., [2]NINS, ExCELLS, [3]Grad. Sch. Biostudies, Kyoto Univ., [4]Grad. Sch. Sci., Kobe Univ., [5]ITbM, Nagoya Univ.)

Room F	Room G	Room H	Room W	Room X	Room Y	Room Z	Time
Plant hormones/ Signaling molecules	Secondary (specialized) metabolism	Vegetative growth					
1aF01 Functional analysis of Arabidopsis CYP707As, which encode key enzymes for ABA catabolism Momoka Miyata[1], Ryosuke Mega[2], June-Sik Kim[2,3], Mitsunori Seo[3], Eiji Nambara[4], Masanori Okamoto[1] ([1]Utsunomiya Univ., [2]Tottori Univ., [3]RIKEN CSRS, [4]Univ. of Toronto)	1aG01 Identification and characterization of key factors involved in the biosynthesis of isoquinoline alkaloid in *Eschscholzia californica* Yasuyuki Yamada[1], Kentaro Hori[2], Shouhei Nishida[2], Daiki Hanaeda[1], Nobukazu Shitan[1], Fumihiko Sato[2,3] ([1]Kobe Pharma. Univ., [2]Grad. Sch. Biost., Kyoto Univ., [3]Grad. Sch. Sci., Osaka Prefect. Univ.)	1aH01 Analysis of the Dedifferentiation Process of Epidermal Cells during Shoot Regeneration in Cultured Stem Segments of *Torenia fournieri* Hatsune Morinaka[1], Akihito Mamiya[1], Hiroaki Tamaki[1], Iwai Ohbayashi[1], Takamasa Suzuki[2], Momoko Ikeuchi[3,4], Akira Iwase[3], Keiko Sugimoto[3], Tetsuya Higashiyama[5,6], Munetaka Sugiyama[1] ([1]Botanical Gardens, Grad. Sch. Sci., Univ. Tokyo, [2]Dept. Biol. Chem., Coll. Biosci. Biotech., Chubu Univ., [3]CSRS, Riken, [4]Faculty of Sci., Niigata Univ., [5]ITbM, Nagoya Univ., [6]Dept. Biol. Sci., Grad. Sch. Sci., Univ. Tokyo)	Symposium S01 Japan-Taiwan Joint Symposium: Front lines of post-transcriptional gene regulation in environmental responses (9:30–12:25)	Symposium S02 Towards a unified understanding of local/systemic signaling and beyond in plant wound and immune responses (PCP sponsored symposium) (9:30–12:10)	Symposium S03 Molecular basis of long-distance signaling in plants (9:30–12:30)	Symposium S04 Molecular mechanism of cell proliferation and reprogramming — the chromatin perspective and beyond — (9:30–12:30)	09:30
1aF02 Plant hormones and these functions to akinetes germination in a terrestrial cyanobacterium, *Nostoc* sp. HK-01 Shunta Kimura[1,2], Masatoshi Nakajima[1], Emi Yumoto[3], Koji Miyamoto[4], Midori Ong[5], Kaori Yokotani[5], Tadao Asami[1] ([1]Dept. Appl. Biol. Chem., Univ. of Tokyo, [2]JSPS Research Fellow, [3]Adv. Instrum. Anal. Center, Teikyo Univ., [4]Fac. Sci. Eng., Teikyo Univ., [5]Fac. Life & Environ. Sci., Univ. Tsukuba)	1aG02 Metabolomics for identifying intermediates of camptothecin in *Ophiorrhiza pumila* Ryo Nakabayashi[1], Amit Rai[2], Tetsuya Mori[1], Taiki Nakaya[2], Mami Yamazaki[2], Kazuki Saito[1,2] ([1]RIKEN CSRS, [2]Chiba University)	1aH02 Ⓔ WIND1 has a potential to orchestrate pleiotropic responses after wounding Akira Iwase[1], Yuki Kondo[2], Anuphon Laohavisit[1], Arika Takebayashi[1], Momoko Ikeuchi[1,5], Keita Matsuoka[3], Masashi Asahina[3], Nobutaka Mitsuda[4], Ken Shirasu[1], Hiroo Fukuda[2], Keiko Sugimoto[1] ([1]RIKEN, CSRS, [2]Grad. Sch. Sci., Univ. Tokyo, [3]Dept. Bisci., Teikyo Univ., [4]Biopro. Res. Inst., AIST, [5]Niigata Univ. Sci.)					09:45
1aF03 Ⓔ Identification of specific inhibitor for root-cutting response in *Arabidopsis thaliana* and involvement of phytohormone response Xu Kang[1], Masaaki Watahiki[1,2] ([1]Graduate School of Life Science, Hokkaido University, Sapporo, Japan, [2]Division of Biological Sciences, Faculty of Science, Hokkaido University, Sapporo, Japan)	1aG03 Terpenoid indole alkaloid biosynthesis in *Catharanthus roseus* Kotaro Yamamoto[1], Dagny Grzech[1], Mai Uzaki[2], Carlos E. Rodriguez-Lopez[1], Lorenzo Caputi[1], Tetsuro Mimura[2], Sarah E. O'Connor[1] ([1]Natural Product Biosynthesis, MPI CE, [2]Dept. Biol., Grad. Sch. Sci., Kobe Univ.)	1aH03 Mechanisms underlying wound-induced regeneration of *Rorippa aquatica* Rumi Amano[1], Risa Momoi[1], Emi Omata[1], Taiga Nakahara[1], Shuka Ikematsu[2], Tomoaki Sakamoto[2], Seisuke Kimura[2] ([1]Facul. Life Sci., Kyoto Sangyo Univ., [2]Facul. Life Sci., Kyoto Sangyo Univ.)					10:00
1aF04 The role of multilayered regulation of membrane-bound ONAC054 in abscisic acid-induced leaf senescence in rice Yasuhito Sakuraba[1], Gynheung An[2], Shuichi Yanagisawa[1], Nam-Chon Paek[3] ([1]Biotechnology Research Center, The University of Tokyo, [2]Department of Plant Molecular Systems Biotechnology, Kyung Hee University, Republic of Korea, [3]Department of Plant Science, Seoul National University, Republic of Korea)	1aG04 Ⓔ Recruitment of pathway-specific flavonoid B-ring hydroxylases for the independent generation of soluble flavone *C*-glycosides and cell-wall-bound tricin-lignin Pui Ying Lam[1], Yuki Tobimatsu[1], Toshiaki Umezawa[1], Clive Lo[2] ([1]RISH, Kyoto University, [2]SBS, U. Hong Kong)	1aH04 Ⓔ A wounding-inducible WUSCHEL RELATED HOMEOBOX promotes callus formation via cell wall modification Momoko Ikeuchi[1,2], Akira Iwase[2], Keiko Sugimoto[2] ([1]Niigata U, [2]RIKEN)					10:15
1aF05 Identification of ABA-RESPONSIVE KINASE SUBSTRATE orthologs in guard cells from *Vicia faba* Yuki Hayashi[1], Yohei Takahashi[2], Keiko Kuwata[3], Takamasa Suzuki[4], Toshinori Kinoshita[1,3] ([1]Grad. Sch. Sci., Nagoya Univ., [2]Div. Biol. Sci., UCSD, [3]WPI-ITbM, Nagoya Univ, [4]Dept. Bio. Chem., Chubu Univ.)	1aG05 Investigation of metabolic polymorphism in Solanum spp Marina Onoue[1], Taiju Okajima[1], Alisdair Fernie[2], Mutsumi Watanabe[1], Takayuki Tohge[1] ([1]Graduate School of Biological Sciences, Nara Institute of Science and Technology(NAIST), [2]Max Planck Institute)	1aH05 Ⓔ Analyses of cellular plasticity in Arabidopsis leaf protoplasts Yuki Sakamoto[1,2], Takamasa Suzuki[3], Keiko Sugimoto[1,2] ([1]Grad. Sch. Sci., Univ. Tokyo, [2]RIKEN CSRS, [3]Col. Biosci. Biotech., Chubu Univ.)					10:30

Ⓔ=Presentation in English

● Day 1, Thur., March 19, AM (9:30–12:15)

Time	Room A	Room B	Room C	Room D	Room E
	Photosynthesis		Environmental responses B	Environmental responses C	Cell wall
10:45	1aA06 Ⓔ Effects of LHCA3 and LHCA7 subunit deletion on the structure and function of the photosystem I Light-harvesting complex in the green alga *Chlamydomonas reinhardtii* Michiyo Takagi[1], Shin-ichiro Ozawa[2], Yuichiro Takahashi[3] ([1]Grad. Sch. Sci., Okayama Univ., [2]IPSR, Okayama Univ., [3]RIIS, Okayama Univ.)		1aC06 Functional analysis of acquired osmotolerance-defective mutant aod13 Masahiro Yamaguchi[1], Kouhei Uchida[1], Hirotaka Ariga[1], Keisuke Tanaka[2], Izumi Yotsui[1], Yoichi Sakata[1], Teruaki Taji[1] ([1]Dept. of Bioscience Tokyo Univ. of Agriculture, [2]NODAI Genome Research Center)	1aD06 Heat shock factors A1 mediate thermomorphogenesis and stomatal movement to accelerate heat avoidance Yuichi Saito[1], Ken Hoshikawa[2], Miki Fujita[3], Kazuho Isono[1], Keisuke Tanaka[4], Hirotaka Ariga[1], Hiroshi Ezura[2], Kazuo Shinozaki[3], Yoichi Sakata[1], Teruaki Taji[1] ([1]Dept. of Bioscience, Tokyo Univ. of Agriculture, [2]Graduate School of Life and Env. Sci., Univ. of Tsukuba, [3]RIKEN CSRS, [4]NODAI Genome Research Center)	1aE06 Ⓔ Cell Wall Remodeling during Rice Lateral Root Emergence Laura Bartley[1,2], Timothy Pegg[1], David Thomas[1], Fan Lin[1], Daniel Hayden[1] ([1]Univ. of Oklahoma, [2]Kyoto University)
11:00	1aA07 Short-term light adaptation of a glaucophyte *Cyanophora paradoxa*, probed by fluorescence spectroscopies Yoshifumi Ueno, Seiji Akimoto (Grad. Sch. Sci., Kobe Univ.)		1aC07 Down regulation of root water permeability (Lp_r) by phosphorylation of HvPIP2;1, a barley aquaporin Aya Ohnishi, Maki Katsuhara (IPSR, Univ. Okayama)	1aD07 Molecular mechanisms of Arabidopsis *DREB1* gene expression regulated by circadian components under cold stress conditions Satoshi Kidokoro[1], Kentaro Hayashi[1], Hiroki Haraguchi[1], Tomona Ishikawa[1], Satomi Toda[1], Takamasa Suzuki[2], Kazuo Shinozaki[3], Kazuko Yamaguchi-Shinozaki[1] ([1]Grad. Sch. Agr. Life Sci., Univ. Tokyo, [2]College of Bioscience and Biotechnology, Chubu Univ., [3]Center for Sustainable Resource Science, RIKEN)	1aE07 Ⓔ Visualization of Living Plant Cell Wall at High Spatiotemporal Resolution Neval Yilmaz[1], Yutaka Kodama[1,2], Keiji Numata[1] ([1]RIKEN, Center for Sustainable Resource Science, Biomacromolecules Research Team, [2]Utsunomiya University, Center for Bioscience Research & Education)
11:15	1aA08 Functional study on hydrogen-bond networks near oxygen-evolving center in photosystem II Hiroshi Kuroda[1], Keisuke Kawashima[2], Kazuyo Ueda[3], Takuya Ikeda[2], Keisuke Saito[2,4], Ryo Ninomiya[5], Chisato Hida[5], Yuichiro Takahashi[1], Hiroshi Ishikita[2,4] ([1]RIIS, Okayama Univ., [2]Dept. Appl. Chem., Grad. Sch. Eng., Univ. Tokyo, [3]Grad. Sch. Nat. Sci. & Tech., Okayam Univ., [4]RCAST, Univ. Tokyo, [5]Dept. Biol., Fac. Sci, Okayama Univ.)		1aC08 Na^+ Secretion from the Root of *Vigna marina* and Genome Assembly with Nanopore Sequencing Haruko Ohashi[1], Yusaku Noda[2], Jun Furukawa[3], Nobuo Suzui[4], Yong-Gen Yin[4], Yuta Miyoshi[4], Naoki Kawachi[4], Ken Naito[2] ([1]Grad. Sch. Front. Sci., the Univ. of Tokyo, [2]Genetic Resources Center, NARO, [3]CRiED, Univ. of Tukuba, [4]Takasaki Advanced Radiation Research Inst., QST)	1aD08 Functional analysis of transcription factors that regulate cold-inducible expression of Arabidopsis *DREB1* genes in a circadian manner Kentaro Hayashi[1], Satoshi Kidokoro[1], Hiroki Haraguchi[1], Kazuo Shinozaki[2], Kazuko Yamaguchi-Shinozaki[1] ([1]Grad. Sch. Agr. Life Sci., Univ. Tokyo, [2]Center for Sustainable Resource Science, RIKEN)	1aE08 Ⓔ Visualization of cell wall pH in *Arabidopsis thaliana* root by genetically encoded chemi-luminescent indicator Quang Tran, Kenji Osabe, Takeharu Nagai (Osaka University Institute of Scientific and Industrial Research Nagai Laboratory)
11:30	1aA09 Origin of High Spin EPR signal in S_2 State Oxygen Evolving Complex Hiroyuki Mino, Hiroki Nagashima (Graduate School of Science, Nagoya University)		1aC09 Genetics of salt tolerance in two wild Vigna species Miho Ito[1], Eri Ogiso[2], Ken Naito[3], Honami Ohashi[1] ([1]Grad. Sch. Frontier Science., U-Tokyo, [2]Institute of Crop Science, NARO, [3]Genetic Resources Center, NARO)	1aD09 Plant winter sensing and characteristic changes in air temperature and day length from autumn to winter Yukio Kawamura, Matsuo Uemura (Department of Plant Bioscience, Iwate University)	
11:45			1aC10 Establishment of Virus-mediated gene function analysis tool for wild Vigna species Hirotaka Ariga[1,2], Tamaki Uehara-Ichiki[1], Ken Naito[1] ([1]NGRC, NARO, [2]PD, JSPS)	1aD10 DNA barcoding and morphological analyses of a diatom which inhabits on the surface of sea ice in Lake Saroma Hidenobu Uchida[1,2,3,4,5], Kazuhito Inoue[1] ([1]Dept. Biol. Sci., Kanagawa Univ., [2]Bunkyo, Tokyo, Open Univ. Japan, [3]Dept. Chem, Fac. Sci., Ochanomizu Univ., [4]Dept. Env. Syst. Sci., Fac. Eng., [5]Fac. Sci., Jap. Women's Univ.)	
12:00					

Room F	Room G	Room H	Room W	Room X	Room Y	Room Z	Time
Plant hormones/ Signaling molecules	Secondary (specialized) metabolism	Vegetative growth					
1aF06 Comparative Phosphoproteomic Analysis of Barley Seed Embryos during After-ripening Shinnosuke Ishikawa[1], Jose Barrero[2], Fuminori Takahashi[3], Hirofumi Nakagami[4], Scott Peck[5], Frank Gubler[2], Kazuo Shinozaki[3], Taishi Umezawa[1] ([1]Grad. Sch. BASE, Tokyo Univ. of Agri. Tech., [2]CSIRO, [3]CSRS, RIKEN, [4]Max-Planck-Inst., [5]Dept. Biochem., Univ. Missouri)	1aG06 Functional analysis of *β-Substituted Alanine Synthase* (*BSAS*) gene family in Arabidopsis Reo Yamaguchi, Takayuki Tohge, Mutsumi Watanabe (Graduate School of Biological Sciences, Nara Institute of Science and Technology (NAIST))	1aH06 Characterization of the Role of Endogenous IAA in the Regulation of Organogenic Competence in 2,4-D-Induced Callus of Arabidopsis Iwai Ohbayashi, Yuki Sakamoto, Munetaka Sugiyama (Bot. Gard., Grad. Sch. Sci., Univ. Tokyo)	Symposium S01 Japan-Taiwan Joint Symposium: Front lines of post-transcriptional gene regulation in environmental responses (9:30–12:25)	Symposium S02 Towards a unified understanding of local/systemic signaling and beyond in plant wound and immune responses (PCP sponsored symposium) (9:30–12:10)	Symposium S03 Molecular basis of long-distance signaling in plants (9:30–12:30)	Symposium S04 Molecular mechanism of cell proliferation and reprogramming — the chromatin perspective and beyond — (9:30–12:30)	10:45
1aF07 Functional analysis of *PIP5K7*, *PIP5K8*, and *PIP5K9* in *Arabidopsis thaliana* Ryo Kuroda, Mariko Kato, Tomohiko Tsuge, Takashi Aoyama (Institute for Chemical Research, Kyoto University)	1aG07 Functional analysis of the calmodulin-binding domain from rice glutamate decarboxylase (OsGAD3) Kazuhito Akama, Masako Kanesaki (Dept. Life Sci., Fac. Life & Environ Sci., Shimane Univ.)	1aH07 Screening of key transcription factors contributing the tuberous root formation in *Arabidopsis thaliana* Takuya Sakamoto[1], Sakiko Nishioka[1], Keito Yasue[1], Kengo Morohashi[1], Takamasa Suzuki[2], Sachihiro Matsunaga[1] ([1]Dept. Applied Bio. Sci., Fac. Sci. Tech., Tokyo Univ. Sci., [2]Dept. Biol. Chem., College Biosci. Biotech., Chubu Univ.)					11:00
1aF08 Functional differentiation of phosphatidylinositol phosphate 5-kinase genes in *Arabidopsis thaliana* Machiko Watari, Romain Blanc-Mathieu, Hiroyuki Ogata, Mariko Kato, Tomohiko Tsuge, Takashi Aoyama (Institute for Chemical Research, Kyoto University)	1aG08 Analysis of Haptophyte algae that are capable of alkane biosynthesis Yuu Hirose[1], Chihong Song[2], Fumihiro Itoh[3], Miyako Sato[4], Hirofumi Kurita[1], Kazuyoshi Murata[2], Toshihiko Eki[1], Naomi Harada[4] ([1]Toyohashi Univ. of Tech., Grad. Sch. of Eng., [2]National Institute of Physiological Sciences, [3]Phytopetrum Co., Ltd., [4]Japan Agency for Marine-Earth Science and Technology)	1aH08 Root-knot Nematodes (RKN) Hijack Auxin-signaling Modules to Activate Procambial Stem Cells Reira Suzuki[1], Takashi Ishida[2], Shinichiro Sawa[1] ([1]Graduate School of Science and Technology, Kumamoto University, [2]International Research Organization for Advanced Science and Technology (IROAST) Kumamoto University,)					11:15
1aF09 Ⓔ Sugar influx via transporters enhances defense signaling Kohji Yamada[1,3], Akira Mine[2,3] ([1]Tokushima Univ., [2]Ritsumeikan Univ., [3]JST, PRESTO)	1aG09 *Lotus japonicus* triterpenoid profile and characterization of the *CYP716A51* and *LjCYP93E1* genes involved in their biosynthesis in planta Hayato Suzuki[1], Ery Odette Fukushima[1,2], Yuko Shimizu[1], Hikaru Seki[1], Yukiko Fujisawa[3], Masao Ishimoto[3], Keishi Osakabe[4], Yuriko Osakabe[4], Toshiya Muranaka[1] ([1]Grad. Sch. Eng., Osaka Univ., [2]Universidad Regional Amazónica IKIAM, [3]Institute of Crop Science, NARO, [4]Faculty of Bioscience and Bioindustry, Tokushima Univ.)	1aH09 A Lotus LRR receptor regulates vascular differentiation and nodule development Yasuyuki Kawaharada[1], Stig Andersen[2], Jens Stougaard[2] ([1]Department of Plant BioSciences, Faculty of Agriculture, Iwate University, [2]Department of Molecular Biology, Aarhus University)					11:30
	1aG10 Ⓔ Integrating platform to elucidate the key amino acid of CYP716 family enzymes in triterpenoid biosynthesis Jutapat Romsuk[1], Ery Odette Fukushima[1,2], Shuhei Yasumoto[1], Hikaru Seki[1], Toshiya Muranaka[1] ([1]Dept. Biotech., Grad. Sch. of Eng., Osaka University, [2]Universidad Regional Amazónica IKIAM)	1aH10 Ⓔ Manipulation of root developmental regulation by plant immunity and associated microbiota Ryohei Thomas Nakano[1], Tamara Gigolashvili[2], Paul Schulze-Lefert[1] ([1]Max Planck Institute for Plant Breeding Research, [2]University of Cologne)					11:45
	1aG11 Ⓔ Comparative analysis of different plant NADPH-cytochrome P450 reductase classes in triterpenoid biosynthesis Pramesti Istiandari[1], Shuhei Yasumoto[1], Ery Odette Fukushima[2], Hikaru Seki[1], Toshiya Muranaka[1] ([1]Osaka University, Department of Biotechnology, [2]Universidad Regional Amazonica IKIAM, Ecuador)	1aH11 Ⓔ Signaling During Parasitic Plant Haustorium Formation Maxwell Robert Fishman[1], Anuphon Laohavisit[1], Sarah Christina Stolze[2], Hirofumi Nakagami[2], Ken Shirasu[1] ([1]RIKEN CSRS Plant Immunity Research Group, [2]Max Planck Institute for Plant Breeding Research)					12:00

Ⓔ=Presentation in English

● Day 1, Thur., March 19, PM (13:45–16:45)

Time	Room A Photosynthesis	Room B	Room C Environmental responses B	Room D Environmental responses C	Room E Plant-organism interaction B
13:45	1pA01 Biochemical analysis of PGRL1 in the green alga *Chlamydomonas reinhardtii* Hiroko Takahashi[1], Kenta Takayama[2], Atsuko Isu[3], Ken-ichi Wakabayashi[3], Toru Hisabori[3], Yoshitaka Nishiyama[1] ([1]Graduate School of Science and engineering, Saitama University, [2]Department of Biochemistry and Molecular Biology, Saitama University, [3]Laboratory for Chemistry and Life Science, Institute of Innovative Research, Tokyo Institute of Technology)	The 16th Database Workshop (13:45–16:45)	1pC01 E Potential role of acetate in enhancing tolerance in *Lens culinaris* against multiple abiotic stresses Md. Shahadat Hossain, Masayuki Fujita (Faculty of Agriculture, Kagawa University)	1pD01 Elucidation of flower opening and closing movement mechanism in Japanese gentian Keiichirou Nemoto, Fumina Goto, Aiko Watanabe, Masahiro Nishihara (Iwate Biotechnology Research Center)	1pE01 *Lotus japonicus* NLP transcription factors regulate the early stage of nodulation in response to nitrate Hanna Nishida[1], Takamasa Suzuki[2], Momoyo Ito[3], Mika Nomoto[4], Ryo Nishijima[1], Taiji Kawakatsu[1], Yasuomi Tada[4], Masayoshi Kawaguchi[5,6], Takuya Suzaki[3] ([1]NARO, [2]Chubu Univ., [3]Univ. Tsukuba, [4]Nagoya Univ., [5]NIBB, [6]SOKENDAI)
14:00	1pA02 E Photosynthetic Electron Transport Regulation in Microalgae Michael Hippler[1,2], Laura Mosebach[1], Shin-ichiro Ozawa[2], Yuichiro Takahashi[3], Felix Buchert[1] ([1]Institute of Plant Biology and Biotechnology, University of Muenster, Germany, [2]Institute of Plant Science and Resources, Okayama University, Japan, [3]Research Institute for Interdisciplinary Science, Okayama University, Japan)		1pC02 Diversity of aluminum (Al^{3+}) stress tolerance in a worldwide collection of the genus *Vigna* Akiko Baba-Kasai, Kaoru Ebana, Norihiko Tomooka (Genetic Resources Center of NARO)	1pD02 E Mechanosensitive channel genes of a stem parasitic plant, *Cuscuta campestris* , and their expression during haustorium initiation Jihwan Park, Koh Aoki (Grad. Sch. Life Environ. Sci., Osaka Pref. Univ.)	1pE02 Studies on *Lotus japonicus* NRSYM3 that regulates nitrate inhibition of root nodule symbiosis and nitrate uptake Fumika Misawa[1], Hanna Nishida[2], Takamasa Suzuki[3], Momoyo Ito[1], Mika Nomoto[4], Yasuomi Tada[4], Taiji Kawakatsu[2], Masayoshi Kawaguchi[5,6], Takuya Suzaki[1] ([1]Univ. Tsukuba, [2]NARO, [3]Chubu Univ., [4]Nagoya Univ., [5]NIBB, [6]SOKENDAI)
14:15	1pA03 E Chemical crosslinking combined with mass spectrometric analyses revealed dynamic photosynthetic membrane protein complex interactions Shin-ichiro Ozawa[1], Philipp Gäbelein[2], Felix Buchert[2], Laura Mosebach[2], Susan Hawat[2], Martin Scholz[2], Wataru Sakamoto[1], Michael Hippler[1,2] ([1]IPSR, Okayama Univ., [2]Institute of Plant Biology and Biotechnology, University of Münster)		1pC03 Increased nickel tolerance by mutations in *AHA2* in *Arabidopsis thaliana* Sho Nishida[1], Toshiki Okazaki[2], Naoki Furuta[2] ([1]Fac. Agr., Saga Univ., [2]Fac. Sci. Eng., Chuo Univ.)	1pD03 Up-regulation of cell division- and vascular development-related genes of host plant is not caused by the mechanisms similar to tissue reunion in the parasitic interface Shota Yamamoto, Koh Aoki (Grad. Sch. Life and Env. Sci., Osaka Pref. Univ.)	1pE03 Systemic regulatory system shared for nodulation and root development in response to nitrate Mika Tsugane[1], Masayoshi Kawaguchi[1,2] ([1]NIBB, [2]SOKENDAI)
14:30	1pA04 C13[2]-Demethoxycarbonylation and hydrolysis of zinc chlorophyll-*a* derivatives by a BciC enzyme Mitsuaki Hirose[1], Misato Teramura[1], Jiro Harada[2], Hitoshi Tamiaki[1] ([1]Grad. Life. Sci., Ritsumeikan. Univ., [2]School of medicine, Kurume. Univ.)		1pC04 Autophagy increases zinc bioavailability to avoid hydroxyl radical production in chloroplast under zinc starvation Daiki Shinozaki[1], Ekaterina Merkulova[2], Loreto Naya[2], Celine Masclaux-Daubresse[2], Kohki Yoshimoto[1,2] ([1]Dep. Life Sci., Grad. Sch. Agri., Meiji Univ., [2]Inst. Jean-Pierre Bourgin, INRA, AgroParisTech, CNRS, Univ. Paris-Saclay)	1pD04 Functional analysis of histone deacetylase involved in the DNA damage response Sachi Tsuji, Shiori S Aki, Masaaki Umeda (Grad. Sch. Sci. Tech., NAIST)	1pE04 Functional characterization of novel *Lotus japonicus* miR2111 precursor loci in the shoot-mediated long-distance feedback pathway controlling nodulation Nao Okuma[1,2], Takashi Soyano[1,2], Masayoshi Kawaguchi[1,2] ([1]National institute for basic biology, [2]SOKENDAI)
14:45	1pA05 Organogelation of 8-Hyper-Alkylated Pigment Mixture of Bacteriochlorophyll *c* or *d* Jiro Harada[1], Yusuke Kinoshita[2], Takeshi Hashishin[3], Tadashi Mizoguchi[2], Ken Yamamoto[1], Hitoshi Tamiaki[2] ([1]Dept. Med. Biochem., Kurume Univ. Sch. Med., [2]Grad. Sch. Life Sci., Ritsumeikan Univ., [3]Facul. Adv. Sci. Tech., Kumamoto Univ.)		1pC05 Elucidation of negative regulatory mechanism of Fe uptake by bHLH11 transcription factor in Arabidopsis Kotaro Nozawa[1], Megumi Kawamoto[2], Kaori Sako[1,2], Shigeru Shigeoka[1,2], Masahiro Tamoi[1,2] ([1]Grad. Sch. Agr., Kindai Univ., [2]Fac. Agr., Kindai Univ.)	1pD05 E A mechanism of precise termination of root hair growth Michitaro Shibata, Ayako Kawamura, Keiko Sugimoto (RIKEN CSRS)	1pE05 Roles of *Lotus japonicus PUCHI* genes in root nodule formation Takashi Soyano[1,2], Masayoshi Kawaguchi[1,2], Makoto Hayashi[3] ([1]National Institute for Basic Biology, [2]SOKENDAI, [3]RIKEN, CSRS)

Room F	Room G	Room H	Room W	Room X	Room Y	Room Z	Time
Plant hormones/ Signaling molecules	Secondary (specialized) metabolism	Vegetative growth					
1pF01 BR biosynthesis in the primary root tip is governed by light perception in the shoot tissue in Arabidopsis Jun Sakaguchi, Yuichiro Watanabe (Grad. School of Arts and Sciences, The Univ. of Tokyo.)	1pG01 Genetic manipulation of transcriptional regulators alters nicotine biosynthesis in tobacco Tsubasa Shoji, Shunya Hayashi, Mutsumi Watanabe, Makoto Kobayashi, Takayuki Tohge, Takashi Hashimoto (Dep. Biol. Sci., NAIST)	1pH01 Analyzing the role for auxin in CLE peptide signaling in the apical meristem of *Marchantia polymorpha* Yuki Hirakawa[1], Go Takahashi[1], Toko Fujimoto[2], Tomohiro Kiyosue[1] ([1]Dept. Life Sci., Gakushuin Univ., [2]Grad. Sch. Sci., Univ. Tokyo)		Symposium S05 The highly specialized plant organs and cells —Its function and evolution— (13:45–16:40)	Symposium S06 Frontiers of research on embryo and endosperm development: Induction of artificial apomixis (13:45–16:45)	Symposium S07 Secret life of chloroplasts: from development to degradation (13:45–16:45)	13:45
1pF02 BRASSINOSTEROID-RELATED-HOMEOBOX-1(BHB1) negatively regulates BR biosynthesis Reika Hasegawa[1], Kenjiro Fujita[3], Yuichiro Tanaka[3], Hironori Takasaki[1], Miho Ikeda[1], Ayumi Yamagami[2], Nobutaka Mitsuda[1,4], Takeshi Nakano[2], Masaru Ohme-Takagi[1] ([1]Grad. Sch. Eng. and Sci., Univ. Saitama, [2]Grad. Sch. bio., Univ. Kyoto, [3]Grad. Sch. Agri., Univ. Meiji, [4]AIST)	1pG02 Diversity analysis of phytoalexin producing ability in rice Tomoki Kobayashi[1], Kazunori Okada[2], Takayuki Tohge[1], Takafumi Shimizu[1] ([1]NAIST, [2]Biotechnology Research Center, The Univ. of Tokyo)	1pH02 Roles of the ROS-producing enzyme MpRbohA in the regulation of cell division, cell differentiation and maintenance of cellular identity of apical meristematic cells in *Marchantia polymorpha* Kenji Hashimoto[1,2], Yuki Hagiwara[1], Sumika Ide[1], Daisuke Miyamoto[1], Tomohiro Takagawa[1], Kimitsune Ishizaki[3], Ryuichi Nishihama[4], Takayuki Kohchi[4], Kazuyuki Kuchitsu[1,2] ([1]Dept. of Appl. Biol. Sci., Tokyo Univ. of Sci., [2]Imaging Frontier Ctr., Tokyo Univ. of Sci., [3]Grad. Sch. of Sci., Kobe Univ., [4]Grad. Sch. of Biostudies, Kyoto Univ.)				14:00
1pF03 Functional analysis of a secreted peptide which inhibits brassinosteroid signaling Takayuki Kondo[1], Iwai Ohbayashi[1], You-Wang Kim[1], Masanori Okamoto[2], Yutaka Kodama[2], Takeshi Yoshizumi[3], Takeshi Haraguchi[4], Mieko Higuchi-Takeuchi[3], Minami Shimizu[3], Mika Nomoto[5], Yasuomi Tada[5], Yusuke Jikumaru[6], Yuji Kamiya[3], Kazuo Shinozaki[3], Keiko Kuwata[7], Shunsuke Oishi[7], Takahiro Kusakabe[8], Jaeman Lee[8], Kousuke Hanada[1,3] ([1]Dept. Biosci. & Bioinform., Kyushu Inst. Technol., [2]Ctr. for Biosci. Res. Educ., Utsunomiya Univ., [3]RIKEN CSRS, [4]Dept. Biol., Grad. Sch. Sci., Chiba Univ., [5]Ctr. for Gene Res., Nagoya Univ., [6]Agilent Technologies, [7]ITbM, Nagoya Univ., [8]Fac. of Agr., Kyushu Univ.)	1pG03 Analysis of sulfur deficiency response in *Brassica oleracea* crops Ryota Nishimoto[1], Kana Nakayama[1], Hoefgen Rainer[2], Fernie Alisdair[2], Mutsumi Watanabe[1], Takayuki Tohge[1] ([1]NAIST Plant secondly metabolites lab, [2]Max Planck Institute)	1pH03 Division Patterns and Apical Cell Lineages in Developing Gemma Revealed by Clonal Analysis in the Liverwort *Marchantia polymorpha* Hidemasa Suzuki[1], Jill Harrison[2], Masaki Shimamura[3], Takayuki Kohchi[1], Ryuichi Nishihama[1] ([1]Graduate School of Biostudies, Kyoto University, [2]School of Biological Sciences, University of Bristol, [3]Graduate School of Integrated Sciences for Life, Hiroshima University)				14:15
1pF04 Analysis of gene candidates for signaling peptides in *Marchantia polymorpha* Haruaki Kobayashi[1], Shigeo S. Sugano[3], Kentaro Tamura[2], Tomoo Shimada[1] ([1]Grad. Sch. Sci., Univ. Kyoto, [2]Sch. Food & Nutritional Sci., Univ. Shizuoka, [3]Bioproduction, AIST)	1pG04 Ⓔ Glucosinolate Breakdown Regulated by "Atypical" Thioglucosidases Initiates Unique Sulfur Catabolism Rui Li, Ryosuke Sugiyama, Ayuko Kuwahara, Masami Yokota Hirai (CSRS, RIKEN)	1pH04 *TAWAWA1*, ALOG transcription factor, mediates stem cell maintenance and differentiation in *Physcomitrella patens* Yuki Hata[1], Yuji Hiwatashi[2], Satoshi Naramoto[1], Junko Kyozuka[1] ([1]Grad. Sch., Life Sci., Tohoku Univ., [2]Sch. Food, Agri., Enviro. Sci., Miyagi Univ.)					14:30
1pF05 Cyclic-peptides affecting root architecture Akira Yoshinari[1], Kumarswamyreddy Nandarapu[1], Keiko Kuwata[1], Jeffrey W. Bode[1,2], Wolf B. Frommer[1,3,4], Shunsuke Oishi[1], Masayoshi Nakamura[1] ([1]Institute of Transformative Biomolecules (WPI-ITbM), Nagoya University, [2]ETH Zurich, [3]Heinrich Heine Universitat Dusseldorf, [4]Max Planck Institute for Breeding Research)	1pG05 Characterization Secreted Lipid Molecules Involved in the Apoplastic Accumulation of Shikonin derivatives Kanade Tatsumi[1], Takuji Ichino[1], Yozo Okazaki[2,3], Yasuhiro Higashi[2], Masataka Kajikawa[4], Hideya Fukuzawa[4], Kiminori Toyooka[2], Mayuko Sato[2], Ikuyo Ichi[5], Kazuki Saito[2,6], Kazufumi Yazaki[1] ([1]RISH, Kyoto Univ., [2]RIKEN CSRS, [3]Grad. Sch. Bioresources, Mie Univ., [4]Grad. Sch. Biostudies, Kyoto Univ., [5]Fac. Core Res., Ochanomizu Univ., [6]Grad. Sch. Pharm. Sci., Chiba Univ.)	1pH05 Functions of AMP1 and CYP78 enzymes in auxin response and meristem formation in the liverwort *Marchantia polymorpha* Hirono Soejima, Hidemasa Suzuki, Hiroto Ikeda, Hiroyuki Kirita, Mayuko Takeda, Ryuichi Nishihama, Takayuki Kohchi (Grad. Sch. Biostudies, Kyoto Univ.)				14:45

Ⓔ=Presentation in English

● Day 1, Thur., March 19, PM (13:45–16:45)

Time	Room A	Room B	Room C	Room D	Room E
	Photosynthesis	The 16th Database Workshop (13:45–16:45)	Environmental responses B	Environmental responses C	Plant-organism interaction B
15:00	1pA06 E Expression Profiling of Chlorophyll Biosynthesis Pathways in Chlorophyll b-Lacking Mutants of Rice (*Oryza sativa* L.) Minh Khiem Nguyen, Chi-Ming Yang (Biodiversity Research Center, Academia Sinica, Nangang, Taipei 115, Taiwan)		1pC06 Molecular genetic analysis of Arabidopsis cadmium sensitive1 mutant Koki Misawa, Erika Urayama, Izumi Yotsui, Teruaki Taji, Yoichi Sakata (Dept. of Bioscience Tokyo Univ. of Agriculture)	1pD06 Callose deposition during phosphate starvation responses in *Arabidopsis thaliana* Kentaro Okada, Koei Yachi, Tan Anh Nhi Nguyen, Tae-Hong Lee, Kei Hiruma, Yusuke Saijo (Grad. Sch. Sci. Tec., NAIST)	1pE06 Sterol acyltransferase is involved in the regulation of root nodule symbiosis Akihiro Yamazaki[1], Yozo Okazaki[1,2], Yasuhiro Higashi[1], Kazuki Saito[1,3], Akira Akamatsu[4], Naoya Takeda[4], Akira Miyahara[5], Miwa Nagae[5], Yosuke Umehara[5], Makoto Hayashi[1] ([1]RIKEN CSRS, [2]Grad. Sch. Bioresources, Mie Univ., [3]Grad. Sch. Pharma. Sci., Chiba Univ., [4]Grad. Sch. Sci. Tec., Kwansei Gakuin Univ., [5]Div. Plant Sci., NIAS)
15:15	1pA07 Effects of carboxyl-terminal residue modifications of photosystem II reaction center D2 protein on the O_2-evolving system Ruri Nihara[1], Hiroshi Kuroda[2], Yuichiro Takahashi[2] ([1]Grad. Sch. Nat. Sci. & Tech., Okayama Univ., [2]RIIS, Okayama Univ.)		1pC07 Cell cycle responses of the Arabidopsis root apical meristem under toxic metal stress Shimpei Uraguchi, Yuka Ohshiro, Haruka Sato, Momoko Hirakawa, Chihiro Hagai, Natsuho Tamaru, Ryosuke Nakamura, Yasukazu Takanezawa, Masako Kiyono (Sch. Pharm., Kitasato Univ.)	1pD07 An temporal oxygen burst is required for an emergence of seminal root in rice under submergence Katsuhiro Shiono[1,2], Kazunari Iwasaki[1], Morten Larsen[2], Ronnie Glud[2] ([1]Dept. Biosci. Biotech., Fukui Pref. Univ., [2]Dept. Biol., Univ. Southern, Denmark)	1pE07 Elucidation of gall formation mechanism by the Ab-GALFA method Takumi Nakayama[1], Yuma Saito[1], Issei Ohshima[2], Yoshihito Suzuki[3], Seisuke Kimura[4], Takakazu Matsuura[5], Yoko Ikeda[5], Seiji Takeda[2], Tomoko Hirano[2], Masa H. Sato[2] ([1]Faculty of Life and Environmental, Kyoto Prefectural University, [2]Graduate School of Life and Environmental Sciences, Kyoto Prefectural University, [3]Faculty of Agriculture, Ibaraki University, [4]Faculty of Integrated Life Sciences, Kyoto Industry University, [5]5Institute of Plant Science and Resources, Okayama University)
15:30	1pA08 Thioredoxin *m*4 regulates PGR5/PGRL1-dependent photosystem I cyclic electron transport Yuki Okegawa[1], Ken Motohashi[1,2] ([1]Fac. Life Sci., Kyoto Sangyo Univ., [2]Fac. Life Sci., Kyoto Sangyo Univ.)		1pC08 Loss of Function of RAPTOR1B, a Positive Growth Regulator, Mitigates Inhibition of Plant Primary Root Growth Under Low Boron Condition Naoki Iwasa, Kyoko Miwa (Grad. Sch. Environ. Sci., Hokkaido Univ.)	1pD08 Nutritropism of Rice Roots Kiyoshi Yamazaki[1], Yoshihiro Ohmori[1], Hirokazu Takahashi[2], Mikio Nakazono[2], Toru Fujiwara[1] ([1]Grad. Sch. Agric. Life Sci., Univ. Tokyo, [2]Grad. Sch. Bioagric. Sci., Nagoya Univ.)	1pE08 E Charting the co-transcriptomes of plants and the plant microbiota Tatsuya Nobori[1,2], Yu Cao[1], Eik Dahms[1], Ruben Garrido-Oter[1], Eric Kemen[1,3], Kenichi Tsuda[1,4] ([1]Max-Planck Institute for Plant Breeding Research, [2]Salk Institute for Biological Studies, [3]University of Tuebingen, [4]Huazhong Agricultural University)
15:45	1pA09 PsbQ-Like protein 3 functions as an assembly factor for the chloroplast NDH complex in Arabidopsis Noriko Ishikawa, Yuki Yokoe, Takeshi Nakano, Kentaro Ifuku (Grad. Sch. Biostudies, Kyoto Univ.)			1pD09 E Gene expression patterns predict leaf temperature Daisuke Kyogoku[1], Yoichi Hashida[2], Suguru E. Tanaka[1], Naoya Mori[3], Hiroyuki Watanabe[4], Atsushi J. Nagano[1] ([1]Faculty of Agriculture, Ryukoku University, [2]Faculty of Agriculture, Takasaki University of Health and Welfare, [3]Research Institute, Tamagawa University, [4]College of Agriculture, Tamagawa University)	1pE09 E Insights into the mechanisms involved in the improvement of yields and quality of Rice exposed to volatile compounds emitted by phytopathogens under climate change Scenarios Marouane Baslam[1,2], Kimiko Itoh[3], Kentaro Kaneko[2], Kana Furuki[2], Sumire Rikimaru[2], Hideyuki Takahashi[3], Edurne Baroja-Fernandez[4], Jose Francisco Munoz[4], Mohammad-Reza Hajirezaei[5], Karel Dolezal[6], Javier Pozueta-Romero[4], Toshiaki Mitsui[1,2] ([1]Lab. of Biochemistry, Fac. of Agriculture, Niigata Univ., [2]Dept. of Life and Food Sciences, Grad. Sch. Sci. Tech., Niigata Univ., [3]Institute of Science and Technology, Niigata Univ., [4]Instituto de Agrobiotecnologia (CSIC/UPNA/Gobierno de Navarra), [5]Leibniz Institute of Plant Genetics and Crop Plant Research (IPK), Gatersleben, Germany, [6]Centre of the Region Hana for Biotechnological and Agricultural Research, Palacky University, Czech Republic)

Room F	Room G	Room H	Room W	Room X	Room Y	Room Z	Time
Plant hormones/ Signaling molecules	Secondary (specialized) metabolism	Vegetative growth					
1pF06 Discovery of consensus sequence for RNA mobility in Plants Ken-ichi Kurotani[1], Hiroki Tsutsui[1], Yu Sawai[1], Takamasa Suzuki[2], Michitaka Notaguchi[1,3] ([1]Biosci. & Biotech. Center, Nagoya Univ., [2]Grad. Sch. Biosci. Biotech, Chubu Univ., [3]ITbM, Nagoya Univ.)	1pG06 A metabolomic approach for the functional analysis of taxane compound transporters from yew Hiroaki Kusano[1], Hiroshi Minami[2], Yoshihiro Kato[2], Kaori Kanazawa[1], Akifumi Sugiyama[1], Homare Tabata[2], Kazufumi Yazaki[1] ([1]RISH, Kyoto Univ., [2]Life Science Center, Hokkaido Mitsui Chemicals, Inc.)	1pH06 Mathematical model analysis on the generation of a steep spiral of costoid phyllotaxis Takaaki Yonekura, Munetaka Sugiyama (Botanical Gardens, Grad. Sch. Sci., Univ. Tokyo)		Symposium S05 The highly specialized plant organs and cells —Its function and evolution— (13:45–16:40)	Symposium S06 Frontiers of research on embryo and endosperm development: Induction of artificial apomixis (13:45–16:45)	Symposium S07 Secret life of chloroplasts: from development to degradation (13:45–16:45)	15:00
1pF07 Study on the response to external thermospermine in vascular plants Minaho Miyamoto, Takahiro Tanaka, Hirotoshi Matsuo, Takashi Okamoto, Hiroyasu Motose, Taku Takahashi (Grad. Sch. Natl. Sci. Tech., Okayama Univ.)	1pG07 Ⓔ Physico-Chemical and cooking quality characteristics: A comparative study of some salt tolerant, drought tolerant and land races of rice genotypes Mahbuba Khatoon[1], MD. Tariqul Islam[1], MD. Imtiaz Uddin[2] ([1]Crop Physiology Division, Bangladesh Institute of Nuclear Agriculture, Mymensingh, [2]Biotechnology Division, Bangladesh Institute of Nuclear Agriculture, Mymensingh)	1pH07 Imaging of auxin and cytokinin signaling in the shoot apical meristem of rice Moeko Sato[1], Yuki Sakamoto[2], Sachihiro Matsunaga[3], Hiroyuki Tsuji[1] ([1]KIBR., Yokohama City University, [2]Dept. Biol. Sci., Grad. Sch. Sci., Osaka University, [3]Dept. App. Biol. Sci., Fac. Sci. Tech., Tokyo Univ. Sci.)					15:15
1pF08 Generation of reactive carbonyl species in proliferating cells in roots Jun'ichi Mano[1,2], Mari Ikemoto[3], Katsunori Tanaka[4,5], Ambara Pradipta[4] ([1]Sci. Res. Center, Yamaguchi Univ., [2]Grad. Schl. Sci. Technol. Innov., Yamaguchi Univ., [3]Fac. Agr., Yamaguchi Univ., [4]RIKEN Cluster for Pioneering Research, [5]Schl. Material Chem. Technol., Tokyo Inst. Tech.)	1pG08 Molecular analysis of red flower color development in red-flowered gentian cultivars Keiichirou Nemoto[1], Nobuhiro Sasaki[1,2], Yuzo Nishizaki[3], Naoki Sugimoto[3], Keisuke Tasaki[1,4], Aiko Watanabe[1], Fumina Goto[1], Atsumi Higuchi[1], Ed Morgan[5], Takashi Hikage[6], Masahiro Nishihara[1] ([1]Iwate Biotechnology Research Center, [2]Toyo University, [3]National Institute of Health Sciences, [4]Tokyo University of Agriculture, [5]The New Zealand Institute for Plant & Food Research Ltd., [6]Hachimantai City Floricultural Research and Development Center)	1pH08 Searching for factors initiate shoot apical meristem formation downstream of *ETTIN* in rice Misuzu Nosaka-T (NIG)					15:30
1pF09 Ⓔ Leucine-rich repeat receptor-like kinases mediate quinone perception in plants Anuphon Laohavisit[1], Takanori Wakatake[1,2], Nobuaki Ishihama[1], Hugh Mulvey[1], Kaori Takizawa[1], Takamasa Suzuki[3], Ken Shirasu[1,2] ([1]RIKEN CSRS, [2]Graduate School of Science, The University of Tokyo, [3]College of Bioscience and Biotechnology, Chubu University)	1pG09 Antioxidative Tea Flavonoids Can Scavenge the Reactive Carbonyl Species Acrolein, Through the Formation of Flavonoid-carbonyl Conjugates Koichi Sugimoto[1], Kyoko Sakai[2], Norika Fujiya[2], Jun'ichi Mano[1,2] ([1]Science Research Center, Yamaguchi Univ., [2]Department of Agriculture, Yamaguchi Univ.)	1pH09 Competitive relationship among BES/BZR transcription factors improves a robustness of stem cell maintenance Tomoyuki Furuya[1], Masato Saito[1], Haruka Uchimura[1], Shohei Nosaki[2], Takuya Miyakawa[2], Akiko Satake[3], Shunji Shimadzu[1], Wataru Yamori[1,2], Masaru Tanokura[2], Hiroo Fukuda[1], Yuki Kondo[1] ([1]Grad. Sch. Sci., The Univ. Tokyo, [2]Grad. Sch. Agri. Life Sci., The Univ. Tokyo, [3]Grad. Sch. Sci., Kyushu Univ.)					15:45

Ⓔ=Presentation in English

● Day 1, Thur., March 19, PM (13:45–16:45)

Time	Room A	Room B	Room C	Room D	Room E
	Photosynthesis		Environmental responses B	Environmental responses C	Plant-organism interaction B
16:00 16:15 16:30		The 16th Database Workshop (13:45–16:45)			

Room F	Room G	Room H	Room W	Room X	Room Y	Room Z	Time
Plant hormones/ Signaling molecules	Secondary (specialized) metabolism	Vegetative growth					
	1pG10 Evaluation of aluminum-detoxifying abilities of various hydrolyzable tannins identified in *Eucalyptus camaldulensis* Ko Tahara[1], Shoichi Suzuki[2], Mitsuru Nishiguchi[1], Koh Hashida[1], Hideyuki Ito[2] ([1]Forestry and Forest Products Research Institute, [2]Graduate School of Health and Welfare Science, Okayama Prefectural University)	1pH10 Towards Molecular Biochemical Identification of Stemness-Related Proteins in Arabidopsis Ryuji Tsugeki[1], Hitoshi Mori[2] ([1]Grad. Sch. Sci., Kyoto Univ., [2]Grad. Sch. Agric. Sci., Nagoya Univ.) 1pH11 Divergent roles of CLAVATA 1 and BARELY ANY MERISTEM class receptor kinases in the regulation of root stem cells Takashi Ishida[1], Shinichiro Sawa[2] ([1]Kumamoto University, IROAST, [2]Kumamoto University, FAST) 1pH12 The role of ER localized SNARE protein in root growth Yushi Yoshitake[1], Wataru Hayasaka[2], Kohki Yoshimoto[2] ([1]OSRI, Meiji Univ., [2]Dep. Life Sci., Sch. Agri., Meiji Univ.)		Symposium S05 The highly specialized plant organs and cells —Its function and evolution— (13:45–16:40)	Symposium S06 Frontiers of research on embryo and endosperm development: Induction of artificial apomixis (13:45–16:45)	Symposium S07 Secret life of chloroplasts: from development to degradation (13:45–16:45)	16:00 16:15 16:30

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● Day 2, Fri., March 20, AM (9:00–11:30)

Time	Room A	Room B	Room C	Room D
	Photosynthesis	New technology	Environmental responses B	Environmental responses A
09:00	2aA01 Analysis of transgenic rice plants with co-overproduced Rubisco and Rubisco activase Mao Suganami[1], Yuji Suzuki[2], Youshi Tazoe[1], Amane Makino[1] ([1]Grad. Sch. Agr. Sci., Tohoku Univ., [2]Fac. Agr., Iwate Univ.)	2aB01 Long-term Ca^{2+} imaging in *Arabidopsis thaliana* Ryuji Suzuki[1], Masatsugu Toyota[2] ([1]Sci., Univ. Saitama, [2]Grad. Sch. Sci., Univ. Saitama)	2aC01 Transpirational demand affects transcriptome dynamics in rice plants Tsuneo Kuwagata[1], Sachinobu Ishida[2], Mari Murai-Hatano[3], Maya Matsunami[3,4], Shingo Terui[2], Atsushi J. Nagano[5] ([1]NARO Institute for Agro-Environmental Sciences, [2]Graduate School of Science and Technology, Hirosaki University, [3]NARO Tohoku Agricultural Research Center, [4]Faculty of Agriculture, Iwate University, [5]Faculty of Agriculture, Ryukoku University)	2aD01 Effect of foliage spraying of oxidized glutathione on *Chamaecyparis obtusa* mother trees on germination of seeds and growth of seedlings Soichiro Noda[1], Aya Hatano-Iwasaki[1], Masato Nakagawa[1], Kenji Henmi[1], Yasukazu Moteki[2], Osamu Matsuda[3], Ken'ichi Ogawa[1] ([1]RIBS Okayama, [2]Gifu Pref. Res. Inst. Forests, [3]Fac. Sci., Kyushu Univ.)
09:15	2aA02 Transgenic rice overproducing Rubisco exhibits high yields with high nitrogen use efficiency in a paddy field from 2016 to 2019 Dong Kyung Yoon[1], Keiki Ishiyama[1], Mao Suganami[1], Takaaki Kagawa[1], Mari Watanabe[1], Serina Imaruoka[1], Maki Ogura[1], Youshi Tazoe[1], Hiroyuki Ishida[1], Yuji Suzuki[2], Mitsuhiro Obara[3], Tadahiko Mae[1], Amane Makino[1] ([1]Grad. Sch. Agr., Tohoku Univ., [2]Fac. Agr., Iwate Univ., [3]JIRCAS)	2aB02 Live cell imaging of plant bilirubin using a fluorescent biosensor UnaG Kazuya Ishikawa[1], Xiaonan Xie[1], Atsushi Miyawaki[2], Keiji Numata[3], Yutaka Kodama[1] ([1]Ctr. Biosci. Res. Educ., Utsunomiya Univ, [2]CBS, RIKEN, [3]CSRS, RIKEN)	2aC02 Identification of guard cell K^+ channel inhibitors that contribute to drought tolerance in *Arabidopsis thaliana* Kanane Sato[1], Kyota Suzuki[1], Kosuke Endo[1], Tomoki Shimada[1], Taishin Kakei[1], Mieko Arisawa[2], Taro Mizuno[2], Nobuhisa Isaka[3], Toshio Yamaguchi[4], Shin Hamamoto[1], Matteo Grenzi[5], Alex Costa[5], Khurram Bashir[6], Motoaki Seki[6], Yasuhiro Ishimaru[1], Nobuyuki Uozumi[1] ([1]Grad. Sch. Eng., Univ. Tohoku, [2]Grad. Sch. Phar., Univ. Tohoku, [3]Applied Life Sci., Univ. Niigata Pharmacy, [4]Faculty of Pharmacy, Univ. Niigata Pharmacy, [5]Biosci., Univ. Milan, [6]RIKEN CSRS)	2aD02 Increased seed lipid accumulation by feeding of hinoki cypress (*Chamaecyparis obtusa*) trees with oxidized glutathione Ken'ichi Ogawa[1], Aya Hatano-Iwasaki[1], Masato Nakagawa[1], Soichiro Noda[1], Satoshi Mochizuki[1], Yasukazu Moteki[2], Osamu Matsuda[3] ([1]Res. Inst. Biol. Sci, Okayama (RIBS OKAYAMA), [2]Gifu Pref. Res. Inst. Forest, [3]Grad. Sch. Sci, Kyushu Univ.)
09:30	2aA03 Flavodiiron Proteins Affect the Photosynthetic Electron Transport in Transgenic Rice with Decreased Rubisco Content Ryo Maruhashi[1], Youshi Tazoe[1], Shinya Wada[2], Daisuke Takagi[1], Hiroshi Yamamoto[3], Toshiharu Shikanai[3], Amane Makino[1] ([1]Grad. sch. Agri., Univ. Tohoku, [2]Grad. sch. Agri., Univ. Kobe, [3]Grad. sch. Sci., Univ. Kyoto)	2aB03 Live imaging system to track RNA polymerase II ser2 phosphorylation in living *Arabidopsis thaliana* Mio Shibuta[1], Megumi Matsuoka[1], Mayu Yoshikawa[1], Kazuki Kurita[1], Tamako Yamaoka[1], Takuya Sakamoto[1], Hiroshi Kimura[2], Sachihiro Matsunaga[1] ([1]Grad. Sch. Science and Technology, Tokyo Univ. of Science, [2]Dept. of life Science and Technology, Tokyo Institute of Tech.)	2aC03 E Preventing Submerge-Triggered Ammonium Toxicity- Mechanism of Inhibition of Ammonium Transporter activity in Arabidopsis Hui-Yu Chen[1], Hung-Yu Wang[1], Chen Yen-Ning[1], Zong-Ta Liu[1], Wolf B. Frommer[2,3,4], Cheng-Hsun Ho[1] ([1]Agricultural Biotechnology Research Center (ABRC) of Academia Sinica, [2]Institute for Molecular Physiology, Heinrich Heine University Dusseldorf, Germany, [3]Max Planck Institute for Plant Breeding Research, Koln, Germany, [4]Institute of Transformative Bio-Molecules (WPI-ITbM), Nagoya University, Chikusa, Nagoya 464-8601, Japan ITbM)	2aD03 Regulation and physiological importance of H_2O_2 metabolism in chloroplasts Takashi Kameoka[1], Takaya Okayasu[1], Takahisa Ogawa[1], Frank Van Breusegem[2], Takahiro Ishikawa[1], Takanori Maruta[1] ([1]Grad. Sch. Nat. Sci. Technol., Shimane Univ., [2]PSB, VIB/ U-Gent)
09:45	2aA04 Differences in the temperature response photosynthetic between rice and wheat Yoshinori Goto, Daisuke Takagi, Youshi Tazoe, Amane Makino (Grad. Sch. Agr. Sci., Tohoku. Univ)	2aB04 Development of iTOMEI Yuki Sakamoto[1], Anna Ishimoto[2], Yuuki Sakai[1,3], Moeko Sato[4], Hiroyuki Tsuji[4], Ryuichi Nishihama[5], Takayuki Kohchi[5], Sachihiro Matsunaga[6] ([1]Dept. Biol. Sci., Grad. Sch. Sci., Osaka Univ., [2]Dept. Biol. Sci., Grad. Sch. Sci., Univ. Tokyo, [3]Dept. Biol., Grad Sch. Sci., Kobe Univ., [4]KIBR., Yokohama City Univ., [5]Grad. Sch. Biostudies, Kyoto Univ., [6]Dept. App. Biol. Sci., Fac. Sci. Tech., Tokyo Univ. Sci.)	2aC04 E Functional and Molecular Characterization of MYB71 and MYB79 Transcription Factors in Arabidopsis Zarnab Ahmad[1,2], Khurram Bashir[1], Junko Ishida[1], Akihisa Shinozawa[3], Teruaki Taji[4], Satoshi Takahashi[1], Bushra Rashid[2], Tayyab Husnain[2], Motoaki Seki[1,5,6] ([1]Plant Genomic Network Research Team, CSRS, RIKEN, [2]Plant Genomic Laboratory, Centre of Excellence in Molecular Biology, University of the Punjab, Lahore, Pakistan, [3]NODAI Genome Research Center, Tokyo University of Agriculture; Setagaya, Tokyo, Japan, [4]Department of Bio-Science; Tokyo University of Agriculture; Setagaya, Tokyo, Japan, [5]Kihara Institute for Biological Research, Yokohama City University, [6]Plant Epigenome Regulation Laboratory, CPR, RIKEN)	2aD04 Glutathione-dependent ascorbate recycling in high light Yusuke Terai[1], Mio Tanaka[2], Hiromi Ueno[1], Takahisa Ogawa[1,2], Atsuko Miyagi[3], Maki Kawai-Yamada[3], Takahiro Ishikawa[1,2], Takanori Maruta[1,2] ([1]Dept. Life Sci. Biotechnol., Fac. Life Environ. Sci., Shimane Univ., [2]Grad. Sch. Nat. Sci. Technol., Shimane Univ., [3]Grad. Sch. Sci. Eng., Saitama Univ.)

Room E	Room F	Room G	Room H	Room W	Room X	Room Y	Room Z	Time
Plant-organism interaction B	Plant hormones/ Signaling molecules	Primary metabolism	Biomembrane/Ion and solute transport					
2aE01 Elucidation of regulatory mechanism for gibberellin-promoted arbuscular mycorrhizal symbiosis in *Eustoma grandiflorum* Takaya Tominaga[1], Chihiro Miura[2], Kotomi Ueno[2], Naoya Takeda[3], Katsushi Yamaguchi[4], Shuji Shigenobu[4], Masahide Yamato[5], Hironori Kaminaka[2] ([1]Dept. Agr. Sci., Grad. Sch. Sust. Sci., Tottori Univ., [2]Fac. Agr., Tottori Univ., [3]Schl. Sci. Tech., Kwansei Gakuin Univ., [4]NIBB, [5]Fac. Edu., Chiba Univ.)	2aF01 E Ancient Arabinogalactans Modulate Auxin Signaling In *Physcomitrella patens* To Regulate Polarity Ooi-Kock Teh[1,2], Junling Ren[4], Mitsuyasu Hasebe[3], Tomomichi Fujita[2] ([1]IAHE, Hokkaido Univ, [2]Dept Biol. Sci., Hokkaido Univ, [3]NIBB, Division Evol. Biol., [4]Dept. Biol., Univ. Louisville)	2aG01 Activation mechanism of the nitrogen depletion responsive transcription factor MYB1 in the unicellular red alga *Cyanidioschyzon merolae* Baifeng Zhou, Kan Tanaka, Sousuke Imamura (Laboratory for Chemistry and Life Science, Institute of Innovative Research, Tokyo Institute of Technology)	2aH01 Possible roles of the sugar transporters SrSWEET2, SrSWEET4, and SrSWEET6 in thermogenic inflorescences of skunk cabbage (*Symplocarpus renifolius*) Miyabi Otsubo[1], Mitsuhiko P. Sato[2], Haruhiko Maekawa[1], Yoshitoshi Ogura[3], Tetsuya Hayashi[3], Takehito Inaba[1], Yasuko Ito-Inaba[1] ([1]Fac. Agri., Univ. Miyazaki, [2]Fac. Agri., Tohoku Univ., [3]Fac. Med., Kyushu Univ.)		Symposium S08 Frontiers of growth and development in grasses explored by young researchers (8:45–11:35)	Symposium S09 Two sides of auxin actions on stem cells (8:45–11:41)	Symposium S10 Understanding plant developmental processes along spatiotemporal axes (9:00–11:40)	09:00
2aE02 Parasitic nematode hijacks plant systemic signaling for successful infection Satoru Nakagami[1], Michitaka Notaguchi[2], Tatsuhiko Kondo[3], Satoru Okamoto[4,5], Takanori Ida[6], Yoshikatsu Sato[7], Tetsuya Higashiyama[7], Allen Yi-Lun Tsai[1,8], Takashi Ishida[1,9], Shinichiro Sawa[1] ([1]Grad. Sch. Sci. Tech., Kumamoto Univ., [2]Biosci. Biotech. Center, Nagoya Univ., [3]Grad. Sch. Agri. Sci, Nagoya Univ., [4]Grad. Sch. Sci. Tech., Niigata Univ., [5]JST, PRESTO, [6]Frontier Science Research Center, Univ. Miyazaki, [7]ITbM, Nagoya Univ., [8]CSRS, RIKEN, [9]IROAST, Kumamoto Univ.)	2aF02 Identification of an Arabidopsis NTR1/PTR FAMILY protein that functions as an indole-3-butyric acid transporter Shunsuke Watanabe[1], Naoki Takahashi[2], Yuri Kanno[1], Hiromi Suzuki[1], Yuki Aoi[3], Hiroyuki Kasahara[1,4], Masaaki Umeda[2], Mitsunori Seo[1] ([1]RIKEN CSRS, [2]Grad. Sch. Sci. Tech., NAIST, [3]Grad. Sch. Agric., Tokyo Univ. Agric. Tech., [4]GIR, Tokyo Univ. Agric. Tech.)	2aG02 Target of rapamycin (TOR) signaling modulates starch accumulation *via* glycogenin phosphorylation status in the unicellular red alga *Cyanidioschyzon merolae* Imran Pancha[1], Hiroki Shima[2], Nahoko Higashitani[3], Kazuhiko Igarashi[2], Atsushi Higashitani[3], Kan Tanaka[1], Sousuke Imamura[1] ([1]Laboratory for Chemistry and Life Science, Institute of Innovative Research, Tokyo Institute of Technology, [2]Department of Biochemistry, Tohoku University Graduate School of Medicine, [3]Graduate School of Life Science, Tohoku University)	2aH02 Functional analyses of ALMT malate transporters expressed in guard cells Takayuki Sasaki, Izumi C. Mori, Michiyo Ariyoshi, Yoko Yamamoto (Institute of Plant Science and Resources, Okayama University)					09:15
2aE03 Characterization of unknown haustorium inducing factor(s) for parasitic plant *Striga hermonthica* Syogo Wada, Takafumi Shimizu, Songkui Cui, Takayuki Tohge, Satoko Yoshida (NAIST)	2aF03 Functional analysis of an Arabidopsis JA-Ile transporter NPF8.1/PTR1 during *Hpa* infection Takafumi Shimizu[1,2], Shuta Asai[2], Hidenori Matsui[2,3], Gang-Su Hyon[2], Yuri Kanno[2], Hirofumi Nakagami[2,4], Ken Shirasu[2], Mitsunori Seo[2] ([1]NAIST, [2]RIKEN CSRS, [3]Grad. Sch. Envi life Sci., Univ. Okayama, [4]MPI for Plant Breeding Research)	2aG03 Adaptive trait to nitrogen deficiency found in an *Arabidopsis thaliana* ecotype is imparted to a different ecotype by grafting Atsushi Mabuchi[1], Keina Monda[1], Michitaka Notaguchi[2], Hiroki Tsutsui[2], Yasuhito Sakuraba[3], Juntaro Negi[1], Mitsutomo Abe[4], Shuichi Yanagisawa[3], Koh Iba[1] ([1]Dept. Biol., Fac. Sci., Kyushu Univ., [2]Grad. Sch. Bioagri. Sci., Nagoya Univ., [3]Biotech. Res. Center, Univ. Tokyo, [4]Grad. Sch. Art Sci., Univ. Tokyo)	2aH03 Multimeric structure of the nitrate transporter composed of small transmembrane proteins Shin-ichi Maeda, Yuna Nishino, Tatsuo Omata (Laboratory of Photosynthesis Research, Department of Applied Biosciences, Graduate School of Bioagricultural Sciences, Nagoya University)					09:30
2aE04 E Bioimaging of fluorophore-tagged monolignols reveals lignification in the parasitic plant organ haustorium Cui Songkui[1], Yuri Takeda[2], Yuki Tobimatsu[2], Satoko Yoshida[1] ([1]Plant Symb., Nara Inst. Sci. Tech., Japan, [2]Res. Inst. Sust. Hum., Kyoto Univ., Japan)	2aF04 Quantitative expression protein analysis of apical dominance in pea Hitoshi Mori (Grad. Bioagr., Nagoya Univ.)	2aG04 E Involvement of Dof1.7 transcription factor in the NIGT1-regulated nitrogen starvation responses in Arabidopsis Mengna Zhuo, Yasuhito Sakuraba, Shuichi Yanagisawa (Biotech. Res. Center, Univ. Tokyo)	2aH04 Role of ammonium transporters in ammonium uptake by rice roots Noriyuki Konishi, Jian Feng Ma (IPSR Okayama Univ.)					09:45

E=Presentation in English

● Day 2, Fri., March 20, AM (9:00–11:30)

Time	Room A	Room B	Room C	Room D
	Photosynthesis	New technology	Environmental responses B	Environmental responses A
10:00	2aA05 E Plastid encoded over-expression of Rubisco activase in *Nicotiana tabacum* for improved photosynthesis and biomass-related traits Shamitha Rao Morey, Mieko Higuchi-Takeuchi, Masaki Odahara, Keiji Numata (RIKEN Center for Sustainable Resource Science, Biomacromolecules Research Team)	2aB05 E Raman Microscopy for Real-time Multiplex Metabolic Imaging in Plants Simon Sau Yin Law[1], Yutaka Kodama[1,2], Keiji Numata[1] ([1]Center for Sustainable Resource Science, RIKEN, [2]Center for Bioscience Research & Education, Utsunomiya University)	2aC05 E Ethanol mitigates drought stress tolerance in plants Khurram Bashir[1], Sultana Rasheed[1], Maho Tanaka[1,2], Chien van Ha[1], Yoshiki Habu[3], Yuuri Tsuboi[4], Jun Kikuchi[4,5,6], Shunsuke Watanabe[7], Mitsunori Seo[7], Eigo Ando[8], Toshinori Kinoshita[8], Makoto Seito[9], Kanako Kawaura[9], Miki Fujita[10], Miyako Kusano[11,12], Kazuki Saito[11], Kazuo Shinozaki[1,10], Motoaki Seki[1,2,9] ([1]Plant Genomic Network Research Team, CSRS, RIKEN, [2]Plant Epigenome Regulation Laboratory, CPR, RIKEN, [3]Graduate School of Life and Environmental Sciences, University of Tsukuba, [4]Environmental Metabolic Analysis Research Team, CSRS, RIKEN, [5]Graduate School of Medical Life Science, Yokohama City University, [6]Graduate School of Bioagricultural Sciences and School of Agricultural Sciences, Nagoya University, [7]Dormancy and Adaptation Research Unit CSRS, RIKEN, [8]Graduate School of Science, Nagoya University, [9]Kihara Institute for Biological Research, Yokohama City University, [10]Gene Discovery Research Group CSRS, RIKEN, [11]Metabolomics Research Group, RIKEN CSRS, [12]Graduate School of Life and Environmental Sciences, University of Tsukuba)	2aD05 Is Plastidial Serine Biosynthesis Redox-Regulated? Keisuke Yoshida[1], Kinuka Ohtaka[2], Masami Yokota Hirai[2], Toru Hisabori[1] ([1]CLS, Tokyo Tech, [2]RIKEN CSRS)
10:15	2aA06 E Bioengineered *Rhodovulum sulfiodophilum* for Bioplastic and Spider Silk Production Choon Pin Foong, Mieko Higuchi-Takeuchi, Keiji Numata (Center for Sustainable Resource Science, RIKEN)	2aB06 E Simultaneous introduction of multiple biomacromolecules into plant cell mediated by cell-penetrating peptide nanocarrier Chonprakun Thagun[1], Yutaka Kodama[1,2], Keiji Numata[1] ([1]Biomacromolecules Research Team, RIKEN CSRS, Wako, Saitama, [2]Center for Bioscience Research and Education, Utsunomiya University, Tochigi)	2aC06 Development of a plant phenotyping platform using “RIPPS”, an automated phenotyping system Miki Fujita[1], Saya Kikuchi[1], Masami Toyoshima[2], Yasunari Fujita[2,3], Takanari Tanabata[4], Kazuo Shinozaki[1] ([1]RIKEN CSRS, [2]JIRCAS, [3]Univ Tsukuba, [4]Kazusa DNA Research Institute)	2aD06 E ROS Level Dynamics during Development of Zygote in Rice Kasidit Rattanawong, Narumi Koiso, Takashi Okamoto (Dept. Biol. Sci., Tokyo Met. Univ.)
10:30	2aA07 Role of lipid transfer protein in the reduction of leaf blade size at elevated CO2 in rice Yonghyun Kim, Sumire Takahashi, Mitsue Miyao (Grad. Sch. Agricul. Sci., Tohoku Univ.)	2aB07 Functional peptide-mediated chloroplast transformation in Rice, Tobacco, and Kenaf Masaki Odahara, Jun Itami, Yoko Horii, Yuki Negishi, Kenta Watanabe, Keiji Numata (Biomacromolecules Research Team, CSRS RIKEN)	2aC07 E Functional complementation of guard cell specific or phloem companion cell specific ABA biosynthesis Takashi Kuromori, Miki Fujita, Eriko Sugimoto, Saya Kikuchi, Kazuo Shinozaki (RIKEN CSRS)	2aD07 The Effects Of LZY3 Expression Level On Its Subcellular Localization And Gravitropism Shogo Mori[1,2], Moritaka Nakamura[2], Ryuichiro Oshida[1], Takeshi Nishimura[2], Masahiko Furutani[3], Miyo T. Morita[2] ([1]Grad. Sch. Bioagri., Univ Nagoya, [2]NIBB, [3]Col. Life Sci., Fujian Agriculture and Forestry Univ.)
10:45	2aA08 Increase in cuticular permeability enhances efficiency of CO_2 uptake in an *Arabidopsis Acetyl-CoA Carboxylase 1* mutant Keina Monda[1], Sho Takahashi[1], Atsushi Mabuchi[1], Juntaro Negi[1], Ichiro Terashima[2], Wataru Yamori[3], Koh Iba[1] ([1]Dept. Biol., Fac. Sci., Univ. Kyushu, [2]Dept. Biol., Sch. Sci., Univ. Tokyo, [3]Grad. Sch. Agri. and Life Sci., Univ. Tokyo)	2aB08 PICsome based biomacromolecule delivery system for plant cells Kenta Watanabe, Riku Kawasaki, Kousuke Tsuchiya, Masaki Odahara, Keiji Numata (Wako Inst., RIKEN)	2aC08 Inter-organ transport of ABA precursors under drought conditions Daisuke Todaka[1], Yuma Tagawa[1], Junro Mogami[1], Shunsuke Watanabe[2], Mitsunori Seo[2], Hiroki Tsutsui[3], Yaichi Kawakatsu[3], Michitaka Notaguchi[3,4], Kazuo Shinozaki[2], Kazuko Yamaguchi-Shinozaki[1] ([1]Grad. Sch. Agr. Life Sci., Univ. Tokyo, [2]Center for Sustainable Resource Science, RIKEN, [3]Grad. Sch. Bioagri. Sci., Nagoya Univ., [4]Biosci. and Biotech Cent., Nagoya Univ.)	2aD08 RLD1, a key regulator of polar auxin transport, interacts with LZY3 during gravity signaling in root branch angle control in Arabidopsis Takeshi Nishimura[1], Masahiko Furutani[2], Yoshinori Hirano[3], Masatoshi Taniguchi[5], Yoichiro Fukao[4], Toshio Hakoshima[3], Miyo T. Morita[1] ([1]NIBB, [2]Fujian Agriculture and Forestry University, [3]Nara Institute of Science and Technology, [4]Ritsumeikan University, [5]Nagoya University)

Room E	Room F	Room G	Room H	Room W	Room X	Room Y	Room Z	Time
Plant-organism interaction B	Plant hormones/ Signaling molecules	Primary metabolism	Biomembrane/Ion and solute transport					
2aE05 Prioritization of *Solanum pennellii* genes that confer post-germination resistance against a root parasitic plant, *Phelipanche aegyptiaca* Junna Saito, Koh Aoki (Grad. Sch. Life and Env. Sci., Oaska Pref Univ.)	2aF05 Ⓔ Small Molecule Inhibitors Of Parasitic *Striga* Germination Jia Xin Yap[1], Hanae Imaizumi[2], Daisuke Uraguchi[3], Rie Yamaguchi[2], Ayato Sato[2], Takashi Ooi[2,3], Toshinori Kinoshita[1,2], Yuichiro Tsuchiya[2] ([1]Grad. Sch. Sci., Nagoya Univ., [2]WPI-ITbM, Nagoya Univ., [3]Grad. Sch. Eng., Nagoya Univ.)	2aG05 Ⓔ An Arabidopsis *NRT1.1* allele is a superior allele conferring better nitrogen use under nitrogen-deficient conditions Zhana Chagan, Yasuhito Sakuraba, Shuichi Yanagisawa (Biotechnology Research Center, The University of Tokyo)	2aH05 Characterization of the nicotianamine exporter ENA1 in rice Tomoko Nozoye[1,2], Nicolaus von Wiren[3], Tetsuya Higashiyama[4], Yoshikatsu Sato[4], Hiromi Nakanishi[2], Naoko Nishizawa[5] ([1]MeijiGakuin Univ., [2]The Univ. of Tokyo, [3]IPK, [4]Nagoya Univ., [5]Ishikawa Pref. Univ.)		Symposium S08 Frontiers of growth and development in grasses explored by young researchers (8:45–11:35)	Symposium S09 Two sides of auxin actions on stem cells (8:45–11:41)	Symposium S10 Understanding plant developmental processes along spatiotemporal axes (9:00–11:40)	10:00
2aE06 Long-distance movement of host derived modified mRNA, *GUS:tRNA-like sequences*, and the translation in a stem parasitic plant, *Cuscuta campestris* Kohki Shimizu, Koh Aoki (Grad. Sch. Life and Env. Sci., Osaka Pref. Univ.)	2aF06 Regulation of strigolactone biosynthesis by the DWARF14-LIKE pathway Kiyoshi Mashiguchi[1], Ryo Morita[2], Kai Tanaka[2], Hiromu Kameoka[3], Junko Kyozuka[2], Yoshiya Seto[4], Shinjiro Yamaguchi[1] ([1]ICR, Kyoto Univ., [2]Grad. Sch. Life Sci., Tohoku Univ., [3]Grad. Sch. Life & Environ. Sci., Osaka Pref Univ., [4]Dep. Agric. Chem., Meiji Univ.)	2aG06 Coexpression network analysis for identification of key regulators of nitrogen responses in rice Katsumi Hagino[1], Yonghyun Kim[1], Yoshiaki Ueda[2], Shuichi Yanagisawa[2], Atsushi J. Nagano[3], Mitsue Miyao[1] ([1]Grad. Sch. Agricul. Sci., Tohoku Univ., [2]Biotech. Res. Center, Univ. Tokyo, [3]Fac. Agricul., Ryukoku Univ.)	2aH06 Ⓔ Mutation of *OsVIT2* alters iron distribution in rice Jing Che, Naoki Yamaji, Jian Feng Ma (IPSR Okayama University)					10:15
2aE07 Ⓔ Epidermal cell-patterning genes are involved in the holdfast formation of a stem parasitic plant, *Cuscuta campestris* Sabrina Sultana, Daiki Fujiwara, Koh Aoki (Grad. Sch. Life and Env. Sci., Osaka Pref. Univ.)	2aF07 Evolution of unique reproductive system using a high bioactive gibberellin in rice Kyosuke Kawai[1], Sayaka Takehara[1], Toru Kashio[1], Minami Morii[1], Aya Ito[1], Hiroyasu Furuumi[3], Ken-ichi Nonomura[3], Takashi Akagi[4], Hitoshi Sakakibara[2], Makoto Matsuoka[1], Miyako Ueguchi-Tanaka[1] ([1]Biosci. and Biotech. Cen., Nagoya Univ., [2]Grad. Sch. of Bioagri. Sci. Nagoya Univ., [3]Experimental Farm, Nat. Ins. of Genetics, [4]Grad. Sch. of Env. and Life Sci. Okayama Univ.)	2aG07 Functional analysis of rice isocitrate lyase in the oxalate synthesis Atsuko Miyagi, Hiroki Nogami, Toshiki Ishikawa, Masatoshi Yamaguchi, Maki Kawai-Yamada (Grad. Sch. of Sci. & Eng., Saitama Univ.)	2aH07 Ⓔ Mechanism underlying differential expression of HvHMA3 involved in cadmium accumulation in barley Gui Jie Lei, Hiroshi Hisano, Daisuke Saisho, Naoki Yamaji, Kazuhiro Sato, Jian Feng Ma (Institute of Plant Science and Resources, Okayama University)					10:30
2aE08 *Semi-in vitro* growth method for searching hyphae of a stem parasitic plant, *Cuscuta campestris* Yusuke Takagaki, Koh Aoki (Grad. Sch. Life and Env. Sci., Osaka Pref. Univ.)	2aF08 Functional analysis of EUI2, an epoxide hydrolase, in deactivation of gibberellins in rice Toshiaki Ishida[1], Shoko Fudano[2], Yingying Zhang[3], Hongbo Zhu[4], Shubiao Zhang[4], Zuhua He[3], Yoshiya Seto[5], Kiyoshi Mashiguchi[1], Shinjiro Yamaguchi[1] ([1]ICR, Kyoto Univ., [2]Grad. Sch. Life Sci., Tohoku Univ., [3]Chinese Academy of Sciences, [4]Fujian Agric. & Forestry Univ., [5]Dep. Agric. Chem., Meiji Univ.)	2aG08 Studies on the molecular mechanisms regulating nitrogen-responsive flowering in Arabidopsis Miho Sanagi[1], Akio Kubo[2], Shogo Ito[3], Mitsutomo Abe[4], Takato Imaizumi[5], Junji Yamaguchi[1], Takeo Sato[1] ([1]Fac. Sci. and Grad. Sch. Life Sci., Hokkaido Univ., [2]Sch. Sci., Hokkaido Univ., [3]Grad. Sch. Sci., Kyoto Univ., [4]Grad. Sch. Arts Sci., Univ. Tokyo, [5]Dept. Biol., Univ. Washington)	2aH08 Ⓔ Functional characterization of OsCASP1 involved in formation of Casparian strip in rice Sheng Huang[1], Naoki Yamaji[1], Ji Xing Xia[2], Jian Feng Ma[1] ([1]Institute of Plant Science and Resources, Okayama University, [2]College of Life Science and Technology, Guang Xi University)					10:45

Ⓔ=Presentation in English

● Day 2, Fri., March 20, AM (9:00–11:30)

Time	Room A	Room B	Room C	Room D
	Photosynthesis	New technology	Environmental responses B	Environmental responses A
11:00	2aA09 Reactivation of oxidatively inactivated Rubisco by BSD2 in plants Florian, A Busch[1], Jun Tominaga[2], Shunichi Takahashi[3], Wataru Yamori[4], Sara E. Milward[1], Kohji Nishimura[5], Yosuke Toda[6], Tsuneaki Takami[7], Shunsuke Watanabe[8], Toshinori Kinoshita[9], Wataru Sakamoto[7], Atsushi Sakamoto[2], Hiroshi Shimada[2] ([1]RSB, ANU, [2]Grad. Sch. Sci., Univ. Hiroshima, [3]NIBB, [4]Grad. Sch. Agri. Life. Sci., Univ. Tokyo, [5]Fac. Life Env. Sci., Shimane Univ., [6]ITbM, Nagoya Univ., JST PRESTO, [7]Inst. Plant Sci. Res., Okayama Univ., [8]RIKEN CSRS, [9]ITbM, Nagoya Univ.)	2aB09 RAP tag and PMab-2 antibody: a tagging system used for detection and purification of proteins in plant cells Kenji Miura[1,2], Hideki Yoshida[1,2], Mika Kaneko[3], Yukinari Kato[3] ([1]Faculty Life Environ Sci, Univ Tsukuba, [2]T-PIRC, Univ Tsukuba, [3]Grad Sch Medicine, Tohoku Univ)	2aC09 Identification of protein kinases that activate ABA-unresponsive subclass I SnRK2 protein kinases under drought stress conditions Fumiyuki Soma[1], Fuminori Takahashi[2], Takamasa Suzuki[3], Kazuo Shinozaki[2], Kazuko Yamaguchi-Shinozaki[1] ([1]Grad. Sch. Agr. Life Sci., Univ. Tokyo, [2]Center for Sustainable Resource Science, RIKEN, [3]Biosci. Biotech., Chubu Univ.)	2aD09 Polarly localized LZY3 recruits RLD1 in gravity-sensing cells Moritaka Nakamura[1], Masahiko Furutani[2], Chiemi Kondo[3], Takeshi Nishimura[1], Masatoshi Taniguchi[4], Miyo T. Morita[1] ([1]NIBB, [2]Col. Life Sci., Fujian Agriculture and Forestry Univ., [3]Sch. Agr., Nagoya Univ., [4]Grad. Sch. Bioagri. Sci., Univ. Nagoya)
11:15		2aB10 Isolation of a rabbit monoclonal antibody for highly sensitive detection of citrus mosaic virus Shogo Miyoshi[1], So Tokunaga[1], Tatsuhiko Ozawa[2], Hiroyuki Takeda[1], Mitsuo Aono[3], Takanori Miyoshi[3], Hiroyuki Kishi[2], Atsushi Muraguchi[2], Shin-ichi Shimizu[3], Akira Nozawa[1], Tatsuya Sawasaki[1] ([1]PROS, Ehime Univ., [2]Grad. Sch. Med. Parm. Sci., Univ. Toyama, [3]Ehime Res. Ins. Agri. Forest. Fish.)		2aD10 Genetic analysis of anti-gravitropic offset in Arabidopsis Nozomi Kawamoto[1], Yuta Kanbe[2], Akiko Yamakawa[2], Miyo T. Morita[1] ([1]National Institute for Basic Biology, [2]School of Agricultural Sciences, Nagoya University)

Room E	Room F	Room G	Room H	Room W	Room X	Room Y	Room Z	Time
Plant-organism interaction B	Plant hormones/ Signaling molecules	Primary metabolism	Biomembrane/Ion and solute transport					
2aE09 Ⓔ Bi-directional movement of mobile small RNA influence common physiological changes in different host-parasitic plant complexes Subhankar Bera[1], Kohki Shimizu[1], Keisuke Tanaka[2], Shunsuke Yajima[2], Katsushi Yamaguchi[3], Shuji Shigenobu[3], Koh Aoki[1] ([1]Department of Applied Life Sciences, Graduate School of Life and Environmental Sciences, Osaka Prefecture University, Japan, [2]NODAI Genome Research Center, Tokyo University of Agriculture, Japan, [3]National Institute for Basic Biology, Japan)		2aG09 Analysis of C/N-nutrient responses through membrane localized ubiquitin ligase ATL31 and SNARE protein SYP61 Yoko Hasegawa[1], Akari Fujimaki[1], Yongming Luo[1], Koki Mukuta[1], Mayu Arai[2], Tomohiro Uemura[3], Yohann Boutte[4], Akihiko Nakano[5], Takeo Sato[1], Junji Yamaguchi[1] ([1]Fac. Sci. and Grad. Sch. Life Sci., Hokkaido Univ., [2]Sch. Sci., Hokkaido Univ., [3]Graduate School of Humanities and Sciences, Ochanomizu Univ., [4]Laboratory of Membrane Biogenesis - CNRS/ Bordeaux Univ. - France, [5]Live Cell Super-Resolution Imaging Research Team, RIKEN Center for Advanced Photonics)	2aH09 Plasma membrane H^+-ATPase is required for active Si uptake in rice Samito Yamamoto[1], Yuya Kawai[1], Masaki Okumura[1], Tameo You[1], Namiki Mitani-Ueno[2], Naoki Yamaji[2], Jian Feng Ma[2], Toshinori Kinoshita[1,3] ([1]Grad. Sch. Sci., Nagoya Univ., [2]IPSR, Okayama Univ., [3]ITbM, Nagoya Univ.) 2aH10 Ⓔ Expression and Ion Transport Activity of Salt Tolerant Pokkali Rice OsHKT1;1 Variants Shahin Imran[1], Maki Katsuhara[1], Tomoaki Horie[2] ([1]Institute of Plant Science and Resources, Okayama University, [2]Division of Applied Biology, Faculty of the Textile Science and Technology, Shinshu University)		Symposium S08 Frontiers of growth and development in grasses explored by young researchers (8:45–11:35)	Symposium S09 Two sides of auxin actions on stem cells (8:45–11:41)	Symposium S10 Understanding plant developmental processes along spatiotemporal axes (9:00–11:40)	11:00 11:15

Ⓔ=Presentation in English

● Day 2, Fri., March 20, PM (13:15–15:45)

Time	Room A	Room B	Room C	Room D
	Photosynthesis	New technology	Organelles/Cytoskeleton	Epigenetic regulation
13:15	2pA01 The function of the chloroplast-localized dynamin-like protein FZL in the regulation of photosynthetic electron transport Yu Ogawa[1], Mari Takusagawa[1], Megumi Iwano[2], Lianwei Peng[3], Fumiyoshi Myouga[4], Toshiharu Shikanai[1] ([1]Grad. Sch. Sci., Univ. Kyoto, [2]Grad. Sch. Bio., Univ. Kyoto, [3]Univ. Shanghai Normal, [4]Wako Inst., Riken)	2pB01 Direct-lysate Targeted RNA-Seq for plant samples Makoto Kashima[1,2,4], Mari Kamitani[1,3], Yasuyuki Nomura[1], Hiromi Hirata[2], Atsushi J. Nagano[4] ([1]Research Institute for Food and Agriculture, Ryukoku University, [2]Department of Chemistry and Biological Science, College of Science and Engineering, Aoyama Gakuin University, [3]Center for Ecological Research, Kyoto University, [4]Faculty of Agriculture, Ryukoku University)	2pC01 Endosymbiont or organelle? Lipid-based theory on the origins of plastids and chromatophores Naoki Sato (Grad. Sch. of Arts and Sci., University of Tokyo)	2pD01 Genome-wide non-coding RNA transcription by RNA polymerase V Masayuki Tsuzuki[1,2], Shriya Sethuraman[2], Andrzej T. Wierzbicki[2] ([1]Grad. Sch. Arts. Sci., Univ. Tokyo, [2]MCDB, Univ. Michigan)
13:30	2pA02 The Analysis of a Novel Gene Essential for Cytochrome b_6f Complex Accumulation Nayu Otsuki[1], Mari Takusagawa[1], Takashi Hamaji[1], Fumiyoshi Myouga[2], Ryutaro Tokutsu[3], Jun Minagawa[3], Toshiharu Shikanai[1] ([1]Graduate School of Science, Kyoto University, [2]RIKEN, CSRS, [3]National Institute for Basic Biology)	2pB02 3D transcriptome technology in plant Taiga Uchikawa, Akane Kubota, Motomu Endo (NAIST)	2pC02 Comparative transcriptome analysis of a chromatophore of thecate amoeba *Paulinella micropora* and it's presumed ancestral cyanobacterial species Mitsuhiro Matsuo[1], Makoto Tachikawa[1], Hiroko Uchida[2], Akio Murakami[2], Junichi Obokata[1] ([1]Kyoto Prefectural University, [2]Kobe University)	2pD02 Activation of an endogenous pararetrovirus and suppression of RNA interference in star-type petunia Kazunori Kuriyama[1], Midori Tabara[1], Hideki Takahashi[2], Hiromitsu Moriyama[1], Toshiyuki Fukuhara[1] ([1]Tokyo Univ. of Agriculture and Tech., [2]Tohoku Univ.)
13:45	2pA03 Alterations in three-dimensional architecture of thylakoid membranes are concurrent with the compositional changes and the functional conversion in photosystems Hatsumi Nozue[1], Takuya Seki[2], Shinji Fukuda[3], Aoi Shimada[2], Kana Shirai[1], Kiyokazu Kametani[4], Shigeichi Kumazaki[3], Masayuki Nozue[1] ([1]SU-PLAF, Shinshu Univ., [2]Grad. Sch. Textile Sci & Tech., Shinshu Univ., [3]Dept. Chem., Grad. Sch. Sci., Kyoto Univ., [4]Dept. Veteri. Anat., Rakuno Gakuen Univ.)	2pB03 Gene targeting in Arabidopsis via an all-in-one strategy that uses a translational enhancer to aid Cas9 expression Fangnan Peng, Wenxin Zhang, Wenjie Zeng, Jian-Kang Zhu, Daisuke Miki (Shanghai Center for Plant Stress Biology (PSC), CAS)	2pC03 Analysis of initiation of organelle DNA replication in red alga *Cyanidioschyzon merolae* Yuki Kobayashi[1], Shinichi Sato[1], Tatsuya Niwa[2], Hideki Taguchi[2], Hiroyuki Nakamura[1], Kan Tanaka[1] ([1]Laboratory for Chemistry and Life Science, Institute of Innovative Science, Tokyo Institute of Technology, [2]Cell Biology Center, Institute of Innovative Research, Tokyo Institute of Technology)	2pD03 A microRNA derived from *CMT1* regulates global CHG methylation levels by controlling *CMT3* activity in *Arabidopsis thaliana* Eriko Sasaki, Magnus Nordborg (Gregor Mendel Institute of Molecular Plant Biology)
14:00	2pA04 Creation of the mutants in phycobilisome genes of the cyanobacterium *Anabaena* sp. PCC 7120 Tsubasa Otomo[1], Takeshi Sato[2,3], Hidehiro Sakurai[3], Kazuhito Inoue[1,2,3] ([1]Dept. Biol. Sci., Grad. Sch. Sci., Kanagawa-Univ, [2]Dept. Biol. Sci., Kanagawa-Univ., [3]Res. Inst. Integr. Sci., Kanagawa-Univ.)	2pB04 Targeted transcriptional activation using the dCas9-activator in *in planta*-regeneration system Risa Ueta, Nozomu Kira, Chihiro Abe-Hara, Tomoko Miyaji, Naoki Wada, Keishi Osakabe, Yuriko Osakabe (Faculty of Bioscience and Bioindustry, Tokushima University)	2pC04 Evolutionary Scenario behind Bacterial-to-Eukaryotic Takeover of Plastid DNA Ligase Function in Land Plants Takashi Hamaji[1], Yusuke Kobayashi[2], Shohei Yamaoka[3], Toshiharu Shikanai[1], Yoshiki Nishimura[1] ([1]Grad. Sch. Sci., Kyoto Univ., [2]Faculty Sci, Ibaraki Univ., [3]Grad. Sch. Life Sci., Kyoto Univ.)	2pD04 Analysis of the gene regulation through histone demethylation in response to DNA damage Takeshi Hirakawa[1], Takamasa Suzuki[2], Keiko Kuwata[3], Sachihiro Matsunaga[4], Toshiro Ito[1] ([1]NAIST, [2]Dept. Biol. Chem. Biosci. Biotech., Chubu Univ., [3]WPI-ITbM, Nagoya Univ., [4]Dept. Applied Bio. Sci., Fac. Sci. Tech., Tokyo Univ. Sci.)
14:15	2pA05 Mechanism of photoprotection of photosystem II by carotenoids during acclimation to very strong light in *Synechocystis* sp. PCC 6803 Taichi Izuhara[1], Ikumi Kaihatsu[2], Haruhiko Jimbo[3], Shinichi Takaichi[4], Yoshitaka Nishiyama[1,2] ([1]Grad. Sch. Sci. Eng., Saitama Univ., [2]Dept. Biochem. Mol. Biol., Saitama Univ., [3]Grad. Sch. Arts Sci., Univ. Tokyo, [4]Dept. Mol. Microbiol., Faculty of Life Science, Tokyo Univ. Agriculture)	2pB05 Genome editing by direct introduction of CRISPR/Cas9 protein-RNA complex into plant cells using our plasma technique Yuki Yanagawa[1,2], Yuma Suenaga[3], Shohei Moriya[3], Yusuke Iijima[3], Masaki Endo[1], Etsuko Kato[4], Seiichi Toki[1], Akitoshi Okino[3], Ichiro Mitsuhara[1] ([1]NIAS, NARO, [2]CSRS, RIKEN, [3]FIRST, Tokyo Tech., [4]NAAC, NARO)	2pC05 A novel light-dependent behavior of nucleoids in chloroplasts of *Marchantia polymorpha* Seika Ishihara[1], Kohta Sakashita[1], Yusuke Ishida[1], Yoshitaka Kimori[2], Yoshiki Nishimura[3], Yusuke Kobayashi[4], Ikuko Hara-Nishimura[1], Kosei Iwabuchi[1] ([1]Grad. Sch of Nat. Sci., Konan Univ., [2]Fac. Environ. Info. Sci., Fukui Univ. Tech., [3]Grad. Sch. Sci., Kyoto, [4]Dep. of Cell Genet., NIG.)	2pD05 JUMONJI-C DOMAIN-CONTAINING PROTEINS control heat acclimation through epigenetic memory of histone Nobutoshi Yamaguchi (Division of Biological Science, Graduate School of Science and Technology, Nara Institute of Science and Technology)

Room E	Room F	Room G	Room H	Room W	Room X	Room Y	Room Z	Time
Flowering/Clock	Transcriptional, post-transcriptional or translational, post-translational regulations	Membrane trafficking/Cell cycle/Cell division	Vegetative growth					
2pE01 Structural and functional analysis on receiver like domain of PRR7 that are implicated in central oscillator function of the circadian clock in *Arabidopsis thaliana* Masahide Kobayashi, Yusuke Takata, Chiaki Teramae, Takafumi Yamashino (Nagoya University Graduate School of Bioagricultural Sciences)	2pF01 Isolation and Characterization of putative transcription factors that bind to the promoter of *RSX1* by yeast one-hybrid assay Fumiya Iwazaki[1], Bai Chaomurilege[1], Masumi Otsuru[1], Nobutaka Mitsuda[2], Yu Takagi[1], Yuki Fujiki[1], Ikuo Nishida[1] ([1]Grad. science and engineering, Univ. Saitama, [2]National Institute of Advanced Industrial Science and Technology)	2pG01 Intracellular dynamics during spermiogenesis in *Marchantia polymorpha* Naoki Minamino[1], Takuya Norizuki[1,2], Kazuo Ebine[1,3], Takashi Ueda[1,3] ([1]NIBB, [2]Grd. Sch. Sci., Univ. Tokyo, [3]SOKENDAI)	2pH01 Ⓔ Identification of key transcription factors that determine pericycle stem cell identity in Arabidopsis Ye Zhang[1], Nobutaka Mitsuda[2], Takeshi Yoshizumi[3], Youichi Kondou[3], Masaru Takagi[2], Minami Matsui[3], Tatsuo Kakimoto[1] ([1]Department of Biology, Graduate School of Science, Osaka University, [2]National Institute of Advanced Industrial Science and Technology, Japan, [3]Plant Science Center, RIKEN Yokohama Institute)		Symposium S11 Development and application of plant manipulation strategy: towards the design of optimized crop production (13:00–16:00)	Symposium S12 Dynamic photosynthetic responses to fluctuating light (13:00–16:00)	Symposium S13 New Trends in Plant Chemical Research by the Interconnection between Chemical Biology and Metabolite Chemistry (13:00–16:00)	13:15
2pE02 Cellular oxidative stress tolerance regulated by circadian clock in *Synechococcus elongatus* PCC7942 Kenya Tanaka[1], Shuji Nakanishi[1,2] ([1]Grad. Sch. Eng. Sci., Osaka Univ., [2]RCSEC, Osaka Univ.)	2pF02 Characterization of a novel transcription factor involved in flavin metabolism regulation in plants Junya Namba[1], Miho Harada[1], Takanori Maruta[1,2], Takahiro Ishikawa[1,2], Kazuya Yoshimura[3], Shigeru Shigeoka[4], Takahisa Ogawa[1,2] ([1]Grad. Sch. Nat. Sci. Technol., Shimane Univ, [2]Dept. Life Sci. Biotechnol., Fac. Life Environ. Sci., Shimane Univ., [3]Dept. Food Nutr. Sci., Coll. Biosci. Biotech., Chubu Univ., [4]Exp. Farm, Kindai Univ.)	2pG02 Screening for Factors Involved in Biogenesis of the Oil Body in *Marchantia polymorpha* Takehiko Kanazawa[1,2], Takashi Ueda[1,2] ([1]NIBB, [2]Life Sci., SOKENDAI)	2pH02 Tissue growth rules self-organize reproducible and scalable organ shape of plant root Motohiro Fujiwara[1], Tatsuaki Goh[2], Satoru Tsugawa[2], Koichi Fujimoto[1] ([1]Grad. Sch. Sci., Univ. Osaka, [2]Grad. Sch. NAIST)					13:30
2pE03 Time information transmitting by sugar- and nutrient- transport maintain the circadian period in plant Kyohei Uemoto[1,2], Yumi Kunimoto[2], Takashi Araki[1], Motomu Endo[2] ([1]Grad. Sch. Biostudies., Univ. Kyoto, [2]Grad. Sch. Bio Science., NAIST)	2pF03 A MYB transcription factor regulating coloration in garden asparagus Daisuke Tsugama[1], Akira Kanno[2], Kaien Fujino[3], Tetsuo Takano[1] ([1]ANESC, Univ. Tokyo, [2]Grad. Sch. Life Sci., Tohoku Univ., [3]Res. Fac. Agr., Hokkaido Univ.)	2pG03 Capture-and-release process of ER exit sites by Golgi stacks Junpei Takagi[1], Yoshitaka Kimori[2], Tomoo Shimada[3], Ikuko Hara-Nishimura[1] ([1]Fac. of Sci. and Eng., Konan Univ., [2]Fac. of Environ. and Info. Sci., Fukui Univ. of Tech., [3]Grad. Sch. of Sci., Kyoto Univ.)	2pH03 Genome-wide alternation of pre-messenger RNA splicing in a *light-sensitive root-hair development 1* mutant of *Arabidopsis thaliana* Miku Ishizawa[1], Kayo Hashimoto[1,2], Misato Ohtani[3], Rhosuke Sano[4], Yukio Kurihara[5], Hiroaki Kusano[6], Taku Demura[4], Minami Matsui[5], Kumi Sato-Nara[7] ([1]Grad. Sch. Human. Sci., Nara Women's Univ., [2]NIBB, [3]Grad. Sch. Front. Sci., Univ. Tokyo, [4]NAIST, Grad. Sch. Sci. Tech., Div. Biol. Sci., [5]RIKEN CSRS, [6]RISH, Kyoto Univ., [7]Div. Nat. Sci., Nara Women's Univ.)					13:45
2pE04 Chronic jet-lag increases light damages in aged leaves Miwako Yamanaka, Akane Kubota, Motomu Endo (NAIST, Biological science)	2pF04 Identification of negative regulation of environmental stress response, by deadenylase AtCCR4 and RNA binding protein APUM5 Kotone Morita[1], Toshihiro Arae[1], Yuya Suzuki[1], Yukako Chiba[1,2] ([1]Grad. Schl. Life Sci., Hokkaido Univ., [2]Fac. Sci., Hokkaido Univ.)	2pG04 Phenotypic analysis of vacuolar sorting mutant *kam2* in sucrose-dependent seedling growth Chika Hosokawa[1], Kentaro Tamura[2], Tomoo Shimada[1] ([1]Grad. Sch. Sci., Univ. Kyoto, [2]Sch. Food & Nutritional Sci., Univ. Shizuoka)	2pH04 De novo *ATML1* transcription in the outermost cells Hiroyuki Iida[1,2], Gerd Juergens[3], Shinobu Takada[1] ([1]Grad. Sch., Osaka Univ, [2]BI, Univ of Helsinki, [3]ZMBP, Tuebingen Univ)					14:00
2pE05 Molecular mechanism of day-length measurement under natural conditions Akane Kubota[1], Shingo Imamura[1], Motomu Endo[1], Takato Imaizumi[2] ([1]Div of Bioscience, NAIST, [2]Dept of Biology, Univ of Washington)	2pF05 Importance of the RNA secondary structure and the helicase domain of Dicer-Like1 in Arabidopsis microRNA biogenesis Rikako Hirata[1], Kei-ichiro Mishiba[1], Nozomu Koizumi[1], Samir M. Hamdan[2], Yuji Iwata[1] ([1]Grad. Sch. Biol. Env., Univ. Osaka Pref., [2]King Abdullah University of Science and Technology)	2pG05 Ⓔ In Silico Identification, Characterization And Functional Annotation Of SNARE And NPSN Genes of Wheat (*Triticum aestivum* L.) Payal Gaggar, Manish Kumar, Kunal Mukhopadhyay (Birla Institute of Technolgy)	2pH05 An epidermis-specific transcription factor MpC4HDZ is essential for growth of Marchantia Shogo Isoyama, Hiroyasu Motose, Taku Takahashi (Okayama University)					14:15

Ⓔ=Presentation in English

● Day 2, Fri., March 20, PM (13:15–15:45)

Time	Room A	Room B	Room C	Room D
	Photosynthesis	New technology	Organelles/Cytoskeleton	Epigenetic regulation
14:30	2pA06 Regulatory mechanism of photosynthetic complexes by antisense RNA As_cpcC2 in the cyanobacterium *Synechocystis* sp. PCC 6803 Yuki Matsumoto[1], Makoto Itagaki[1], Wolfgang R. Hess[2], Yukako Hihara[1] ([1]Grad. Sch. Sci. Eng., Saitama Univ., [2]Fac. Biol., Freiburg Univ.)	2pB06 CRISPR/Cas9 technology for single nucleotide insertion in rice genome editing Hidetaka Kaya[1,2], Hiroaki Saika[2], Naho Hara[2], Takeshi Ito[3], Seiichi Toki[2,4,5] ([1]PMBV, Graduate School of Agriculture, Ehime University, [2]Plant Genome Engineering Research Unit, Institute of Agrobiological Sciences, NARO, [3]Bioinformatics Team, Advanced Analysis Center, NARO, [4]Department of Life and Environmental System Science, Graduate School of Nanobioscience, Yokohama City University, [5]Kihara Institute for Biological Research, Yokohama City University)	2pC06 Evolutionary Aspects of Plastid-to-Nucleus Signaling and GUN1 Function Nobuyoshi Mochizuki[1], Hidetoshi Saskayama[2], Tomoaki Nishiyama[3], Akira Nagatani[1] ([1]Grad. Sch. Sci., Kyoto University, [2]Grad. Sch. Sci., Kobe Univ., [3]Adv. Sci. Res. Cen., Kanazawa Univ.)	2pD06 Two Modes of H3K4me Regulation Revealed by Machine Learning; Upstream and Downstream of Transcription Satoyo Oya[1], Inagaki Soichi[1], Tetsuji Kakutani[1,2] ([1]Grad. Sch. Biol. Sci., UTokyo, [2]NIG)
14:45	2pA07 Mapping analysis of error prone PCR generated mutations on ChlR, which enable to activate gene expression constitutively, in the cyanobacterium *Synechocystis* sp. PCC 6803 Yuto Hiraide[1], Haruki Yamamoto[1], Yasushi Kawajiri[1], Hisanori Yamakawa[1], Kei Wada[2], Yuichi Fujita[1] ([1]Graduate school of Bioagricultural Sciences, Nagoya University, [2]Department of Medical Sciences, University of Miyazaki)	2pB07 Development of Gn1a (CKX2) gene-knockout indica rice line with enlarged sink capacity using genome-editing technologies Akira Komatsu[1], Miki Ohtake[1], Maki Nagata[1], Masaki Okamura[2], Hitoshi Sakakibara[3], Ikuo Ando[4], Motohiko Kondo[3] ([1]NARO Institute of Agrobiological Sciences (NIAS), [2]NARO Hokuriku Research Station, Central Region Agricultural Research Center, [3]Graduate School of Bioagricultural Sciences, Nagoya University, [4]NARO Hokkaido Agricultural Research Center)	2pC07 E AP2/ERF transcription factors regulate salt-induced chloroplast division in the moss, *Physcomitrella patens* Thi Huong Do[1], Pongthai Prapapron[1], Ariyarathne Menaka[4], Hiroyoshi Takano[2], Yasushi Yoshioka[3], Ooi-Kock Teh[4], Tomomichi Fujita[4] ([1]Grad. Sch. of Life Sci., Univ. Hokkaido, [2]Grad. Sch. of Sci., Univ. Kumamoto, [3]Grad. Sch. of Sci., Univ. Nagoya, [4]Fac. of Sci., Univ. Hokkaido)	
15:00	2pA08 Development of a novel transformation method of marine purple photosynthetic bacteria using micropinocytosis-inducing peptide Mieko Higuchi-Takeuchi, Kumiko Morisaki, Mami Goto, Keiji Numata (RIKEN CSRS, Biomacromolecules Research Team)	2pB08 Highly efficient genome editing in *Euglena gracilis* Toshihisa Nomura[1,2], Komaki Inoue[1], Yukiko Uehara-Yamaguchi[1], Kohji Yamada[2,3], Osamu Iwata[2,3], Kengo Suzuki[2,3], Keiichi Mochida[1,2,4,5] ([1]RIKEN CSRS, [2]RIKEN BZP, [3]euglena Co., Ltd., [4]Kihara Ins. Biol. Yokohama city Univ., [5]IPSR Okayama Univ.)	2pC08 Roles of anionic membrane lipids during the development of etioplasts in dark-grown cotyledons Akiko Yoshihara[1], Hajime Wada[2], Koichi Kobayashi[3] ([1]Sch. Sci., Osaka Pref. Univ., [2]Grad. Sch. Arts Sci., Univ. Tokyo, [3]Fac. Arts Sci., Osaka Pref. Univ.)	
15:15	2pA09 Development of a genome-editing system in a cyanobacterium, *Acaryochloris marina* Hiroki Tabushi, Chikahiro Matsumoto, Ryusei Furuya, Kazuyuki Watabe, Tohru Tsuchiya (Grad. Sch. Hum. Env. St., Kyoto Univ.)	2pB09 Transgene-free genome editing using removal highly active Platinum TALEN plasmids in oleaginous microalga, *Nannochloropsis* Tomokazu Kurita[1], Keishi Morol[2], Masako Iwai[3], Kumiko Okazaki[1], Seiji Nomura[4], Fumihiko Saito[4], Akihide Takami[4], Atsushi Sakamoto[1], Hiroyuki Ohta[3], Tetsushi Sakuma[1], Takashi Yamamoto[1] ([1]Hiroshima Univ., Grad. Sch. Inte. Sci. Life, [2]Hiroshima Univ., Grad. Sch. of Sci., [3]Tokyo Inst. Tech., Sch. Life Sci. Tech., [4]Mazda Motor Corporation)	2pC09 Role of ppGpp in the chloroplast biogenesis during early leaf development in rice Kazuhiro Ito[1], Doshun Ito[2], Shinji Masuda[3], Koh Iba[1], Kensuke Kusumi[1] ([1]Dept. Biol. Fac. Sci. Kyushu Univ., [2]Dept. Life Science & Technology, Tokyo Institute of Technology, [3]Center for Biological Resources & Informatics, Tokyo Institute of Technology)	

Room E	Room F	Room G	Room H	Room W	Room X	Room Y	Room Z	Time
Flowering/Clock	Transcriptional, post-transcriptional or translational, post-translational regulations	Membrane trafficking/Cell cycle/Cell division	Vegetative growth					
2pE06 The short day- and salicylic acid-induced flowering pathway of a duckweed, *Wolffiella hyalina* 7378 Minako Isoda, Shogo Ito, Tokitaka Oyama (Grad. Sch. Sci., Univ. Kyoto)	2pF06 Evolution of plastid RNA editing sites and strategy of new target acquisition by PPR protein as a specificity factor Kota Ishibashi[1], Sota Fujii[2], Toshiharu Shikanai[1] ([1]Grad. Sch. Sci., Kyoto U., [2]Grad. Sch. Agric. Life Sci., U. Tokyo)	2pG06 Aurora kinase 3 affects the dynamics of cellulose synthase complex through phosphorylation of CesA1 subunit in *Arabidopsis thaliana* Rina Miura[1], Takuya Sakamoto[1], Noriyoshi Yagi[2], Hirofumi Nakagami[3], Sachihiro Matsunaga[1] ([1]Dep. App. Biol. Sci., Fac. Sci. Tech., Tokyo Univ. Sci., [2]ITbM, Nagoya Univ., [3]Plant Breeding Research, MPI)	2pH06 Functional analyses of MpBHLH35 involved in the sporophytic tissue formation in *Marchantia polymorpha* Kenta Moriya[1], Makoto Shirakawa[2], Yoriko Matsuda[3], Kentaro Tamura[4], Ryuichi Nishihama[3], Ikuko Hara-Nishimura[5], Takayuki Kohchi[3], Tomoo Shimada[1] ([1]Grad. Sch. Sci., Kyoto Univ., [2]Div. of Biol. Sci., NAIST, [3]Grad. Sch. Bio., Kyoto Univ., [4]Sch. Food & Nutritional Sci., Univ. Shizuoka, [5]Fac. Sci. Eng., Konan Univ.)		Symposium S11 Development and application of plant manipulation strategy: towards the design of optimized crop production (13:00–16:00)	Symposium S12 Dynamic photosynthetic responses to fluctuating light (13:00–16:00)	Symposium S13 New Trends in Plant Chemical Research by the Interconnection between Chemical Biology and Metabolite Chemistry (13:00–16:00)	14:30
2pE07 A mechanism of early flowering in *pect1-4* mutants of *Arabidopsis thaliana* Yuki Sato, Natsumi Hoshino, Saki Ikegai, Yuki Fujiki, Ikuo Nishida (Grad. Science and engineering, Univ. Saitama)	2pF07 Genome-Wide Identification of Evolutionarily Conserved Non-AUG UORFs Involved in Translational Control in Plants Yuta Hiragori[1], Hiro Takahashi[2], Noriya Hayashi[1], Shun Sasaki[1], Yui Yamashita[1], Satoshi Naito[1,3], Hitoshi Onouchi[1] ([1]Grad. Sch. Agric., Hokkaido Univ., [2]Grad. Sch. Med. Sci., Kanazawa Univ., [3]Grad. Sch. Life Sci., Hokkaido Univ.)	2pG07 Comprehensive analysis of nuclear pore complex in centromere arrangement in *Arabidopsis thaliana* Nanami Ito[1], Yuka Oko[1], Yuki Sakamoto[2], Takuya Sakamoto[1], Sachihiro Matsunaga[1] ([1]Dep. App. Biol. Sci., Fac. Sci. Tech., Tokyo Univ. Sci., [2]Dep. Biol. Sci., Grad. Sch. Sci., Osaka Univ.)	2pH07 Transcriptome landscape connecting arginine metabolism with gametophore formation in *Physcomitrella patens* Kensuke Kawade[1,2,3,4], Yuu Hirose[5], Gorou Horiguchi[6,7], Akira Oikawa[4,8], Masami Yokota Hirai[4], Kazuki Saito[4,9], Tomomichi Fujita[10], Hirokazu Tsukaya[11] ([1]ExCELLS, [2]NIBB, [3]SOKENDAI, [4]RIKEN CSRS, [5]Dept. Environ. Life Sci., Toyohashi Univ. Tech., [6]Coll. Sci., Rikkyo Univ., [7]Res. Cent. Life Sci., Rikkyo Univ., [8]Fuc. Agr., Yamagata Univ., [9]Grad. School Pharma. Sci., Chiba Univ., [10]Fac. Sci., Hokkaido Univ., [11]Grad. Sch. Sci., Univ. Tokyo)					14:45
2pE08 Florigen promotes internode elongation in wheat Hiroyuki Tsuji[1], Jun Ito[1], Shinpei Yasukawa[1], Yuko Nomura[1], Hirokazu Handa[2] ([1]Kihara Institute for Biological Research, Yokohama City University, [2]Laboratory of Plant Breeding, Graduate School of Life and Environmental Sciences, Kyoto Prefectural University)	2pF08 Ⓔ Global analysis of nutrient-dependent translational regulation Naoyuki Sotta[1], Yukako Chiba[2], Hirofumi Fukuda[1], Kyoko Miwa[2], Seidai Takamatsu[2], Mayuki Tanaka[1], Yui Yamashita[2], Masami Yokota Hirai[3], Satoshi Naito[2], Toru Fujiwara[1] ([1]University of Tokyo, [2]Hokkaido University, [3]RIKEN Center for Sustainable Resource Science)	2pG08 Ⓔ Differential regulation of cell cycle progression in the root epidermis Teruki Sugiyama, Masaaki Umeda (Nara Institute of Science and Technology, JAPAN)	2pH08 Functional Analysis of the Phosphatidic Acid Phosphohydrolase (PAH) of the Liverwort *Marchantia polymorpha* Misao Shimojo[1], Masashi Nakamura[1], Ginga Kitaura[2], Yuko Sasaki-Sekimoto[1], Shinsuke Shimizu[1], Koichi Hori[1], Masako Iwai[1], Hiroyuki Ohta[1], Kimitsune Ishizaki[2], Mie Shimojima[1] ([1]Grad. Sch. Life Sci. & Tech., Tokyo Tech, [2]Grad. Sch. Sci., Kobe Univ.)					15:00
	2pF09 Reverse genetics-based biochemical studies of the ribosomal exit tunnel constriction region in eukaryotic ribosome stalling: Spatial allocation of the regulatory nascent peptide at the constriction Seidai Takamatsu[1], Yubun Ohashi[2], Noriyuki Onoue[1], Yoko Tajima[3], Tomoya Imamichi[1], Shinya Yonezawa[1], Kyoko Morimoto[3], Hitoshi Onouchi[2,3], Yui Yamashita[2,3], Satoshi Naito[1,2,3] ([1]Grad. Schl. Life Sci., Hokkaido Univ., [2]Grad. Schl. Agr., Hokkaido Univ., [3]Fac. Agr., Hokkaido Univ.)		2pH09 Orientation of cortical microtubules in *ANGUSTIFOLIA* gene knockout lines of the moss *Physcomitrella patens* Hiroyoshi Takano[1,2], Katsuaki Takechi[1], Yoshikatsu Sato[3], Tomoyuki Furuya[4], Noriyuki Yabe[5], Hiroaki Nagase[5], Koro Hattori[4], Susumu Takio[1,6], Hirokazu Tsukaya[4] ([1]FAST, Kumamoto Univ., [2]Inst. Pulsed Power Sci., Kumamoto Univ., [3]WPI-ITbM, Nagoya Univ., [4]Grad. Sch. Sci., Univ. Tokyo, [5]Grad. Sch. Sci. Tech., Kumamoto Univ., [6]Center for Water Cycle, Marine Environ. and Disaster Manage., Kumamoto Univ.)					15:15

Ⓔ=Presentation in English

● Day 2, Fri., March 20, PM (13:15–15:45)

Time	Room A	Room B	Room C	Room D
	Photosynthesis	New technology	Organelles/Cytoskeleton	Epigenetic regulation
15:30		2pB10 Trials of Targeted Gene Disruption of *NAD7* in the Mitochondrial Genome of *Arabidopsis thaliana* via mitoTALEN Hiroki Ayabe[1], Tomomi Hidaka[2], Yoshiko Tamura[2], Nobuhiro Tsutsumi[2], Shin-ichi Arimura[2] ([1]Fac. Agr., Univ. Tokyo, [2]Grad. Sch. Agr. Life Sci., Univ. Tokyo)		

Room E	Room F	Room G	Room H	Room W	Room X	Room Y	Room Z	Time
Flowering/Clock	Transcriptional, post-transcriptional or translational, post-translational regulations	Membrane trafficking/Cell cycle/Cell division	Vegetative growth					
	2pF10 Ⓔ SUMO E3 ligase SIZ1 negatively regulates shoot regeneration in Arabidopsis Duncan Coleman[1,2], Ayako Kawamura[1], Momoko Ikeuchi[1], David S Favero[1], Akira Iwase[1], Alice Lambolez[1,2], Takamasa Suzuki[3], Keiko Sugimoto[1,2] ([1]Center for Sustainable Resource Science (CSRS), Riken, [2]Department of Biological Science, Graduate School of Science, The University of Tokyo. (Grad. Sch. Sci., Univ. Tokyo), [3]College of Bioscience and Biotechnology, Chubu University. (Col. Biosci. Biotech., Chubu Univ.))		2pH10 Ⓔ ROS production by MpRbohB activated by Ca^{2+} binding and MpCPK5-mediated phosphorylation is essential for polar tip growth of rhizoids in *Marchantia polymorpha* Kenji Hashimoto[1,2], Naoaki Abe[1], Takeru Itabashi[1], Toshinori Morisaku[2,3], Hiroharu Yui[2,3], Kimitsune Ishizaki[4], Ryuichi Nishihama[5], Takayuki Kohchi[5], Kazuyuki Kuchitsu[1,2] ([1]Dept. Appl. Biol. Sci., Tokyo Univ. of Sci., [2]Imaging Frontier Center, Tokyo Univ. of Sci., [3]Dept. Chem., Tokyo Univ. of Sci., [4]Dept. Biol., Kobe Univ., [5]Grad. Sch. Biostudies, Kyoto Univ.)		Symposium S11 Development and application of plant manipulation strategy: towards the design of optimized crop production (13:00–16:00)	Symposium S12 Dynamic photosynthetic responses to fluctuating light (13:00–16:00)	Symposium S13 New Trends in Plant Chemical Research by the Interconnection between Chemical Biology and Metabolite Chemistry (13:00–16:00)	15:30

Ⓔ=Presentation in English

● Day 3, Sat., March 21, AM (9:00–11:45)

Time	Room A	Room B	Room C	Room D
	Reproductive growth	Systems biology	Organelles/Cytoskeleton	Photoreceptors/Photoresponses
09:00	3aA01 Live Imaging of Chromatin Dynamics in *Arabidopsis* Early Embryogenesis Shiori Nagahara[1], Yusuke Kimata[2], Minako Ueda[2], Tetsuya Higashiyama[1,2,3], Hidenori Takeuchi[2,4] ([1]Grad. Sch. Sci., Nagoya Univ., [2]ITbM, Nagoya Univ., [3]Grad. Sch. Sci., Univ. of Tokyo, [4]Inst. Adv. Res., Nagoya Univ.)	3aB01 E *In silico* Flux Analysis using Context-specific, Genome-scale Metabolic Network Models of Arabidopsis Leaves Responding to Drought Stress Ratklao Siriwach[1], Fumio Matsuda[2], Kentaro Yano[3], Masami Yokota Hirai[1] ([1]RIKEN Center for Sustainable Resource Science, [2]Department of Bioinformatic Engineering, Graduate School of Information Science and Technology, Osaka University, [3]Bioinformatics Laboratory, Department of Life Sciences, School of Agriculture, Meiji University)	3aC01 Biochemical characterization and expression profile of Arabidopsis 5-aminolevulinic acid dehydratases Yuri Kanbayashi, Takahiko Tanaka, Masashi Amao, Tomohide Uno, Kengo Kanamaru (Lab. Biol. Chem., Grad. Sch. Agrisci., Kobe Univ.)	3aD01 Reactive carbonyl species mediate ROS signaling and inhibit blue light-dependent stomatal opening Nanaka Murakami[1], Jun'ichi Mano[2], Atsushi Takemiya[3] ([1]Fac. Sci., Yamaguchi Univ., [2]Sci. Res. Center, Yamaguchi Univ., [3]Grad. Sch. Sci. Tech. Innov., Yamaguchi Univ.)
09:15	3aA02 Analysis of germ cell-specific histone H1 variants involved in spermiogenesis in Marchantia Kanta Kotani[1], Ruri Nishida[1], Asuka Higo[2], Keisuke Inoue[1], Shohei Yamaoka[1], Takashi Araki[1] ([1]Grad. Sch. Biostudies., Univ. Kyoto, [2]Kihara Inst., Univ. Yokohama City)	3aB02 Generative Model-based Interpolation of Gene Expression State Space and Its Application to Gene Coexpression Analysis Yuichi Aoki[1,2], Takeshi Obayashi[2] ([1]ToMMo, Tohoku Univ., [2]Grad. Sch. Info. Sci., Tohoku Univ.)	3aC02 *SAGA1* Mutants of *Chlamydomonas* Exhibit the High-CO_2 Requiring Phenotype due to the Repression of Bicarbonate Uptake System as well as the Abnormal Morphology of Pyrenoid Daisuke Shimamura, Yuki Niikawa, Takashi Yamano, Hideya Fukuzawa (Grad. Sch. Bio., Univ. Kyoto)	3aD02 Autophagy controls reactive oxygen species homeostasis in guard cells that essential for blue light-dependent stomatal opening Shota Yamauchi[1], Shoji Mano[2], Kazusato Oikawa[2], Kazumi Hikino[2], Kousuke Teshima[3], Yoshitaka Kimori[2], Mikio Nishimura[4], Ken-ichro Shimazaki[3], Atsushi Takemiya[1] ([1]Grad. Sch. Sci. Tech. Innov., Yamaguchi Univ., [2]National Institute for Basic Biology, [3]Grad. Sch. Sci., Kyushu Univ., [4]Faculty of Science and Engineering., Konan Univ.)
09:30	3aA03 A scaffold protein of deadenylase complex is important for dynamic change in gene expression during pollen development Kazuki Motomura[1,2], Toshihiro Arae[3,4], Yuya Suzuki[3], Hidenori Takeuchi[2,5], Takamasa Suzuki[6], Yasunori Ichihashi[7], Arisa Shibata[8], Ken Shirasu[8,9], Atsushi Takeda[1,10], Tetsuya Higashiyama[2,11], Yukako Chiba[3,12] ([1]R-GIRO, Ritsumeikan Univ., [2]WPI-ITbM, Nagoya Univ., [3]Grad. Sch. Life Sci., Hokkaido Univ., [4]Grad. Sch. Frontier Sci., Univ. Tokyo, [5]Inst. Adv. Res., Nagoya Univ., [6]Dept. Biol. CHem., College of Biosci. Biotech., Chubu Univ., [7]BRC, RIKEN, [8]CSRS, RIKEN, [9]Grad. Sch. Sci., Univ. Tokyo, [10]Dept. Biotech., College Life Sci., Ritsumeikan Univ., [11]Grad. Sch. Sci., Nagoya Univ., [12]Faculty Sci. Hokkaido Univ.)	3aB03 E ATTED-II v10: a Plant Coexpression Database Providing Logit Score of Ensemble Mutual Rank as Coexpression Index to Enhance Usability for Genome-Wide Analyses Takeshi Obayashi[1], Yuichi Aoki[2] ([1]Grad. Sch. Info. Sci., Univ. Tohoku, [2]ToMMo, Univ. Tohoku)	3aC03 Starch sheath is required for the CO_2-concentrating mechanism in *Chlamydomonas reinhardtii* Chihana Toyokawa, Takashi Yamano, Hideya Fukuzawa (Grad. Sch. Bio., Kyoto Univ.)	3aD03 PRR7 regulates phototoropin-mediated light responses Shunta Sumi[1], Hinako Kasuya[1], Kotaro Torii[1,2], Akane Kubota[1], Toshinori Kinoshita[3], Norihito Nakamichi[3], Motomu Endo[1] ([1]Div of Bioscience, NAIST, [2]Grad. Sch. BIOSTUDIES, Univ. Kyoto, [3]Grad. Sch. Sci., Univ. Nagoya)
09:45	3aA04 COP9 signalosome and its interacting partner AtSAP130 both contribute to pollen development in *Arabidopsis thaliana* Chika Akagi, Shiori S Aki, Takashi Aoyama, Tomohiko Tsuge (ICR, Kyoto Univ.)	3aB04 Genome structure analysis of monosomic alien addition lines in rice Aoi Hosaka[1], Ayaka Mayumi[1], Kaho Yamaguchi[1], Ken-ichi Nonomura[2], Hideshi Yasui[3], Hiroyuki Tsuji[1] ([1]KIBR., Yokohama City University, [2]Experimental Farm., National Institute of Genetics, [3]Grad. Sch. Agric., Kyushu Univ)	3aC04 Functional analysis of APEM6 homologs involved in organelle biogenesis Akane Kamigaki[1], Mikio Nishimura[2], Shoji Mano[1,3] ([1]Dept. Cell Biol., NIBB, [2]Facl. Sci. Engineer., Konan Univ., [3]Dept. Basic Biol., Sokendai)	3aD04 Toward Target Identification of Compounds that Affect Light-induced Stomatal Opening Yusuke Aihara[1], Gwangchol Sin[1], Shigeo Toh[2], Shinpei Inoue[1], Ayato Sato[3], Toshinori Kinoshita[1,3] ([1]Grad. Sch. Sci., Nagoya Univ., [2]Grad. Sch. Agr., Meiji Univ., [3]WPI-ITbM, Nagoya Univ.)

Room E	Room F	Room G	Room H	Room W	Room X	Room Y	Room Z	Time
Plant-organism interaction A	Environmental responses of photosynthesis	Primary metabolism	Vegetative growth					
3aE01 Ⓔ Plant aquaporin phosphorylation for antibacterial water defense under high humidity Shigetaka Yasuda[1], Taishi Hirase[1], Lionel Verdoucq[2], Colette Tournaire-Roux[2], Kohji Yamada[3,4], Iris Finkemeier[3,5], Hirofumi Nakagami[3], Xiu-Fang Xin[6], Sheng Yang He[6], Christophe Maurel[2], Yusuke Saijo[1,3] ([1]NAIST, [2]CNRS, [3]MPMIZ, [4]Tokushima Univ., [5]Univ. Munster, [6]Michigan State Univ.)	3aF01 Roles of PG turnover in PSII repair cycle Haruhiko Jimbo[1], Kaichiro Endo[1], Masato Abe[2], Hajime Wada[1] ([1]Grad. Sch. Arts. Sci., Univ. Tokyo, [2]Grad. Sch. Agr., Ehime Univ.)	3aG01 Algal Protein Kinase, Triacylglycerol Accumulation Regulator1, Modulates Cell Viability and Gametogenesis in Carbon/Nitrogen Imbalanced Conditions Haruka Shinkawa[1], Masataka Kajikawa[1,2], Yuri Sawaragi[1], Takashi Yamano[1], Yu Kanesaki[3], Hirofumi Yoshikawa[3], Hideya Fukuzawa[1] ([1]Graduate School of Biostudies, Kyoto University, [2]Faculty of Biology-Oriented Science and Technology, Kindai University, [3]Department of Bioscience, Tokyo University of Agriculture)	3aH01 Ⓔ A study on adaxial-abaxial polarity-dependent control of vascular stem cell fates Aif Meem Nurani[1], Yuki Kondo[1], Kazuki Yamada[2], Kyomi Shibata[3], Masashi Asahina[3], Yuki Sakamoto[4], Kazuo Ebine[5,6], Sachihiro Matsunaga[7], Takashi Ueda[5,6], Hiroo Fukuda[1] ([1]Grad. Sch. Sci., Univ. Tokyo, [2]Grad. Sch. Sci. & Eng., Teikyo Univ., [3]Dept. Biosci., Teikyo Univ., [4]Dept. Biosci., Osaka Univ., [5]Div. Cellular Dynamics, NIBB, [6]Sch. Life Sci., SOKENDAI, [7]Sci. Tech., Tokyo. Univ. Sci.)			Symposium S14 Higher-order functions in plant endomembrane system (8:45–11:35)	Symposium S15 From plant physiology to biotechnology (8:45–11:45)	09:00
3aE02 Sensitization of PEPR damage signaling confers pathogen resistance under phosphate deficiency in *Arabidopsis thaliana* Tae-Hong Lee[1], Midori Tanaka[1], Taishi Hirase[1], Shigetaka Yasuda[1], Kei Hiruma[1,2], Yusuke Saijo[1] ([1]NAIST, [2]JST PRESTO)	3aF02 Ⓔ Role of Arabidopsis PsbP-like Protein 1 In the Assembly of Photosystem II Supercomplexes and Plant Adaptation Under Fluctuating Light Yufen Che[1], Shoko Kusama[1], Shintaro Matsui[1], Marjaana Suorsa[2], Takeshi Nakano[1], Eva-Mari Aro[2], Kentaro Ifuku[1] ([1]Grad. School. Biostudies, Kyoto Univ, [2]Dept. Biol. Chem, Univ of Turku)	3aG02 Characterization of a Chlamydomonas mutant with elevated levels of TAG under C/N-imbalanced conditions Suzuka Nagafusa[1], Asuka Miyamoto[1], Haruka Shinkawa[1], Yuki Niikawa[1], Takashi Yamano[1], Yoshinori Tsuji[1], Masataka Kajikawa[1,2], Hideya Fukuzawa[1] ([1]Graduate School of Biostudies., Kyoto University, [2]Factory of Biology-Oriented Science and Technology, Kindai University)	3aH02 Roles of ROP interactive partners (RIPs) in regulation of cell division orientation in the Arabidopsis leaf primordium Qimuge Hasi, Tatsuo Kakimoto (Graduate School of Science osaka university)					09:15
3aE03 OsGAPC1 acts as a NO sensor to trigger disease resistance to rice blast fungus through the degradation of histone deacetylase HDT701 Ken-ichi Kosami[1], Jing Su[3], Thi Thu Dang[1], Ko Shimamoto[3], Yoji Kawano[1,2] ([1]Shanghai Center for Plant Stress Biology, [2]Institute of Plant Science and Resources, Okayama University, [3]NAIST)	3aF03 Role of chloroplast translation factor cpEF-Tu in the strong-light tolerance of photosynthesis in *Arabidopsis* Azusa Shinjo, Machi Toriu, Yoshitaka Nishiyama (Grad. Sch. Sci. Eng., Univ. Saitama)	3aG03 Characterization of seed oil biosynthesis in *Camellia sinensis* Masatake Kanai[1], Atsushi Sugiura-Nakai[2], Katsushi Yamaguchi[3], Shuji Shigenobu[3,4,5], Shoji Mano[1,5] ([1]Dept. Cell Biol., NIBB, [2]Yamanosakuyujo. Co, [3]Funct. Genomics Fac., NIBB, [4]Cent. Devel. New Model Organisms, [5]SOKENDAI)	3aH03 Key roles of the RING-type ubiquitin ligase SZK2 and the ribosome protein RPL12B in ribosome stress signaling Shugo Maekawa[1,4], Kanta Igarashi[1], Kanae Fukada[1], Masahiro Takahara[1], Keisuke Nishimura[1], Hirokazu Tsukaya[2,3], Gorou Horiguchi[1,4] ([1]Dept. Life Sci., Coll. Sci., RIkkyo Univ., [2]Grad. Sch. Sci., Univ. Tokyo, [3]ExCeLLS, NINS, [4]Res. Cent. Life Sci., Coll. Sci., Rikkyo Univ.)					09:30
3aE04 Ⓔ Pathogen challenge to *Arabidopsis* cotyledons sets sustained upregulation of a *WRKY* gene and defense priming at newly formed rosette leaves Kanoknipa Sukaoun[1], Tokuji Tsuchiya[2] ([1]Grad. Sch. ALS., Nihon Univ., [2]Coll. Biores. Sci., Nihon Univ.)	3aF04 Roles of a galactolipase, Galp1, in acclimation to high-light stress in *Synechococcus elongatus* PCC 7942 Nobuyuki Takatani[1], Kazutaka Ikeda[2], Tatsuo Omata[1] ([1]Grad. Sch. Bioagr. Sci. Nagoya Univ., [2]Clinical Omics Unit, Kazusa DNA Res.)	3aG04 Physiological Roles of the Serine Biosynthetic Enzyme 3-Phosphoglycerate Dehydrogenase in *Marchantia polymorpha* Kinuka Ohtaka[1,2], Hiromitsu Tabeta[1,3], Hiromichi Akashi[1,2], Ayuko Kuwahara[1], Ryuichi Nishihama[4], Yoriko Matsuda[4], Keisuke Yoshida[5], Ali Ferjani[6], Takayuki Kohchi[4], Masami Yokota Hirai[1,2] ([1]RIKEN CSRS, [2]Grad. Sch. Bioagri, Sci., Univ. Nagoya, [3]Dept. Biol., Tokyo-Gakugei Univ., [4]Grad. Sch. Biostudies., Kyoto Univ., [5]CLS., Tokyo Tech, [6]Grad. Sch. Arts & Sci., Univ. Tokyo)	3aH04 Characterization of stress response pathways induced by impaired plastid and cytosolic ribosome production Yumi Nagashima[1], Shugo Maekawa[1,2], Miyuki Nakata[2], Hirokazu Tsukaya[3,4], Gorou Horiguchi[1,2] ([1]Dept. Life Sci., Coll. Sci., Rikkyo Univ., [2]Res. Cent. Life Sci., Coll. Sci., Rikkyo Univ., [3]Grad. Sci., Univ. Tokyo, [4]ExCELLS, NINS)					09:45

Ⓔ=Presentation in English

● Day 3, Sat., March 21, AM (9:00–11:45)

Time	Room A	Room B	Room C	Room D
	Reproductive growth	Systems biology	Organelles/Cytoskeleton	Photoreceptors/Photoresponses
10:00	3aA05 Ⓔ Molecular analyses of CFI 25 in plant 3'-UTR length determination Xiaojuan Zhang[1], Naoki Takahashi[2], Masaaki Umeda[2], Marta Garcia Leon[3], Vicente Rubio[3], Mika Nomoto[4], Yasuomi Tada[4], Tsuyoshi Furumoto[5], Takashi Aoyama[1], Tomohiko Tsuge[1] ([1]ICR, Kyoto University, [2]Graduate School of Science and Technology, NAIST, [3]CNB-CSIC, Spain, [4]Center for Gene Research, Nagoya University, [5]Faculty of Agriculture, Ryukoku University)	3aB05 Functional Analysis Of Novel Small Coding Gene In Plant Genome Tomoyuki Takeda[1], Kentaro Nakaminami[2], Mieko Higuchi-Takeuchi[2], You-Wang Kim[1], Minami Shimizu[2], Masanori Okamoto[3], Takeshi Yoshizumi[2], Ranko Nishi[2], Motoaki Seki[2], Kazuo Shinozaki[2], Minami Matsui[2], Kousuke Hanada[1] ([1]Grad. Inf., Kyushu Institute of Technology, [2]CSRS., RIKEN, [3]Univ. Utsunomiya)	3aC05 Ⓔ On the C-terminal DYW domain of PPR type RNA editing factors in plant organelles Mizuki Takenaka[1], Brody Frink[1], Ayako Maeda[1], Sachi Takenaka[1], Matthias Burger[2], Gert Weber[3] ([1]Grad. Sch. Sci., Kyoto Univ., [2]Mol. Bot., Ulm Univ. Germany, [3]Helmholtz-Zentrum Berlin, Germany)	3aD05 The role of blue-light sensing by PHOT and CRY in the regulation of unequal gemmaling in *Marchantia paleacea* subsp. *diptera* Toshiaki Kozuka, Toshiki Hanada, Kouta Tsukiyama, Makoto Kusaba, Masaki Shimamura (Grad. Sch. Integr. Sci. Life, Hiroshima Univ.)
10:15	3aA06 Biochemical analysis of natural variations in STIGMATIC PRIVACY1, an interspecies incompatibility factor, in *Arabidopsis thaliana* Yoshinobu Kato, Yuka Kimura, Seiji Takayama, Sota Fujii (Grad. Sch. Agric. Life Sci., Univ. Tokyo)	3aB06 Ⓔ Predicting genes related to the biosynthesis of Camptothecin by integrating promoter similarity score with gene co-expression analysis Koki Hayashi[1], Amit Rai[1,2], Kazuki Saito[1,2,3], Mami Yamazaki[1,2] ([1]Fac. Pharm. Sci., Chiba Univ., [2]Plant Mol. Sci. Center, Chiba Univ., [3]RIKEN CSRS)	3aC06 Alternative Oxidase Capacity of Mitochondria in Microsporophylls May Function in Cycad Thermogenesis Yasuko Ito-Inaba, Mizuki Ohata, Haruna Yamamoto, Takehito Inaba (Fac. Agri., Univ. Miyazaki)	3aD06 Characterization of light-induced leaf movement in soy bean Yusuke Kubo[1], Rie Mishima[1], Toshinori Kinoshita[1,2], Shin-ichiro Inoue[1] ([1]Biol., Sci., Nagoya Univ., [2]ITbM, Nagoya Univ.)
10:30	3aA07 Study of amino acid residues involved in the function of Stigmatic privacy 1 that rejects foreign pollen Shota Ishida, Yuka Kimura, Sota Fujii, Seiji Takayama (Laboratory of Bioorganic Chemistry Graduate School of Agriculture and Life Sciences The University of Tokyo)	3aB07 Transcriptomic assessment of the reproducibility of seasonal phenomena in poplar trees grown in a shortened annual cycle system Yuko Kurita[1], Ayumi Tezuka[1], Ayumi Deguchi[1], Miwa Ohnishi[2], Kimitsune Ishizaki[2], Hidehiro Fukaki[2], Kei'ichi Baba[3], Tetsuro Mimura[2], Atsushi J. Nagano[1] ([1]Faculty of Agriculture, Ryukoku University, [2]Grad. Sch. Sci., Kobe University, [3]RISH, Kyoto University)	3aC07 Critical roles of autophagy and enzymatic ROS production in the regulation of tapetal programmed cell death in rice Takamitsu Kurusu[1,2], Shigeru Hanamata[2,3], Jumpei Sawada[4], Togo Fukunaga[4], Kazunori Ogawa[4], Seijiro Ono[5], Hidetaka Kaya[6], Seiichi Toki[7], Ken-ichi Nonomura[5], Kazuyuki Kuchitsu[2,4] ([1]Suwa Univ. of Sci., [2]Imaging Frontier Center, Tokyo Univ. of Sci., [3]Niigata Univ., [4]Dept. of Appl. Biol. Sci., Tokyo Univ. of Sci., [5]Natl. Inst. of Genetics, [6]Ehime Univ., [7]NARO)	3aD07 Multiple roles of auxin transport in the blue-light-directed movement of petiole Yuta Otsuka[1], Masaaki Watahiki[2], Ken Haga[3], Tatsuya Sakai[4], Hirokazu Tsukaya[1,5] ([1]Grad. Sch. Sci., UTokyo, [2]Grad. Sch. Sci., Hokkaido Univ., [3]Dept. App. Chem., Fac. Fan. Eng., NIT, [4]Grad. Sch. Sci. Tech., Niigata Univ., [5]ExCELLs, OIIB)
10:45	3aA08 Ⓔ Deep evolutionary origin of gamete-directed zygote activation by KNOX/BELL transcription factors in green plants Tetsuya Hisanaga[1,2], Shota Fujimoto[2], Yihui Cui[2], Katsutoshi Sato[2], Shohei Yamaoka[3], Takayuki Kohchi[3], Frederic Berger[1], Keiji Nakajima[2] ([1]Gregor Mendel Institute, [2]Grad. Sch. Sci. Tech., NAIST, [3]Grad. Sch. Biostudies, Kyoto Univ.)	3aB08 Characterization of secondary metabolites in black rice in field conditions Kyonoshin Maruyama[1], Hidetoshi Asai[1], Hiroaki Sakai[2] ([1]JIRCAS, [2]NARO)	3aC08 Essential roles of autophagy in metabolic regulation in endosperm development during rice seed maturation Shigeru Hanamata[1,2,3], Yuri Sera[1], Shingo Sakamoto[4], Seijiro Ono[5,6], Kentaro Kaneko[2], Yuudai Mitsui[2], Tomoko Koyano[1], Naoko Fujita[7], Ai Sasou[8,9], Takehiro Masumura[8], Hikaru Saji[10], Ken-ichi Nonomura[5], Nobutaka Mitsuda[4], Toshiaki Mitsui[2], Takamitsu Kurusu[1,3,11], Kazuyuki Kuchitsu[1,3] ([1]Dept. of Appl. Biol. Sci., Tokyo Univ. of Sci., [2]Grad. Sch. of Sci. and Technol, Niigata Univ., [3]Imaging Frontier Center, Tokyo Univ. of Sci., [4]Bioprod. Res. Inst., AIST, [5]Plant Cytogenetics Labo., Natl. Inst. of Genetics, [6]Dept. of Dev. Biol., Inst. for Plant Sci. and Microb., Univ. of Hamburg, [7]Dept. of Biol. Prod., Akita Prefect. Univ., [8]Lab. of Genetic Eng., Grad. Sch. of Life and Environ. Sci., Kyoto Prefect. Univ., [9]Div. of Mucosal Immunol., Inst. of Med. Sci., The Univ. of Tokyo, [10]Center for Environ. Biol. and Ecosys. Stud., NIES, [11]Dept. of Mech. and Elect. Eng., Suwa Univ. of Sci.)	3aD08 Ⓔ AT-hook transcription factors restrict petiole growth by antagonizing PIFs David S Favero[1,6,7], Ayako Kawamura[1], Michitaro Shibata[1], Arika Takebayashi[1], Jae-Hoon Jung[2,3], Takamasa Suzuki[4], Katja E Jaeger[2,5], Takashi Ishida[1], Akira Iwase[1], Philip A Wigge[2,5], Michael M Neff[6,7], Keiko Sugimoto[1,8] ([1]RIKEN Cent. Sust. Res. Sci., [2]Sainsbury Lab., Univ. Cambridge, UK, [3]Dep. Biol. Sci., Sungkyunkwan Univ., Korea, [4]Dep. Biol. Chem., Chubu Univ., [5]Leibniz-Institut fur Gemuse- und Zierpflanzenbau, Germany, [6]Dep. Crop Soil Sci., Washington State Univ., USA, [7]Mol. Plant Sci. Grad. Prog., Washington State Univ., USA, [8]Dep. Biol. Sci., Univ. Tokyo)

Room E	Room F	Room G	Room H	Room W	Room X	Room Y	Room Z	Time
Plant-organism interaction A	Environmental responses of photosynthesis	Primary metabolism	Vegetative growth					
3aE05 Elucidation of transcriptional regulation of salicylic acid biosynthesis in *Arabidopsis thaliana* Emi Okada[1], Tomotaka Itaya[1,2], Takaya Ogawa[3], Hirofumi Yoshioka[3], Mika Nomoto[1,2], Yasuomi Tada[1,2] ([1]Div. of Bio. Sci., Grad. Sch. of Sci., Nagoya Univ., [2]Cent. for Gene. Res., Nagoya Univ., [3]Grad. Sch. of Bioagr. Sci., Nagoya Univ.)	3aF05 Involvement of superoxide production in the strong-light tolerance of photosynthesis in the noxious red-tide-forming raphidophyte *Chattonella marina* Koki Yuasa[1], Takayoshi Ichikawa[1], Yuma Ishikawa[1], Tomoyuki Shikata[2], Yasuhiro Yamasaki[3], Yoshitaka Nishiyama[1] ([1]Grad. Sch. Sci. Eng., Saitama Univ., [2]Natl. Res. Inst. of Fisheries & Environment of Inland Sea, FRA, [3]Dept. Appl. Aquabiol., Natl. Fisheries Univ., FRA)	3aG05 Dominant Contribution Of ER Lipid Pathway For Shoot-removal Induced Chloroplast Development In *Arabidopsis* Root Tomoki Obata[1], Ryosuke Tadakuma[1], Taiki Akasaka[2], Koichi Kobayashi[3], Koh Iba[1], Juntaro Negi[1] ([1]Fac. Sci., Kyushu Univ., [2]Fac. Agr., Kyushu Univ., [3]Fac. Lib. Arts & Sci., Osaka Prefec. Univ.)	3aH05 Roles of nucleolar protein RNA HELICASE10 for nuclear localization of zinc-finger protein AS2 in leaf development of *Arabidopsis thaliana* Sayuri Ando[1], Masato Iwai[2], Shoko Kojima[1], Daisuke Kurihara[3,4], Tetsuya Higashiyama[3,5,6], Yasunori Machida[3], Chiyoko Machida[1] ([1]Grad. Sch. Biosci. Biotech., Chubu Univ, [2]Sch. Biosci. Biotech., Chubu Univ, [3]Grad. Sch. Sci., Nagoya Univ, [4]JST, PRESTO, [5]ITbM, Nagoya Univ, [6]Grad. Sch. Sci., Tokyo Univ)			Symposium S14 Higher-order functions in plant endomembrane system (8:45–11:35)	Symposium S15 From plant physiology to biotechnology (8:45–11:45)	10:00
3aE06 Ⓔ Effect of salicylic acid and jasmonate pathways on *Agrobacterium*-mediated transient transformation in *Marchantia polymorpha* Hidekazu Iwakawa[1,3], Satoshi Naramoto[2], Junko Kyozuka[2], Hirofumi Nakagami[1] ([1]Max-Planck Institute for Plant Breeding Research, Germany, [2]Graduate School of Life Sciences, Tohoku University, [3]Graduate School of Bioscience and Biotechnology, Chubu University)	3aF06 Physiological characterization of a bacterial community, cryoconites, and its dominant cyanobacterium on the glacial surface in Spitsbergen, Svalbard Makiko Kosugi[1,2], Jun Uetake[3], Mitsuhiro Yano[2], Yuri Tabuchi[2], Yuichi Suwa[2], Hiroyuki Koike[2] ([1]Astrobiology Center, [2]Chuo University, [3]Colorado State University)	3aG06 A Hexosamine-containing Head Group of Sphingolipid Is a Novel Determinant of Seed Size in Arabidopsis Toshiki Ishikawa, Maki Kawai-Yamada (Grad. Sch. Sci. Eng., Saitama Univ.)	3aH06 ABA and Transcription Factor Control of Submergence-Induced Stomatal Suppression in an Amphibious Plant, *Callitriche palustris* Yuki Doll[1], Hiroyuki Koga[1], Hirokazu Tsukaya[1,2] ([1]Grad. Sch. Sci., Univ. Tokyo, [2]ExCELLS, NINS)					10:15
3aE07 Ⓔ Evolutionary perspective on Salicylic acid - NPR pathway Hidekazu Iwakawa, Hirofumi Nakagami (MPIPZ, Cologne)		3aG07 Effects of excess sterols on cellular activity of plants Takashi Shimada[1], Shuji Shigenobu[2], Katsushi Yamaguchi[2], Hiro Takahashi[3], Shuichi Fukuyoshi[3], Takashi Ueda[2], Ikuko Hara-Nishimura[4] ([1]Chiba Univ., [2]NIBB, [3]Kanazawa Univ., [4]Konan Univ.)	3aH07 Plant hormone and light signal crosstalk in rapid response of *Rorippa aquatica* to suppress stomatal development under submergence Shuka Ikematsu, Tatsushi Umase, Fuko Noguchi, Tomoaki Sakamoto, Seisuke Kimura (Kyoto Sangyo Univ. Life Science)					10:30
3aE08 Ⓔ Effector signaling in hypersensitive response of plant microbe interaction: Single-molecule-signaling of suppressor from Phytophthora infestans and Host Selective Toxin of Alternaria solani on Ca2+-dependent protein-kinase Naotaka Furuichi (AAAS., USA)		3aG08 Pinitol, the main sugar component of the Sugi male strobili Tomohiro Igasaki[1], Shojiro Hishiyama[2], Koichi Kakegawa[2] ([1]Dept. of Mol. Genet. Biotech., FFPRI, [2]Dept. of For. Res. Chem., FFPRI)	3aH08 Ⓔ The role of *PRESSED FLOWERb* in the morphogenesis of flattened leaf blade Xiaofeng Yin, Hirokazu Tsukaya (The University of Tokyo)					10:45

Ⓔ=Presentation in English

● Day 3, Sat., March 21, AM (9:00–11:45)

Time	Room A	Room B	Room C	Room D
	Reproductive growth	Systems biology	Organelles/Cytoskeleton	Photoreceptors/Photoresponses
11:00	3aA09 Transcriptomic approach to identify the molecular regulators of zygote polarity Yusuke Kimata[1], Takamasa Suzuki[2], Miya Mizutani[1,3], Tomomi Yamada[1,3], Masahiro Kanaoka[1,3], Tetsuya Higashiyama[1,3,4], Minako Ueda[1,3] ([1]WPI-ITbM, Nagoya University, [2]College of Bioscience and Biotechnology, Chubu University, [3]Graduate School of Science, Nagoya University, [4]Graduate School of Science, The University of Tokyo)		3aC09 Microtubule dynamics on the first asymmetric division in the spore of *Marchantia polymorpha* Yuuki Sakai[1,2,3], Takumi Higaki[4], Ryuichi Nishihama[5], Takayuki Kohchi[5], Seiichiro Hasezawa[1,6] ([1]GSFS, Univ. Tokyo, [2]Grad. Sch. Sci., Kobe Univ., [3]Grad. Sch. Sci., Osaka Univ., [4]IROAST, Kumamoto Univ., [5]Grad. Sch. Biostudies, Kyoto Univ., [6]Grad. Sch. Sci. Eng., HOSEI Univ.)	3aD09 CDKA regulates light signaling responses in *Physcomitrella patens* Natsumi Inoue[1], Liang Bao[1], Hayato Sugawara[1], Masaki Ishikawa[2,3], Eiji Gotoh[4], Masami Sekine[5], Ooi-Kock Teh[7], Mitsuyasu Hasebe[2,3], Masamitsu Wada[6], Tomomichi Fujita[7] ([1]Grad. Sch. of Life Sci., Univ. Hokkaido, [2]Natl. Inst. Basic Biol., [3]Sch. Life Sci., Grad. Univ. Adv. Stud., [4]Fac. of Agri., Univ. Kyusyu, [5]Dept. of Bioprod., Ishikawa Pref. Univ., [6]Fac. of Sci. and Eng., Univ. Tokyo Metro., [7]Fac. of Sci., Univ. Hokkaido)
11:15	3aA10 E Transcriptional regulation of APO2 in early stage of inflorescence development in rice Yiling Miao[1], Taiyo Toriba[1], Satoshi Naramoto[1], Chengqiang Ding[2], Junko Kyozuka[1] ([1]Grad. Sch. Life Sci., Univ. Tohoku, [2]Grad. Sch. Agri., Univ. Nanjing Agri.)		3aC10 Functional Analysis of a Plant Nuclear Lamina Protein CRWN in *Marchantia polymorpha* Koji Takino[1], Hiroaki Kudo[1], Chinaru Takahashi[1], Yuki Sakamoto[1], Sakiko Ishida[2], Yoriko Matsuda[2], Ryuichi Nishihama[2], Takayuki Kohchi[2], Taisuke Togawa[3], Katsuyuki T. Yamato[3], Shingo Takagi[1] ([1]Grad. Sch. Sci., Osaka Univ., [2]Grad. Sch. Biostudies, Kyoto Univ., [3]Grad. Sch. Bio-Ori Sci Tech., Kindai Univ.)	3aD10 Mutational effects on the LOV domain fused to the histidine kinase domain of CheA Yusuke Fukuhara, Mamiko Shimoji, Masahiro Kasahara, Kazuki Terauchi, Chihiro Azai (Grad. Sch. Life Sci., Univ. Ritsumei)
11:30	3aA11 Genome-wide association study and physiological observation of afternoon flower-opening morning glory (AFOMG) Seika Motoyama[1], Kimiyo Sage-Ono[1], Kenta Watanabe[1,2], Nobuo Nakamura[3], Eiji Nitasaka[4], Nobuyoshi Nakajima[5], Kenta Shirasawa[6], Michiyuki Ono[1] ([1]GRC, Univ. Tsukuba, [2]RIKEN CSRS, [3]Hakodate SG HS, [4]Gra. Sch. Sci, Kyushu Univ., [5]NIES, [6]Kazusa DNA Res. Inst.)			3aD11 There exists a difference in chloroplast localization of CPD photolyase among plant species Chiharu Komatsu, Mamoru Hara, Yuki Takahashi, Mika Teranishi, Jun Hidema (Grad. Sch. Sci., Univ. Tohoku)

Room E	Room F	Room G	Room H	Room W	Room X	Room Y	Room Z	Time
Plant-organism interaction A	Environmental responses of photosynthesis	Primary metabolism	Vegetative growth					
3aE09 Functional analysis of novel effector protein RHIF derived from plant pathogenic bacteria *Acidovorax avenae* Minami Nakamura[1], Machiko Kondo[2], Takehito Furukawa[2], Takemasa Kawaguchi[1], Fang-Sik Che[1,2,3] ([1]Grad. Sch. of Biosci., Nagahama Inst. of Bio-sci and Tech., [2]Dept. of Bio-sci., Nagahama Inst. of Bio-sci and Tech., [3]Genome Editing Research Institute, Nagahama Inst. of Bio-sci and Tech.)		3aG09 Ⓔ Involvement of distinct glycolytic enzymes in glycogen turnover in *Synechocystis* sp. PCC 6803 Eiji Suzuki, Ryuichiro Suzuki (Fac Bioresour Sci, Akita Pref Univ)	3aH09 Identification of Genes Specifically Expressed in Hydathodes Hiroki Yagi[1], Atsushi J. Nagano[2], Kentaro Tamura[3], Nobuyoshi Mochizuki[1], Akira Nagatani[1], Tomoo Shimada[1] ([1]Grad. Sch. Sci., Kyoto Univ., [2]Fac. Agr., Ryukoku Univ., [3]Sch. Food & Nutritional Sci., Univ. Shizuoka)			Symposium S14 Higher-order functions in plant endomembrane system (8:45–11:35)	Symposium S15 From plant physiology to biotechnology (8:45–11:45)	11:00
3aE10 Investigation of biosynthetic genes of hatching factor for potato cyst nematodes using tomato hairy root culture system Kosuke Shimizu[1,3], Ryota Akiyama[1], Itaru Sakata[2], Itaru Kushida[2], Keiji Tanino[3], Keishi Osakabe[4], Yuriko Osakabe[4], Yukihiro Sugimoto[1], Masaharu Mizutani[1] ([1]Grad. Sch. Agri. Sci., Univ. Kobe, [2]NARO/HARC, [3]Grad. Sch. Chem. Sci Eng., Univ. Hokkaido, [4]Fucul. Biosci. Bioind., Univ. Tokushima)		3aG10 Involvement of quantitative variation of nicotinamide coenzymes in *en bloc* metabolic regulation Shin-nosuke Hashida[1], Atsuko Miyagi[2], Maki Kawai-Yamada[2] ([1]Environ. Res. Lab., CRIEPI, [2]Grad. Sch. Sci. & Eng., Saitama Univ.)	3aH10 *CURLED LATER1* encoding the largest subunit of the Elongator complex is required for leaf development at specific growth stage of rice Hikari Matsumoto[1], Yukiko Yasui[1], Yoshihiro Ohmori[2], Wakana Tanaka[1,3], Tetsuya Ishikawa[4], Hisataka Numa[4], Kenta Shirasawa[4,5], Yojirou Taniguchi[4], Junichi Tanaka[4], Yasuhiro Suzuki[4], Hiro-Yuki Hirano[1] ([1]Grad. Sch. Sci., Univ. Tokyo, [2]Grad. Sch. Agric. Life Sci., Univ. Tokyo, [3]Grad. Sch. Integr. Sci. Life, Hiroshima Univ., [4]NARO, [5]Present affiliation:Kazusa DNA Res Inst)					11:15
3aE11 Calcium-based defense movement in the sensitive plant *Mimosa pudica* Takuma Hagihara[1], Hiroaki Mano[2], Tomohiro Miura[1], Mitsuyasu Hasebe[2,3], Masatsugu Toyota[1] ([1]Grad. Sch. Sci., Saitama Univ., [2]Evol. Biol., Natl. Inst. Basic Biol., [3]Life Sci., Grad. Univ. Advanced Studies)			3aH11 Suppression of leaf blade development by *BLADE-ON-PETIOLE* orthologs is a common strategy for underground rhizome growth Taiyo Toriba[1], Hiroki Tokunaga[2], Kazuma Nagasawa[1], Fanyu Nie[1], Akiko Yoshida[3], Junko Kyozuka[1] ([1]Grad. Sch. Life Sci., Tohoku Univ., [2]RIKEN CSRS, [3]Grad. Sch. Agri., Tokyo Univ. of Agri. and Tech.)					11:30

Ⓔ=Presentation in English

List of Chairpersons of Oral Presentations

Day 1, Thur., March 19, AM

1aA01-09	Photosynthesis	Ryo Nagao Keisuke Kawakami Yutaka Shibata
1aC01-10	Environmental responses B	Yuriko Osakabe Yoichi Sakata Ken Naito
1aD01-10	Environmental responses C	Kazuko Yamaguchi-Shinozaki Teruaki Taji Motoaki Seki
1aE01-08	Cell wall	Taku Demura Toshihisa Kotake
1aF01-09	Plant hormones/Signaling molecules	Taishi Umezawa Masanori Okamoto Shunta Kimura
1aG01-11	Secondary (specialized) metabolism	Yasuyuki Yamada Ryo Nakabayashi Seiji Takahashi
1aH01-11	Vegetative growth	Yuki Hirakawa Takashi Ishida Momoko Ikeuchi

Day 1, Thur., March 19, PM

1pA01-09	Photosynthesis	Shin-Ichiro Ozawa Hiroko Takahashi Yuki Okegawa
1pC01-08	Environmental responses B	Kyoko Miwa Masahiro Tamoi
1pD01-09	Environmental responses C	Keiko Sugimoto Masaaki Umeda Satoshi Kidokoro
1pE01-09	Plant-organism interaction B	Makoto Hayashi Takuya Suzaki Masayoshi Kawaguchi
1pF01-09	Plant hormones/Signaling molecules	Kiyoshi Mashiguchi Ayumi Yamagami Michitaka Notaguchi
1pG01-10	Secondary (specialized) metabolism	Akifumi Sugiyama Takayuki Tohge Naoko Yoshimoto
1pH01-12	Vegetative growth	Ryuichi Nishihama Kazuyuki Kuchitsu Yuki Kondo

Day 2, Fri., March 20, AM

2aA01-09	Photosynthesis	Hiroshi Shimada Wataru Yamori Yuichiro Takahashi
2aB01-10	New technology	Keiji Numata Sachihiro Matsunaga Keiichiro Nemoto
2aC01-09	Environmental responses B	Miki Fujita Takashi Kuromori Daisuke Todaka
2aD01-10	Environmental responses A	Miyo Morita Takanori Maruta Keisuke Yoshida
2aE01-09	Plant-organism interaction B	Koh Aoki Satoko Yoshida Kenichi Tsuda
2aF01-08	Plant hormones/Signaling molecules	Hiroyuki Kasahara Mitsunori Seo Yuichiro Tsuchiya

2aG01-09	Primary metabolism	Sousuke Imamura Shuichi Yanagisawa Takeo Satou
2aH01-10	Biomembrane/Ion and solute transport	Tomoko Nozoye Tomoaki Horie Jian Feng Ma

Day 2, Fri., March 20, PM

2pA01-09	Photosynthesis	Toshiharu Shikanai Yukako Hihara Jiro Harada
2pB01-10	New technology	Keiichi Mochida Daisuke Miki Hidetaka Kaya
2pC01-09	Organelles/Cytoskeleton	Yoshiki Nishimura Kouichi Kobayashi Kensuke Kusumi
2pD01-06	Epigenetic regulation	Toshiyuki Fukuhara Yoko Ikeda
2pE01-08	Flowering/Clock	Motomu Endo Hiroyuki Tsuji Tokitaka Oyama
2pF01-10	Transcriptional, post-transcriptional or translational, post-translational regulations	Yukako Chiba Nobutaka Mitsuda Mayuki Tanaka
2pG01-08	Membrane trafficking/Cell cycle/Cell division	Tomoo Shimada Takashi Ueda Akira Iwase
2pH01-10	Vegetative growth	Tomomichi Fujita Yukiko Yasui Tatsuaki Goh

Day 3, Sat., March 21, AM

3aA01-11	Reproductive growth	Tetsuya Higashiyama Shohei Yamaoka Keiji Nakajima
3aB01-08	Systems biology	Masami Hirai Takeshi Obayashi Mami Yamazaki
3aC01-10	Organelles/Cytoskeleton	Yuuki Sakai Yasuko Ito-Inaba Takashi Yamano
3aD01-11	Photoreceptors/Photoresponses	Shin-Ichiro Inoue Yusuke Aihara Toshiaki Kozuka
3aE01-11	Plant-organism interaction A	Yoji Kawano Hiroyuki Hirai Hirofumi Nakagami
3aF01-06	Environmental responses of photosynthesis	Haruhiko Jimbo Nobuyuki Takatani
3aG01-10	Primary metabolism	Toshiki Ishikawa Eiji Suzuki Shoji Mano
3aH01-11	Vegetative growth	Chiyoko Machida Kumi Sato-Nara Gorou Horiguchi

General Presentations

Program of Poster Presentations

- On Day 2, those presenting on Day 1 should remove their posters at 9:00–12:00, and those presenting on Day 3 should mount their posters at 14:00–17:00.

The poster discussion times are as follows.

- For presentations in the first half: 17:00–18:30 on Day 1.
- For presentations in the second half: 13:00–14:30 on Day 3.
- On both Days 1 and 3, presenters of odd- and even-numbered posters should be in front of their boards during the first and second half of the poster discussion time, respectively

■ Photosynthesis

PF-001 Screening of crystallization and cryo-protectant conditions of photosystem II with a high efficiency of S-state transitions

Yoshiki Nakajima[1], Naoki Matsubara[2], Fusamichi Akita[1,3], Jian-Ren Shen[1] ([1]Research Institute for Interdisciplinary Science, and Graduate School of Natural Science and Technology, Okayama University, [2]Faculty of Science, Okayama University, [3]Japan Science and Technology Agency, PRESTO)

PF-002 An open-cubane oxyl/oxo mechanism for O=O bond formation in photosystem II revealed by X-ray free laser pulses

Michi Suga[1,2], Fusamichi Akita[1,2], Masaki Yamamoto[3], Hideo Ago[3], Jian-Ren Shen[1] ([1]Okayama Univ. RIIS, [2]JST PREST, [3]RIKEN SPring-8 center)

PF-003 Cryo-EM structure of Anabaena PSI tetramer

Koji Kato[1], Ryo Nagao[1], Tian-Yi Jiang[1], Yoshifumi Ueno[2], Makio Yokono[3], Siu Kit Chan[1], Mai Watanabe[4], Masahiko Ikeuchi[4], Jian-Ren Shen[1], Seiji Akimoto[2], Naoyuki Miyazaki[5], Fusamichi Akita[1,6] ([1]RIIS, Okayama Univ., [2]Grad. Sch. Sci., Kobe Univ., [3]Nippon Flour Mills Co., Ltd., [4]Grad. Sch. Arts & Sci., Univ. Tokyo, [5]TARA, Univ. Tsukuba, [6]PRESTO, JST)

PF-004 Structural analysis of Photosystem I-IsiA supercomplex by Cyro-EM

Fusamichi Akita[1,2], Ryo Nagao[1], Koji Kato[1], Yoshiki Nakajima[1], Makio Yokono[3], Yoshifumi Ueno[4], Takehiro Suzuki[5], Naoshi Dohmae[5], Jian-Ren Shen[1], Seiji Akimoto[4], Naoyuki Miyazaki[6] ([1]RIIS, Okayama Univ., [2]PRESTO, JST., [3]Nippon Flour Mills Co., Ltd., [4]Grad. Sch. Sci., Kobe Univ., [5]CSRS, RIKEN., [6]TARA, Tsukuba Univ.)

PF-005 Reduction of *E. arvense* Fd I in anaerobic chamber and heteronuclear NMR analysis for the reduced structure

Akihiro Fujita[1], Kaizan Yoshida[1], Yusuke Ohnishi[2], Genji Kurisu[2], Takahisa Ikegami[3], Keizo Teshima[1] ([1]Grad. Sch. Int. Sci. Life, Hiroshima Univ., [2]Inst. Pro. Res., Osaka Univ., [3]Grad. Sch. Med. Life Sci., Yokohama City Univ.)

PF-006 Effect of external environment on amino acid sequences of hydrophilic domains in type II reaction center membrane protein complex of photosynthetic bacteria

Yurika Morioka, Sakiko Nagashima, Satoshi Hanada (Grad. Sch. Sci., Univ. Tokyo Met. Univ.)

PF-007 Purification of the Rieske/cyt*b* complex under anaerobic conditions and its interaction analysis with cytochrome *c*-556 in green sulfur bacteria

Hiraku Kishimoto[1], Takahiro Nagaoka[1], Chihiro Azai[2], Risa Mutoh[3], Hideaki Tanaka[4], Yohei Miyanoiri[4], Genji Kurisu[4], Hirozo Oh-oka[1] ([1]Grad. Sch. Sci., Osaka Univ., [2]Col. Life Sci., Ritsumeikan Univ., [3]Fac. Sci., Fukuoka Univ., [4]Inst. Protein Res., Osaka Univ.)

PF-008 Chlorophyll protein complexes in *Alocasia odora*, a shade tolerant plant: Mechanisms for the resistance to PS I photoinhibition

Ichiro Terashima[1], Sachiko Funayama-Noguchi[1], Yukifumi Uesono[1], Yoshihiro Suzuki[2], Wataru Yamori[3], Masaru Kono[1] ([1]Dept. Biol., Sch. Sci., Univ. Tokyo, [2]Grad. Sch. Sci., Kanagawa Univ., [3]Grad. Sch. Agri., Univ. Tokyo)

PF-009 Analysis of A Novel Thylakoid Protein Required for Proper Accumulation of Photosystem I in Arabidopsis

Hiroshi Yamamoto, Toshiharu Shikanai (Grad. Sch. Sci., Kyoto Univ.)

PF-010 Effects of site-directed mutations at D1-R140 or D2-T231 interacting with one phosphatidylglycerol molecule (PG714) on the function of PSII

Yuto Sugawara[1], Toshiyuki Shinoda[2], Kaichiro Endo[3], Tatsuya Tomo[4], Kenjin Shen[5], Haruhiko Jimbo[3], Hajime Wada[3], Naoki Mizusawa[1,2,6] ([1]Grad. Sch. Sci. Eng., Univ. Hosei, [2]Fac. Biosci. App. Chem., Hosei University, [3]Grad. Sch. Art Sci., Univ. Tokyo, [4]Fac. sci., Tokyo Univ. Sci, [5]Res. Institute for Interdisciplinary Sci., Univ. Okayama, [6]Res. Center for Micro-Nano Tech., Univ. Hosei)

PF-011 Light-Induced Amino-Acid Conversion of the Mutant of a Carboxylate Ligand to the Mn Cluster in Photosystem II

Tomomi Kitajima-Ihara[1], Takehiro Suzuki[2], Shin Nakamura[1], Yuichiro Shimada[1], Ryo Nagao[1,3], Naoshi Dohmae[2], Takumi Noguchi[1] ([1]Grad. Sch. Sci., Nagoya Univ., [2]CSRS, RIKEN, [3]RIIS, Okayama Univ.)

PF-012 Role of D1-H252 in pH-dependent electron transfer regulation in photosystem II

Yuichiro Shimada[1], Seiryu Nakajima[1], Tomoyuki Kobayashi[1], Ryo Nagao[1,2], Takumi Noguchi[1] ([1]Grad. Sch. Sci., Nagoya Univ., [2]RIIS, Okayama Univ.)

PF-013 PsbM contributes to PSII supercomplex stability during prolonged dark incubation in higher plants

Kaori Kohzuma[1], Makoto Kusaba[2] ([1]Grad. Sch. Life Sciences, Tohoku Univ., [2]Grad. Sch. Int. Sciences for Life, Hiroshima Univ.)

PF-014 Characterization of *A, thaliana*peroxiredoxin Q ability to destroy peroxides

Midori Uenaka[1], Keizo Teshima[2], Naoki Nakagawa[2] ([1]Sch. Applied Bio. Sci., Hiroshima Univ., [2]Grand. Sch. Int. Sci. Life, Hiroshima Univ.)

PF-015 Characterization of STR4a related to TROL in Arabidopsis

Naoto Doi, Mari Takusagawa, Kota Ishibashi, Toshiharu Shikanai (Grad. Sch. Sci., Kyoto Univ.)

PF-016 The relationship between the phosphorylation level of Lhcb2 and the acclimation to Fe deficiency in barley

Yuna Wakabayashi[1], Akihiro Saito[2], Takuji Ohyama[2], Kyoko Higuchi[2] ([1]Tokyo Univ. of Agri., [2]Tokyo Univ. of Agri.)

PF-017 Suppression of Rubisco content reduces drought stress tolerance in rice

Yuji Suzuki[1], Shinya Wada[1,2], Chikahiro Miyake[2], Amane Makino[3] ([1]Fac. Agr., Iwate Univ., [2]Grad. Sch. Agr. Sci., Kobe Univ., [3]Grad. Sch. Agr. Sci., Tohoku Univ.)

PF-018 Study of function of θ-carbonic anhydrase in the marine diatom *Phaeodactylum tricornutum*

Kazuya Nagata, Fuka Arimizu, Kohei Yoneda, Sae Kikutani, Yoshinori Tsuji, Yusuke Matsuda (Dept. Biosci., Grad. Sch. Sci. Tech., Kwansei Gakuin Univ.)

PF-019 Characterization Of Putative Thylakoidal Anion Channels In The Marine Diatom, *Phaeodactylum tricornutum*

Shun Ito, Kansei Yamagishi, Ai Miyatake, Kohei Yoneda, Yoshinori Tsuji, Yusuke Matsuda (Kwansei-Gakuin University)

■ Primary metabolism

PF-020 ACT-domain repeat protein, CmACR, integrates GS/GOGAT cycle in the unicellular red alga *Cyanidioschyzon merolae*

Tokiaki Takemura[1,2], Sousuke Imamura[1], Kan Tanaka[1] ([1]Laboratory for Chemistry and Life Science, Institute of Innovative Research, Tokyo Institute of Technology, [2]School of Life Science and Technology, Tokyo Institute of Technology)

PF-021 Characterization of Target of Rapamycin (TOR) Complex in the Unicellular Red Alga *Cyanidioschyzon merolae*

Kaumeel Chokshi, Kan Tanaka, Sousuke Imamura (Lab. for Chem. and Life Sci., Tokyo Inst. of Tech.)

PF-022 Functional analysis of class III *SERAT* genes in *Arabidopsis thaliana*

Aiko Yamagiwa, Takayuki Tohge, Mutsumi Watanabe (Grad. Sch. Bio. Sci., NAIST)

PF-023 Multiple inorganic pyrophosphatases cooperatively accommodate pyrophosphate generation in *Arabidopsis thaliana*

Shoji Segami[1], Mayu Fukuda[1], Marika Mieda[1], Takaaki Tomoyama[1], Satoru Kinoshita[1], Ali Ferjani[2], Masayoshi Maeshima[1,3] ([1]Grad. Sch. Bioagr. Sci., Nagoya Univ.,, [2]Grad. Sch. Arts&Sci., Tokyo Univ., [3]Grad. Sch. Biosci. Biotech., Chubu Univ.)

PF-024 Involvement of boron transporter (BOR1) in growth under low boron and high nitrate condition in *Arabidopsis thaliana*

Qing Wang[1,2], Wenna Zhang[1], Hua Xiao[2], Naoyuki Sotta[2], Marcel Pascal Beier[2], Junpei Takano[3], Kyoko Miwa[4], Lihong Gao[1], Toru Fujiwara[2] ([1]Beijing Key Laboratory of Growth and Developmental Regulation for Protected Vegetable Crops, College of Horticulture, China Agricultural University, Beijing, PR China, [2]Department of Applied Biological Chemistry, Graduate School of Agricultural and Life Sciences, The University of Tokyo, Tokyo, Japan, [3]Graduate School of Life and Environmental Sciences, Osaka Prefecture University, Sakai, Japan, [4]Graduate School of Environmental Science, Hokkaido University, Sapporo, Japan)

PF-025 Mathematical modeling of the expression pattern of *NRT2.1* gene during the nitrate response in Arabidopsis

Yoshiaki Ueda, Shuichi Yanagisawa (Biotech. Res. Center, Univ. Tokyo)

PF-026 Molecular mechanism of the repression of *NRT2.1* expression by glutamine

Mineko Konishi, Pengcheng Guo, Shuichi Yanagisawa (Biotech. Res. Center, Univ. Tokyo)

PF-027 Functional analysis of a deubiquitinating enzyme involved in C/N-nutrient response in *Arabidopsis thaliana*

Yongming Luo, Yoko Hasegawa, Takeo Sato, Junji Yamaguchi (Fac. Sci. and Grad. Sch. Life Sci., Hokkaido Univ.)

PF-028 The differential roles of OsNLPs in regulating growth under nitrate condition in rice

Mengyao Wang[1], Takahiro Hasegawa[1], Makoto Hayashi[2], Yoshihiro Ohmori[1], Kenji Yano[1], Shota Teramoto[1], Takehiro Kamiya[1], Toru Fujiwara[1] ([1]Graduate School of Agricultural and Life Sciences, The University of Tokyo, [2]RIKEN Center for Sustainable Resource Science)

■ Secondary (specialized) metabolism

PF-029 Cross-species comparison of fruit-metabolomics to define pathway structure and metabolic regulation of fruit polyphenolics in different species of pepper (*Capsicum* spp.)

Carla Lenore F. Calumpang, Mutsumi Watanabe, Takayuki Tohge (Plant Secondary Metabolism Laboratory, Nara Institute of Science and Technology (NAIST))

PF-030 Diversity and species specificity of anthocyanin biosynthesis in plants

Tomoki Saigo, Hiroshi Marui, Tong Wang, Mutsumi Watanabe, Takayuki Tohge (Graduate School of Science and Technology, Nara Institute of Science and Technology)

PF-031 Cross-species Comparison and Functional Analysis of Flavonoid Type MYB Transcription Factors

Tong Wang, Tomoki Kobayashi, Mutsumi Watanabe, Takayuki Tohge (Nara Institute of Science and Technology)

PF-032 Elucidation of Biosynthetic Mechanism of Secondary Metabolisms in *Sophora flavescens*

Yohei Shimizu[1,2], Amit Rai[1], Michimi Nakamura[1], Hideyuki Suzuki[3], Kazuki Saito[1,2], Mami Yamazaki[1] ([1]Grad. Sch. Pharm. Sci., Chiba Univ., [2]RIKEN CSRS, [3]Kazusa DNA Res. Inst.)

PF-033 Evolution of P450 enzymes activity drives saponin chemodiversity in medicinal *Glycyrrhiza* plants

Much Zaenal Fanani[1], Satoru Sawai[1,2,3,4], Hikaru Seki[1,2], Masato Ishimori[3], Hiroshi Sudo[4], Ery Odette Fukushima[1], Kiyoshi Ohyama[2,5], Kazuki Saito[2,3], Toshiya Muranaka[1,2] ([1]Dept. Biotech., Grad. Sch. Eng., Osaka Univ., [2]RIKEN CSRS, [3]Grad. Sch. Pharm. Sci., Chiba Univ., [4]Tokiwa Phytochemical Co., Ltd., [5]Dept. Chem. Mat. Sci., TITECH.)

PF-034 Induction and analysis of *S*-alk(en)ylcysteine sulfoxides of *Allium* callus tissues

Ayuna Kisanuki[1], Takashi Asano[2], Chihiro Kanno[2], Machiko Asanuma[2], Isao Fujii[2], Kazuki Saito[1], Naoko Yoshimoto[1] ([1]Grad. Sch. Pharm. Sci., Chiba Univ., [2]Sch. Pharm., Iwate Med. Univ.)

PF-035 Isolation and functional characterization of UDP-glucosyltransferases involved in benzoxazinoid biosynthesis in *Scoparia dulcis*

Yuria Kasai, Takayoshi Kuraoka, Ryosuke Ago, Jung-Bum Lee, Yoshimi Yamamura (Fac. Pharm. Sci., Univ. Toyama)

PF-036 Characterization of 4-coumaroyl-CoA ligase (4CL) involved in the secondary metabolism in *Lithospermum erythrorhizon*

Kohei Nakanishi[1], Hao Li[1], Keishi Osakabe[2], Bunta Watanabe[3], Kazufumi Yazaki[1] ([1]RISH, Kyoto Univ., [2]Faculty Biosci. Bioind., Tokushima Univ., [3]ICR, Kyoto Univ.)

PF-037 Functional differentiation of shikonin/alkannin acyltransferases in *Lithospermum erythrorhizon*

Haruka Oshikiri[1], Hao Li[2], Bunta Watanabe[3], Kazufumi Yazaki[2], Kojiro Takanashi[1,5] ([1]Grad. Sch. Sci. & Tech., Shinshu Univ., [2]RISH, Kyoto Univ., [3]ICR, Kyoto Univ., [4]Fac. Life Sci., Toyo Univ., [5]Fac. Sci., Shinshu Univ.)

PF-038 A search for novel vacuolar transporter of glucosinolates in *Arabidopsis thaliana*

Kaichiro Endo[1], Akiko Nakazaki[2], Tomoo Shimada[2], Ikuko Nishimura[3], Kenji Yamada[1] ([1]Malopolska Centre of Biotechnology, Jagiellonian Univ., [2]Graduate School of Science, Kyoto Univ., [3]Faculty of Science and Engineering, Konan Univ.)

■ Biomembrane/Ion and solute transport

PF-039 Identification of genes involved in the regulation of NIP5;1 expression in response to boron in *Arabidopsis thaliana*

Mayuki Tanaka[1], Naoyuki Sotta[1,2], Toru Fujiwara[1] ([1]Grad. Sch. Agri. Life Sci., Univ. Tokyo, [2]Cardiff University)

PF-040 Overexpression of BOR5 alleviates the inhibition of root elongation under a high boron condition

Yukari Kawata[1], Naoyuki Sotta[1], Kyoko Miwa[2], Muhammad Saqib[1], Shigeki Takada[3], Junpei Takano[4], Toru Fujiwara[1] ([1]Grad. Sch. Agr. Life Sci., Univ. Tokyo, [2]Grad. Sch. Env. Sci., Hokkaido Univ., [3]Grad. Sch. Agr., Hokkaido Univ., [4]Grad. Sch. Life. Env. Sci., Osaka Pref. Univ.)

PF-041 Reduced function of *AVP2;1* confers low-boron tolerance in *Arabidopsis thaliana*

Amarachukwu Faith Onuh, Kyoko Miwa (Graduate School of Environmental Science, Hokkaido University)

PF-042 Elucidation of Physiological Roles of OsHKT1;4 Na+ Transporter in Rice under Salinity Stress Using Rice TILLING Mutants

Toshiki Kawamura[1], Natsuko I. Kobayashi[2], Thanh Hao Nguyen[3,7], Ryo Ishikawa[4], Maki Katsuhara[5], Keitaro Tanoi[2], Hiroaki Matsuzaka[6], Toshihiro Kumamaru[6], Herve Sentenac[3], Anne-Alienor Very[3], Tomoaki Horie[1] ([1]Div. Appl Biol., TST., Shinshu Univ., [2]Grad. Sch. Agri Life Sci., Univ. Tokyo, [3]CNRS/INRA/SupAgroM. Univ. Montpellier, [4]Grad. Sch. Agri Sci., Kobe Univ., [5]IPSR., Okayama Univ., [6]Fac. Agri., Kyushu Univ., [7]Inst. Plant Sci. Micro Biol., Hamburg Univ.)

PF-043 Ca^{2+}- sensitive and non-selective Na^{+}/K^{+} channel activity in a barley aquaporin HvPIP2;8

Sen Thi Huong Tran[1], Maki Katsuhara[1], Tomoaki Horie[2] ([1]Institute of Plant Science and Resources, Okayama university, [2]Division of Applied Biology, Faculty of the Textile Science and Technology, Shinshu University)

PF-044 Water transport activities of Arabidopsis tonoplast intrinsic proteins, AtTIPs

Shigeko Utsugi, Maki Katsuhara (IPSR, OKAYAMA UNIV.)

■ Membrane trafficking

PF-045 Sucrose starvation induce the degradation of proteins in *trans*-Golgi network and secretory vesicle cluster in tobacco BY-2 cells

Yamato Oda[1], Satoru Asatsuma[2], Hiroaki Nakasone[1], Ken Matsuoka[1,2] ([1]Grad. Sch. Agric., Kyushu Univ., [2]Fac. Agric., Kyushu Univ.)

PF-046 Spatiotemporal relation between vacuolar trafficking zone of *trans*-Golgi network and multivesicular body/pre-vacuolar compartment

Yutaro Shimizu[1,2], Junpei Takagi[3], Yoko Ito[1,4], Yamato Komatsu[2], Kazuo Ebine[5,6], Takashi Ueda[5,6], Kazuo Kurokawa[1], Tomohiro Uemura[7], Akihiko Nakano[1] ([1]RIKEN RAP, [2]Grad. Sch. Sci., Univ. Tokyo, [3]Fac. Sci. & Eng., Konan Univ., [4]CNRS/Bordeaux Univ., [5]Div. Cellular Dynamics, NIBB, [6]Dept. Basic Biology, SOKENDAI, [7]Fac. Sci., Ochanomizu Univ.)

PF-047 Identification of RAB5 effectors containing PH domain called REAP2 and REAP3 in Arabidopsis

Seung-won Choi[1], Kazuo Ebine[2,5], Naoya Kato[3], Takafumi Ishihara[3], Chie Suzuki[3], Yuki Sugiyama[3], Yumiko Tanaka[3], Nami Kuwano[1], Takashi Ueda[2,5], Akihiko Nakano[4], Emi Ito[1] ([1]Dept. Natural Sciences, ICU, [2]Div. Cellular Dynamics, NIBB, [3]Grad. Sch. Science, Univ. Tokyo, [4]RIKEN, RAP, [5]Sch. Life Sci., SOKENDAI)

PF-048 Golgi Transport 1 (GOT1B) is required for localization of storage protein RNA to cortical ER domain and for efficient export of proglutelin and α-globulin from ER

Mako Fukuda[1], Toshihiro Kumamaru[1], Thomas W. Okita[2] ([1]Agriculture, Kyushu Univ., [2]Biol. Chemistry, Washington state Univ.)

PF-049 Functional analysis of Arabidopsis phosphate transporter traffic facilitator 1

Hui-Fang Lung, Jia-Dong Chu, Tzu-Yin Liu (Institute of Bioinformatics and Structural Biology, National Tsing Hua University, Taiwan (R.O.C.))

PF-050 Analyses Of Small RNAs In Plants Extracellular Vesicles

Teppei Aso[1], Takahito Takei[2], Yoko Ikeda[3], Yuichiro Watanabe[2,4], Takahiro Hamada[1,5] ([1]Okayama University of Science, [2]Grad. Sch. Sci., Univ. Tokyo, [3]IPSR, Univ. Okayama, [4]Grad. Sch. Art and Sci., Univ. Tokyo, [5]JST PRESTO)

■ Organelles/Cytoskeleton

PF-051 HMG protein controls the level of chloroplast DNA compaction in *Chlamydomonas reinhardtii*

Mari Takusagawa[1], Yoichiro Fukao[2], Kumi Hidaka[3], Takashi Hamaji[1], Yusuke Kobayashi[1], Masayuki Endo[3], Hiroshi Sugiyama[3], Toshiharu Shikanai[1], Yoshiki Nishimura[1] ([1]Grad. Sch. Sci., Univ. Kyoto, [2]Dept. Bioinfo., Univ. Ritsumeikan, [3]Grad. Sch. Sci., Univ. Kyoto)

PF-052 Identification of Pyrenoid Component's Structure and Function in Marine Diatom *Phaeodactylum tricornutum*

Kohei Ueda, Maiko Aoi, Natsumi Morishima, Kohei Yoneda, Sae Kikutani, Yoshinori Tsuji, Yusuke Matsuda (Kwansei Gakuin University)

PF-053 Biochemical changes in nitrogen assimilation in an Arabidopsis mutant having giant chloroplasts

Chao Jin, Kaho Tsuruyama, Minori Sakamoto, Tomohide Uno, Kengo Kanamaru (Grad. Sch. Agri. Sci., Kobe Univ.)

PF-054 Reconsideration of transcriptome in *var2* white sector

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

PF-055 A novel ATP hydrolysis activity of VIPP1 protein involved in chloroplast membrane integrity

Norikazu Ohnishi[1], Lingang Zhang[2], Wataru Sakamoto[1] ([1]Inst. Plant Sci. Res., Okayama Univ., [2]Sch. Life Sci., Inner Mongolia Univ.)

PF-056 Preprotein translocation across the inner envelope of chloroplast in *Arabidopsis thaliana*

Xueyang Zhao[1,2], Takeshi Higa[1], Masato Nakai[1] ([1]Institute for Protein Research, Osaka University, [2]Department of Biological Sciences, Graduate School of Science, Osaka University)

PF-057 Identification and analysis of a suppressor gene of the suppressor line S1-9 of *crl* mutant in *Arabidopsis thaliana*

Shun Minamikawa[1], Ryo Yoshimura[1], Ryohei Seta[1], Takamasa Suzuki[2], Munemasa Horio[3], Yasuomi Tada[3], Yasushi Yoshioka[1] ([1]Div. Biol. Sci., Grad. Sch. Sci., Nagoya. Univ, [2]Col. Biosci. Biotech., Chubu. Univ, [3]Cent. for. Gene. Res., Nagoya Univ)

PF-058 Identification and analysis of the suppressor gene of the suppressor line 2-6 of *crl* mutant in *Arabidopsis thaliana*

Ryo Yoshimura[1], Shun Minamikawa[1], Ryohei Seta[1], Takamasa Suzuki[2], Benhamed Moussa[3], Yasushi Yoshioka[1] ([1]Div. Biol. Sci., Grad. Sch. Sci., Nagoya Univ., [2]Col. Biosci. Biotech., Chubu Univ., [3]Inst. Plant Sci. Paris-Saclay, Univ. Paris-Sud)

PF-059 Chloroplast Relocation Induced by CO_2

Taichi Sugiyama, Ichiro Terashima (Plant Eco-Physiology Laboratory, Department of Biological Science, Graduate School of Science, The University of Tokyo)

PF-060 Time-lapse analysis of chloroplast movement in sun- and shade-type leaves of *Arabidopsis thaliana*
Aya Masuda, Shingo Takagi (Grad. Sch. Sci., Osaka Univ.)

■ Cell wall

PF-061 Impact of O-acetylation of Xyloglucans on Seed Germination Performance
Hiromi Suzuki[1,2], Parisa Savane[1], Julien Sechet[1], Annie Marion-Poll[1] ([1]IJPB, INRA, AgroParisTech, CNRS, Universite Paris-Saclay, [2]CSRS, Riken)

PF-062 VND7 Regulates Expression of Ubiquitin E3 Ligases FLY1 and FLY2 in Xylem Vessel Cell Differentiation
Tadashi Kunieda[1,2,3], Mitsuki Jifuku[1], George W. Haughn[2], Ikuko Hara-Nishimura[3], Taku Demura[1] ([1]Div. of Biol. Sci., NAIST, [2]Dept. of Bot., UBC, [3]Fac. of Sci. and Eng., Konan Univ.)

PF-063 Secondary cell wall is essential to form G-layer under tension stress in poplar
Naoki Takata[1], Kei'ichi Baba[2], Shingo Sakamoto[3], Nobutaka Mitsuda[3], Toru Taniguchi[4] ([1]Forest Bio Res. Cent., For. Forest Prod. Res. Inst., [2]RISH, Kyoto Univ., [3]Bioprod. Res. Inst., AIST, [4]Tohoku Reg. Breeding Office, Forest Tree Breeding Cent., For. Forest Prod. Res. Inst.)

PF-064 Functional analyses of PECTIN METHYLESTERASE 11 in the detachment of the outermost root cap layer in *Arabidopsis thaliana*
Kazuki Maeda[1], Tadashi Kunieda[2], Kentaro Tamura[3], Ikuko Hara-Nishimura[4], Tomoo Shimada[1] ([1]Grad. Sch. of Sci., Univ. Kyoto, [2]Div. of Biol. Sci., NAIST, [3]Sch. Food & Nutritional Sci., Univ. Shizuoka, [4]Fac. Sci. Eng., Konan Univ.)

PF-065 Analysis of Cell Wall Polysaccharides in Transgenic Poplar Trees with an Introduced Pectin Methylesterase Gene
Koichi Kakegawa[1], Mitsuru Nishiguchi[2] ([1]Dept. Forest Resources Chemistry, Forest and Forest Products Res. Inst., [2]Dept. Forest Molecular Genetics and Biotechnology, Forest and Forest Products Res. Inst.)

PF-066 Pectin functions of root border cells in protecting root from Al toxicity
Teruki Nagayama[1], Atsuko Nakamura[1], Naoki Yamaji[2], Shinobu Satoh[1], Jun Furukawa[1], Hiroaki Iwai[1] ([1]Faculty of Life and Environmental Sciences, University of Tsukuba, Tsukuba, [2]Research Institute for Bioresources, Okayama University, Chuo, Kurashiki)

PF-067 Monitoring of metal nano ink-coated cotyledon epidermal cell morphogenesis with metal microscopy
Kazuki Yoshimura[1], Akira Watanabe[2], Takumi Higaki[1] ([1]IROAST, Kumamoto Univ., [2]IMRAM, Tohoku Univ.)

■ Vegetative growth

PF-068 The promotive effect of light irradiation on somatic embryogenesis in carrot is mediated by reactive oxygen species
Katsumi Higashi, Yoshiki Maeyama, Shohei Soeda (Department of Life & Health Sciences, Teikyo University of Science)

PF-069 Enhancement of somatic embryo inducing elements
Ryota Sato[1], Hironori Takasaki[2], Miho Ikeda[2], Masaru Ohme-Takagi[2] ([1]Sci. Univ. Saitama, [2]Grad. Sch. Sci. and Eng., Univ. Saitama)

PF-070 Identification of a novel regulator of gemma cup development in the liverwort *Marchantia polymorpha*
Hirotaka Kato[1], Yukiko Yasui[1,2], Hidehiro Fukaki[1], Tetsuro Mimura[1] ([1]Grad. Sch. Sci., Kobe Univ., [2]Grad. Sch. Biostudies, Kyoto Univ.)

PF-071 Molecular mechanism of plant callus formation accelerated by Promoter of Plant Growth(PPG)
Kotomi Maekawa[1,3], Shota Tanaka[2,3], Shun Takeno[2,3], Ayumi Yamagami[1,2], Yusuke Kakei[4], Yukihisa Shimada[4], Yoshimitsu Kondou[2], Naoshi Douzen[2], Setsuko Shimada[2], Minami Matsui[2], Tetsuo Kushiro[3], Naoyuki Osada[2], Tadao Asami[5], Kazuo Shinozaki[2], Takeshi Nakano[1,2] ([1]Dept. Biostudies., Kyoto. Univ., [2]RIKEN, CSRS, [3]Dept. Agri. Chem., Meiji. Univ., [4]Yokohama City Univ., [5]Dept. Appl. Biol. Chem., Tokyo. Univ.)

PF-072 Two R2R3-MYB Transcription Factors Promote Regeneration in *Marchantia polymorpha*
Yukiko Yasui[1,2], Hirotaka Kato[1], Sakiko Ishida[2], Ryuichi Nishihama[2], Hidehiro Fukaki[1], Tetsuro Mimura[1], Takayuki Kohchi[2], Kimitsune Ishizaki[1] ([1]Grad. Sch. Sci, Kobe Univ., [2]Grad. Sch. Biostudies, Kyoto Univ.)

PF-073 Environmental control of cellular reprogramming in plant regeneration
Yu Chen, David S Favero, Ayako Kawamura, Keiko Sugimoto (CSRS, Riken)

PF-074 Analysis of shoot regeneration mechanism in vegetative propagation of *Rorippa aquatica*
Emi Omata, Rumi Amano, Shuka Ikematsu, Risa Momoi, Tomoaki Sakamoto, Seisuke Kimura (Facul. Life Sci., Kyoto Sangyo Univ.)

PF-075 BEN3 and BIG family ARF GEFs redundantly regulate root growth in Arabidopsis

Kosuke Ogita[1], Saeko Kitakura[2], Tatsuo Kakimoto[2], Hirokazu Tanaka[1] ([1]Sch. Agri., Meiji Univ., [2]Grad. Sch. Sci., Osaka Univ.)

PF-076 Isolation and analysis of lateral root pre-patterning mutants using the luminescence reporter gene

Ayaka Ozasa[1], Tatsuaki Goh[2], Kimitsune Ishizaki[1], Tetsuro Mimura[1], Hidehiro Fukaki[1] ([1]Grad. Sch. Sci., Kobe Univ., [2]Grad. Sch. Sci. Tech., NAIST)

PF-077 Analysis of Mutants Showing an Altered Response to TOLS2 Peptide That Negatively Regulates *Arabidopsis* Lateral Root Initiation

Riku Nishimaru[1], Yuka Aoki[1], Koichi Toyokura[1,2], Akinori Shinoda[1], Tatsuaki Goh[1,3], Kimitsune Ishizaki[1], Tetsuro Mimura[1], Hidehiro Fukaki[1] ([1]Grad. Sch. Sci., Kobe Univ., [2]Fac. Sci. Eng., Konan Univ., [3]Grad. Sch. Sci. Tech., NAIST)

PF-078 Auxin biosynthesis and transport in the initial vascular development of Arabidopsis roots

Kyoko Ohashi-Ito, Kuninori Iwamoto, Hiroo Fukuda (Grad. Sch. Sci., Univ. Tokyo)

PF-079 Developmental regulation involving the TGN-localized membrane trafficking component BEN2/VPS45 in Arabidopsis

Narumi Fukasawa[1], Yuki Matsuura[2], Tatsuo Kakimoto[2], Hirokazu Tanaka[1] ([1]Sch. Agr., Meiji Univ., [2]Grad. Sch. Sci., Osaka Univ.)

PF-080 Elucidation of the Mechanism How Cytokinin Signaling Promote Radial Growth

Miyu Imamura[1], Nobutaka Mitsuda[2], Yuki Kondo[3], Masaru Ohme-Takagi[2,4], Masaki Ito[5], Takafumi Yamashino[1] ([1]Grad. Sch. Bioagr. Sci., Nagoya Univ., [2]Bioprod. Res. Inst., Nat. Inst. of Adv. Ind. Sci. Tech, [3]Grad. Sch. Sci., Univ. Tokyo, [4]Grad. Sch. Sci. Eng., Saitama Univ., [5]Grad. Sch. Nat. Sci. and Tech., Kanazawa Univ.)

PF-081 Control of Cell Proliferation in Leaf Meristem Under Polar Auxin Transport Inhibition

Makiko Naito[1], Hirokazu Tsukaya[1,2] ([1]Grad. Sch. Sci., Univ. Tokyo, [2]ExCELLS)

PF-082 Roles of nucleolar proteins in establishment of leaf polarity mediated by AS2 and gene body methylation of the AS2 target gene in *Arabidopsis thaliana*

Chiyoko Machida[1], Tetsunori Hibino[1], Kyohei Mitani[1], Yuto Mizutani[1], Simon Vial-Pradel[1], Hiro Takahashi[2], Shoko Kojima[1], Yasunori Machida[3] ([1]Grad. Sch. Biosci. Biotech., Chubu. Univ, [2]Grad. Medical Sci., Kanazawa. Univ, [3]Grad. Sch. Sci., Nagoya Univ.)

PF-083 Function of AS2 domain of ASYMMETRIC LEAVES2 in the establishment of leaf polarity in *Arabidopsis thaliana*

Masato Iwai[1], Shuta Nishii[1], Runa Morita[1], Mahiro Mizuno[1], Shoko Kojima[1], Michiko Sasabe[2], Yasunori Machida[3] ([1]Sch. Biosci. Biotech., Chubu. Univ., [2]Facul. Agri. Life Sci., Hirosaki Univ., [3]Grad. Sch. Sci., Nagoya Univ.)

PF-084 Functional anaysis of AS2 homologs in *Arabisopsis thaliana* during leaf development

Shoko Kojima[1], Momoka Yukimori[2], Yuki Yoshino[1], Midori Mizuno[1], Michiko Sasabe[2], Yasunori Machida[3], Chiyoko Machida[1] ([1]Col. Biosci. Biotech., Chubu Univ., [2]Facul. Agri. Life Sci., Hirosaki Univ., [3]Grad. Sch. of Sci., Nagoya Univ.)

PF-085 Acceleration of leaf development in the mutants of Arabidopsis deadenylases, AtCCR4a/b

Taku Tokunaka[1], Toshihiro Arae[1,2], Yuya Suzuki[1], Yukako Chiba[1,3] ([1]Grad. Sch. Life Sci., Hokkaido Univ., [2]Grad. Sch. Front. Sci., Univ. of Tokyo, [3]JST PRESTO)

PF-086 Evo-devo study on acquisition of the leaf in angiosperms with *Amborella trichopoda*, which is the earliest diverged angiosperm

Hokuto Nakayama, Hirokazu Tsukaya (Graduate School of Science, Department of Biological Sciences, The University of Tokyo)

■ Reproductive growth

PF-087 Analysis of the developmental mechanisms of endosperm that nourishes embryo

Rio Toyoshima, Hironori Takasaki, Miho Ikeda, Masaru Takagi (Grad. Sch. Sci., Univ. Saitama)

PF-088 Exploration of genes involved in the eating quality of Koshihikari expressed in endosperm during grain filling

Akihiro Saito[1], Kazuho Enami[1], Keiichi Kimura[3], Ken Iijima[2], Takuji Ohyama[1], Kyoko Higuchi[1], Yoshimasa Tsujii[1], Katsumi Takano[1], Kiyosumi Hori[2] ([1]Facl. Appl. Biosci., Tokyo Univ. Agri., [2]Inst. Crop Sci., NARO, [3]Grad. Sch. Agri., Tokyo Univ. Agri.)

PF-089 Identification of CRABS CLAW target genes in *Arabidopsis* nectary

Hideaki Iimura[1], Nobutoshi Yamaguchi[1,2], Toshiro Ito[1] ([1]NAIST, [2]JST Sakigake)

PF-090 Functional analysis of the octoploid cultivated strawberry *CONSTANS-like* genes family in modulating floral transition and floral formation in transgentic Arabidopsis plant

Althea Yi Shan Li, Wei Zong Kuo, Po Husan Chou (Department of Life Sciences, Tzu Chi University, Hualien 97004, Taiwan, ROC.)

PF-091 The longevity of stem cell population in primary shoot apex of *Arabidopsis*

Yukun Wang, Makoto Shirakawa, Toshiro Ito (Graduate School of Biological Science, Nara Institute of Science and Technology)

■ Plant hormones/Signaling molecules

PF-092 Phenylalanine production is a rate-limiting step of phenylacetic acid biosynthesis in Arabidopsis

Yuki Aoi[1], Ryosuke Sasaki[2], Akira Oikawa[2,3], Ken-ichiro Hayashi[4], Hiroyuki Kasahara[2,5] ([1]Grad. Sch. Agric., Tokyo Univ. Agric. Tech., [2]RIKEN CSRS, [3]Fac. Agric., Yamagata Univ., [4]Dep. Biochem., Okayama Univ. Sci., [5]GIR, Tokyo Univ. Agri. Tech.)

PF-093 Auxin synthesized from the indole-3-pyruvate pathway regulates root growth and high temperature response in the lycophyte *Selaginella moellendorffii*

Shutaro Kaneko[1], Sam David Cook[2], Ken-ichiro Hayashi[3], Hiroyuki Kasahara[4,5] ([1]Grad. Sch. Agric., Tokyo Univ. Agric. Tech., [2]Inst. Agric., Tokyo Univ. Agric. Tech., [3]Dep. Biochem., Okayama Univ. Sci., [4]GIR, Tokyo Univ. Agri. Tech., [5]RIKEN CSRS)

PF-094 An Indole-3-acetic acid carboxyl methyltransferase 1 gene influences nodule formation in *Lotus japonicus*

Takashi Goto[1,2], Takashi Soyano[1,2], Meng Liu[1], Takuya Suzaki[3], Masayoshi Kawaguchi[1,2] ([1]National Institute for Basic Biology, [2]Life Science, SOKENDAI, [3]Life and Environmental Sciences, Univ. Tsukuba)

PF-095 Dissecting structure-function relationships of ARF-AuxRE genetic switches

Keita Tanaka[1], Alejandra Freire-Rios[2], Isidro Crespo[3], Roeland Boer[3], Victoria Mironova[4], Dolf Weijers[1] ([1]Laboratory of Biochemistry, Wageningen University & Research, [2]Laboratory of Cell Biology, Wageningen University & Research, [3]ALBA Synchrotron Light Source, [4]Novosibirsk State University)

PF-096 The mechanisms of action for 4-PBA analog, novel inhibitor of gravitropism

Youichi Kondou, Issei Takahashi, Takahiro Sato, Rei Matsumoto, Kie Takahashi, Hirokazu Iida (Dept. Biosci., Kanto Gakuin Univ.)

PF-097 Vascular pattern formation in the presence of polar auxin transport inhibitor in C4 Flaveria bidentis

Mei Osawa[1], Yukimi Taniguchi[1], Tammy Sage[2], Yuri Munekage[1] ([1]Department of Bioscience, School of Science and Technology, Kwanisei Gakuin University, [2]Department of Ecology & Evolutionary Biology, University of Toronto)

PF-098 Bioavtive GAs synthesized by OsGA3ox1 regulate the starch accumulation of rice pollen

Minami Morii, Akihiko Sugihara, Kyosuke Kawai, Toru Kashio, Aya Ito, Sayaka Takehara, Makoto Matsuoka, Miyako Ueguchi-Tanaka (Bioscience and Biotechnology Center, Nagoya Univ.)

PF-099 The Function of Gibberellin-Related Diterpenoids in Sexual Reproduction of the Liverwort *Marchantia polymorpha*

Rui Sun, Ryunosuke Kusunoki, Ran Wang, Keisuke Inoue, Ryuichi Nishihama, Shohei Yamaoka, Takayuki Kohchi (Grad. Sch. Biostudies, Kyoto Univ.)

PF-100 Functional analysis of brassinosteroid signaling factor BSHs

Rina Su[1,3], Ayumi Yamagami[1], Tomoko Miyaji[2], Masaaki Sakuta[3], Tadao Asami[4], Kazuo Shinozaki[2], Takeshi Nakano[1] ([1]Grad. Biostudies., Univ. kyoto, [2]CSRS., Riken, [3]Univ. Ochanomizu, [4]Dept. Appl. Biol. chem., Univ. Tokyo)

PF-101 Arabidopsis transcription factors in BR signaling by CRES-T method

Yuichiro Tanaka[1,3], Reika Hasegawa[4], Ayumi Yamagami[1,2], Miho Ikeda[4], Nobutaka Mitsuda[5], Tetsuo Kushiro[3], Kazuo Shinozaki[2], Tadao Asami[6], Masaru Takagi[4], Takeshi Nakano[1,2] ([1]Dept. Biostudies., Kyoto Univ., [2]CSRS, RIKEN, [3]Dept. Agric. Chem., Meiji Univ., [4]Grad. Sch. Science. Technol., Saitama Univ., [5]AIST., [6]Dept. Appl. Biol. Chem., Univ. of Tokyo)

PF-102 Expression of the ACC Synthase Gene in the Vine Tissue on the Side in the Touch with a Pole in Morning Glory

Tomoe Yofune, Tsuyoshi Kaneta (Grad. Sch. Sci, & Eng., Ehime Univ.)

PF-103 Screening for the novel cytokinin transporter

Takuya Uragami, Takatoshi Kiba, Hitoshi Sakakibara (Grad. Sch. Bioagr. Sci., Univ. Nagoya)

PF-104 Functional Analysis of Arabidopsis DFL2 in Its Putative Involvement in JA-Ile Biosynthesis

Jay Delfin, Takayuki Tohge, Takafumi Shimizu (Plant Secondary Metabolism Lab, Nara Inst. Sci. Tech.)

PF-105 Functional analysis of COI1 homologs in rice

Hideo Inagaki[1], Hibiki Ito[2], Yuki Fukumoto[2], Ayaka Yajima[2], Xi Chen[3], Masanobu Ishitsuka[1], Tomoko Sakazawa[2], Emi Yumoto[4], Masashi Asahina[1,2,4], Kenichi Uchida[1,2,4], Kengo Hayashi[5], Saki Oura[5], Rina Saitou[6], Takuya Kaji[5], Yasuhiro Ishimaru[7], Yousuke Takaoka[5,8], Minoru Ueda[5,6], Kazunori Okada[9], Hisakazu Yamane[1,2,4], Koji Miyamoto[1,2] ([1]Grad. Sch. Sci. & Eng., Teikyo Univ., [2]Dept. of Biosci., Teikyo Univ., [3]Univ. Bremen, [4]Adv. Instrum. Anal. Cent., Teikyo Univ., [5]Grad. Sch. Sci., Tohoku Univ., [6]Grad. Sch. Life Sci., Tohoku Univ., [7]Grad. Sch. Eng., Tohoku Univ., [8]JST-PRESTO, Tohoku Univ., [9]BRC, The Univ. of Tokyo)

PF-106 Comprehensive phytohormone quantification analysis by liquid chromatography-mass spectrometry

Mikiko Kojima[1], Yumiko Takebayashi[1], Hitoshi Sakakibara[2] ([1]CSRS., RIKEN, [2]Grad. Sch. Bio., Nagoya. Univ)

■ Photoreceptors/Photoresponses

PF-107 Functional characterization of novel compounds that affect signaling pathway in stomatal opening

Gwangchol Sin[1], Yusuke Aihara[1], Shigeo Toh[2], Shinpei Inoue[1], Ayato Sato[3], Toshinori Kinoshita[1,3] ([1]Grad. Sch. Sci., Univ. Nagoya, [2]Grad. Sch. Agr., Univ. Meiji, [3]WPI-ITbM, Univ. Nagoya)

PF-108 The Role of Dephosphorylation of NPH3 in the Hypocotyl Phototropism of *Arabidopsis*

Taro Kimura[1], Ken Haga[2], Yuko Nomura[3], Hirofumi Nakagami[4], Tatsuya Sakai[1] ([1]Grad. Sch. Sci. Tech., Niigata Univ., [2]Fac. Fundam. Eng., Nippon Inst. Tech., [3]RIKEN CSRS, [4]Max Planck Inst. Plant Breeding Res.)

PF-109 Analysis of photomorphogenesis based on the total amount of irradiated light

Momoko Nakaya[1], Takahiro Hamada[2], Shizue Yoshihara[1], Hayato Tokumoto[1] ([1]Sci., Univ. Osaka pref, [2]Sci., Okayama Univ. Sci.)

PF-110 Involvement of phyB_N26 peptide in the control of hypocotyl elongation by light in the presence of sucrose

Shoi Takayama, Shizue Yoshihara, Hayato Tokumoto (Sci., Univ. Osaka Pref.)

PF-111 Control of seed germination in transgenic *Arabidopsis* expressing *Adiantum* chimeric photoreceptor phytochrome3

Mina Horiuchi[1], Izumi Kimura[2], Yuki Kimura[2], Takeshi Kanegae[1,2] ([1]Dept. of Biol. Sci., Grad. Sch. of Sci., Tokyo Metropolitan Univ., [2]Dept. of Biol. Sci., Grad. Sch. of Sci. and Eng., Tokyo Metropolitan Univ.)

PF-112 Functional analysis of carotenoids in *Euglena gracilis* for the cell structure and photomovement using carotenoid-deficient mutants

Shun Tamaki[1], Yuri Tanno[1], Shota Kato[1,2], Kazunari Ozasa[3], Mayumi Wakazaki[4], Mayuko Sato[4], Kiminori Toyooka[4], Tomoko Shinomura[1] ([1]Dept. Biosci., Sch. Sci. Eng., Teikyo Univ., [2]Ctr. Plant Aging Res., Inst. Basic Sci., [3]Maeda Bioeng. Lab., RIKEN, [4]CSRS, RIKEN)

PF-113 A Light signal transduction pathway involved in Cul4 ubiquitin ligase complex in the unicellular red alga *Cyanidischyzon merolae*

Miyako Kitagawa[1,2], Yuki Kobayashi[2], Toko Yoshikawa[1,2], Hikaru Ohara[3], Mitsumasa Hanaoka[3], Sousuke Imamura[2], Kan Tanaka[2] ([1]School of Life Science and Technology, Tokyo Institute of Technology, [2]Laboratory for Chemistry and Life Science, Tokyo Institute of Technology, [3]Graduate School of Horticulture, Chiba University)

PF-114 Gene expression analysis of microbial rhodopsin-like genes from marine algae *Guillardia theta*

Yumeka Yamauchi[1], Masae Konno[1,2], Keiichi Inoue[1,2], Hideki Kandori[1,3] ([1]Life Sci. Appl. Chem., Grad. Sch. Eng., NIT, [2]ISSP, Univ. Tokyo, [3]OBTRC, NIT)

■ Flowering/Clock

PF-115 [Cancelled]

PF-116 Chemical regulation of flowering by inhibition of florigen activation complex

Ken-ichiro Taoka[1,5], Ikumi Kawahara[2], Zenpei Shimatani[3,4], Rie Terada[4], Hiroyuki Tsuji[1], Chojiro Kojima[5] ([1]Kihara Institute for Biological Research, Yokohama City University, [2]Institute for Protein Research, Osaka University, [3]Graduate School of Science, Technology and Innovation, Kobe University, [4]Graduate School of Agriculture, Meijo University, [5]Faculty of Engineering, Yokohama National University)

PF-117 A biochemical approach to identify co-regulatory proteins that interact with florigen activation complex

Eri Funayama, Ken-ichiro Taoka, Hiroyuki Tsuji (Kihara Institute for Biological Research, Yokohama City University)

PF-118 Effect of Low Temperature and Photoperiod to *in Vitro* Bulblet Formation and Expression of *FLOWERING LOCUS T*-like Genes in Garlic for Cold Regions

Kazuki Tadamura, Atsushi Torada (HOKUREN Agric. Res. Inst.)

PF-119 Possible roles of PTA7 in the GA -dependent flowering pathway under continuous light in *Arabidopsis thaliana*

Aya Sakamoto, Kana Miyata, Ryosuke Hayama, Tsuyoshi Mizoguchi (Grad. Sch. Sci., ICU)

PF-120 Dynamic change in the shoot apical meristem during floral transition in *Arabidopsis thaliana*

Atsuko Kinoshita[1,2], Alice Vayssieres[2], Rene Richter[2], George Coupland[2] ([1]Tokyo Metropolitan University, [2]Max Planck Institute for Plant Breeding Research)

PF-121 Functional analysis of SnRK2 substrate 1 as a regulator of flowering time

Sotaro Katagiri, Risa Suzuki, Yoshiaki Kamiyama, Taishi Umezawa (BASE Tokyo Univ. Agric, Thec. UmezawaLab)

PF-122 Analysis of gene expression during photoperiodic and stress-induced flowering responses on *Lemna minor* 5512

Shogo Ito, Tokitaka Oyama (Department of Botany, Division of Biological Sciences, Graduate School of Science, Kyoto University)

PF-123 [Cancelled]

■ Environmental responses A

PF-124 Analyses Of A Novel Gene That Enhances Ozone Tolerance Of Plants

Shoko Saji[1], Hikaru Saji[1], Kimiyo Sage-Ono[2], Michiyuki Ono[2], Nobuyoshi Nakajima[1], Tomomi Inoue[1], Mitsuko Aono[1] ([1]Natl. Inst. Environ. Studies, [2]GRC, T-PIRC, Univ. Tsukuba)

PF-125 Visualization of Arabidopsis root system by X-ray Micro-CT at SPring-8: Manual 3D-Modeling and automatic segmentation

Tomofumi Kurogane[1], Daisuke Tamaoki[2], Sachiko Yano[3], Humiaki Tanigaki[3], Toru Shimazu[4], Haruo Kasahara[3], Daisuke Yamauchi[5], Kentaro Uesugi[6], Makoto Hoshino[6], Seiichiro Kamisaka[1], Yoshinobu Mineyuki[5], Ichirou Karahara[2] ([1]Grad. Sch. of Sci. Eng., Univ. of Toyama, [2]Fac. of Sci., Univ of Toyama, [3]JAXA, [4]Japan Space Forum, [5]Grad. Sch. of Life Sci., Univ. of Hyogo, [6]JASRI)

PF-126 Nodal rule of root-cut response in *Arabidopsis thaliana*

Xin Li, Masaaki Watahiki (Grad. Sch. Life. Sci., Univ. Hokkaido)

PF-127 The influence of sucrose on Arabidopsis root diameter and mechanics

Marcel Pascal Beier[1], Shumpei Hayashi[2], Kyoko Miwa[3], Hirotaka Hida[2], Toru Fujiwara[1] ([1]Fac. Agr., Univ. Tokyo, [2]Grad. Sch. Eng., Kobe Univ., [3]Grad. Sch. Environ. Sci., Hokkaido Univ.)

PF-128 Imaging stress-responsive rapid long-distance Ca^{2+} signaling in *Marchantia*

Kota Hasegawa[1], Hiroki Shindo[1], Takeru Itabashi[1], Hikaru Mizoe[1], Kenji Hashimoto[1,2], Kazuyuki Kuchitsu[1,2] ([1]Dept. of Appl. Biol. Sci., Tokyo Univ. of Sci., [2]Imaging Frontier Center, Tokyo Univ. of Sci.)

PF-129 Spatiotemporal imaging of wound-induced ROS production and ROS signal propagation in *Marchantia polymorpha*

Kenshiro Watanabe[1], Kota Hasegawa[1], Hiroki Shindo[1], Takeru Itabashi[1], Hikaru Mizoe[1], Kenji Hashimoto[1,2], Kazuyuki Kuchitsu[1,2] ([1]Dept. Appl. Biol. Sci., Tokyo Univ. of Science, [2]Imaging Frontier Center, Tokyo Univ. of Science)

■ Environmental responses B

PF-130 Functional analysis of the *D14* knockout in *Fragaria vesca* by using CRISPR/Cas9 system

Tomoko Miyaji[1], Shoya Tagami[1], Kohei Sakaguchi[1], Kanari Shimada[1], Eiko Nakashima[1], Syuki Fujii[1], Keiko Shinohara[2], Yoko Harada[2], Keishi Osakabe[1], Yuriko Osakabe[1,3] ([1]Faculty of Bioscience and Bioindustry, Tokushima University, [2]Tokushima Agriculture, Forestry, and Fisheries Technology Support Center, [3]RIKEN, BZP)

PF-131 Isolation and analyses of potential transcriptional repressors that are involved in drought stress responses

Yoshimi Nakano, Keiko Kigoshi, Sumire Fujiwara (Bioprod. Res. Inst., AIST)

PF-132 Design of ABA-responsive synthetic promoters

Takumi Tsuchiya[1], ChengLi Zhao[1], Smita Sahoo[2], Sanjib K. Panda[2], Natsuki Hayami[1], Kyonoshin Maruyama[3], Satoshi Iuchi[4], Ryoya Tanabe[1], Yoshiharu Y. Yamamoto[1] ([1]Faculty of Applied Biological Sciences, Gifu University, [2]Indian Institute of Technology, Guwahati, [3]JIRCAS, [4]RIKEN BRC, [5]RIKEN CSRS)

PF-133 Effects of water deficit and high temperature stresses on the sugar compositions in the soluble sugar and cell wall polysaccharide fractions in a semi-shade brytophyte (*Plagiomnium acutum*)

Ryosuke Nakanishi[1], Yoh Sakuma[2], Masahiro Inouhe[2] ([1]Biology, Sci., Ehime Univ., [2]Biology, Grad. sch. sci. & Eng., Ehime Univ.)

PF-134 Analysis of transcription factors involved in the drought response of *Klebsormidium nitens*

Koichi Hori, Noriaki Tounosu, Kanami Sesoko, Mie Shimojima, Hiroyuki Ohta (School of Life Science and Technology, Tokyo Institute of Technology)

PF-135 Functional analysis and generation of knockout plants of tomato *NAD kinase2* by using CRISPR/Cas9 system

Ryosuke Hashimoto, Kohji Yamada, Keishi Osakabe, Yuriko Osakabe (Fac. Biosci. Bioindust., Tokushima Univ.)

PF-136 Functional analysis of ABI5-related bZIP transcription factors in drought tolerance of *Marchantia polymorpha*

Yuta Kidokoro[1], Daisuke Takezawa[2], Teruaki Taji[1], Yoichi Sakata[1], Izumi Yotsui[1] ([1]Dept. of Bioscience Tokyo Univ. of Agriculture, [2]Dept. of Regulatory Biology, Saitama Univ.)

PF-137 [Cancelled]

PF-138 Role of a Class I Fructose-1,6-Bisphosphate Aldolase for Salt Stress Tolerant Mechanism in a Halotolerant Cyanobacterium

Tanutcha Patipong[1,2], Takashi Hibino[1,3], Rungaroon Waditee-Sirisattha[2], Hakuto Kageyama[1,3] ([1]Grad. Sch. Environ. Hum. Sci., Meijo Univ., [2]Fac. Sci., Chulalongkorn Univ., [3]Fac. Sci. Tech., Meijo Univ.)

PF-139 Identification of salt-responsive ubiquitin ligases in *Arabidopsis thaliana*

Yasuhiro Takami, Masahiro Tamoi, Kaori Sako (Dept. Adv. Biosci., Kindai Univ.)

PF-140 Modifications of water status, growth rate and antioxidant system in two wheat cultivars as affected by salinity stress and salicylic acid

Naglaa Loutfy[2], Yoh Sakuma[1], Dharmendra Kumar Gupta[1], Masahiro Inouhe[1] ([1]Biology, Grad. Sch. Sci. & Eng., Ehime Univ., [2]Dept. Botany, South Valley Univ.)

PF-141 Anatomical and Sub-cellular Changes in Growing Rice Plants in Response to Drought and First Phase Salt Stresses

MD. Nesar Uddin[1,2], Yasuko Kaneko[1] ([1]Department of Natural Sciences, Faculty of Education, Graduate School of Science and Engineering, Saitama University, Saitama 338-8570, [2]Department of Crop Botany, Bangladesh Agricultural University, Mymensingh 2202, Bangladesh)

PF-142 Mechanisms of salt tolerance in wild accessions *Lotus japonicus*, and their effect on local adaptation

Yoshiko Isomura[1], Shusei Sato[1], Yusdar Mustamin[1], Madihah Manggabarani[1], Stig Andersen[2] ([1]Graduate School of Life Sciences, Tohoku University, [2]Aarhus University)

PF-143 Exploration of genes involved in different responses of barley and tomato to alkaline-nutrient solution

Kotono Tomita[1], Sho Nishida[2], Haruka Shirai[1], Akihiro Saitou[1], Takuji Ohyama[1], Kyoko Higuchi[1] ([1]Apli. Bio., Tokyo univ. Agri, [2]Agri., Saga Univ.)

PF-144 Overexpression of MATE transporter FRD3 attenuate toxicity of Sr on growth of *Arabidopsis thaliana*

Masaki Arai, Kouta Kawase, Takeshi Nagata (Setsunan University Faculty Science and Engineering)

PF-145 Damage of bismuth on root of IRT1 defective *Arabidopsis thaliana*

Takeshi Nagata[1], Makoto Nishimura[1], Satsuki Kimoto[2], Natsumi Yamano[1] ([1]Faculty of Science and engineering, Setsunan University, [2]Graduate School of Science and engineering, Setsunan University)

PF-146 The relationship between the gene expressions of SUF machinery and the accumulation of the photosystem I reaction center in iron-deficient barley leaves

Maya Katori[1], Akihiro Saito[2], Takuji Ohyama[2], Kyoko Higuchi[2] ([1]Grad. Sch. Agri. Chem., Tokyo Univ. Agri., [2]Agri. Chem., Tokyo Univ. Agri.)

PF-147 Effects of salicylic acid and heavy metal ions (Fe2+, Cu2+, Zn2+) on rice seed germination and seedling growth

Yutaro Daido[1], Satomi Hori[1], Yoh Sakuma[2], Masahiro Inouhe[2] ([1]Dept. Biol., Ehime Univ., [2]Biology, Grad. Sch. Sci & Eng., Ehime Univ.)

■ Environmental responses C

PF-148 *CoHT* regulates mRNA splicing at high-temperature in *Arabidopsis thaliana* accessions

Kazuho Isono[1], Keisuke Tanaka[2], Kousuke Hanada[3], Izumi Yotsui[1], Yoichi Sakata[1], Teruaki Taji[1] ([1]Dept. of Bioscience, Tokyo Univ. of Agriculture, [2]NODAI Genome Research Center, [3]Dept. of Bioscience and Bioinformatics, Kyushu Institute of Technology)

PF-149 Analysis of Protein Kinases in the Post-translational Regulation of the Stress-responsive Transcription Factor DREB2A

Junya Mizoi[1], Ryosuke Takahashi[1], Norihito Nakamichi[2,3], Toshinori Kinoshita[2,3], Kazuo Shinozaki[4], Kazuko Yamaguchi-Shinozaki[1] ([1]Grad. Sch. Agr. Life Sci., Univ. Tokyo, [2]ITbM, Nagoya Univ., [3]Grad. Sch. Sci. Nagoya Univ., [4]Center for Sustainable Resource Science, RIKEN)

PF-150 Development of gene expression-based prediction technique of grain filling impairment in rice

Takeshi Shiraya[1], Sayuri Ota[1], Toshiaki Mitsui[2,3], Yoichiro Fukao[4], Toru Tsuchida[5] ([1]Niigata Agr. Res. Inst., [2]Grad. Sch. Sci. & Tech., Niigata Univ., [3]Dept. Applied Biol. Chem., Niigata Univ., [4]Grad. Sch. Life Sci., Ritsumeikan Univ., [5]Niigata Crop Res. Center)

PF-151 Expression of the Anther-Specific Transcription Factor OsMYB80 is Down-Regulated under High-Temperature-Induced Male Sterility Conditions in Rice

Makiko Kawagishi-Kobayashi[1], Ryuji Kuroda[2], Yuzuru Tozawa[2], Atsushi Higashitani[3] ([1]NIAS, NARO, [2]Grad. Sch. Sci. Eng., Saitama Univ., [3]Grad. Sch. Life Sci., Tohoku Univ.)

PF-152 Relationships of SGs formation and HSPs expression in plants

Akie Miura[1], Takahito Takei[2], Yuichiro Watanabe[2,3], Takahiro Hamada[1,4] ([1]Okayama University of Science, [2]Grad. Sch. Sci., Univ. Tokyo, [3]Grad. Sch. Art and Sci., Univ. Tokyo, [4]JST PRESTO)

PF-153 Cold-induced degradation of PIF4 is mediated by ubiquitin E3 ligase HOS1 with ICE1 as a scaffold protein to regulate cold signaling

Renhu Na[1], Hiroki Okuda[1], Taketo Ogawa[2], Takuya Suzaki[1], Tsuyoshi Furumoto[2], Kenji Miura[1] ([1]Grad. Sch. Life. Sci., Univ. Tsukuba, [2]Grad. Sch. Sci., Hiroshima Univ.)

PF-154 Effects of Gajyumaru Latex and various chitinases on cell growth and cell wall formation in fission yeast

Momoko Terao[1], Hironori Niki[2], Yoh Sakuma[1], Masahiro Inouhe[1] ([1]Biology, Grad. Sch. Sci. & Eng., Ehime Univ., [2]Nat, Ins, Genetics.)

PF-155 Characterization of Sll1558 in Environmental Stress Tolerance of *Synechocystis* sp. PCC 6803

Junji Uchiyama[1,2,3], Ayumi Matsuhashi[2], Yuta Ichikawa[2], Mamoru Sambe[2], Hisataka Ohta[1,2,3] ([1]Fac. of Sci., Tokyo Univ. of Sci., [2]Dept. of Math. and Sci. Edu., Grad. Sch. of Math. and Sci. Edu., Tokyo univ. of Sci., [3]Dept. of Math. and Sci. Edu., Grad. Sch. of Sci., Tokyo univ. of Sci.)

PF-156 The effect of cell differentiation and gene expression in *Anabaena* sp. PCC7120 under acid stress

Masanori Sato[1], Kouichi Takahashi[1], Yukino Sakai[1], Junji Uchiyama[1,2], Hisataka Ohta[1,2] ([1]Dept. of Math. and Sci. Edu., Grad. Sch. of Sci., Tokyo Univ. of Sci., [2]Dept of Biol., Fac. of Sci., Tokyo Univ. of Sci.)

PF-157 Evolutional implication of sulfur dioxide-resistant mechanisms in plants

Lia Ooi, Yoko Ikeda, Izumi C. Mori (Institute of Plant Science and Resources, Okayama University)

PF-158 Mutagenic screening for *Arabidopsis thaliana* mutants altered with callose deposition during phosphate starvation response

Tan Anh Nhi Nguyen, Koei Yachi, Kentaro Okada, Tae-Hong Lee, Kei Hiruma, Yusuke Saijo (Nara Institute of Science and Technology (NAIST))

PF-159 Atmospheric nitrogen dioxide inhibits binding of PIF4 to the promoter region of auxin pathway genes to inhibit hypocotyl elongation in Arabidopsis

Misa Takahashi, Atsushi Sakamoto, Hiromichi Morikawa (Graduate School of Integrated Science for Life, Hiroshima Univ.)

PF-160 Comparison of the effect of allantoin and allantoic acid on stress gene expression in Arabidopsis

Taiki Fujibayashi[1], Yuhi Hashiguchi[2], Yiping Han[2], Hiroshi Shimada[1,2,3], Atsushi Sakamoto[1,2,3] ([1]Sch. Sci., Hiroshima Univ., [2]Grad. Sch. Sci., Hiroshima Univ., [3]Grad. Sch. Int. Sci. Life, Hiroshima Univ.)

PF-161 Analysis of glutathione metabolism and xenobiotic detoxification by γ-glutamyltransferase and phytochelatin synthase in Arabidopsis

Ryota Inoue, Naoto Nakamura, Yusuke Kadota, Takeru Yamane, Hisabumi Takase, Jiro Sekiya, Rafael Prieto (Department of Bioscience and Biotechnology, Kyoto University of Advanced Science)

■ Plant-organism interaction A

PF-162 Peptidomics approach to identify natural forms of microbe-associated molecular patterns

Sayaka Matsui[1], Kiyoteru Wakuri[1], Keiko Kuwata[2], Hidefumi Shinohara[1], Yoshikatsu Matsubayashi[1] ([1]Grad. Sch. Sci., Nagoya Univ., [2]ITbM, Nagoya Univ.)

PF-163 Analysis of receptor for flagellin derived from pathogenic bacteria in rice

Yuya Katsuragi[1], Takamasa Yasuda[2], Takehito Furukawa[1], Hiroyuki Hirai[1], Fang-Sik Che[1,2] ([1]Nagahama Inst. of Bio-Sci. and Tech., [2]Grad. Sch. of Biosci. Nagahama Inst. of Bio-Sci. and Tech.)

PF-164 Recognition mechanism of EFa50 derived from bacterial EF-Tu by receptor like kinase ERC1 in rice

Koki Iba[1], Takehito Furukawa[1], Hiroyuki Hirai[1], Fang-Sik Che[1,2,3] ([1]Dept. of Biosci., Nagahama Inst. of Bio-Sci. and Tech., [2]Grad. Sch. of Bio-Sci., Nagahama Inst. of Bio-Sci. and Tech., [3]Inst. of Genome Editing Res., Nagahama Inst. of Bio-Sci. and Tech.)

PF-165 Dissection of chitin signaling pathway in the moss *Physcomitrella patens* using a forward genetic approach

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

PF-166 Elicitor-active Pep peptide modulation of root system architecture and root-associated microbiome under phosphate deficiency in rice

Masako Fuji[1], Yuniar Devi Utami[1,2], Shigetaka Yasuda[1], Rena Tani[1], Yuichi Hongoh[2], Yutaka Sato[3], Yusuke Saijo[1] ([1]Grad. Sch. Sci. and Tech., NAIST, [2]Grad. Sch. Biosci. Biotech., Tokyo Institute of Technology, [3]National Institute of Genetics)

PF-167 NPR-mediated immune system in the model monocot *Brachypodium distachyon*

Kohei Shimizu[1], Takuya Uemura[1], Ryosuke Hoshino[1], Hitomi Suzuki[1], Akira Nozawa[2], Tatsuya Sawasaki[2], Ayako Yoshida[3], Makoto Nishiyama[3,4], Chiharu Nishiyama[1], Gen-ichiro Arimura[1] ([1]Dept. Bio. Sci. Tech., Tokyo Univ. Sci, [2]PROS., Univ. Ehime, [3]BRC., Univ. Tokyo, [4]CRIIM., Univ. Tokyo)

PF-168 Characterization of novel putative plant defense activators that promote resistance against *Pseudomonas syringae*, and accumulation of jasmonic acid in Arabidopsis

Masataka Nakano[1], Keito Yasue[2], Taiki Funahashi[2], Ippei Yamasaki[2], Yuho Saito[2], Nobutaka Kitahata[2,3], Takako Ishiga[4], Yasuhiro Ishiga[4], Hiroshi Abe[5], Seisuke Kimura[6], Kengo Morohashi[2], Tadao Asami[3], Kazuyuki Kuchitsu[1,2] ([1]Imaging Frontier

Center, Tokyo Univ. of Sci., [2]Dept. Appl. Biol. Sci., Tokyo Univ. of Sci., [3]Grad. Sch. Agri. & Life Sci., Univ. of Tokyo, [4]Fac. of Life & Env. Sci., Univ. of Tsukuba, [5]RIKEN, [6]Dept. of Bioresource & Envi. Sci., Kyoto Sangyo Univ.)

PF-169 In Silico Detection of Novel Leaf Rust Responsive microRNAs and Their Target Genes In Wheat (*Triticum aestivum* L.)
Uzma Afreen, Kunal Mukhopadhyay, Manish Kumar (Department of Bioengineering, Birla Institute of Technology)

PF-170 Transcription profiling of sugar-responsive modulation of pattern-triggered immunity in Arabidopsis plants
Xingwen Li[1], Kotaro Kusaka[1], Linnan Jie[1], Shigetaka Yasuda[2], Yusuke Saijo[2], Takeo Sato[1], Junji Yamaguchi[1] ([1]Fac. Sci. and Grad. Sch. Life Sci., Hokkaido Univ., [2]Grad. Sch. Biol. Sci., NAIST)

PF-171 Proteomic Study of Plant Leaf Epidermis Challenged with *Fusarium graminearum*
Yasir Sidiq[1], Daisuke Tamaoki[2], Takumi Nishiuchi[3] ([1]Graduate School of Natural Science and Technology, Kanazawa University, [2]Graduate School of Science and Engineering, University of Toyama, [3]Institute for Gene Research, Advanced Science Research Center, Kanazawa University)

PF-172 Histone modification-mediated control of systemic defense priming in *Arabidopsis thaliana*
Yi Ting Yeh, Yuri Tajima, Eliza Po-Iian Loo, Natsuki Shiraishi, Yusuke Saijo (NAIST)

PF-173 Functional analyses for candidate secretion effector proteins of plant growth-promoting endophytic fungi in *Arabidopsis thaliana*
Kazuki Tsurukawa[1], Shigetaka Yasuda[1], Kei Hiruma[1,2], Hong Ye[1], Kazuhiko Semba[3], Mutsumi Watanabe[1], Keisuke Tanaka[4], Teruaki Taji[5], Takayuki Tohge[1], Yoshiaki Nakao[3], Yusuke Saijo[1] ([1]Grad. Sch. Sci. Tech., NAIST, [2]JST PRESTO, [3]Grad. Sch. Eng., Kyoto Univ., [4]NODAI Genome Research Center, Tokyo Univ. Agric., [5]Dept. Biosci., Tokyo Univ. Agric.)

■ Plant-organism interaction B

PF-174 Single-cell RNAseq analysis of *Lotus japonicus* roots to elucidate the genetic mechanisms of cell division reactivation in legume cortical cells
Kai Battenberg[1,2], Thomas Kelly[2], Nicola A. Hetherington[2], Aki Minoda[2], Makoto Hayashi[1] ([1]RIKEN CSRS, [2]RIKEN IMS)

PF-175 The legume-rhizobial gene-for-gene interaction based on the *Lotus japonicus* and *Mesorhizobium loti* co-expression network
Tsuneo Hakoyama[1], Atsuko Hirota[1], Yoshikazu Shimoda[2], Makoto Hayashi[1] ([1]RIKEN CSRS Plant Symbiosis RT, [2]NARO NIAS)

PF-176 Exploring Genes Regulating To Host Specificity Of Legumes In Nodule Symbiosis By GWAS
Makoto Taniuchi[1], Stig Andersen[2], Tomomi Wakabayashi[3], Yasuyuki Kawaharada[1,4] ([1]Grad. Sch. Art. Sci., Iwate Univ., [2]Dept. MBG, Aarhus Univ., [3]CORE of STEM, Nara Women's Univ., [4]Dpt. Agr., Iwate Univ.)

PF-177 Reactive sulfur species interacts with small signal molecules in the root nodule symbiosis
Mitsutaka Fukudome[1], Hazuki Shimada[2], Nahoko Uchi[3], Ken-ichi Osuki[1], Haruka Ishizaki[2], Yuta Shimokawa[2], Toshiki Uchiumi[1] ([1]Grad. Sch. Sci. Eng., Kagoshima Univ., [2]Fac. Sci., Kagoshima Univ., [3]Grad. Sch. Med. Den., Kagoshima Univ.)

PF-178 Analysis of santhopine-mediated tobacco-Arthrobacter interaction
Tomohisa Shimasaki[1], Takashi Kawasaki[1], Yuichi Aoki[2], Kazufumi Yazaki[1], Akifumi Sugiyama[1] ([1]RISH, Kyoto Univ., [2]ToMMo, Tohoku Univ.)

PF-179 Elucidation Of Gall Cells' Morphology, Using *Arabidopsis thaliana*
Megumi Matsuzawa, Tomoko Hirano, Masa H. Sato (Life and Environ., Kyoto Pref. Univ.)

■ Epigenetic regulation

PF-180 Cell cycle-dependent epigenetic regulation of KNUCKLES for floral meristem determinacy in *Arabidopsis thaliana*
Margaret Anne Pelayo, Haruka Sawada, Katsumi Matsushita, Liang-Sheng Looi, Nobutoshi Yamaguchi, Toshiro Ito (Nara Institute of Science and Technology)

PF-181 Genome-wide seasonal dynamics of various histone modifications in natural environments
Haruki Nishio[1], Tasuku Ito[1], Mie N. Honjo[1], Tomoaki Muranaka[1], Naoko Emura[1,2], Hiroshi Kudoh[1] ([1]CER, Kyoto Univ., [2]Fac. Agri. Kagoshima Univ.)

PF-182 Analysis for Gene Silencing Mechanism by Plant Mobile Domain Proteins in Arabidopsis
Yoko Ikeda[1], Olivier Mathieu[2] ([1]IPSR, Okayama Univ., [2]GReD, CNRS, Inserm, Univ. Clermont Auvergne, France)

PF-183 Functional Analysis of RNA Polymerase IV, V in *Marchantia polymorpha*
Hikari Ikeda[1], Masayuki Tsuzuki[1], Mario Arteaga-Vazquez[2], Yuichiro Watanabe[1] ([1]Grad. Sch. Arts Sci., Univ. Tokyo, [2]Universidad Veracruzana)

■ Transcriptional, post-transcriptional or translational, post-translational regulations

PF-184 Functional analysis of transcription factor *LRL1* for root hair development in *Arabidopsis thaliana*

Koh Yamada[1], Mariko Kato[1], Tomohiko Tsuge[1], Takuji Wada[2], Rumi Tominaga-Wada[2], Li-Jia Qu[3], Takashi Aoyama[1] ([1]ICR., Univ. Kyoto, [2]Grad. Sch. Integrated Sciences for Life., Univ. Hiroshima, [3]Univ. Peking)

PF-185 Forward genetics approach to elucidate the UPR-associated root growth regulation

June-Sik Kim[1], Yuki Sakamoto[2,3], Fuminori Takahashi[1], Mikiko Kojima[1], Kaoru Urano[1], Hitoshi Sakakibara[1], Sachihiro Matsunaga[4], Kazuko Yamaguchi-Shinozaki[5], Kazuo Shinozaki[1] ([1]RIKEN CSRS, [2]IFC, RIST, Tokyo Univ. Sci., [3]Dept. of Bio. Sci., Grad. Sch. of Sci., Osaka Univ., [4]Dept. Applied Bio. Sci., Fac. Sci. Tech., Tokyo Univ. Sci., [5]Grad. Sch. Agri. Life Sci., Univ. Tokyo)

PF-186 Indeterminate Domain Transcription Factors And Gras Protein Cooperatively Control Gene Expression

Takuya Aoyanagi[1], Shun Ikeya[1], Akiko Kozaki[2] ([1]Grad. Sch. Sci tec., univ. Shizuoka, [2]Fac of Sci., univ. Shizuoka)

PF-187 Analyses of integration-dependent transcriptional and epigenetic alterations of the foreign genes in the plant genome

Kohei Kawaguchi[1], Mei Kazama[1], Takayuki Hata[1], Naoto Takada[1], Chihiro Hayakawa[1], Kazuki Mukae[2], Mitsuhiro Matsuo[1], Junichi Obokata[1,2], Soichirou Satoh[1,2] ([1]Grad. Sch. Life Env. Sci., Kyoto Pref. Univ., [2]Fac. Life Env. Sci., Kyoto Pref. Univ.)

PF-188 Post-transcriptional Expression Regulation of S_1 bZIP Family Genes in *Arabidopsis*

Shugo Sugawara[1], Hitoshi Onouchi[1], Satoshi Naito[1,2], Yui Yamashita[1] ([1]Grad. Sch. Agr., Hokkaido Univ., [2]Grad. Sch. LifeSci., Hokkaido Univ.)

PF-189 Functional analysis of a RNA-binding protein regulating the alternative splicing event of chloroplastic ascorbate peroxidese

Masato Yamada[1], Noriaki Tanabe[2], Yuichi Washizu[1], Takamasa Suzuki[3], Ayako Nishizawa-Yokoi[4,5], Kazuya Yoshimura[1] ([1]Dept. Food Nutr. Sci., Coll. Biosci. Biotech., Chubu Univ., [2]Dept. Adv. Biosci., Fac. Agr., Kindai Univ., [3]Dept. Biol. Chem., Coll. Biosci. Biotech., Chubu Univ., [4]NIAS, NARO, [5]JST, PRESTO)

PF-190 Study on the evolutionaly conserved AT-AC type introns

Takamasa Suzuki (Col. Biosci. Biotech., Chubu Univ.)

PF-191 DYW domains also contribute selection of RNA editing site in plant organelles

Ayako Maeda, Sachi Takenaka, Mizuki Takenaka (Grad. Sch. Sci., Kyoto Univ.)

■ Systems biology

PF-192 Neighbor GWAS: incorporating neighbor genotypic identity into genome-wide association studies of field herbivory on *Arabidopsis thaliana*

Yasuhiro Sato[1,2], Eiji Yamamoto[1,3], Kentaro K Shimizu[4,5], Atsushi J. Nagano[2] ([1]JST PRESTO, [2]Ryukoku University, [3]Kazusa DNA Research Institute, [4]University of Zurich, [5]Yokohama City University)

PF-193 Assembly and comparative analysis of *Rorippa aquatica* chromosome

Tomoaki Sakamoto[1], Takuya Sakamoto[2], Sachihiro Matsunaga[2], Seisuke Kimura[1] ([1]Life Sci., Kyoto Sangyo Univ., [2]Sci. and Tech., Tokyo Univ. of Sci.)

PF-194 Integrative systems biology approach to understand dynamics of grafting in *Nicotiana benthamiana*

Amit Rai[1], Megha Rai[1], Tetsuya Mori[2], Mami Yamazaki[1], Michitaka Notaguchi[3], Ryo Nakabayashi[2] ([1]Department of Molecular Biology and Biotechnology, Graduate School of Pharmaceutical Sciences, Chiba University, [2]RIKEN CSRS, [3]Nagoya University)

PF-195 Diversity of developmental trajectories in barley under field conditions

Keiichi Mochida[1,2,3], Kotaro Takahagi[1,2], Yukiko Uehara-Yamaguchi[1], Komaki Inoue[1], Asaka Kanatani[1], Minami Shimizu[1], Daisuke Saisho[3], Takashi Hirayama[3] ([1]RIKEN CSRS, [2]Yokohama City U., KIBR, [3]Okayama Univ., IPSR)

PF-196 Diversity of physiological states in diverse barley accessions under field conditions

Takashi Hirayama[1], Kotaro Takahagi[2], Komaki Inoue[3], Yukiko Uehara-Yamaguchi[3], Asaka Kanatani[3], Daisuke Saisho[1], Takakazu Matsuura[1], Satoshi Okada[1], Jun Ito[2], Yoko Ikeda[1], Yasuhiro Matsushita[4], Hiroyuki Tsuji[2], Keiichi Mochida[1,2,3] ([1]IPSR, Okayama Univ., [2]KIBR, YCU, [3]CSRS, RIKEN, [4]SET Software Co., Ltd.)

■ New technology

PF-197 Comparing technologies for single-cell transcriptome analysis in *Arabidopsis thaliana* root tissue

Thomas Kelly[1], Nicola A. Hetherington[1], Kai Battenberg[1,2], Miho Kihira[3], Shiori S Aki[3], Haruka Yabukami[1], Tsukasa Kouno[1], Masaaki Umeda[3], Makoto Hayashi[2], Aki Minoda[1] ([1]RIKEN Center for Integrative Medical Sciences, [2]RIKEN Center for Sustainable Resource Science, [3]Nara Institute of Science and Technology)

PF-198 Novel Method of Agroinfiltration in *Arabidopsis thaliana*

Jun Nakayama, Miho Ikeda, Masaru Ohme-Takagi (Grad. Sch. Sci. and Eng., Univ. Saitama)

PF-199 Efficient agroinfiltration method for Amaranthaceae

Choyo Tai[3], Shigeo S. Sugano[1,2], Tatsuya Kageyama[4], Yoichiro Fukao[3,4] ([1]Bioproduction I., AIST, [2]R-GIRO, Ritsumeikan U., [3]Grad. Sch. Life Sci., Ritsumeikan U., [4]Dept. Life Sci., Ritsumeikan U.)

PF-200 A space-saving visual screening method, *Glycine max* FAST, for generating transgenic soybean

Kosei Iwabuchi[1], Takashi Shimada[2], Tetsuya Yamada[3], Ikuko Hara-Nishimura[1] ([1]Grad. Sch. Nat. Sci., Konan Univ., [2]Grad. Sch. Hort., Chiba Univ., [3]Grad. Sch. Agr., Hokkaido Univ.)

PF-201 Functional analyses of TRYPTICHON homologues of *Solanum lycopersicum*

Takashi Fujiwara[1], Kazufumi Yazaki[2], Takashi Aoyama[1] ([1]ICR, Univ. Kyoto, [2]RISH, Univ. Kyoto)

PF-202 Genome editing in commercial tomato cultivars by geminivirus-mediated CRISPR/Cas9 vector

Katsuhisa Yamada, Chihiro Hara, Yuriko Osakabe, Keishi Osakabe (Fac. Biosci. Bioindust., Tokushima Univ.)

PF-203 A brochure for understanding of genome-edited foods

Nozomu Koizumi (Grad. Sch. Life&Sci. Osaka Pref. Univ.)

PF-204 Visualization of common structures in cyanobacteria *Prochlorococcus* cells by using X-ray diffraction imaging with X-ray free-electron laser

Amane Kobayashi[1,2], Yuki Takayama[1,2,3], Takeshi Hirakawa[4], Koji Okajima[1,2], Mao Oide[1,2], Tomotaka Oroguchi[1,2], Yayoi Inui[4], Masaki Yamamoto[1], Sachihiro Matsunaga[4], Masayoshi Nakasako[1,2] ([1]RIKEN SPring-8 Center, [2]Faclt. Sci. Tech., Keio Univ., [3]Schl. Sci. Univ. Hyogo, [4]Faclt. Sci. Tech., Tokyo Univ. Sci.)

PF-205 Designing iron-sulfur protein based nitric oxide sensing indicators

Jiro Nomata, Toru Hisabori (LCLS, Tokyo Tech.)

PF-206 Detection of DNA damage from radiation by Arabidopsis callus harboring an alternative beta-glucuronidase reporter gene in field of Fukushima

Shinya Takahashi[1], Masanori Tamaoki[2] ([1]Univ. Tsukuba, [2]Natl. Inst. Env. Stud.)

■ Others

PF-207 Collection and Maintenance of Plant Cell Lines at RIKEN BRC in FY2020

Toshihiro Kobayashi, Masatomo Kobayashi (RIKEN BRC)

PF-208 The Search Function of the Plant BioResource Database, Exp-Plant Catalog, in RIKEN BRC

Satoshi Iuchi, Masatomo Kobayashi (RIKEN BRC Experimental Plant Division)

PF-209 Updated resources in the National BioResource Project *Lotus* / *Glycine*

Shusei Sato[1], Yoshiko Isomura[1], Yusdar Mustamin[1], Madihah Manggabarani[1], Stig Andersen[2], Nadia Kamal[3], Klaus Mayer[3], Masatsugu Hashiguchi[4], Hidenori Tanaka[4], Ryo Akashi[4] ([1]Grad. Sch. Life Sci., Tohoku Univ., [2]Aarhus Univ., [3]Helmholtz Zentrum Munchen, [4]Fac. Agri., Univ. Miyazaki)

PF-210 Genome wide association study identifies candidate SNPs that contribute to the growth and exudation of rice root

Yunshu Wang[1], Zhihang Feng[1], Ting Yang[2], Mengyao Wang[1], Qing Wang[3], Bian Bian[1], Shota Teramoto[1], Yufang Lu[2], Takehiro Kamiya[1], Weiming Shi[2], Toru Fujiwara[1] ([1]Grad. Sch. Agri., Univ. Tokyo, [2]State Key Laboratory of Soil and Sustainable Agriculture, Institute of Soil Science, Chinese Academy of Sciences, Nanjing, China, [3]Beijing Key Laboratory of Growth and Developmental Regulation for Protected Vegetable Crops, College of Horticulture, China Agricultural University, Beijing, China)

PF-211 [Cancelled]

PF-212 [Cancelled]

PF-213 Chromosome-level genome assembly of liverwort *Marchantia polymorpha* and updates of the genome database MarpolBase

Yasuhiro Tanizawa[1], Masaru Yagura[1], Mika Sakamoto[1], Takako Mochizuki[1], Sean A. Montgomery[2], Bence Galik[2], Shohei Yamaoka[3], Ryuichi Nishihama[3], Katsuyuki T. Yamato[4], Takayuki Kohchi[3], Frederic Berger[2], Chang Liu[5], Yasukazu Nakamura[1] ([1]Genome Informatics Lab., NIG, [2]GMI, [3]Grad. Sch. of Biostudies, Kyoto Univ., [4]B.O.S.T., Univ. Kindai, [5]ZMBP, Univ. Tubingen)

PF-214 Robust analysis using GC/MS for crude samples which cause reduce the sensitivity

Aya Anegawa, Hidetaka Anazawa, Sadao Nakamura (Agilent Technologies Japan, Ltd)

■ Reproductive growth

PF-215 Effects of mechanical forces on floral development in *Arabidopsis thaliana*

Akitoshi Iwamoto[1], Yuna Yoshioka[2], Ryuta Karube[1], Yohei Tanoue[1] ([1]Dept. Biol. Sci., Fac. Sci., Kanagawa Univ., [2]Dept. Biol., Tokyo Gakugei Univ.)

■ Photosynthesis

PL-001 Time-resolved spectroscopy of energy and electron transfer processes in the reaction center from *Heliobacterium modesticaldum*

Risa Kojima[1], Hayata Yamamoto[2], Chihiro Azai[3], Daisuke Kosumi[4], Hirozo Ohoka[1] ([1]Grad. Sch. Sci., Osaka Univ., [2]Grad. Sch. Sci. & Tech., Kumamoto Univ., [3]Coll. Life Sci., Ritsumeikan Univ., [4]Inst. Pulsed Power Sci., kumamoto Univ.)

PL-002 Chloroplasts inside leaves and differentiated cyanobacterial cells analyzed by Raman scattering spectral microscopy with a fast line-scanning parallel acquisition in the near infrared region

Kouto Tamamizu[1], Mitsunori Katayama[2], Masahide Terazima[1], Takashi Shiina[3], Shigeichi Kumazaki[1] ([1]Grad. Sch. Sci., Kyoto Univ, [2]Coll. Ind. Tech., Nihon Univ, [3]Grad. Sch. Life and Environ., Kyoto Pref. Univ.)

PL-003 Spatial Heterogeneity in the Mode of State Transition within Single *Chlamydomonas reinhardtii* Cells Observed by High Resolution Cryogenic Optical Microscope

Yuki Fujita, Xianjun Zhang, Yutaka Shibata (Organic Physical Chemistry Lab., Tohoku Univ.)

PL-004 Response to far-red light in the primary process of photosynthesis using red-shifted chlorophyll *a*

Hiroto Matsuzaka[1], Yoshifumi Ueno[2], Jian-Ren Shen[3], Ryo Nagao[3], Fei Wang[4], Hideaki Miyashita[4], Seiji Akimoto[1,2] ([1]Fac. Sci., Kobe Univ., [2]Grad. Sch. Sci., Kobe Univ., [3]RIIS, Okayama Univ., [4]Grad. Sch. Hum. Environ. Stud., Kyoto Univ.)

PL-005 Kinetic analysis of the $NADP^+$ reduction reaction catalyzed by the ferredoxin-$NAD(P)^+$ reductase in the presence of ferredoxin

Daisuke Seo[1], Masaharu Kitashima[2], Kazuhito Inoue[2] ([1]Grad. Sch. Nat. Sci. &Tec., Kanazawa Univ., [2]Dep. Bio. Sci., Fac. Sci, Kanagawa Univ.)

PL-006 The regulation of the pmf by the NDH complex and KEA3

Leonardo Basso[1], Wataru Yamori[2], Toshiharu Shikanai[1] ([1]Grad. Sch. Sci., Univ. Kyoto, [2]Grad. Sch. Sci., Univ. Tokyo)

PL-007 Activity of novel membrane proteins involved in maintenance of chloroplast H+ homeostasis

Akira Hashimoto[1], Yoichi Nakahira[2], Masaru Tsujii[3], Nobuyuki Uozumi[3], Shinji Masuda[4] ([1]School of Life Sciences and Technology, Tokyo Insitute of Technology, [2]College of Agriculture, Ibaraki University, [3]Department of Biomolecular Engineering, Graduate School of Engineering, Tohoku University, [4]Center for Biological Resources & Informatics, Tokyo Institute of Technology)

PL-008 Characterization of novel factors controlling light-dependent proton homeostasis in cyanobacteria

Haruya Inago[1], Shinji Masuda[2] ([1]Department of Life Sciences and Technology, Tokyo Institute of Technology, [2]Center for Biological Resources and Informatics, Tokyo Institute of Technology)

PL-009 Characterization of cyanobacterial variants lacking photosynthetic growth ability isolated by long-term adaptation to chemoheterotrophic conditions in the dark

Shintaro Hida[1], Haruki Yamamoto[1], Kazuma Uesaka[2], Kunio Ihara[2], Shinichi Takaichi[3], Yuichi Fujita[1] ([1]Grad. Sch. Bioagricultural. Sci., Nagoya Univ., [2]Center for Gene Research., Nagoya Univ., [3]Fac. Life Sci., Tokyo Univ. Agric.)

PL-010 Reveal Of Selective Use Of Photosynthetic Electron Transport Pathway In *Synechocystis* sp. PCC 6803 Under Different Spectral Light Conditions By FBA Simulation

Masakazu Toyoshima[1], Chiaki Yamamoto[1], Yoshifumi Ueno[2], Yoshihiro Toya[1], Seiji Akimoto[2], Hiroshi Shimizu[1] ([1]Department of Bioinformatic Engineering, Graduate School of Information Science and Technology, Osaka University, [2]Department of Chemistry, Graduate School of Science, Kobe University)

PL-011 Diverse physiological roles of the two routes of cyclic electron flow around photosystem I in C_4 *Flaveria bidentis*

Takako Ogawa, Kana Kobayashi, Yuri Munekage (Grad. Sch. Sci. & Tec., Univ. Kwansei Gakuin)

PL-012 Elucidation of photobleaching suppression mechanism by LHCSR-NPQ in the green alga *Chlamydomonas reinhardtii*

Keisuke Okajima[1,2], Shunichi Takahashi[1,2], Jun Minagawa[1,2] ([1]Department of Basic Biology, School of Life Science, Graduate University for Advanced Science, [2]Division of Environmental Photobiology, National Institute for Basic Biology)

PL-013 Reconstitution of assembly process of dark-operative protochlorophyllide oxidoreductase with BchN and BchB individually expressed in Escherichia coli

Yoshiki Morimoto, Masanori Yamamoto, Hisanori Yamakawa, Haruki Yamamoto, Yuichi Fujita (Grad. Sch. Bioagricultural. Sci., Nagoya Univ)

PL-014 The chloroplast enzymes involved in chlorophyll degradation are localized in the grana margins in *Arabidopsis thaliana*

Kouki Fukura, Ryouichi Tanaka, Hisashi Ito (Inst Low Temp Sci, Hokkaido Univ)

PL-015 Subcellular immunogold localization of chlorophyllase in the leaves of *Pachira macrocarpa*

Tin-Han Shih, Jun-Wei Lin, Szu-Hsien Lin, Chi-Ming Yang (Biodiversity Research Center Academia Sinica)

PL-016 Identification of the chemical compounds that inhibit photosynthesis in dicotyledonous plants, Arabidopsis and tobacco

Fumiyoshi Myouga, Kazuo Shinozaki (RIKEN CSRS)

PL-017 Phylogenetic analysis of mitochondrial pyruvate carrier homologues in *Panicum miliaceum*

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

PL-018 Construction of some mutant strains selectively expressing alternative nitrogenase in *Anabaena* sp. PCC 7120 and the availability for photobiological H_2 production

Takeshi Sato[1,3], Honami Mizutani[2], Riho Yanai[1], Minh Chau Tran[1], Chika Shibata[1], Hidehiro Sakurai[3], Kazuhito Inoue[1,2,3] ([1]Dept. Biol. Sci., Kanagawa Univ., [2]Dept. Biol. Sci., Grad. Sch. Sci., Kanagawa Univ., [3]Res. Inst. Integr. Sci., Kanagawa Univ.)

PL-019 Metabolic engineering attempts to convert β-carotene to retinal in *Rhodobacter capsulatus* chromatophore membrane

Kaori Shimizu[1], Shinichi Takaichi[2], Kazuhiko Saeki[1] ([1]Department of Biological Sciences, Nara Women's University, [2]Department of Molecular Microbiology, Tokyo University of Agriculture)

PL-020 Genomic analysis and genome editing of the diatom *Chaetoceros gracilis*

Minoru Kumazawa[1], Hiroyo Nishide[2], Ikuo Uchiyama[2], Natsuko Inoue-Kashino[3], Yasuhiro Kashino[3], Takeshi Nakano[1,4], Kentaro Ifuku[1,4] ([1]Facl. Agri., Kyoto Univ, Kyoto., [2]NIBB, Okazaki, Aichi., [3]Grad. Sch. Life Sci., Univ. Hyogo, Hyogo., [4]Grad. Sch. Biostudies., Kyoto Univ., Kyoto.)

■ Environmental responses of photosynthesis

PL-021 Biphasic state transitions for regulating Liner and Cyclic electron flows

Kenji Takizawa[1,2,3], Ryutaro Tokutsu[1,3], Jun Minagawa[1,3] ([1]NIBB, [2]ABC, [3]SOKENDAI)

PL-022 Responses of energy-transfer processes in two diatom species to fluctuating lights with different cycles

Miyuki Tanabe[1], Yoshifumi Ueno[1], Makio Yokono[2], Jian-Ren Shen[3], Ryo Nagao[3], Seiji Akimoto[1] ([1]Grad. Sch. Sci., Kobe Univ., [2]Nippon Flour Mills Co., Ltd., [3]RIIS, Okayama Univ.)

PL-023 Spectral changes of *Acaryochloris marina* in response to different light qualities

Zhe Wang[1], Yoshifumi Ueno[1], Reona Toyofuku[2], Tatsuya Tomo[2], Seiji Akimoto[1] ([1]Grad. Sch. Sci., Kobe Univ., [2]Fac. Sci., Tokyo Univ. Sci)

PL-024 Evaluation of ATP and NADPH production rates in photosynthesis in *Synechocystis* sp. PCC 6803 based on ^{13}C metabolic flux analysis

Chiaki Yamamoto[1], Sayaka Kitamura[1], Masakazu Toyoshima[1], Yoshifumi Ueno[2], Yoshihiro Toya[1], Seiji Akimoto[2], Hiroshi Shimizu[1] ([1]Grad. Sch. Inf., Univ. Osaka, [2]Grad. Sch. Sci., Univ. Kobe)

PL-025 Attempts to increase free fatty acid production by reducing the degree of lipid unsaturation in *Synechocystis* sp. PCC 6803

Sumie Keta[1], Honoka Saruhashi[1], Yuuya Senoo[2], Kazutaka Ikeda[2], Tatsuo Omata[3], Makiko Aichi[1] ([1]Biol. Chem., Chubu Univ., [2]Kazusa DNA Res., [3]Grad. Sch. Bioagri. Sci., Nagoya Univ.)

PL-026 Phospho-protemics analysis of Arabidopsis *vitamin C deficient 3* mutant in response to light

Yasuhiro Tanaka[1], Takanori Maruta[1], Takahisa Ogawa[1], Masaru Mori[2,3] ([1]Grad. Sch. Nat. Sci. Technol., Shimane Univ.,, [2]Instit. Adv. Biosci., Keio Univ.,, [3]SFC Grad. Sch. Media Govern., Keio Univ.)

PL-027 Photosynthesis under low dissolved inorganic carbon condition in the amphibious plant *Hygrophila polysperma*

Genki Horiguchi[1], Kaori Matsumoto[2], Naoki Hirotsu[1,2] ([1]Grad. Sch. Life Sci., Univ. Toyo, [2]Dept. Life Sci., Univ. Toyo)

PL-028 Molecular basis of persulfide sensing involved in sulfide-mediated regulation of physiological activities

Takayuki Shimizu[1], Shinji Masuda[2], Tatsuru Masuda[1] ([1]Grad. Sch. Arts and Sci., Univ. Tokyo, [2]Cent. Biol. Res. and Inform., Tokyo Inst. Technol.)

PL-029 Changes in chloroplast function associated with photoautotrophic acquisition in cultured cells

Gen Takenaka, Satomi Takeda (Dept. Biol, Grad. Sch. Sci., Osaka Prefecture Univ.)

■ Primary metabolism

PL-030 Analysis of a lipid transfer protein involved in the plastid lipid metabolism in *Marchantia polymorpha*

Takashi Hirashima[1], Haruhiko Jimbo[1], Koichi Kobayashi[2], Hajime Wada[1] ([1]Graduate School of Arts and Sciences, University of Tokyo, [2]Faculty of Arts and Sciences, Osaka Prefecture University)

PL-031 A heat-inducible lipase gene involves in glycerolipid remodeling in plant leaves

Yasuhiro Higashi[1], Yozo Okazaki[1,2], Kouji Takano[1], Kazuki Saito[1,3] ([1]CSRS, RIKEN, [2]Grad. Sch. Bioresources, Mie Univ., [3]Grad. Sch. Pharm. Sci., Chiba Univ.)

PL-032 Construction of LC-PUFA synthesis system in the marine microalga *Nannochloropsis oceanica*

Chinatsu Nagai[1], Takashi Nobusawa[2], Masako Iwai[1], Yuko Sasaki-Sekimoto[1], Masakazu Saito[3], Hajime Wada[3], Mie Shimojima[1], Hiroyuki Ohta[1] ([1]School of Life Science and Technology, Tokyo Institute of Technology, [2]Graduate School of Integrated Sciences for Life, Hiroshima University, [3]Graduate School of Arts and Sciences, The University of Tokyo)

PL-033 A search for the regulator controlling lipid remodeling under phosphorus starvation in Nannochloropsis

Yunato Kuroyanagi[1], Hiroki Murakami[2], Masako Iwai[1], Koichi Hori[1], Mie Shimojima[1], Hiroyuki Ohta[1] ([1]School of Life Science and Technology, Tokyo Institute of Technology, [2]Graduate School of Integrated Sciences for Life, Hiroshima University)

PL-034 Engineering of Arabidopsis plants to increase oil content in leaves

Eiki Yoshida, Hiroyuki Ohta, Mie Shimojima (School of Life Science and Technology, Tokyo Institute of Technology)

PL-035 Red light-induced activation of nitrate acquisition in *Arabidopsis thaliana*

Yuma Onoue, Yasuhito Sakuraba, Shuichi Yanagisawa (Biotech. Res. Center, Univ. Tokyo)

PL-036 Analysis of the degradation mechanism of NIN-LIKE PROTEIN (NLP) transcription factors responsible for nitrate responses in plants

Takuto Ariga, Yasuhito Sakuraba, Mineko Konishi, Shuichi Yanagisawa (Biotech. Res. Center, Univ. Tokyo)

PL-037 Screening of dynamic NH_4^+ responsive rice varieties by combing the developed hydroponic culture system and ccd camera based image analysis

Keisuke Kutsuwada[1], Kouji Takano[2], Makoto Kobayashi[2], Kaoru Ebana[3], Takaya Tanabata[4], Miyako Kusano[1,2] ([1]Agro. Bio. Res. Sci., Univ. Tsukuba, [2]CSRS., Riken, [3]NARO, [4]Kazusa DNA Inst.)

PL-038 Search of sucrose responsible promoter in rice callus

Hiroshi Teramura, Mariko Ohnuma, Ibuki Aihara, Hiroaki Shimada (Department of Biological Science and Technology, Tokyo University of Science)

■ Secondary (specialized) metabolism

PL-039 Elucidation of Isoflavonoid Metabolism by Omics Analyses of Genome-edited Soybean Hairy Root

Kai Uchida[1], Yuji Sawada[1], Muneo Sato[1], Jun Inaba[1], Yutaka Yamada[1], Hiroshi Tsugawa[1], Tomoyoshi Akashi[2], Masami Yokota Hirai[1] ([1]RIKEN CSRS, [2]Dept. Appl. Biol. Sci. Nihon Univ.)

PL-040 Two β-Glucosidases, BGLU28 and BGLU30, are Responsible for Sulfur Deficiency-Induced Glucosinolate Catabolism in *Arabidopsis*

Liu Zhang[1], Ryota Kawaguchi[1], Tomomi Morikawa-Ichinose[1], Alaa Allahham[1], Sun-Ju Kim[2], Akiko Maruyama-Nakashita[1] ([1]Grad. Sch. Bio-Environ. Sci., Univ. Kyushu, [2]Univ. Chungnam National)

PL-041 Analysis of glucose metabolism control mechanism of FLO2 gene using *Arabidopsis thaliana* flo2 mutant

Ryoko Matsushita[1,2], Miho Kihira[3], Nonoka Sato[1], Yohe Ishi[1], Chihiro Kaneko[1], Yong-Gen Yin[2], Nobuo Suzui[2], Naoki Kawachi[2], Hiroaki Shimada[1] ([1]Grad. Bio. Tech., Univ. Tokyo Univ. Sci., [2]Takasaki Inst., QST, [3]Nara Inst. Sci. Tech.)

PL-042 Analysis of Changes in Secondary metabolism along with Plant Growth in *Catharanthus roseus* Leaves

Mai Uzaki[1], Kotaro Yamamoto[2], Yuko Kurita[3], Miwa Ohnishi[4], Carlos E. Rodriguez-Lopez[2], Chizuko Shichijo[1], Katsutoshi Takahashi[5], Atsushi J. Nagano[3], Kimitsune Ishizaki[1], Hidehiro Fukaki[1], Sarah E. O'Connor[2], Tetsuro Mimura[1] ([1]Grad. Sch. Sci., Kobe Univ., [2]Dept. Nat. Prod. Bio., MPI, [3]Dept. Agr., Ryukoku Univ., [4]Grad. Sch. Sci., Technol. and Innov., [5]AIST)

PL-043 Expression of an Alkaloid Transporter NtJAT1 Increases the Alkaloid Production in Stylopine-producing Pichia Cells

Miya Urui[1], Yasuyuki Yamada[1], Hidehiro Oki[1], Nana Sumida[1], Hiromichi Minami[2], Fumihiko Sato[3,4], Nobukazu Shitan[1] ([1]Kobe Pharma. Univ., [2]Ishikawa Pref. Univ., [3]Kyoto Univ., [4]Osaka Pref. Univ.)

PL-044 Transcriptome analysis of autumn foliage in *Egeria densa*

Takuya Hara[1], Emi Okamoto[1], Takashi Tsujimoto[1], Taira Miyahara[2], Masahiro Nishihara[3], Motoki Shimizu[3], Yoshihiro Ozeki[1] ([1]Tokyo University of Agriculture and Technology, [2]Chiba University, [3]Iwate Biotechnology Research Center)

PL-045 Functional identification of myxol biosynthesis genes in marine flavobacteria *Nonlabens spongiae*

Keisuke Nakazawa[1], Kenjiro Sugiyama[1], Masaharu Yamada[1], Susumu Yoshizawa[2], Shinichi Takaichi[3] ([1]Kogakuin Univ., [2]Grad. Sch. Front. Sci., Univ. Tokyo, [3]Fac. Life Sci., Tokyo Univ. Agric.,)

PL-046 Comparison of different methods and datasets for genome-wide association study -a case study in sorghum

Xu Chen[1], Kiyoshi Yamazaki[1], Bian Bian[1], Hideki Takanashi[1], Masaru Fujimoto[1], Nobuhiro Tsutsumi[1], Hiromi Kajiya-Kanegae[1], Motoyuki Ishimori[1], Hiroyoshi Iwata[1], Toru Fujiwara[1], Junichi Yoneda[2], Taichi Koshiba[2], Tsuyoshi Tokunaga[2], Masaomi Yamamura[3], Yuki Tobimatsu[3], Toshiharu Umezawa[3] ([1]Graduate School of Agricultural and Life Sciences, The University of Tokyo, [2]EARTHNOTE Co., Ltd., [3]Research Institute for Sustainable Humanosphere, Kyoto Univeristy)

PL-047 [Cancelled]

■ Biomembrane/Ion and solute transport

PL-048 Role of the cornichon family in plant adaptation to nutrient stress

Chang-Yi Chiu, Tzu-Yin Liu (Institute of Bioinformatics and Structural Biology, NTHU)

PL-049 Identification of a transporter for preferential distribution of phosphorus in Arabidopsis

Guangda Ding[1,2], Gui Jie Lei[1], Naoki Yamaji[1], Kengo Yokosho[1], Namiki Mitani-Ueno[1], Sheng Huang[1], Jian Feng Ma[1] ([1]IPSR, Okayama Univ., [2]Huazhong Agr. Univ.)

PL-050 Short-term Magnesium Deficiency Triggers Nutrient Retranslocation in *Arabidopsis thaliana*

Takaaki Ogura[1], Natsuko I. Kobayashi[1], Christian Hermans[2], Yoshimi Ohmae[1], Yasunori Ichihashi[3], Arisa Shibata[4], Ken Shirasu[4], Naohiro Aoki[1], Ryohei Sugita[1], Takahiro Ogawa[1], Hisashi Suzuki[5], Ren Iwata[6], Tomoko M. Nakanishi[1,7], Keitaro Tanoi[1] ([1]GSALS, Univ. Tokyo, [2]Interfaculty Sch. Bioengineers, ULB, [3]BRC, RIKEN, [4]CSRS, RIKEN, [5]NIRS, QST, [6]CYRIC, Tohoku Univ., [7]Hoshi Univ.)

PL-051 Contribution of Root Hair to Sulfate Uptake in Arabidopsis

Akiko Maruyama-Nakashita[1], Yuki Kimura[1], Tsukasa Ushiwatari[1], Akiko Suyama[1], Rumi Tominaga-Wada[2], Takuji Wada[2] ([1]Fac. Agr. Kyushu Univ., [2]Grad. Sch. Biosphere Sci. Hiroshima Univ.)

PL-052 A search for flavin transporters in plants

Takuto Sugimoto[1], Miho Harada[2], Hikari Kuwata[2], Takanori Maruta[1,2], Takahiro Ishikawa[1,2], Kazuya Yoshimura[3], Shigeru Shigeoka[4], Takahisa Ogawa[1,2] ([1]Grad. Sch. Nat. Sci. Technol., Shimane Univ., [2]Dept. Life Sci. Biotechnol., Fac. Life Environ. Sci., Shimane Univ., [3]Dept. Food Nutr. Sci., Coll. Biosci. Biotech., Chubu Univ., [4]Exp. Farm, Kindai Univ.)

PL-053 Characterization of photosynthesis-dependent activation of plasma membrane H^+-ATPase in Arabidopsis leaves

Satoru Kinoshita[1], Masaki Okumura[1,2], Toshinori Kinoshita[1,3] ([1]Grad. Sch. of Science, Nagoya Univ., [2]Dep. of Plant and Microbial Biol., Univ. of Minnesota, [3]WPI-ITbM, Nagoya Univ.)

■ Organelles/Cytoskeleton

PL-054 Mitochondrial genome editing by mitoTALEN: Gene disruption of *ATP6* genes and inheritance of the mutated genome in *Arabidopsis thaliana*

Yu Tsuruta, Hajime Sugaya, Shungo Yanase, Yuta Watari, Yoshiko Tamura, Nobuhiro Tsutsumi, Shin-ichi Arimura (Grad. Sch. Agri., Univ. Tokyo)

PL-055 Roles of Myosin XI-I in Mitochondrial Movement in *Arabidopsis thaliana*

Yingqi Wang[1], Atsuki Onishi[1], Md. Sayeedul Islam[1], Yuuko Miyatake[2], Zhongrui Duan[2], Motoki Tominaga[2], Shingo Takagi[1] ([1]Grad. Sch. Sci., Osaka Univ., [2]Fac. Educ. Integrated Arts. Sci., Waseda Univ.)

PL-056 Roles of Arabidopsis DUF538 family proteins in the endoplasmic reticulum stress response

Kazue Kanehara, Chao-Yuan Yu (Institute of Plant and Microbial Biology, Academia Sinica)

PL-057 Decreased Expression Of ATG8-interacting Proteins (ATI1 and ATI2) Does Not Influence Chloroplast-targeted Autophagy (Chlorophagy) In Arabidopsis

Tsubasa Nishimura[1], Shinya Wada[2], Masanori Izumi[3,4], Sakuya Nakamura[3], Amane Makino[1], Gad Galili[5], Hiroyuki Ishida[1] ([1]Grad. Schl. Agr. Sci., Tohoku Univ., [2]Grad. Schl. Agr. Sci., Kobe Univ., [3]CSRS, RIKEN, [4]PREST, JST, [5]Weizmann Institute of Science)

PL-058 The role of autophagy in phosphate homeostasis in Arabidopsis

Tzu-Yin Liu, Li-Yen Lin, Wen-Chun Chou (Institute of Bioinformatics and Structural Biology, National Tsing Hua University)

PL-059 2,4-Dichlorophenoxyacetic acid-induced depolymerization of actin is regulated by ROP-INTERACTIVE CRIB MOTIF-CONTAINING proteins

Kenji Sugita[1], Maho Takahashi[1], Kana Umetsu[1], Abidur Rahman[1,2,3] ([1]Grad. Sch. Sci., Univ. Iwate, [2]UGAS., Univ. Iwate, [3]AIC., Univ. Iwate)

PL-060 Proteome analysis of protoplasts at mitotic metaphase

Yuuka Yamazaki[1], Takumi Nishiuchi[2], Ichirou Karahara[3], Daisuke Tamaoki[3] ([1]Dept. Biol., Sch. Sci., Univ. Toyama, [2]ASRC, Kanazawa Univ., [3]Fac. Sci., Acad. Assemb., Univ. Toyama)

PL-061 Live imaging of rhizoid growth and functional analysis of armadillo-repeat kinesin in *Marchantia polymorpha*

Asaka Kanda, Taku Takahashi, Hiroyasu Motose (Dep. Biol., Fac. Sci., Okayama Univ.)

PL-062 The relationship between *BPP* family and *SPK1* in morphogenesis of leaf epidermal cells

Takehide Kato, Sho-ichiro Mitsui, Takashi Hashimoto (Div. of Biol. Sci., Grad. Sch. of Sci. and Tech., NAIST)

■ Cell cycle/Cell division

PL-063 Role of histone methyltransferases ARABIDOPSIS TRITHORAX-RELATED 5/6 in cell cycle regulation

Haruka Manabe[1], Hirotomo Takatsuka[2], Masaaki Umeda[1] ([1]Grad. Sch. Sci. Tech., NAIST, [2]Sch. Biol. Sci. Tech., Kanazawa Univ.)

PL-064 Assessment of degradation activity of FtsZ by ClpXP in *Synechocystis* sp. PCC6803

Hidetaka Kohga[1], Yoshikazu Saito[1], Junji Uchiyama[1,2], Hisataka Ohta[1,2] ([1]Graduate School of Science, Tokyo university of Science, [2]Faculty of Science, Tokyo university of Science)

PL-065 Mechanisms of ANAC044/085-mediated G2 arrest response to DNA damage

Natsumi Mori, Naoki Takahashi, Masaaki Umeda (Grad. Sch. Tech., NAIST)

PL-066 Quantitative analysis of root growth and chromosome polytenization in eupolyploids of *Arabidopsis thaliana*

Suzuka Kikuchi[1], Munetaka Sugiyama[2], Akitoshi Iwamoto[3] ([1]Dept. Biol., Tokyo Gakugei Univ., [2]Bot. Gard., Grad. Sch. Sci., Univ. Tokyo, [3]Dept. Biol. Sci., Fac. Sci., Kanagawa Univ.)

PL-067 Division mechanism of chloroplast with Quadruple envelope in marine diatom

Daisuke Wakino[1], Kohei Yoneda[1], Atsuko Tanaka[2], Yusuke Matsuda[1] ([1]Kwansei-Gakuin University Department of Bioscience, [2]Ryukyu University)

■ Vegetative growth

PL-068 Roles of *ALE2* homologues in epidermal development in Arabidopsis

Aiko Harada[1], Hirotaka Kouno[2], Tatsuo Kakimoto[2], Hirokazu Tanaka[1] ([1]Sch. Agr., Meiji Univ., [2]Grad. Sch. Sci., Osaka Univ.)

PL-069 The Deterministic Role Of Plant Cell-surface Ceramides In Epidermis Differentiation

Kenji Nagata[1], Toshiki Ishikawa[2], Maki Kawai-Yamada[2], Taku Takahashi[3], Mitsutomo Abe[4] ([1]Grad. Sch. Sci., Univ. Tokyo, [2]Grad. Sch. Sci. and Eng., Saitama Univ., [3]Grad. Sch. Sci., Okayama Univ., [4]Grad. Sch. Arts and Sci., Grad. Sch. Sci., Univ. Tokyo)

PL-070 The role of *DTL* genes in epidermal cell differentiation in *Arabidopsis thaliana* shoots

Shinobu Takada, Ayaka Yoshida, Nozomi Takada, Miharu Ito, Hiroyuki Iida (Dept. Biol. Sci., Grad. Sch. Sci., Osaka Univ)

PL-071 Molecular genetic analyses of the rice endosperm mutants

Hirokazu Katoh[1], Yuko Kobayashi[2], Issei Kobayashi[2], Hidemi Kitano[1], Shin Takeda[1], Tsukaho Hattori[1] ([1]Grad. Sch. Bioagric., Univ. Nagoya, [2]ASRPC Univ. Mie)

PL-072 Genetic Factors Regulating the Number of Endosperm Cell in Rice

Nao Moriyama[1], Nodoka Honnma[2], Tomoki Fukui[2], Naoki Hirotsu[1,2] ([1]Grad. Sch. Sci, Univ. Toyo, [2]Fac. Sci, Univ. Toyo)

PL-073 Effect of phosphorus fertilization on phytic acid content in rice grain

Ayaka Fukushima[1], Ishara Perera[2], Koki Hosoya[3], Tatsuki Akabane[3], Naoki Hirotsu[1,3] ([1]Grad. Sch. Life Sci., Toyo Univ., [2]Grain Legumes and Oil Crops Research and Development Centre, [3]Fac. Life Sci., Toyo Univ.)

PL-074 A putative *AGAMOUS* ortholog is a candidate for the gene determining ease of pericarp removal in Tartary buckwheat

Yuka Fukuie[1], Hana Shimoyama[2], Toshikazu Morishita[3], Daisuke Tsugama[4], Kaien Fujino[5] ([1]Graduate School of Agriculture, Hokkaido Univ., [2]ASAFAS., Kyoto Univ., [3]Institute of Crop Science, NARO, [4]ANESC., Tokyo Univ., [5]Research Faculty of Agriculture, Hokkaido Univ.)

PL-075 Cotyledon morphogenesis in European Gesneriaceae

Kanae Nishii[1,2], Bing-Hong Huang[3], Chun-Neng Wang[4], Michael Moeller[2] ([1]Kanagawa Uni., [2]Roy. Bot. Gard. Edinburgh, [3]Nat. Taiwan Norm. Uni., [4]Nat. Taiwan Uni.)

PL-076 Distinct temperature signaling pathways are involved in thermoinhibition of Arabidopsis seeds in the light and in the dark

Erina Takayama, Asuka Watanabe, Yuki Nakazawa, Shigeo Toh, Naoto Kawakami (Grad. Sch. Agric., Univ. Meiji)

PL-077 Function of MAPK cascade in the regulation of gibberellin action during Arabidopsis seed germination

Masahiko Otani[1], Ryo Tojo[1], LiPeng Zheng[1], Suzuha Omori[1], Kazuhiko Sugimoto[2], Kohei Yokota[3], Kazuya Ichimura[3], Naoto Kawakami[1] ([1]Grad. Sch. Agric., Univ. Meiji, [2]Inst. Crop Science, NARO, [3]Grad. Sch. Agri., Univ. Kagawa)

PL-078 Sdr4-like (SFL) genes positively regulate seed germination and seeding development in Arabidopsis

LiPeng Zheng[1], Masahiko Otani[1], Kazuhiko Sugimoto[2], Naoto Kawakami[1] ([1]Grad. Sch. Agric., Univ. Meiji, [2]Inst. Crop Science, NARO)

PL-079 Effect of ribosomal protein-expression level on ribosome stress response

Kei Kondo[1], Seidai Takamatsu[2], Hitoshi Onouchi[1], Satoshi Naito[1,2], Yui Yamashita[1] ([1]Grad. Sch. Agr., Hokkaido Univ., [2]Grad. Sch. Life Sci., Hokkaido Univ.)

PL-080 Senescence and cell death in meta-caspase gene knock-down plants

Rika Shimamoto, Miku Chiba, Hiroshi Hayashi (Fac. Biosci. Biotec., Fukui Pref. Univ.)

PL-081 Creation of *rsx1 null* mutants by genome editing

Chaomurilege Bai[1], Fumiya Iwazaki[1], Fenglin Deng[2], Youngsook Lee[2], Yuki Fujiki[1], Ikuo Nishida[1] ([1]Grad. Science and enginnering, Univ. Saitama, [2]Tec. Sci. Univ. Pohang)

PL-082 Search for factors which are important for cell-to-cell communication or cell polarity regulation by chemical screening in the moss *Physcomitrella patens*

Chiyo Jinno[1], Naoya Kadofusa[2], Ayato Sato[2], Tomomichi Fujita[3] ([1]Grad. Sch. Life Sci., Univ. Hokkaido, [2]WPI-ITbM, Univ. Nagoya, [3]Fac. Sci., Univ. Hokkaido)

PL-083 Characterization of the RAPID ALKALIZATION FACTOR (RALF) in the moss *Phycomitrella patens*

Eggie Febrianto Ginanjar[1], Ooi-Kock Teh[2], Tomomichi Fujita[2] ([1]Grad. Sch. of Life Sci. Hokkaido Univ, [2]Fac. of Sci. Hokkaido Univ)

PL-084 NIN-like protein homologs are involved in the longevity of diploid meristem in *Physcomitrella patens*

Emiko Yoro, Keiko Sakakibara (Dep. of Life Science, Rikkyo Univ.)

PL-085 Contribution of a novel signal-transducing protein PCaP1 to meristem formation

Natsuki Tanaka-Takada[1], Miya Mizutani[2], Shinpei Okuda[1], Ryuichi Nishihama[3], Takayuki Kohchi[3], Masayoshi Maeshima[4], Liam Dolan[5] ([1]Grad. Sch. Bioagr. Sci., Nagoya Univ., [2]Grad. Sch. Science, Nagoya Univ., [3]Grad. Sch. Biostudies, Kyoto Univ., [4]Dep. Biosci. Biotech., Chubu Univ., [5]Dep. Plant Sciences, Oxford Univ.)

PL-086 Analysis of a rice *tiller elongation defective1* mutant that shows a defect in axillary shoot elongation

Manami Namiki[1], Hiro-Yuki Hirano[1], Wakana Tanaka[1,2] ([1]Grad. Sch. Sci., Univ. Tokyo, [2]Grad. Sch. Integr. Sci. Life, Hiroshima Univ.)

■ Reproductive growth

PL-087 *Oryza sativa* orthologue of ELONGATION OF SILIQUES WITHOUT POLLINATION 3 plays a role in regulation of ovary enlargement through the accumulation of nutrient in rice

Saku Kijima[1], Shingo Sakamoto[1], Miho Ikeda[2], Hironori Takasaki[2], Masaru Takagi[2], Nobutaka Mitsuda[1], Yoshimi Ohshima[1] ([1]Bioprod. Res. Inst., AIST, [2]Grad. Sch. of Sci. and Eng., Saitama Univ.)

PL-088 [Cancelled]

PL-089 Development of pollen tube attraction assay system in tomato

Kana Hisabayashi[1,2], Masahiro Kanaoka[1,2] ([1]Grad Sch Science, Nagoya Univ., [2]ITbM, Nagoya Univ.)

PL-090 Analysis of growth dynamics of sexual organs in *Marchantia polymorpha*

Hiroyasu Motose, Taku Takahashi (Dep. Biol., Fac. Sci., Okayama Univ.)

PL-091 [Cancelled]

■ Plant hormones/Signaling molecules

PL-092 Screening of small molecules for activating SnRK2

Shoko Matsuoka[1], Karin Sato[1], Riyo Imamura[2], Yoshiteru Noutoshi[3], Takayoshi Okabe[2], Taishi Umezawa[1] ([1]Grad. Sch. BASE, Tokyo Univ. Agric. Tech., [2]DDI, Univ. Tokyo, [3]Grad. sch. Env. Life. Sci., Okayama Univ.)

PL-093 Strigolactone Biosynthetic Pathway Catalyzed by Sulfotransferase LGS1

Akiyoshi Yoda[1], Narumi Mori[2], Xiaonan Xie[1,3], Kaori Yoneyama[4], Kenji Miura[5], Kohki Akiyama[2], Koichi Yoneyama[3], Takahito Nomura[1,3] ([1]United Grad. Sch. of Agri. Sci., Tokyo Univ. of Agri. and Tech., [2]Grad. Sch. of Life & Environ. Sci., Osaka Pref. Univ., [3]Ctr. for Biosci. Res. & Educ., Utsunomiya Univ., [4]Fac. of Agri., Ehime Univ., [5]Fac. of Life and Environ. Sci./T-PIRC, Univ. of Tsukuba)

PL-094 Expression patterns of KAI2-Ligand signaling genes in *Marchantia polymorpha*

Kyoichi Kodama[1], Aino Komatsu[2], Shota Shimazaki[2], Youhei Mizuno[2], Satoshi Naramoto[2], Junko Kyozuka[2] ([1]Fac. Sci., Tohoku Univ., [2]Grad. Sch., Life Sci., Tohoku Univ.)

PL-095 Establishment of highly sensitive bioassay system to detect karrikin-like compounds

Hiromu Kameoka[1,2], Kohki Akiyama[1] ([1]Grad. Sch. Life & Environ. Sci., Osaka Pref. Univ., [2]JSPS Research Fellow)

PL-096 Evaluation of abamine derivatives as strigolactone biosynthesis inhibitors

Ikuo Takahashi, Hikaru Koishihara, Tadao Asami (Dept. Appl. Biol. Chem., Univ. Tokyo)

PL-097 Comprehensive analysis of small proteins and peptides in xylem sap

Satoru Okamoto[1,2], Yumiko Makino[3], Kie Kumaishi[4], Azusa Kawasaki[1], Takamasa Suzuki[5], Yasunori Ichihashi[4] ([1]Niigata Univ., [2]JST PRESTO, [3]NIBB, [4]RIKEN BRC, [5]Chubu Univ.)

PL-098 Identification and Functional Characterization of Peptide Hormones Secreted from the Seed Coat to the Spermosphere

Allen Yi-Lun Tsai, Mitsunori Seo (CSRS, Riken)

PL-099 Stress-mediated secreted protein modulates distant organ communications under dehydration stress

Fuminori Takahashi[1], Takehiro Suzuki[2], Naoshi Dohmae[2], Kazuo Shinozaki[1] ([1]RIKEN CSRS Gene Discovery Research Group, [2]RIKEN CSRS Biomolecular Characterization Unit)

PL-100 Novel Receptor Kinase Family Acting For Senescence Regulation

Koji Uda[1,2], Keiko Torii[1,3], Naoyuki Uchida[1,2] ([1]ITbM Nagoya Univ, [2]Grad. Sch. Sci. Nagoya Univ, [3]UT Austin HHMI)

PL-101 A Small Molecule That Induces Cell Mass Formation With A Shoot Regeneration Competency

Yuki Nakashima[1,2], Keiko Torii[1,3], Naoyuki Uchida[1,2] ([1]ITbM, Nagoya Univ., [2]Dept. Sci., Nagoya Univ., [3]UT Austin, HHMI)

PL-102 A Small-Compound-Based Approach To Dissect Mechanisms Coordinating Hypocotyl Growth

Mizuki Murao[1,2], Rika Kato[1,2,3], Hitoshi Endo[1], Rina Hisamatsu[1], Keiko Kuwata[1], Ayato Sato[1], Shinya Hagihara[3], Kenichiro Itami[1,2], Keiko Torii[1,4], Naoyuki Uchida[1] ([1]Nagoya Univ. ITbM, [2]Nagoya Univ. Grad. Sci., [3]Riken CSRS, [4]UT Austin, HHMI)

PL-103 Screening for novel growth-accelerating substances derived from plants

Tomokazu Tsutsui[1], Tomoaki Kato[2], Takumi Nishiuchi[1] ([1]ASRC, Kanazawa Univ., [2]Flora Co., Ltd.)

PL-104 Cytosolic Ca2+ signal in guard cells is not essential for inhibition by allyl isothiocyanate of light-induced stomatal opening

Wenxiu Ye[1,2,3], Eigo Ando[4], Eiji Okuma[2], Yoshimasa Nakamura[2], Toshinori Kinoshita[3,4], Yoshiyuki Murata[2] ([1]School of Agriculture and Biology, Shanghai Jiao Tong University, [2]Graduate School of Environmental and Life Science, Okayama University, [3]Institute of Transformative Bio-Molecule, Nagoya University, [4]Graduate School of Science, Nagoya University)

PL-105 A simple method to establish an efficient medium suitable for potato regeneration

Mariko Ohnuma, Hiroshi Teramura, Hiroaki Shimada (Dept. of Biol. Sci. & Tech., Tokyo University of Science)

PL-106 Construction of in vitro grafting system of *Nicotiana benthamiana*

Yaichi Kawakatsu[1,2], Katsuhiro Shiratake[2], Michitaka Notaguchi[1] ([1]Biosci. & Bioteh. Center, Nagoya Univ., [2]Grad. Sch. Bioagri. Sci., Nagoya Univ.)

PL-107 Characterization of growth and environmental adaptation of Mongolian plants *Chloris virgata* and *Arabidopsis mongolica*

Bolortuya Byambajav[1,2], Ayumi Yamagami[1], Davaapurev Bekh-Ochir[2], Udval Gombosuren[3], Jigjidsuren Sodnomdarjaa[3], Battogtokh Tugsjargal[3], Batkhuu Javzan[2], Tadao Asami[4], Takeshi Nakano[1,2] ([1]Grad. Biostudies. Kyoto Univ, [2]National Univ. of Mongolia, [3]Res. Ins. of Ani. Husb, [4]Dept. Appl. Biol. Chem., Univ of Tokyo)

■ Flowering/Clock

PL-108 Search for proteins involved in the degradation of KaiC and the effect on rhythm by turnover

Keiko Imai[1], Yohko Kitayama[2], Masayuki Fujiwara[3], Kenyo Kaneko[4], Hiroshi Ito[4], Takao Kondo[2] ([1]Cell Biology, Kansai Med. Univ., [2]Div. Biol. Sci., Grad. Sch. Sci., Nagoya Univ., [3]Institute for Advanced Biosciences, Keio Univ., [4]Labolatory for Biological Rhythms, Kyushu University)

PL-109 Deletions of sufR and ntrC recover growths of circadian clock mutants

Naohiro Kawamoto, Shunya Ezo, Kyoko Baba, Hideo Iwasaki (Department o Electrical Engineering and Bioscience, Waseda university)

PL-110 Ubiquitin Carboxyl-terminal Hydrolases Are Required For Period Maintenance Of The Circadian Clock At High Temperature In Arabidopsis

Ryosuke Hayama[1,2], Peizhen Yang[3], Federico Valverde[2], Tsuyoshi Mizoguchi[1,2], Ikuyo Furutani-Hayama[1], Richard Vierstra[3], George Coupland[2] ([1]ICU, [2]Max Planck Institute for Plant Breeding Research, [3]University of Wisconsin-Madison)

PL-111 Monitoring uncoupled circadian rhythms in individual cells of duckweed by co-transfection of luciferase reporters with different colors

Emiri Watanabe, Shogo Ito, Tokitaka Oyama (Grad. Sch. Sci., Kyoto Univ.)

PL-112 Circadian regulation influences the water use efficiency of Arabidopsis

Noriane Simon[2], Calum Graham[1], Nicholas Comben[2], Alistair Hetherington[2], Antony Dodd[1] ([1]John Innes Centre, UK, [2]University of Bristol, UK)

PL-113 Analysis of the stability of cellular circadian rhythms of *Arabidopsis* isolated cells

Shunji Nakamura, Shogo Ito, Tokitaka Oyama (Grad. Sci., Univ. Kyoto)

PL-114 Regulation of seasonal sensing mechanism by circadian clocks

Atsuhiro Hirohata[1], Yuta Yamatsuta[2], Takashi Araki[1], Motomu Endo[2] ([1]Grad. Biostudies, Kyoto University, [2]Grad. Biological Sciences, Nara Institute of Science and Technology)

PL-115 Molecular Mechanism For Day-length Perception In The Basal Land Plant *Marchantia polymorpha*

Keisuke Inoue, Yuki Kanesaka, Shohei Yamaoka, Ryuichi Nishihama, Takayuki Kohchi, Takashi Araki (Grad. Sch. Biostudies, Univ. Kyoto)

■ Environmental responses A

PL-116 Effects of Glutathione Feeding on the Contents of Amino Acids and Potassium in Crown Daisy

Kenji Henmi, Ken'ichi Ogawa (RIBS Okayama)

PL-117 ROS quantification in Arabidopsis root grown on Zn deficient condition

Haruna Hirokawa[1], Sachie Kimura[2], Shigeo S. Sugano[2,3], Sayuri Nakayama[1], Wrzaczek Michael[4], Yoichiro Fukao[1] ([1]Grad. Sch. Life Sci., Ritsumeikan U., [2]R-GIRO, Ritsumeikan U., [3]Bioproduction I., AIST, [4]Organismal and Evolutionary Biology Research Programme, Univ. Helsinki)

PL-118 Identification and characterization of interactors of AtNUDX6 and 7 involved in stress responses

Masashi Notsu[1], Tomohiro Nonaka[2], Momoko Ueki[2], Takanori Maruta[1,2], Takahiro Ishikawa[1,2], Kazuya Yoshimura[3], Shigeru Shigeoka[4], Takahisa Ogawa[1,2] ([1]Grad. Sch. Nat. Sci. Technol., Shimane Univ., [2]Dept. Life Sci. Biotechnol., Fac. Life Environ. Sci., Shimane Univ., [3]Dept. Food Nutr. Sci., Coll. Biosci. Biotech., Chubu Univ., [4]Exp. Farm, Kindai Univ.)

PL-119 Transcriptional regulation of chloroplast genes depending on diverse photosynthetic environments

Hikaru Ohara[1], Akira Yasuda[1], Mitsumasa Hanaoka[1,2] ([1]Grad. Sch. Horticul., Chiba Univ., [2]Plant Mol. Sch. Cent., Chiba Univ.)

PL-120 Screening of a mutant with altered light/dark response of the expression of VTC2 gene encoding a rate-limiting enzyme for ascorbate biosynthesis

Mari Sugimoto[1], Kanta Yoshimura[1], Noriaki Kumagai[1], Takahiro Ishikawa[2], Kazuya Yoshimura[1] ([1]Dept. Food Nutr. Sci., Coll. Biosci. Biotech., Chubu Univ., [2]Dept. Life Sci. Biotechnol., Fac. Life Environ. Sci., Shimane Univ.)

■ Environmental responses B

PL-121 Towards a multi-approach study focused on Improving Resource Use Efficiency in Cereals under climate change (IRUEC)

Toshihiro Nagamori[1], Marouane Baslam[1,2], Takeshi Takamatsu[1,2], Kentaro Kaneko[2], Eckart Priesack[3], Bertrand Gakiere[4], Maria Dolores Serret[5], Jose Luis Araus[5], Iker Aranjuelo[6], Toshiaki Mitsui[1,2] ([1]Dept. Applied Biol. Chem., Niigata Univ., [2]Grad. Sch. Sci. & Tech., Niigata Univ., [3]Helmholtz Center-Munich, Munich, Germany, [4]Institute of Plant Sciences Paris-Saclay (IPS2), CNRS

Universite Paris-Sud, Orsay, France, [5]University of Barcelone, Barcelona, Spain, [6]Instituto de Agrobiotecnologia (CSIC/UPNA/ Gobierno de Navarra). Mutilva, Navarra, Spain)

PL-122 Physiological analysis of hydroxysteroid dehydrogenase 1 in Arabidopsis

Rina Ihaya[1], Yushi Yoshitake[2], Kousuke Shimazaki[1], Yukiko Kurosawa[1], Hiroyuki Ohta[1], Mie Shimojima[1] ([1]School of Life Science and Technology, Tokyo Institute of Technology, [2]Organization for the Strategic Coordination of Research and Intellectual Properties, Meiji university)

PL-123 Improvement of growth and yield in stress tolerant plants by gene stacking

Toshiki Kato[1], Satoshi Kidokoro[1], Madoka Kudo[1], Kazuo Shinozaki[2], Kazuko Yamaguchi-Shinozaki[1] ([1]Grad. Sch. Agr. Life Sci., Univ. Tokyo, [2]Center for Sustainable Resource Science, RIKEN)

PL-124 Analysis of transcription factors that down-regulate expression of the *PIF4* gene in response to abiotic stress Arabidopsis

Hidetoshi Hisamune[1], Satoshi Kidokoro[1], Jin-Seok Moon[1], Miki Osugi[1], Kazuo Shinozaki[2], Kazuko Yamaguchi-Shinozaki[1] ([1]Grad. Sch. Agr. Life Sci., Univ. Tokyo, [2]Center for Sustainable Resource Science, RIKEN)

PL-125 Functional analysis of *Arabidopsis* MAPKKKs under drought stress conditions

Haruka Kameoka, Fumiyuki Soma, Azusa Fukui, Kazuko Yamaguchi-Shinozaki (Grad. Sch. Agr. Life Sci., Univ. Tokyo)

PL-126 Functional Analysis of Group C Raf-like Protein Kinases in Arabidopsis ABA Signaling

Yoshiaki Kamiyama[1], Misaki Hirotani[1], Shinnosuke Ishikawa[1], Fuko Minegishi[1], Conner Rogan[2], Sotaro Katagiri[1], Fuminori Takahashi[3], Mika Nomoto[4], Kazuya Ishikawa[5], Yutaka Kodama[5], Yasuomi Tada[4], Yoichi Sakata[6], Daisuke Takezawa[7], Jeffrey Anderson[2], Scott Peck[8], Kazuo Shinozaki[3], Taishi Umezawa[1] ([1]BASE, Tokyo Univ. Agric. Tech., [2]Dept. Bot. Plant Pathol., Oregon State Univ., [3]CSRS, RIKEN, [4]Centr. Gene Res., Nagoya Univ., [5]Centr. Bio. and Edu., Utsunomiya Univ., [6]Dept. Bioscience, Tokyo Univ. Agric., [7]Grad. Sch. Sci. and Eng., Saitama Univ., [8]Dept. Biochem., Univ. Missouri)

PL-127 Metabolic diversities of rice under salt stress responses

Ayanfu Toba, Takayuki Tohge, Takafumi Shimizu (Grad. Sch. Bio. Sci., NAIST)

PL-128 Effect of NaCl on activities of cell wall degrading enzymes in Amaranthaceae plants with different salinity tolerance

Keiichi Ishikura[1], Shoko Yoshimura[2], Mizuho Ishii[2], Mariko Oka[2] ([1]Grad. Sch. Agr., Tottori Univ., [2]Fac. Agr., Tottori Univ.)

PL-129 Cyanobacterial lipid remodeling and its molecular mechanism under phosphorus-starved conditions

Tatsunori Hiyoshi, Norihiro Sato (Tokyo University of Pharmacy and Life Sciences)

PL-130 Differences in components of biofilm and importance of protein under various environmental stresses of *Synechocystis* sp. PCC6803

Kouichi Takahashi[1], Haruna Ishikawa[2], Ayako Itagaki[2], Yukino Sakai[1], Masanori Sato[1], Junji Uchiyama[1,2,3], Hisataka Ohta[1,2,3] ([1]Dept. of Math. and Sci. edu., Grad. Sch. of Sci., Tokyo Univ. of Sci., [2]Dept. of Math. and Sci. edu., Grad. Math. and Sci. edu., Tokyo Univ. of Sci., [3]Dept. of Biol., Fac. of Sci., Tokyo Univ of Sci.)

PL-131 The role of hexosamine pathway in environmental stress tolerance in *Arabidopsis thaliana*

Yousuke Matoba[1], Kaede Adachi[1], Yasushi Sato[2] ([1]Department of Biology, Faculty of Science, Ehime University, [2]Graduate School of Science and Engineering, Ehime University)

PL-132 The relationship between asymptomatic virus infection and abiotic stress tolerance in *Arabidopsis halleri*

Midori Tabara[1], Shimpei Uraguchi[2], Hideki Takahashi[3], Hideki Takahashi[1,4] ([1]GIR, Tokyo Univ. Agri. Tech., [2]School. Pharm., Kitasato Univ., [3]Grad. Agri., Tohoku Univ., [4]Grad. Agri., Tokyo Univ. Agri. Tech.)

PL-133 Analysis Of The Relationship Between Reactive Oxygen Species And Callose In Low-Calcium Response In Arabidopsis

Yusuke Shikanai, Takehiro Kamiya, Toru Fujiwara (Grad. Sch. Agri., Univ. Tokyo)

PL-134 The *Arabidopsis* PrmC/MTQ2/HemK homolog physically associates with an ER-localized Mg transporter and is required for the low-Mg adaptation

Zhihang Feng, Hiroshi Nagao, Takehiro Kamiya, Toru Fujiwara (Laboratory of Plant Nutrition and Fertilizers, the University of Tokyo)

PL-135 Novel CDKA function in the regulation of potassium ion transporters in the moss *Physcomitrella patens*

Menaka Ariyarathne[1], Brody Frink[2], Ooi-Kock Teh[1], Tomomichi Fujita[1] ([1]Faculty of Science, Hokkaido University, [2]Graduate School of Life Science, Hokkaido University)

PL-136 *De novo* transcriptome analysis revealed an imperturbable transcriptome under high Cd conditions in the hyper Cd-tolerant fern *Athyrium yokoscense*

Yuko Ukai[1], Komaki Inoue[2], Manaka Kamata[1], Hiroshi Teramura[1], Shunsuke Yanagisawa[1], Kazuyoshi Kitazaki[3,7], Kazuhiro Shoji[3], Fumiyuki Goto[3,8], Keiichi Mochida[3,4,5,6,9], Toshihiro Yoshihara[1,3], Hiroaki Shimada[1] ([1]Dept. Biol. Sci. & Techno., Tokyo University

of Science, [2]Center for Sustainable Resource Sci., RIKEN, [3]Env. Sci. Research Lab., CRIEPI, [4]Kihara Inst. for Bio. Res., Yokohama City Univ., [5]Grad. of Nanobiosci., Yokohama City Univ., [6]Inst. of Plant Sci. and Resources, Okayama Univ., [7]Grad. of Agri., Hokkaido Univ., [8]Faculty of Agri., Saga Univ., [9]RIKEN Baton Zone Program)

PL-137 Identification of the plasma membrane and tonoplast localized new cesium transporters

Keita Ito[1], Arif Ashraf[1], Keitaro Tanoi[2], Abidur Rahman[1,3,4] ([1]Grad. Sch. Sci., Univ. Iwate, [2]Grad. Sch. Agri., Univ. Tokyo, [3]UGAS., Univ. Iwate, [4]AIC., Univ. Iwate)

PL-138 Natural Variation of a MATE family gene contributes to differential cadmium accumulation in rice

Hua Xiao[1], Nobuhiro Takana[1], Zhihang Feng[1], Bian Bian[1], Kiyoshi Yamazaki[1], Mayuki Tanaka[1], Qing Wang[1,2], Takehiro Kamiya[1], Toru Fujiwara[1] ([1]Department of Applied Biological Chemistry, Graduate School of Agricultural and Life Sciences, The University of Tokyo, [2]Beijing Key Laboratory of Growth and Developmental Regulation for Protected Vegetable Crops, College of Horticulture, China Agricultural University)

■ Environmental responses C

PL-139 Potential systemic mobile mRNAs involving in chilling stimulation

Wenqian Liu (Beijing Key Laboratory of Growth and Developmental Regulation for Protected Vegetable Crops)

PL-140 Identification of coactivators for cold inducible gene expression regulated by circadian clock

Izumi Konoura[1], Satoshi Kidokoro[1], Kentaro Hayashi[1], Kazuo Shinozaki[2], Kazuko Yamaguchi-Shinozaki[1] ([1]Grad. Sch. Agr. Life Sci., Univ. Tokyo, [2]Center for Sustainable Resource Science, RIKEN)

PL-141 Diverse changes in cell wall structure and composition in response to cold and sub-zero acclimation

Daisuke Takahashi[1], Arun Sampathkumar[2], Kim L. Johnson[3], Antony Bacic[3], Ellen Zuther[2], Dirk K. Hincha[2] ([1]Graduate School of Science and Engineering, Saitama University, [2]Max-Planck-Institute of Molecular Plant Physiology, [3]La Trobe Institute for Food and Agriculture, La Trobe University)

PL-142 Analysis of plant adaptation to temperature using metabolome and transcriptome

Natsuki Hayami[1], Miyako Kusano[2,3], Kyonoshin Maruyama[4], Mieko Higuchi-Takeuchi[2], Kousuke Hanada[5], Minami Matsui[2], Yoshiharu Y. Yamamoto[1,2] ([1]United Grad. Sch. Agric. Sci., Gifu Univ, [2]CSRS, RIKEN, [3]Grad. Sch. Life and Env. Sci., Tsukuba Univ., [4]JIRCAS, [5]Frontier Research Academy for Young Researchers, Kyushu Inst. of Tech.)

PL-143 Functions and Long-distance Transport of MiRNAs to Root upon Dormancy Induction by Short-day in Poplar

Shinya Hirooka, Kimiyo Sage-Ono, Jun Furukawa, Michiyuki Ono, Shinobu Satoh (Grad. Sch. Life and Envi. Sci., Univ. Tsukuba)

PL-144 Functional analysis of OsNLPs in rice

Bian Bian, Mengyao Wang, Hua Xiao, Zhihang Feng, Xu Chen, Kiyoshi Yamazaki, Kenji Yano, Takehiro Kamiya, Toru Fujiwara (The University of Tokyo, Graduate School of Agricultural and Life Sciences)

PL-145 Fructan metabolism and snow resistance in barley

Masaru Nakata, Masako Seki, Hideyuki Aoki, Takashi Nagamine (CARC, NARO)

PL-146 Identification of novel transcription factors involved in negative correlation between growth and defense by using Arabidopsis semi-dominant mutant *uni-1D*

KwiMi Chung[1], Masaru Ohme-Takagi[2], Nobutaka Mitsuda[1] ([1]Bioprod. Res. Inst., AIST, [2]Green-bio research center, Grad School Sci Tech, Saitama University)

PL-147 Characterization of Slr2006-2009 involved in pH homeostasis in *Synechocystis* sp. PCC6803

Yukino Sakai[1], Kouichi Takahashi[1], Masanori Sato[1], Junji Uchiyama[1,2], Hisataka Ohta[1,2] ([1]Dept. of Math. and Sci. Edu., Grad. Sch. of Sci., Tokyo Univ of Sci, [2]Dept of Biol., Fac. of Sci., Tokyo Univ. of Sci)

PL-148 Search for an environmental trigger to induce a barrier to radial oxygen loss in rice

Yuto Sawazaki, Xoan Nguyen, Katsuhiro Shiono (Res. Plant Eco. Dept. Biosci., Univ. Pref. Fukui)

PL-149 Two kinases regulated by MYB36 are essential for correct localization of lignin deposition in the Casparian strip domain

Qi Wu, Toru Fujiwara, Takehiro Kamiya (The Laboratory of Plant Nutrition and Fertilizers, Department of Applied Biological Chemistry, Graduate School of Agricultural and Life Sciences, The University of Tokyo)

PL-150 Diel and seasonal transcriptome dynamics of *Arabidopsis halleri* in a natural environment

Tomoaki Muranaka, Mie N. Honjo, Hiroshi Kudoh (Center for Ecological Research, Kyoto University)

PL-151 Analysis of malate synthesis in guard cells during stomatal opening

Kohei Fukatsu[1], Yuki Hayashi[1], Keiko Kuwata[2], Takamasa Suzuki[3], Toshinori Kinoshita[1,2] ([1]Grad. Sch. Sci., Nagoya Univ., [2]ITbM, Nagoya Univ., [3]Dep. Biol. Chem., Chubu Univ.)

■ Plant-organism interaction A

PL-152 Cysteine-rich receptor-like kinase CRK2 and C-terminus phosphorylation of NADPH oxidase RBOHD regulates ROS production in Arabidopsis

Sachie Kimura[1,2], Kerri Hunter[2], Aleksia Vaattovaara[2], Anne Rokka[3], Sarah Christina Stolze[4], Anne Harzen[4], Yoichiro Fukao[1], Masatsugu Toyota[5,6], Hirofumi Nakagami[4], Michael Wrzaczek[2] ([1]Ritsumeikan Global Innovation Research Organization, Ritsumei Univ., [2]Organismal and Evolutionary Biology Research Programme, Univ. Helsinki, [3]Turku Centre for Biotechnology, Univ. Turku and Åbo Akademi Univ., [4]Protein Mass Spectrometry Group, Max-Planck Institute for Plant Breeding Research, [5]Department of Biochemistry and Molecular Biology, Saitama Univ., [6]Department of Botany, Univ. Wisconsin-Madison)

PL-153 Handmade leaf cutter for efficient and reliable ROS assay

Hanae Kaku[1], Yoshitake Desaki[1,2], Hikaru Shimada[1], Shohei Takahashi[1], Chisa Sakurayama[1], Mika Kawai[1], Naoto Shibuya[1] ([1]Dept. Life Sciences, Sch. Agriculture, Meiji University, [2]Dept. Biological Science and Technology, Fac. Industrial Science and Technology, Tokyo University of Science)

PL-154 HAK, receptor-like kinase (RLK), is involved in the defense responses to herbivore-secreted oligosaccharide elicitor in Arabidopsis

Yuka Sano[1], Takuya Uemura[1], Ayaka Ito[1], Ryosuke Hoshino[1], Yoshitake Desaki[1], Akira Nozawa[2], Akira Sawazaki[2], Gen-ichiro Arimura[1] ([1]Dept. Bio. Sci. Tech., Tokyo. Univ. Sci, [2]PRIS., Univ. Ehime)

PL-155 AtPBL27, receptor-like cytoplasmic kinase, involved in herbivore danger signal response through AtHAK1 in Arabidopsis

Ayaka Ito[1], Takuya Uemura[1], Yuka Sano[1], Ryosuke Hoshino[1], Yoshitake Desaki[1], Galis Ivan[2], Mujirono Kadis[2,4], Akira Nozawa[3], Tatsuya Sawasaki[3], Gen-ichiro Arimura[1] ([1]Dept. Bio. Sci. Tech., Tokyo Univ. Sci, [2]IPSR., Univ. Okyama, [3]PROS., Univ. Ehime, [4]Fac. Agric. Mulawarman Univ. Indonesia)

PL-156 Characterization of Tetranychus urticae-derived elicitor (Tetranin) recognition system

Kaori Tanimura[1], Ayano Yasuno[1], Kento Takafuji[1], Junya Iida[1], Hiroshi Abe[2], Yoshitake Desaki[1], Gen-ichiro Arimura[1] ([1]Dept. Bio. Sci. Tech., Tokyo Univ. Sci., [2]BRC, RIKEN)

PL-157 Evaluation of menthol derivatives' effects on induced defense responses of soybean

Chisato Tsuzuki, Masakazu Hachisu, Yuna Nakayama, Yoko Nonaga, Satoru Sukegawa, Shigetomi Horito, Gen-ichiro Arimura (Dept. Bio. Sci. Tech., Tokyo Univ. Sci.)

PL-158 Characterization of a novel Jasmonic acid-induced amino acid-like transporter in rice

Tilisa Tohi, Yuko Hojo, Tomonori Shinya, Ivan Galis (IPSR, Okayama Univ)

PL-159 Plant response to flooding stress impairs rice defense systems against herbivores

Kadis Mujiono[1,2], Yuko Hojo[1], Tomonori Shinya[1], Ivan Galis[1] ([1]IPSR, Okayama Univ., [2]Fac. Agric., Mulawarman Univ., Indonesia)

PL-160 Investigation of mechanisms of host plant selection by rice brown planthopper (*Nilaparvata lugens*)

Nhan Thanh Ho[1,2], Tomonori Shinya[1], Ivan Galis[1] ([1]IPSR, Okayama Univ., [2]Cuu Long Delta Rice Res Inst, Vietnam)

PL-161 ER-body-glucosinolate chemical defense suppresses feeding motivation of predators through olfactory and taste organs

Somare Mizuho[1], Toru Maeda[2,5], Tatsuya Uebi[2], Junpei Takagi[3], Tadashi Kunieda[3,4], Kenji Yamada[5], Mamiko Ozaki[2], Ikuko Nishimura[1] ([1]Grad. Shc. of Nat. Sci., Konan Univ., [2]Grad. Shc. Sci., Kobe Univ., [3]Fac. Sci. Eng., Konan Univ., [4]Div. of Biol. Sci., NSIST, [5]Malopolska Center Biotechnol., Jagiellonian Univ.)

■ Plant-organism interaction B

PL-162 Promotion of arbuscular mycorrhizal symbiosis in plants treated with chitins

Hinako Kawakami[1], Takaya Tominaga[1], Momoko Takagi[2], Akira Mine[3,4], Shinsuke Ifuku[5], Hironori Kaminaka[2] ([1]Grad. Sch. Sust. Sci., Univ. Tottori, [2]Fac. Agr., Univ. Tottori, [3]Coll. Life Sci., Univ. Ritsumeikan, [4]JST, PRESTO, [5]Grad. Schl. Eng., Univ. Tottori)

PL-163 Relationships between plant rhizosphere environment and microbiota

Shinichi Yamazaki[1], Yuichi Aoki[1], Hossein Mardani Korrani[2], Rumi Kaida[2], Yoshiharu Fujii[2], Masaru Kobayashi[3], Akifumi Sugiyama[4] ([1]ToMMo, Univ. of Tohoku, [2]Grad. Sch. of Agri., TUAT, [3]Grad. Sch. of Agri., Univ. of Kyoto, [4]RISH, Univ. of Kyoto)

PL-164 Visualization of plant-plant communication through green leaf volatile

Yuri Aratani[1], Masatsugu Toyota[1], Kenji Matsui[2] ([1]Department of Biochemistry and Molecular Biology Saitama University, [2]Yamaguchi university)

PL-165 Reevaluation of allelopathic potential of goldenrod (*Solidago altissima*) naturalized in Japan

Atsushi Sakai, Yuiko Ushikoshi, Akiko Sasaki (Nara Women's Univ.)

PL-166 Haustorium inducing activity for parasitic plants in plant exudates incubated with 2,6-dimethoxy-p-benzoquinone (DMBQ)

Natsumi Aoki, Syogo Wada, Songkui Cui, Satoko Yoshida (NAIST)

PL-167 Effects of nutrient conditions on haustorium formation in a parasitic plant *Phtheirospermum japonicum*

Xiang Zhang, Songkui Cui, Satoko Yoshida (Naist)

■ Transcriptional, post-transcriptional or translational, post-translational regulations

PL-168 Nascent peptide-mediated ribosome stalling in eukaryotes: What we see from pulse-chase experiments

Tomoya Imamichi[1], Shugo Sugawara[2], Seidai Takamatsu[1], Hitoshi Onouchi[2], Yui Yamashita[2], Satoshi Naito[1,2] ([1]Grad. Sch. Life Sci., Univ. Hokkaido, [2]Grad. Sch. Agr., Univ. Hokkaido)

PL-169 Translation complex containing an upstream ORF-encoded nascent peptide senses cellular magnesium levels to regulate translation

Noriya Hayashi[1], Shun Sasaki[1], Yuta Hiragori[1], Feng Zhihang[2], Toru Fujiwara[2], Toshihiro Watanabe[1], Kodai Machida[3], Hiroaki Imataka[3], Hiro Takahashi[4], Yui Yamashita[1], Satoshi Naito[1,5], Hitoshi Onouchi[1] ([1]Grad. Sch. Agr., Hokkaido Univ., [2]Grad. Sch. Agr. Sci., Univ. Tokyo, [3]Grad. Sch. Eng., Univ. Hyogo, [4]Grad. Sch. Med. Sci., Kanazawa Univ., [5]Grad. Sch. Life Sci., Hokkaido Univ.)

PL-170 Ribosome profiling analysis upon blue light exposure from darkness in Arabidopsis

Yukio Kurihara[1], Yuko Makita[1], Haruka Shimohira[1], Tomoya Fujita[2], Shintaro Iwasaki[2], Minami Matsui[1] ([1]RIKEN CSRS, [2]RIKEN CPR)

PL-171 Phenotypic features of Arabidopsis mutants related to tRNA wobbleU34* modification

Yumi Nakai (Biochemistry, Osaka Medical College)

PL-172 Analyses of aggregation-prone proteins for design of artificial membrane-less organelle in plants

Yoshito Koja, Yu Joshima, Haruka Go, Nagisa Hakamata, Hinako Kaseda, Tsukaho Hattori, Shin Takeda (Grad. Sch. Bioagr. Sci., Univ. Nagoya)

PL-173 Does WSRK, a regulatory factor of wax ester fermentation in *Euglena gracilis*, control pyruvate:$NADP^+$ oxidoreductase as a downstream target ?

Yosuke Komai[1], Yuuki Ishii[1], Takahisa Ogawa[1], Takanori Maruta[1], Shigeru Shigeoka[2], Masami Nakazawa[3], Takahiro Ishikawa[1] ([1]Grad. Sch. Nat. Sci. Technol., Shimane Univ., [2]Exp. Farm, Kindai Univ., [3]Grad. Sch. Life Environ. Sci., Osaka Pref. Univ.)

PL-174 Analysis of functions of close homologs of B"-family subunits of protein phosphatase 2A

Hyuk Sung Yoon[1], Kaien Fujino[2], Tetsuo Takano[1], Daisuke Tsugama[1] ([1]ANESC, Univ. Tokyo, [2]Res. Fac. Agr., Hokkaido Univ.)