The 60th Annual Meeting of the Japanese Society of Plant Physiologists

https://jspp.org/annualmeeting/60/

Date: **March 13 (Wed) through March 15 (Fri), 2019**

Venue: **Higashiyama Campus, Nagoya University**
Furo-cho, Chikusa-ku, Nagoya 464-8601, Japan
http://en.nagoya-u.ac.jp/access/index.html

Banquet: **HOTEL MIELPARQUE NAGOYA**
3-16-16 Aoi, Higashi-ku, Nagoya 461-0004, Japan
https://www.mielparque.jp/nagoya/en/

Organizing Committee

Chairperson: Masayoshi Maeshima

Vice-Chairperson: Yuichi Fujita / Toshinori Kinoshita

General Affairs: Masaki Ito / Miki Kawachi / Natsuki Tanaka

Accounting: Takafumi Yamashino

Banquet: Yoshikatsu Matsubayashi

Program Committee: Norihito Nakamichi (Chairperson)
Motoyuki Ashikari / Mimi Hashimoto / Tetsuya Higashiyama / Shin-ichiro Inoue / Takatoshi Kiba / Takuya Matsuo / Hitoshi Mori / Masayoshi Nakamura / Mikio Nakazono / Michitaka Notaguchi / Tatsuo Omata / Hidefumi Shinohara / Katsuhiro Shiratake / Mamoru Sugita / Ryo Tabata / Yuichiro Tsuchiya / Naoyuki Uchida / Minako Ueda

Venue: Koji Takahashi / Tsukaho Hattori / Yoshiaki Inukai / Sumie Ishiguro / Shin Takeda / Kumi Yoshida / Yasushi Yoshioka / Chiharu Ueguchi

Poster and exhibition: Gohta Goshima / Mizuho Ichinose / Shin-ichi Maeda / Kenichiro Maeo / Takumi Noguchi / Shoji Segami / Mitsutaka Taniguchi

Nursery: Narie Sasaki / Youichi Nakanishi / Miyako Ueguchi-Tanaka

Mixer: Setsuyuki Aoki

JTPB2019 (60th anniversary memorial project): Yasuomi Tada / Toshiro Ito / Masahiro Kanaoka / Miyo T. Morita / Mika Nomoto / Wataru Sakamoto / Hirofumi Yoshioka

Conference Secretaria

Nakanishi Printing Co., Ltd.
Shimodachiuri-Ogawa, Kamigyo-ku, Kyoto 602-8048, Japan
FAX: +81-75-415-3662
E-mail: jspp2019@nacos.com

Meeting Information

Program

1. General Information

1-1. Important Notice

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

- No program booklet is provided at the meeting site.
- The program and abstracts are accessible electronically using iOS/Android Apps, which will be available after March 6 (Wed).
- 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.

2) 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.

3) Japan–Taiwan Plant Biology (JTPB) 2019

- JTPB 2019, a joint international conference with the Taiwan Society of Plant Biologists, will be held in tandem with this annual meeting. The poster session and symposia on Day 3 will be held as a joint program with JTPB2019.
- JTPB2019 participants from Taiwan can also attend all programs of the JSPP annual meeting.
- A banquet will be held on Day 2 as a welcome party for the JTPB2019 participants from Taiwan.
- The Keynote Symposia of JTPB2019 on March 16 will be held at Toyoda Auditorium in Higashiyama Campus. Please be aware that the meeting place on this day is different from that on Days 1–3.

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 9:00–10:00, and those presenting on Day 3 should mount their posters at 12:00–16:00.
- 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).

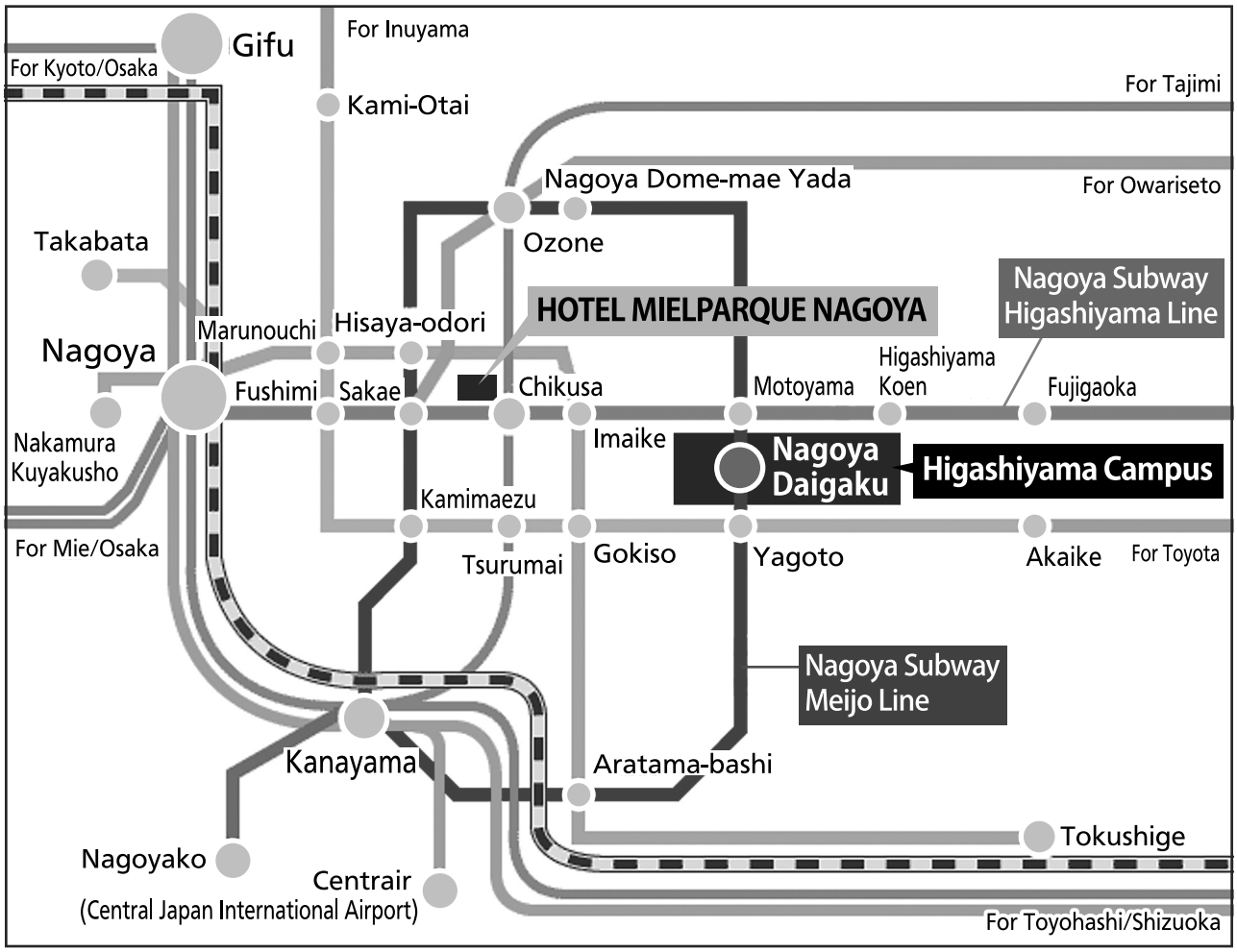
5) Distribution of anniversary gift bags

- Anniversary bags will be presented to all participants of the JSPP annual meeting in commemoration of the 60th anniversary of JSPP. The anniversary bags are limited to one per participant. Please show your name tag and receive one at Lecture Room C12 in the morning of Day 1, and anytime afterwards, you may do so at the reception desk of the annual meeting.

About the Meeting Logo

The logo of the 60th Annual Meeting of JSPP at Nagoya was designed by combining the "Golden Shachihoko", a symbol of Nagoya, and Hananoki, the tree of Aichi prefecture. In this logo, the dynamic body of Shachihoko is expressed with leaves of Hananoki, and red flowers of Hananoki are arranged on the left side. Hananoki, *Acer pycnanthum*, is an endemic species in Japan, naturally growing in a limited area in the Chubu region including Aichi Prefecture, and the red flowers bloom before the leaves come out in early spring. The logo of JTPB2019 is designed with plum blossoms, Taiwan's national flower, to pair with the JSPP Nagoya logo, wishing for active academic exchanges between the members of JSPP and TSPB. We welcome everyone who is coming to Nagoya for the 60th Annual Meeting of JSPP with the smile of Shachihoko. (Shachihoko is a fabulous dolphin-like fish, a pair of which were traditionally used to decorate the roof ridges of Japanese castles. The Golden Shachihoko on Nagoya Castle is the most famous one due to its size and beauty, thus making Shachihoko one of the symbols of Nagoya.)

1-2. Venue and Access



Train **The closest station from Higashiyama Campus, Nagoya University is**

Nagoya Daigaku Sta. (Subway Meijo Line).

- **Liberal Arts and Sciences Main Building:** 6 minutes walk from Exits 1
- **Toyoda Auditorium (JTPB2019 Keynote Symposia):** 3 minutes walk from Exits 2

From Nagoya Station:

Take the Subway Higashiyama Line to Motoyama Sta. (15 minutes),
then transfer to the Subway Meijo Line to Nagoya Daigaku Sta.
(Higashiyama Campus is just off the subway exit.).

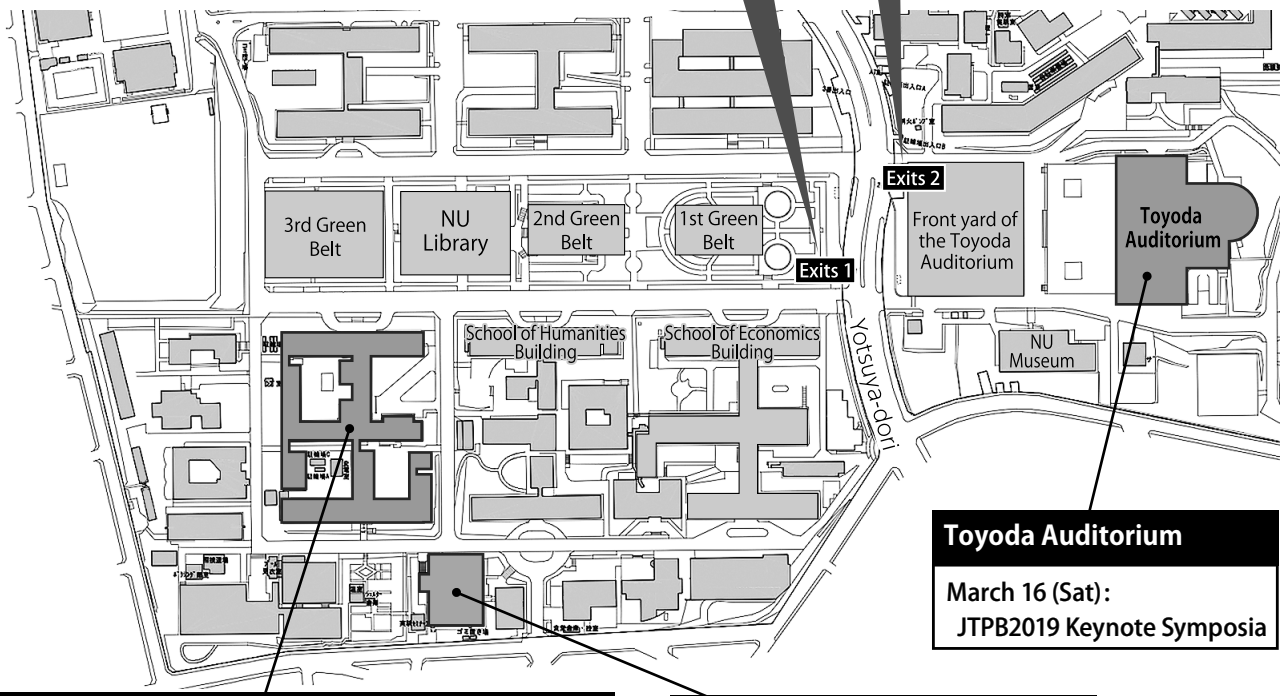
Airplane **From Centrair (Central Japan International Airport):**

Take the Meitetsu Line to Kanayama Sta. (30 min.),
then transfer to the Subway Meijyo Line to Nagoya Daigaku Sta. (21 min.).

Banquet **HOTEL MIELPARQUE NAGOYA** Take the Subway Higashiyama Line to **Chikusa Sta.**

Guide map (Nagoya University, Higashiyama Campus)

Nagoya Daigaku Sta. (Subway Meijo Line).
Exits 1 to **Liberal Arts and Sciences Main Building**
Exits 2 to **Toyoda Auditorium**



Toyoda Auditorium

March 16 (Sat):
JTPB2019 Keynote Symposia

Liberal Arts and Sciences Main Building

Registration Desk / Cloak
JSPP Awards Ceremony and Award Lectures (Room N)
Symposia (Room A/B/F/N)
JTPB2019 Symposia (Room A/B/F/G)
Database Workshop (Room F)
Oral Presentation (Room C-M, O)
Poster Presentations (Room P-Y)
Exhibition Booths (1F)
Board of Delegates' Meeting (Room N)

University Cafeteria (Mei-dining)

Mixer

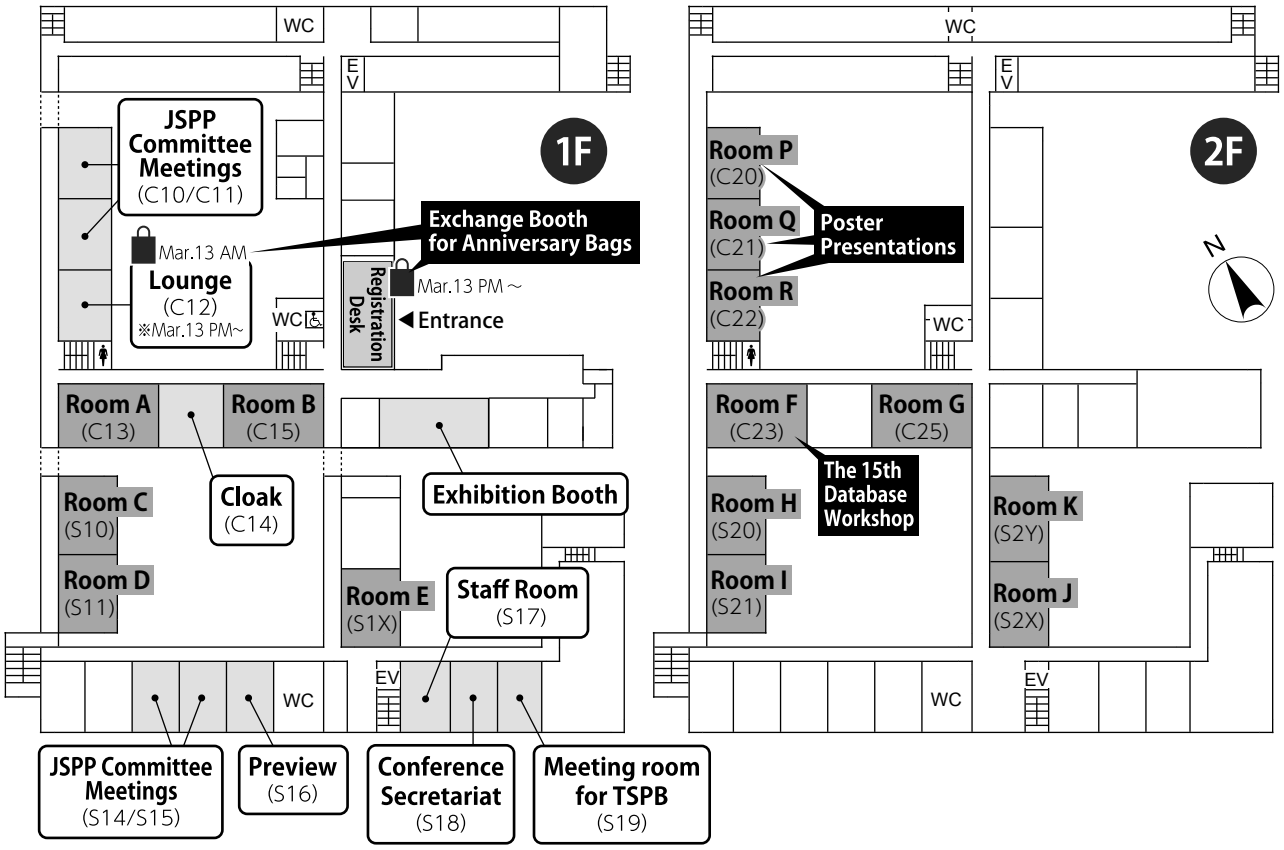
Nearby General Hospitals

1. Japanese Red Cross Nagoya Daini Hospital（名古屋第二赤十字病院）
052-832-1121 (main number) https://www.nagoya2.jrc.or.jp (Japanese)

2. Nagoya University Hospital（名古屋大学医学部付属病院）
052-832-1121 (main number) https://www.med.nagoya-u.ac.jp/hospital_en/ (English)

3. Seirei Hospital（聖霊病院）
052-832-1181 http://www.seirei-hospital.org (Japanese)

Conference Room



2F
Room P
001 002 003 004 005 006 007 008 009 010 011 012 PF-013 014 015 016 017 018 019 020 021 022 023 024 025
Photosynthesis
Environmental responses of photosynthesis
Primary metabolism
Room Q
026 027 028 029 030 031 032 033 034 035 036 037 PF-038 039 040 041 042 043 044 045 046 047 048 049 050
Primary metabolism
Secondary metabolism
Biomembrane/Ion and solute transport
Membrane trafficking
Organelles/Cytoskelton
Room R
051 052 053 054 055 056 057 058 059 060 061 062 PF-063 064 065 066 067 068 069 070 071 072 073 074 075
Organelles/Cytoskelton
Cell wall
Cell cycle/Cell division
Vegetative growth
3F
Room S
076 077 078 079 080 081 082 083 084 085 086 087 PF-088 089 090 091 092 093 094 095 096 097 098 099 100
Vegetative growth
Reproductive growth
Plant hormones/Signal molecules
Room T
101 102 103 104 105 106 107 108 109 110 111 112 PF-113 114 115 116 117 118 119 120 121 122 123 124 125
Plant hormones/Signal molecules
Photoreceptors/Photoresponses
Room U
126 127 128 129 130 131 132 133 134 135 136 137 PF-138 139 140 141 142 143 144 145 146 147 148 149 150
Photoreceptors/Photoresponses
Flowering/Clock
Environmental responses A
Environmental responses B
4F
Room W
151 152 153 154 155 156 157 158 159 160 161 162 PF-163 164 165 166 167 168 169 170 171 172 173 174 175
Environmental responses B
Environmental responses C
Room X
176 177 178 179 180 181 182 183 184 185 186 187 PF-188 189 190 191 192 193 194 195 196 197 198 199 200
Environmental responses C
Plant-organism interaction A
Plant-organism interaction B
Room Y
201 202 203 204 205 206 207 208 209 210 211 212 PF-213 214 215 216 217 218 219 220 221 222 223 224 225
Epigenetic regulation
Systems biology
Others
Transcriptional regulation....

2F
Room P
001 002 003 004 001 002 005 006 007 008 009 003 004 170 010 011 012 013 014 005 006 007 008 009 010
PL- PT- PL- PT- PL- PT-
Photosynthsis, Environmental responses of photosynthesis
Primary metabolism, Secondary metabolism
Biomenbarane/Ion and solute transport
Room Q
011 012 013 014 015 016 015 017 018 019 020 021 016 017 018 019 020 021 022 023 024 025 026 022 023
PT- PL- PT- PL- PT- PL-
Biomenbarane/Ion and solute transport
Cell cycle/Cell division
Vegetative growth
Reproductive
Room R
027 028 029 030 031 032 033 034 035 036 037 038 039 024 025 026 027 028 029 030 040 041 042 043 044
PT- PL- PT-
Reproductive growth
Plant hormones/Signaling molecules
3F
Room S
045 046 047 048 049 031 032 033 034 035 036 037 050 051 052 053 054 055 056 057 058 059 060 061 062
PT- PL- PT-
Plant hormones/Signaling molecules
Photoreceptors/Photoresponses, Flowering/Clock
Room T
063 064 065 038 039 040 041 042 043 044 045 066 067 068 069 070 071 072 073 074 075 076 077 078 079
PT- PL- PT-
Photoreceptors/Photoresponses, Flowering/Clock
Environmental responses A, B
Room U
080 081 082 046 047 048 049 050 051 052 053 083 084 085 086 087 088 089 090 091 092 093 094 095 096
PT- PL- PT-
Environmental responses A, B
Environmental responses C
Room V
PL-054 097 098 099 100 101 102 103 104 105 106
PT-
Plant-organism interaction
4F
Room W
PL-055 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130
PT-
Plant-organism interaction
Room X
131 132 133 134 056 135 136 137 138 139 140 141 142 143 144 145 146 057 058 059 060 147 148 149 150
PT- PL- PT- PL- PT-
Plant-organism interaction
Epigenetic regulation, Transcriptional regulation....
Systems biology, Others
Room Y
061 062 063 064 065 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 171
PL- PT- PT-
Systems biology, Others
Plant hormones/Signaling molecules

1-3. Registration of Participants

1) The registration desk will be open from 8:30 on March 13 (Wed) at the entrance of the venue.
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. Please take a name tag holder at the entrance.
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)	
JSPP Members	JPY 11,000 (tax free)
JSPP Student Members	JPY 6,000 (tax free)
Non-JSPP members	JPY 14,000 (tax included)
Banquet fee	
JSPP Members	JPY 9,000 (tax included)
JSPP Student Members	JPY 9,000 (tax included)
Non-JSPP Members	JPY 9,000 (tax included)
Gala Dinner fee (JTPB2019)	
JSPP Members	JPY 6,000 (tax included)
JSPP Student Members	JPY 6,000 (tax included)
Non-JSPP Members	JPY 6,000 (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 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

The university cafeteria (with 650 seats) next to the venue is open during the meeting period. You can also find restaurants, cafes, and convenience stores around the venue.

1-5. Cloakroom

The cloakroom is located on the first floor (lecture room C14) 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 13 (Wed)	8:30–19:30
Day 2:	March 14 (Thu)	8:30–18:30
Day 3:	March 15 (Fri)	8:30–19:00

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.

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 Annual Meeting Committee have tried to meet your request with regard to the type of presentation (poster or oral presentation) upon abstract submission. However, owing to the space limitation of the venue, a significant number of submissions requesting poster presentation have been assigned to the oral presentation session. Please prepare your presentation after confirming your type of presentation in the program.

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 12:30 on Day 1 and remove them anytime from 9:00 to 10:00 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 12:00 to 16:00 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: 17:00–19:00 on Day 1.
   - For presentations in the second half: 14:00–16:00 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
   - The poster session on Day 3 will be held as a joint program with JTPB2019. The abstract numbers beginning with PT are assigned to the titles for JTPB2019 participants from Taiwan.

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.
   - Before the presentation, please check your slides in the Preview rooms on the first floor (Lecture Room S16). There will be no staff attending the Preview rooms. For questions, please visit the Conference Secretariat room on the first floor.
   - 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 (e.g., Mac, HDMI, USB type-C) 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 6 (Wed). The password will be provided by e-mail after March 6. 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.

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 jspp2019@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 18:00 on Day 1 (March 13) at the university cafeteria (Mei-dining) located adjacent to the venue. 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 Mielparque Nagoya from 19:00 on Day 2 (March 14). It is about 15 minutes by metro from the venue to the hotel. On-site registration for the banquet is accepted at the reception desk.

HOTEL MIELPARQUE NAGOYA
3-16-16 Aoi, Higashi-ku, Nagoya 461-0004, Japan
https://www.mielparque.jp/nagoya/en/

2-2. JSPP Awards Ceremony and Award Lectures

Date and time: Day 2, March 14 (Thu) 16:15–18:00
Venue: Room N
Please see the program p.19 for details.

2-3. Symposia

Nine symposia will be held on Days 1 and 2 in this Meeting. In addition, 12 symposia will be held on Day 3 as a joint program with JTPB2019. For the content and purpose of each symposium, please refer to the Meeting website (https://jspp.org/annualmeeting/60/E-index.html). Please see p.20–28 for the program.

Day 1, March 13 (Wed) 9:30–12:30

♦ **S01** Understanding of field plants and development of innovative techniques toward these plant regulation
♦ **S02** The final phase of the photosynthetic electron transport
♦ **S03** Understanding the plant survival strategies from the perspective of stem cells

Day 1, March 13 (Wed) 14:00–17:00

♦ **S04** Strategies of mechanical optimization in plants
♦ **S05** Metabolisms as Survival Strategy in Plants
♦ **S06** Plant adaptation strategies via ABA-mediated signaling in change of environmental conditions.

Day 2, March 14 (Thu) 9:00–12:00

♦ **S07** Find out the mechanism supporting C4 photosynthesis

Day 2, March 14 (Thu) 13:30–16:00

♦ **S08** How to inherit and rewrite cellular memory in plants

♦ **S09** Plant mineral transporters: from function to structure and modelling

2-4. The 15th Database Workshop

Date and time: Day 2, March 14 (Thu) 9:00–12:00

Venue: Room F

Organizers: Kentaro Yano (Meiji Univ.), Shizuka Koshimizu (Meiji Univ.)

Please see p.29 for the program.

2-5. Luncheon Seminars

Registration is not required, but distribution of lunch box will be on a first-come-first-served basis.

Please see p.30–33 for the program and contents.

♦ **Leave a Nest Luncheon Seminar: Contest to Social Challenges by Plant Scientists**

Date and time: Day 1, March 13 (Wed) 12:45–13:45

Venue: Room G

Sponsor: Leave a Nest Co., Ltd.

♦ ***PCP* Luncheon Seminar "60 Years of PCP: Past, Present and Future"**

Date and time: Day 1, March 13 (Wed) 12:45–13:45

Venue: Room N

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

♦ **Carrier Path Seminar on Gender Equality**

The current status of Japanese science and technology as seen from a large-scale survey with a focus on fostering young researchers and promoting the empowerment of the female researchers

Date and time: Day 2, March 14 (Thu) 12:15–13:15

Venue: Room C

Sponsor: JSPP Gender Equality Committee

♦ **Leica Microsystems K.K. Luncheon Seminar**

Date and time: Day 2, March 14 (Thu) 12:15–13:15

Venue: Room G

Sponsor: Leica Microsystems K.K.

2-6. Satellite Meetings

Please see p.34–37 for the programs.

♦ **The 21st Plant Organelle Workshop**

Date and time: March 12 (Tue) (The day before the Meeting), 13:00–18:40

Venue: Sakata Hirata Hall, Science South building, Nagoya University (Higashiyama Campus)

Representative Organizer: Junichi Obokata (Kyoto Prefectural 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 at our website. People who wish to join the mixer after the talk session should register at our website below by Monday, March 4. Beer, soft drinks, and food will be provided at a cost of 4,500 yen per person (4,000 yen for graduate and undergraduate students).

Contact addresses: Takuya Matsuo, E-mail: t-matsuo@gene.nagoya-u.ac.jp
Kensuke Kusumi, E-mail: kusumi.k.239@m.kyushu-u.ac.jp

http://dfns.u-shizuoka-ken.ac.jp/labs/pctech/workshop

♦ 4th Workshop on Photosynthetic Bacteria

Date and time: The day before the Meeting, March 12 (Tue) 13:30–17:00

Venue: Room C

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://goo.gl/LGQ4FV) (deadline, 03/01/2019). We are expecting your participation.

♦ The 37th Meeting of the Japanese Society for Young Plant Physiologists

Date and time: Day 1, March 13 (Wed) 19:15-20:45

Venue: Lecture room, 1st floor of ITbM building, Nagoya University (Higashiyama Campus)

Organizers: Rumi Amano (Kyoto Sangyo University), Tatsuya Nobori (Max-Planck Institute for Plant Breeding Research)

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. Dr. Akito Kano is an R&D researcher at Takii Seed company studying crop protection from pests and diseases. Dr. Keiko Kuwata is a Chief-Coordinator of ITbM Molecular Structure Center, Nagoya University, providing supports on Mass spectrometry. 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://goo.gl/forms/KLhpgwxm1M8cB8Gh2 by March 6.

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: nobori@mpipz.mpg.de

♦ The 2nd Meeting of Plant Mathematical Modeling

Date and time: Day 1, March 13 (Wed) 19:00-20:30

Venue: The 5th lecture room, 1st floor of Lecture building, Graduate school of Bioagricultural Sciences, Nagoya University (Higashiyama Campus)

Organizers: Hironori Fujita (National Institute for Basic Biology), Munetaka Sugiyama (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. This meeting is also aimed at building a community in this research field, and is planned to be held continuously in annual meetings of JSPP and BSJ. In the meeting, invited speakers will talk about their collaborative research between experiments and modeling. This meeting is free to all participants, and if you are interested please feel free to join us.

2-7. JSPP Committee Meetings

The day before the meeting, Tue., March 12

9:00–10:00	[Science and Agricultural Building SA329]	PCP Editors Board pre-Meeting
10:30–16:30	[Science and Agricultural Building SA329]	PCP Editors and Advisory Editorial Board Meeting
14:30–16:30	[Lecture Room C10]	Public Relations Committee Meeting
16:00–17:00	[Room N]	Directors' and managers' Meeting
17:00–19:30	[Room N]	Board of Delegates' Meeting

Day1, Wed., March 13

12:45–13:45	[Lecture Room C10]	JSPP Awards Committee Meeting
12:45–13:45	[Lecture Room S15]	GMO Working Group Meeting
12:45–13:45	[Lecture Room S14]	Gender Equality Committee Meeting

Day2, Thu., March 14

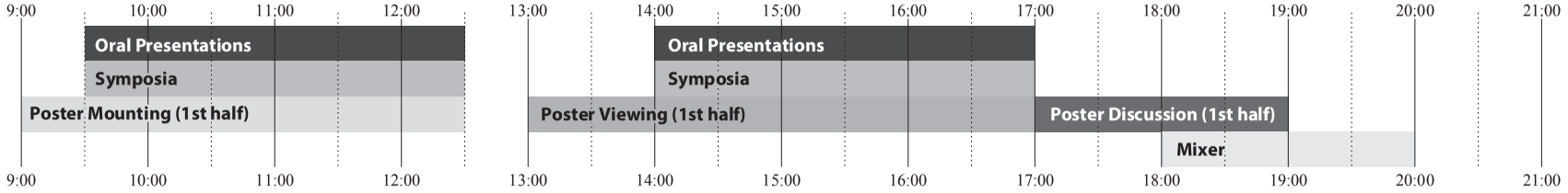
12:15–13:15	[Lecture Room C10]	Gathering of Science Advisors and Public Relations Committee Members

Day3, Fri., March 15

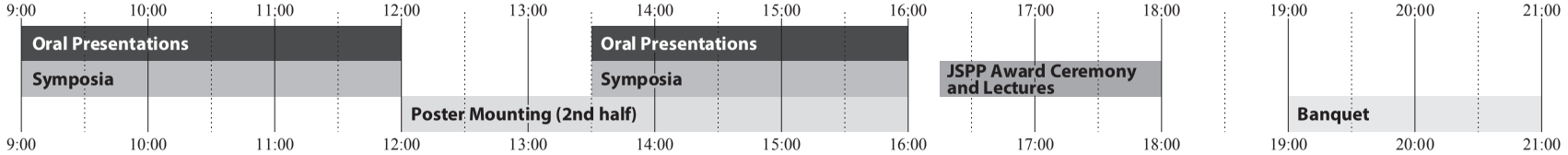
12:55–13:30	[Lecture Room C10]	International Committee Meeting
16:00–17:30	[Conference Secretariat Rm]	Annual Meeting Committee Meeting

Time Table of 60th JSPP Annual Meeting and JTPB2019

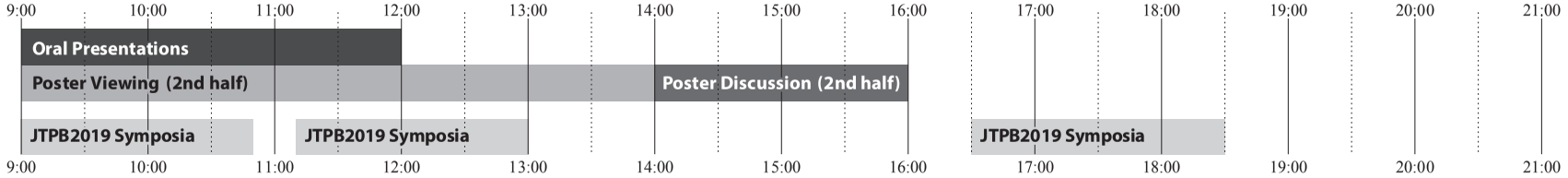
Day 1 (March 13, Wednesday)



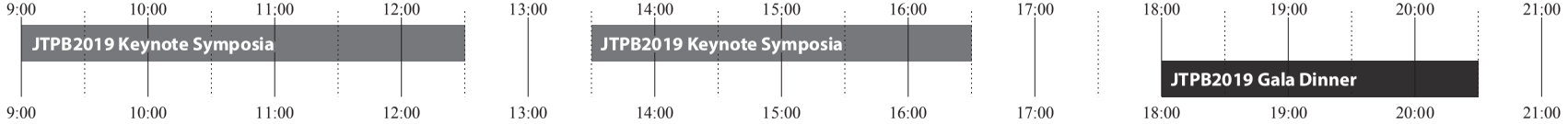
Day 2 (March 14, Thursday)



Day 3 (March 15, Friday)



JTPB2019 (March 16, Saturday)



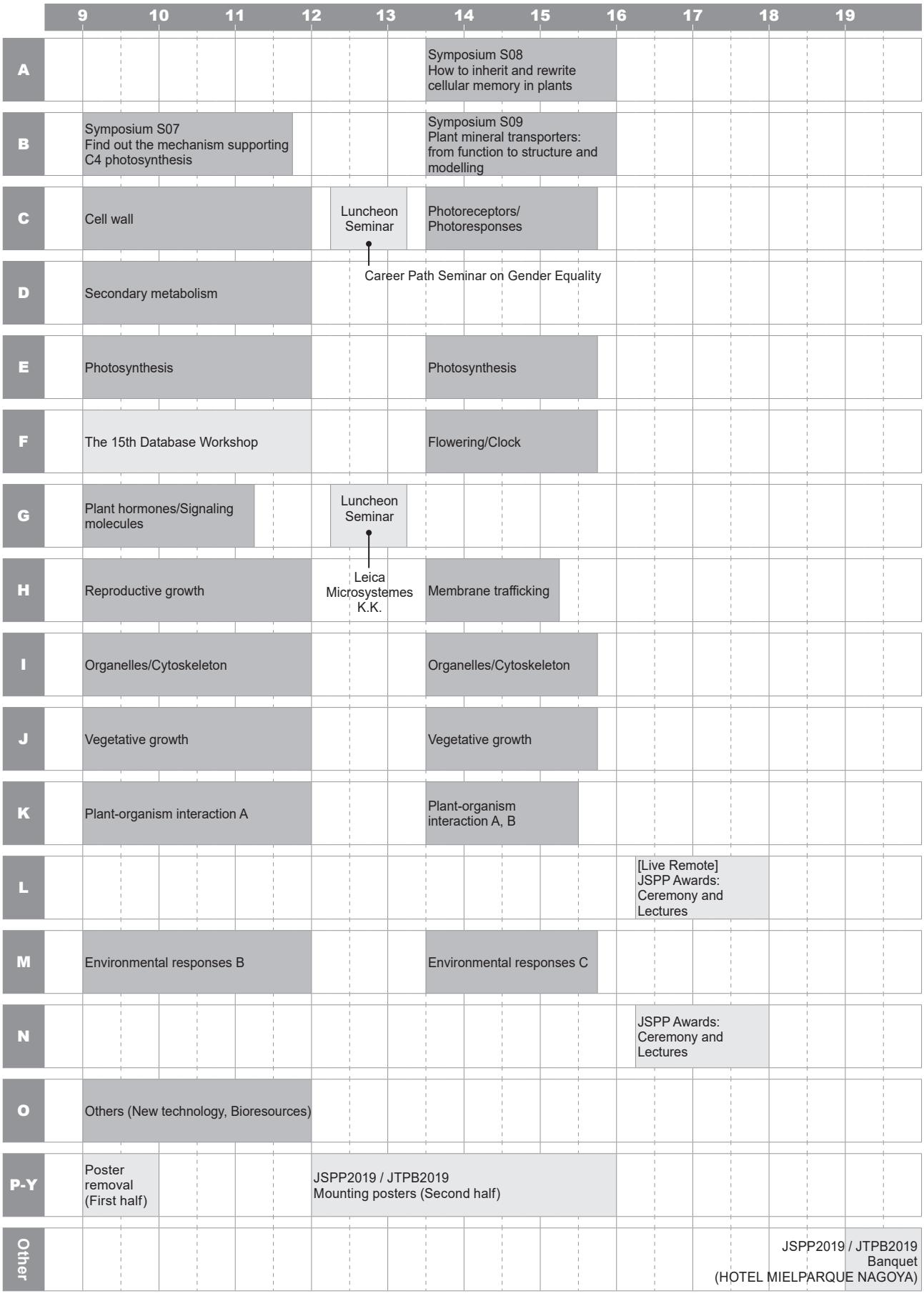
Time table Wed., March 13

	9	10	11	12	13	14	15	16	17	18	19
A		Symposium S01 Understanding of field plants and development of innovative techniques toward these plant regulation				Symposium S04 Strategies of mechanical optimization in plants					
B		Symposium S02 The final phase of the photosynthetic electron transport				Symposium S05 Metabolisms as Survival Strategy in Plants					
C		Biomembrane/Ion and solute transport				Cell cycle/Cell division					
D		Primary metabolism				Primary metabolism, Secondary metabolism					
E		Environmental responses of photosynthesi				Photosynthesis, Environmental responses of photosynthesis					
F		Environmental responses A				Symposium S06 Plant adaptation strategies via ABA-mediated signaling in change of environmental conditions					
G		Plant hormones/Signaling molecules			Luncheon Seminar Leave a Nest	Plant hormones/Signaling molecules					
H		Epigenetic regulation				Reproductive growth					
I		Flowering/Clock				Organelles/Cytoskeleton					
J		Vegetative growth				Vegetative growth					
K		Plant-organism interaction A				Plant-organism interaction A					
L		Plant-organism interaction B				Transcriptional, post-transcriptional/ Translational regulations/Protein modification & degradation					
M		Environmental responses C				Environmental responses B					
N		Symposium S03 Understanding the plant survival strategies from the perspective of stem cells			Luncheon Seminar PCP						
O		Systems biology				Systems biology					
P-Y		Mounting posters (First half)			Poster presentation (First half)				Questions and answers Odd numbers	Even numbers	
Other										Mixer (Mei-dining)	

The 37th Meeting of the Japanese Society for Young Plant Physiologists
The 2nd Meeting of Plant Mathematical Modeling

Thu., March 14

JSPP2019 Day 2 / JTPB2019 Day 1



	9	10	11	12	13	14	15	16	17	18	19
A	JTPB2019 Symposium Session 1 Environmental Responses, Abiotic Stresses I			JTPB2019 Symposium Session 5 Environmental Responses, Abiotic Stresses II					JTPB2019 Symposium Session 9 Growth and Development		
B	JTPB2019 Symposium Session 2 Biomembrane, Ion and Solute Transporters			JTPB2019 Symposium Session 6 Evolution, Taxonomy					JTPB2019 Symposium Session 10 Gene Regulation		
C	Photoreceptors/Photoresponses										
D											
E	Photosynthesis										
F	JTPB2019 Symposium Session 3 Cell Biology			JTPB2019 Symposium Session 7 Primary and Secondary Metabolism					JTPB2019 Symposium Session 11 Photobiology		
G	JTPB2019 Symposium Session 4 Plant-Micorbe Interaction			JTPB2019 Symposium Session 8 Plant Hormones, Signaling Molecules					JTPB2019 Symposium Session 12 Crop Improvement		
H											
I	Organelles/Cytoskeleton										
J	Vegetative growth										
K	Plant-organism interaction B										
L	Transcriptional, post-transcriptional/Translational regulations/Protein modification & degradation										
M	Environmental responses B										
N											
O											
P-Y	JSPP2019 / JTPB2019 Poster presentation (Second half)						Questions and answers: Odd numbers / Even numbers		Poster removal (Second half)		
Other											

Thu., March 14, 16:15–18:00 Room N

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

16:15	Reports on Selection Process	Chairpersons of Award Committee
16:30	JSPP Award, JSPP Young Investigator Awards and PCP Award	JSPP President
16:40	Honorary Membership Award Masayuki Katsumi (ICU, Professor Emeritus)	JSPP President

Award Lectures

Language: Japanese

16:50 A01 JSPP Award
"Studies on the Function of Ribosome as a Play Stage for the Maintenance of Cellular Homeostasis"
Satoshi Naito (Grad. Sch. Agr., Hokkaido Univ.)

17:10 A02 JSPP Young Investigator Award
"Temperature sensing mechanism involved in chloroplast movement"
Yutaka Kodama (Center for Biosci. Res. Edu., Utsunomiya Univ.)

17:25 A03 JSPP Young Investigator Award
"Molecular genetic studies on symbiotic organ development and nitrate response during legume—*Rhizobium* symbiosis"
Takuya Suzaki (Grad. Sch. Life & Env. Sci., Univ. Tsukuba)

17:40 A04 PCP Award
Makoto Hayashi, Mina Tanaka, Saki Yamamoto, Taro Nakagawa, Masatake Kanai, Aya Anegawa, Miwa Ohnishi, Tetsuro Mimura and Mikio Nishimura (2017)
"Plastidial Folate Prevents Starch Biosynthesis Triggered by Sugar Influx into Non-Photosynthetic Plastids of Arabidopsis"
Plant Cell Physiol. 58(8): 1328–1338
Makoto Hayashi (Dept. Biosci., Nagahama Inst. Biosci. Technol.), et al.

Wed., March 13, 9:30–12:30 Room A

Understanding of field plants and development of innovative techniques toward these plant regulation

Language: Japanese

Organizers: Nobutoshi Yamaguchi (NAIST)
Yoko Mizuta (Nagoya University)
Shigeo Sugano (Ritsumeikan Universtiy)

● Chairperson: Shigeo Sugano

09:30 Opening remarks
Nobutoshi Yamaguchi

09:30 **S01-1** Molecular genetic analysis for epigenetic memory and acquired traits
Nobutoshi Yamaguchi[1,2] ([1]NAIST, [2]JST PRESTO)

09:55 **S01-2** Evolution and diversification of sexual systems in plants: insights from "persimmon"
Takashi Akagi[1,2] ([1]Grad. Sch. Agric., Kyoto Univ., [2]JST-PRESTO)

10:20 **S01-3** Gene Expression Dynamics Of The Obligate Filamentous Pathogen Blumeria Spp. And Their Host Plant Under Field Environments
Kentaro Yoshida[1,2] ([1]Grad. Sch. Agric. Sci., Kobe Univ., [2]JST, Presto)

● Chairperson: Yoko Mizuta

10:45 **S01-4** Elucidating biological networks of plant-microbiota superorganism
Yasunori Ichihashi (RIKEN BioResource Research Center)

11:10 **S01-5** Precise control of auxin signaling by synthetic approach
Shinya Hagihara[1,2] ([1]CSRS, RIKEN, [2]ITbM, Nagoya Univ.)

● Chairperson: Nobutoshi Yamaguchi

11:35 **S01-6** Development of the core technology that allows quantitative evaluation of solute movement in a living plant using radioisotopes
Keitaro Tanoi[1,2], Ryohei Sugita[1], Natsuko I. Kobayashi[1] ([1]Grad. Sch. Agri. Life Sci., UTokyo, [2]JST PRESTO)

12:00 **S01-7** Genetic modification of plant reproductive cells using pollen tube as a vector and the study of plant reproduction
Yoko Mizuta[1,2], Shiori Nagahara[2], Daisuke Kurihara[1,2], Tetsuya Higashiyama[2,3]
([1]JST PRESTO, [2]ITbM, Nagoya Univ., [3]Grad. Sch. of Sci., Nagoya Univ.)

12:25 Closing remarks
Yoko Mizuta

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

Wed., March 13, 9:30–12:30 Room B

The final phase of the photosynthetic electron transport

Language: Japanese

Organizers: Shinji Masuda (Cent. Biol. Res. Inform., Tokyo Inst. Tech.)
Kentaro Ifuku (Grad. Sch. Biostu., Kyoto Univ.)

● Chairperson: Shinji Masuda

09:30 Shinji Masuda

09:40 **S02-1** Photosynthesis Organisms Favor O_2 to Suppress ROS Production
~Who Understands O_2 Worlds?~
Chikahiro Miyake (Fac Agri, Kobe University)

10:05 **S02-2** Roles of far-red light in regulation of photosynthesis in fluctuating light in land plants
Masaru Kono, Wataru Yamori, Ichiro Terashima (Sch. Sci. Univ. Tokyo)

10:30 **S02-3** Structural basis for the electron transfer mechanism between photosystem I and ferredoxin
Hisako Kubota-Kawai[1], Risa Mutoh[2], Takahisa Ikegami[3], Hideaki Tanaka[4], Genji Kurisu[4] ([1]Faculty of Sci., Yamagata Univ., [2]Faculty of Sci., Fukuoka Univ., [3]Faculty of Sci., Yokohama city Univ., [4]IPR. Osaka Univ.)

● Chairperson: Kentaro Ifuku

10:55 **S02-4** Crosstalk between $NADP^+$ supply system and electron transfer in photosynthesis
Shin-nosuke Hashida[1], Maki Kawai-Yamada[2] ([1]Environ. Sci. Res. Lab., CRIEPI, [2]Grad. Sch. Sci. Eng., Saitama Univ.)

11:20 **S02-5** Regulation of photosynthetic electron transport via proton motive force
Toshiharu Shikanai, Caijuan Wang (Kyoto University)

11:45 **S02-6** The role of cyclic electron flow in C_4 photosynthesis
Takako Ogawa, Kana Kobayashi, Yukimi Taniguchi, Yuri Munekage (Grad. Sch. Sci. & Tec., Univ. Kwansei Gakuin)

12:10 Kentaro Ifuku

Cosponsor: New photosynthesis

Wed., March 13, 9:30–12:10 Room N

Understanding the plant survival strategies from the perspective of stem cells

Language: English

Organizers: Masaaki Umeda (NAIST)
Hitoshi Sakakibara (Nagoya Univ.)

09:30 Opening remarks
Masaaki Umeda

● Chairperson: Masaaki Umeda

09:35 **S03-1** Towards understanding mechanisms controlling indeterminacy of plant stem cells
Junko Kyozuka (Tohoku Univ., Life Sciences)

09:55 **S03-2** Mechanisms for the timing of the stem cell production in plants
Shinjiro Yamaguchi[1,2] ([1]Kyoto Univ., Inst. Chem. Res., [2]Tohoku Univ., Grad. Sch. Life Sci.)

10:15 **S03-3** Role of cytokinins in maintenance and modulation of shoot meristem activity
Hitoshi Sakakibara, Takatoshi Kiba (Grad. Sch. Bioagr. Sci., Nagoya Univ.)

10:35 Break

● Chairperson: Hitoshi Sakakibara

10:50 **S03-4** Gene regulatory networks in root nodule symbiosis
Makoto Hayashi[1], Kai Battenberg[1], Tsuneo Hakoyama[1], Atsuko Hirota[1], Akihiro Yamazaki[1], Shiori Aki[2], Masaaki Umeda[2], Thomas Kelly[3], Nicola Hetherington[3], Aki Minoda[3] ([1]RIKEN CSRS, [2]NAIST, [3]RIKEN IMS)

11:10 **S03-5** Genome maintenance strategies in stem cells
Masaaki Umeda (Grad. Sch. Sci. Tech., NAIST)

11:30 **S03-6** Direct roles of MUTE in termination of asymmetric cell division and orchestration of stomata differentiation
Soon-Ki Han[1], Keiko Torii[1,2,3] ([1]ITbM, Nagoya University, [2]Howard Hughes Medical Institute, University of Washington, [3]Department of Biology, University of Washington)

11:50 **S03-7** Cell division in moss stem cells
Gohta Goshima (Nagoya University)

Cosponsor: Grant-in-Aid for Scientific Research on Innovative Areas 'Principles of pluripotent stem cells underlying plant vitality'

Wed., March 13, 14:00–17:00 Room A

Strategies of mechanical optimization in plants

Language: Japanese

Organizers: Haruko Ueda (Konan University)
Shinichiro Sawa (Kumamoto University)

● Chairperson: Shinichiro Sawa

14:00		Opening remarks
14:05	**S04-1**	Strategy of Mechanical Optimization During Plant Development by Regulation of Secondary Cell Wall Formation Taku Demura, Misato Ohtani (Division of Biological Science, Nara Institute of Science and Technology)
14:35	**S04-2**	Explore mechanical optimization strategies of jigsaw puzzle-shaped pavement cells Takumi Higaki (IROAST, Kumamoto Univ.)
15:00	**S04-3**	Organ bending and its restoration system for adjusting plant posture Haruko Ueda, Ikuko Hara-Nishimura (Fac. Sci. Engin., Konan Univ.)
15:25		Break

● Chairperson: Haruko Ueda

15:35	**S04-4**	Plant mechanosensory transduction as revealed by highly-sensitive biosensors Masatsugu Toyota (Dept Biochem and Mol Biol, Saitama Univ)
16:00	**S04-5**	Single cell detection and manipulation by atomic force microscopy and laser ablation Yoichiroh Hosokawa (Division of Materials Science, Nara Institute of Science and Technology)
16:25	**S04-6**	Plantphysiology and Structural Engineering Kenichi Kawaguchi (IIS, the University of Tokyo)
16:55		General discussion

Cosponsor: Plant-Structure Optimization Strategy

Wed., March 13, 14:00–17:00 Room B

Metabolisms as Survival Strategy in Plants

Language: English

Organizers: Mami Yamazaki (Grad. Sch. Pharm. Sci., Chiba Univ.)
Nobukazu Shitan (Kobe Pharm. Univ.)
Hikaru Seki (Grad. Sch. Engineering, Osaka Univ.)

14:00		Opening remarks Mami Yamazaki
14:05	**S05-1**	Polyphenolic polymorphism found in neo-functionalization related to production of UV light protectants Takayuki Tohge (NAIST)
14:30	**S05-2**	A heat-inducible lipase remodels chloroplastic glycerolipids in Arabidopsis leaves Yasuhiro Higashi[1], Yozo Okazaki[1,2], Kouji Takano[1], Fumiyoshi Myouga[1], Kazuo Shinozaki[1], Eva Knoch[1], Atsushi Fukushima[1], Kazuki Saito[1,3] ([1]CSRS, RIKEN, [2]Grad. Sch. Bioresources, Mie Univ., [3]Grad. Sch. Pharm. Sci., Chiba Univ.)
14:55	**S05-3**	Importance of chemical information on insect-plant network Masaaki Kotera (Dep. Eng., Univ. Tokyo)
15:20	**S05-4**	Investigating biosynthesis and regulation of plant triterpenoids: towards the elucidation of their biological functions Hikaru Seki (Grad. Sch. Eng., Osaka Univ)
15:45		Short break
16:00	**S05-5**	Transporters of secondary metabolites —Identification, characterization, and possible application to synthetic biology— Nobukazu Shitan (Kobe Pharm. Univ.)
16:25	**S05-6**	Neo-functionalization of enzymes commits to biosynthesis of bioactive alkaloids Mami Yamazaki (Grad. Sch. Pharm. Sci., Chiba Univ.)
16:50		General discussion

Cosponsor: Grant-in-Aid for Scientific Research on Innovative Areas FY2016-2020 "Redesigning Biosynthetic Machineries"; Grobal and Prominent Research, "Phytochemical Plant Molecular Sciences", Chiba University

Wed., March 13, 14:00–16:50 Room F

Plant adaptation strategies via ABA-mediated signaling in change of environmental conditions

Language: English

Organizers: Toshinori Kinoshita (Nagoya Univ.)
Noriyuki Nishimura (ICS, NARO)
Fuminori Takahashi (RIKEN CSRS)

14:00 Opening remarks
Noriyuki Nishimura

● Chairperson: Fuminori Takahashi

14:05 **S06-1** New Insights into Drought-Linked Stomatal Movements and Abscisic Acid Signal Transduction
Julian I. Schroeder[1], Yohei Takahashi[1], Zixing Li[1], Felix Hauser[1], Po-Kai Hsu[1], Shintaro Munemasa[2], Rainer Waadt[3] ([1]Division of Biological Sciences, University of California, San Diego, USA, [2]Graduate School of Environmental and Life Science, Okayama University, Okayama, Japan, [3]Centre for Organismal Studies, Plant Developmental Biology, Ruprecht-Karls-University of Heidelberg, Heidelberg, Germany)

14:30 **S06-2** Chemical genetics for elucidating stomatal movement
Yusuke Aihara[1], Shigeo Toh[2], Yosuke Toda[3,4], Gwanchol Sin[1], Takahiro Yuki[1], Ayato Sato[4], Toshinori Kinoshita[1,4] ([1]Grad.Sch.Sci., Nagoya Univ., [2]Grad.Sch.Agr., Meiji Univ., [3]PRESTO, JST, [4]WPI-ITbM, Nagoya Univ.)

14:55 **S06-3** A regulatory system of seed dormancy and germination regulated by abscisic acid signaling
Noriyuki Nishimura[1], Wataru Tsuchiya[2], James J. Moresco[3], Yuki Hayashi[4], Kouji Satoh[1], Nahomi Kaiwa[1], Tomoko Irisa[1], Toshinori Kinoshita[4], Julian I. Schroeder[5], John R. Yates, III[3], Takashi Hirayama[6], Toshimasa Yamazaki[2] ([1]ICS, NARO, [2]AAC, NARO, [3]TSRI, [4]Grad. Sch. Sci., Nagoya Univ, [5]UCSD, [6]IPSR, Okayama Univ)

15:20 Coffee break

● Chairperson: Noriyuki Nishimura

15:30 **S06-4** Phosphoproteomics of Highly ABA-Induced1 (HAI1) reveals new factors in growth and RNA splicing regulation during drought stress.
Paul Verslues (Academia Sinica, Institute of Plant and Microbial Biology)

15:55 **S06-5** Conserved and diversified signaling mechanisms revealed by molecular studies of ABA responses in bryophytes
Daisuke Takezawa[1], Kenji Komatsu[2], Izumi Yotsui[2], Taishi Umezawa[3], Yoichi Sakata[2] ([1]Saitama University, [2]Tokyo University of Agriculture, [3]Tokyo University of Agriculture and Technology)

16:20 **S06-6** Long-distance peptide signaling in drought stress responses
Fuminori Takahashi[1], Takehiro Suzuki[1], Yuriko Osakabe[2], Shigeyuki Betsuyaku[3], Yuki Kondo[4], Naoshi Dohmae[1], Hiroo Fukuda[4], Kazuko Yamaguchi-Shinozaki[4], Kazuo Shinozaki[1] ([1]RIKEN CSRS, [2]Tokushima Univ., [3]Tsukuba Univ., [4]The Univ. of Tokyo)

16:45 Closing remarks
Fuminori Takahashi

Cosponsor: Plant Memory

Thu., March 14, 9:00–11:40 Room B

Find out the mechanism supporting C4 photosynthesis

Language: English

Organizers: Yuri Munekage (Kwansei Gakuin Univ.)
Tsuyoshi Furumoto (Ryukoku Univ.)

09:00 Opening remarks
Yuri Munekage

● Chairperson: Tsuyoshi Furumoto

9:05 **S07-1** Evolutionary Assembly of C_4 Leaf Structure
Tammy Sage (Department of Ecology & Evolutionary Biology, University of Toronto)

9:30 **S07-2** Organelle positioning in C_4 photosynthetic cells
Mitsutaka Taniguchi[1], Takao Oi[1], Koji Yamane[2] ([1]Grad. Sch. Bioagricul. Sci., Nagoya Univ., [2]Facul. Agricul., Kindai Univ.)

9:55 **S07-3** Electron transport and energy production in chloroplasts of NADP-ME type C_4 plants
Yuri Munekage, Takako Ogawa, Yukimi Taniguchi (Sch Sci Tech, Kwansei Gakuin Univ.)

● Chairperson: Yuri Munekage

10:20 **S07-4** Optimum integration of C_4 cycle into Calvin-Benson cycle
Tsuyoshi Furumoto (Faculty of Agriculture, Ryukoku University)

10:45 **S07-5** The molecular evolution of C_4 photosynthesis
Julian Hibberd (Department of Plant Sciences, University of Cambridge)

11:10 **S07-6** Mechanisms regulating differentiation and positioning of the two chloroplast types in single-cell C_4 species
Sascha Offermann[1], Philipp Bohnhorst[1], Diana Wimmer[1], Inhwan Hwang[2] ([1]Institute of Botany, Leibniz University Hannover, [2]Pohang University of Science and Technology)

11:35 Closing remarks
Tsuyoshi Furumoto

Cosponsor: New photosynthesis

Thu., March 14, 13:30–16:00 Room A

How to inherit and rewrite cellular memory in plants

Language: English

Organizers: Momoko Ikeuchi (RIKEN CSRS)
Yosuke Tamada (NIBB, SOKENDAI)

13:30 Opening remarks
Momoko Ikeuchi

● Chairperson: Yosuke Tamada

13:35 **S08-1** Mechanisms underlying cell fate specification and plasticity
Roger Deal (Emory University, Department of Biology)

14:05 **S08-2** Reconfiguring the A. thaliana epigenome by bypassing epigenetic resetting in the germ line
Claude Becker[1,2] ([1]Gregor Mendel Institute of Molecular Plant Biology, [2]Austrian Academy of Sciences)

14:35 **S08-3** Balancing act in the control of plant cell reprogramming
Momoko Ikeuchi, Akira Iwase, Keiko Sugimoto (RIKEN CSRS)

● Chairperson: Momoko Ikeuchi

15:00 **S08-4** de novo Meristem Formation at Single Cell Resolution
Idan Efroni, Gil Naama, Omary Moutasem, Matosevich Rotem, Gedion Beatrice (The Hebrew University)

15:30 **S08-5** Role of the histone variant in the regulation of cellular memory
Yosuke Tamada[1,2] ([1]Div. Evol. Biol., Natl. Inst. Basic Biol., [2]Sch. Life Sci., SOKENDAI)

15:55 Closing remarks
Yosuke Tamada

Sponsored by Scientific Research on Innovative Areas, Integrative system of autonomous environmental signal recognition and memorization for plant plasticity

Thu., March 14, 13:30–16:00 Room B

Plant mineral transporters: from function to structure and modelling

Language: English

Organizer: Jian Feng Ma (IPSR, Okayama Univ.)

13:30 Opening remarks

● Chairperson: Jian Feng Ma

13:35 **S09-1** Node-based transporters for preferential distribution of mineral elements
Naoki Yamaji, Jian Feng Ma (IPSR, Okayama Univ.)

13:55 **S09-2** IRON MAN to the rescue: how plants take up iron
Louis Grillet[1], Ping Lan[1,2], Wenfeng Li[1,3], Girish Mokkapati[1,4,5], Wolfgang Schmidt[1,4] ([1]IPMB, Academia Sinica, Taiwan, [2]State Key Laboratory of Soil and Sustainable Agriculture, Institute of Soil Science, Chinese Academy of Sciences, China, [3]Collaborative Innovation Center of Sustainable Forestry in Southern China of Jiangsu Province, Nanjing Forestry University, China, [4]Graduate Institute of Biotechnology, National Chung-Hsing University, Taiwan, [5]Molecular Biology and Agricultural Sciences Program, Taiwan International Graduate Program, Academia Sinica and National Chung-Hsing University, Taiwan)

14:20 **S09-3** Regulation of nitrogen acquisition under low availability and beyond
Takatoshi Kiba (Grad. Sch. Bioagr., Nagoya Univ.)

14:45 **S09-4** Sensing external and internal nitrate by transceptors
Yi-Fang Tsay, Hui-Yu Chen (Institute of Molecular Biology, Academia Sinica, Taipei, Taiwan)

15:10 **S09-5** Structure of a silicon transporter in plant
Yasunori Saitoh[1], Kengo Matsuki[1], Shin-Ichiro Yonekura[1], Lingli Yang[1], Namiki Mitani-Ueno[2], Naoki Yamaji[2], Jian-Ren Shen[1], Jian Feng Ma[2], Michi Suga[1] ([1]Research Insititute for Interdisciplinary Science, Okayama Univ., [2]Institute of Plant Science and Resources, Okayama Univ.)

15:35 **S09-6** Integrated micro-scale and macro-scale modeling of silicon transportation system in rice
Gen Sakurai[1], Naoki Yamaji[2], Namiki Mitani-Ueno[2], Masayuki Yokozawa[3], Keisuke Ono[1], Jian Feng Ma[2] ([1]Institute for Agro-Environmental Sciences, NARO, [2]Institute of Plant Science and Resources, Okayama University, [3]Faculty of Human Sciences, Waseda University)

16:00 Closing remarks

Cosponsor: Specially Promoted Research
“Integrated analysis of mineral transport system in crops”

Thu., March 14, 9:00–12:00 Room F

The 15th Database Workshop

Language: Japanese

Organizers: Kentaro Yano (Sch. Agri., Meiji Univ.)
Shizuka Koshimizu (Sch. Agri., Meiji Univ.)

● Chairperson: Kentaro Yano

09:00 **D01-1** Introduction —The current status of plant omics databases—
Kentaro Yano (Bioinformatics, Meiji Univ.)

● Chairperson: Shizuka Koshimizu

09:20 **D01-2** Launch the deep learning from a viewpoint of a "wet" researcher: Image diagnosis and its visual explanations
Takashi Akagi[1,2] ([1]Grad. Sch. Agric., Kyoto Univ., [2]JST-PRESTO)

10:40 **D01-3** Plant Annotation Tasks by Deep Learning and Utilization of Public Cloud
Eli Kaminuma (Tokyo Medial and Dental University)

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

Wed., March 13, 12:45–13:45 Room G

Leave a Nest Luncheon Seminar
Agri Garage Laboratory where plant scientists are active

Language: Japanese

Sponsor: Leave a Nest Co., Ltd.

Leave a Nest established Institution of Innovation and Knowledge (I2K) in 2013, and we have been conducting research to generate new value by gathering knowledge from all over the world and combining them together. Given the circumstances, we decided to establish Agri Garage Laboratory in 2016 to promote the research focused on exploring the potential of algae and plants and efficient use of them, and also on contributing to agriculture, forestry, fishing and food and nutrition. In this institution, plant scientists are going to work not only on our own research but also collaborative research and funded research with universities, companies and ventures. This time, I will introduce about members and research cases.

*The first 165 attendees are served with lunch box. No prior registration is required.

Leave a Nest

Leave a Nest Co., Ltd.
The Knowledge-based Platform

Leave a Nest thrives to achieve global happiness by enhancing everyday life through science and education for future generation.
We have overseas branches in Singapore, Malaysia, USA and UK.

◊ **Education Support Project**

Education Support Project, together with partner companies, develops and conducts education programs for next generation who need to survive unpredictable future.

◊ **Human Resource Encouragement Project**

Human Resource Encouragement Project shares common vision for professional development with our partner companies, design interactive training programs, and support those who wish to keep learning and advancing.

◊ **Researcher Encouragement Project**

Researcher Encouragement Project supports researchers' career and R&Ds in industry, and create partnership opportunities between researchers in academia and private sector.

◊ **Entrepreneurship Support Project**

Entrepreneurship Support Project supports technology-based startups from academia or ventures in their early stage in the process of growing its seed into business and innovation.

Home Page: https://en.lne.st

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

Wed., March 13, 12:45–13:45 Room N

PCP Luncheon Seminar*

"60 Years of PCP: Past, Present and Future"

Language: English

Plant & Cell Physiology (PCP) is in the top 8% of international Plant Science Journals and the official journal of the JSPP. This year marks PCP's 60th anniversary, and in this luncheon seminar, we celebrate PCP's history and discuss future directions with the Editor in Chief, Prof. Hitoshi Sakakibara, and a selection of domestic and international Editors.

Symposium outline:

Introduction: 60 years of PCP (speaker: Hitoshi Sakakibara, Editor-in-Chief)

a) The changing face of PCP and key publishing highlights over the years.
b) Expansion of editorial board to encompass greater international representation.

Followed by mini presentations by a selection of PCP Editors covering a range of subject areas.

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.

Thu., March 14, 12:15–13:15 Room C

The current status of Japanese science and technology as seen from a large-scale survey with a focus on fostering young researchers and promoting the empowerment of the female researchers

Speaker: Akiyoshi MURAKAMI (Ministry of Education, Culture, Sports, Science and Technology (MEXT), National Institute of Science and Technology Policy (NISTEP), Research Unit for Science and Technology Analysis and Indicators, Research Fellow)

Large-scale surveys are regularly conducted on Japanese scientists by the National Institute of Science and Technology Policy, an agency of MEXT (Ministry of Education, Culture, Sports, Science and Technology), in order to understand the current status and trends in science technology and innovation in Japan. The survey aims in particular to understand factors that cannot be assessed through the numerical analysis of various indexes. In these surveys, the questionnaire was created according to the national science and technology's basic plan to reflect the analysis results for future policy making. In this seminar, the speaker will talk about the recent analytical report of these surveys with a particular focus on the results pertaining to young and/or female scientists at universities and public research institutes and discuss possible strategies to promote their careers in science.

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

Day 2, Lunch time | **Luncheon Seminar**

Thu., March 14, 12:15–13:15 Room G

Leica Microsystems K.K. Luncheon Seminar

Language: Japanese

Sponsor: Leica Microsystems K.K.

Leica Microsystems develops high-tech precision microscopy products for the analysis of microstructures. We will introduce the key technologies and applications of newly developed equipment for life science imaging.

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

---

1. Leica Thunder / Lightning
   Fusion of optical and digital —State of the art digital imaging technologies—
   Speaker: Kanae Shibata, Leica Microsystems K.K.

2. Leica TCS SP8 FLIM
   New axis of confocal microscope observation —Fluorescence lifetime imaging—
   Speaker: Satoshi Ijuin, Leica Microsystems K.K.

Tue., March 12, 13:00–18:40 Sakata Hirata Hall, Science South building, Nagoya University (Higashiyama Campus)

The 21st Plant Organelle Workshop
—Plant organelles and membrane systems: Their structure, function, and evolution—

Language: Japanese

Organizers (*in alphabetical order*):
Nobuaki Hayashida (Shinshu University), Yusuke Kato (Okayama University), Shigeyuki Kawano (University of Tokyo), Hirokazu Kobayashi (University of Shizuoka), Kensuke Kusumi (Kyushu University), Takuya Matsuo (Nagoya University), Yutaka Miyazawa (Yamagata University), Yoshiki Nishimura (Kyoto University), Junichi Obokata (Kyoto Prefectural University)

13:00	Opening remarks
Session 1	
13:05	Molecular mechanism of chloroplast protein import: New developments and perspectives Masato Nakai (Osaka University)
13:40	Synthesis of thylakoid membrane lipids facilitates plastid differentiation Sho Fujii (University of Tokyo)
14:15	A new perspective on the function and lipid metabolism of chloroplasts in Arabidopsis guard cells Juntaro Negi (Kyushu University)
14:50	Role of organelle-organelle contact sites in phospholipid transfer Yasushi Tamura (Yamagata University)
15:25	Break
Session 2	
15:35	Circadian control of plant organelles Takuya Matsuo (Nagoya University)
16:10	The evolution of "supercomplex" in the photosynthetic electron transport chain: How did angiosperms establish the connection between PSI and NDH complexes? Yoshinobu Kato, Toshiharu Shikanai (Kyoto University)
16:45	Contemplation on the origin of plastids through the lens of modern-day symbioses Shinichiro Maruyama (Tohoku University)
17:20	Break
Keynote lecture	
17:30	45/135 years history on the origin of double-membrane organelle Naoki Sato (University of Tokyo)
18:30	General discussion
18:40	Closing remarks
19:00	Mixer Restaurant "Hananoki" in Nagoya University

This workshop is free to all attendance, but they are encouraged to register at the below website for preparation of abstract books. People who may join the mixer are requested to register at the below website before March 4, Monday.
http://dfns.u-shizuoka-ken.ac.jp/labs/pctech/workshop
Contact address: Takuya Matsuo: t-matsuo@gene.nagoya-u.ac.jp
Kensuke Kusumi: kusumi.k.239@m.kyushu-u.ac.jp

Tue., March 12, 13:30–17:00 Room C

4th Workshop on Photosynthetic Bacteria

Language: Japanese

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

13:00	Registration
13:30	Opening remarks (Jiro Harada)
13:35	Functional diversity of CO_2-fixing enzyme, RuBisCO Hiroki Ashida (Kobe University)
14:05	CrtJ repression and activation is differentially regulated by interacting with short and long isoforms of the cobalamin binding regulator AerR Haruki Yamamoto[1,2] ([1] Indiana University, [2] Nagoya University)
14:30	Input and output mechanism of cyanobacterial circadian clock and intracellular redox Tanaka Kenya (Osaka University)
14:50	Coffee break
15:05	Roles of carotenoids in purple bacterial photosynthetic light-harvesting and photoprotection Daisuke Kosumi[1], Richard J. Cogdell[2], Hideki Hashimoto[3] ([1]Kumamoto University, [2]University of Glasgow, [3]Kwansei Gakuin University)
15:35	Carotenoid for aerobic anoxygenic phototrophic bacteria~evolution and role Yuki Sato-Takabe[1], Jiro Harada[2], Keizo Shimada[2], Satoshi Hanada[2], Shinichi Takaichi[3] ([1]Tokyo Metropolitan University, [2]Kurume University School of Medicine, [3]Tokyo University of Agriculture)
15:55	Pigment Exchange in light-harvesting complexes from purple photosynthetic bacteria Yoshitaka Saga (Kindai University)
16:25	Lipid-Controlled Stabilization of Charge-Separated States and Photocurrent Generation Activity of a Light-Harvesting−Reaction Center Core Complex (LH1-RC) Noji Tomoyasu (The University of Tokyo)
16:50	Discussion
19:00	Get together

Wed., March 13, 19:00–20:30

Venue: The 5th lecture room, 1st floor of Lecture building,
Graduate school of Bioagricultural Sciences

The 2nd Meeting of Plant Mathematical Modeling

Organizers: Hironori Fujita (National Institute for Basic Biology)
Munetaka Sugiyama (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. This meeting is also aimed at building a community in this research field, and is planned to be held continuously in annual meetings of JSPP and BSJ. In the meeting, invited speakers will talk about their collaborative research between experiments and modeling. This meeting is free to all participants, and if you are interested please feel free to join us.

Day 1, Evening | **Satellite Meeting**

Wed., March 13, 19:15–20:45

Venue: Lecture room, ITbM building 1F, Nagoya University (Higashiyama Campus)

The 37th Meeting of the Japanese Society for Young Plant Physiologists

Language: Japanese

Organizers: Rumi Amano (Kyoto Sangyo University)
Tatsuya Nobori (Max-Planck Institute for Plant Breeding Research)

19:15	Opening remarks by Organizers
19:20	Introduction of research in seed companies with concrete examples Dr. Akihito Kano (Takii seed company, Plant breeding & Experiment station)
19:50	Work-Life Balance: Me, My Family, and Mass Spectrometry Dr. Keiko Kuwata (ITbM, Nagoya University)
20:20	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. Dr. Akito Kano is an R&D researcher at Takii Seed company studying crop protection from pests and diseases. Dr. Keiko Kuwata is a Chief-Coordinator of ITbM Molecular Structure Center, Nagoya University, providing supports on Mass spectrometry. No registration required to participate in this meeting.
Please note that ITbM building is approximately 700m away from the Congress main building.
(D2① in the campus map: http://www.nagoya-u.ac.jp/access-map/)

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://goo.gl/forms/8JMT4ryI9NMunJiE2 by March 6.

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: nobori@mpipz.mpg.de

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 in the Preview rooms on the first floor. No staff is attending the Preview rooms. For questions, please visit the Staff room on the 1st floor.

- 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, Wed., March 13, AM (9:30–12:30)

Time	Room A	Room B	Room C	Room D	Room E	Room F	Room G	Room H
	Symposium S01 Understanding of field plants and development of innovative techniques toward these plant regulation (9:30–12:30)	Symposium S02 The final phase of the photosynthetic electron transport (9:30–12:30)	Biomembrane/Ion and solute transport	Primary metabolism	Environmental responses of photosynthesi	Environmental responses A	Plant hormones/ Signaling molecules	Epigenetic regulation
9:30			1aC01 Functional analysis of water channel aquaporins involved in flower opening and closure in Japanese gentian Keiichirou Nemoto, Fumina Goto, Aiko Watanabe, Masahiro Nishihara (Iwate Biotechnology Research Center)	1aD01 Study of ramet-to-ramet communication via rhizome in response to different nitrogen condition in *Oryza longistaminata* Misato Kawai[1], Haruno Honda[1], Satoru Okamoto[2], Miwa Ohashi[1], Hitoshi Sakakibara[1] ([1]Grad. Sch. Agr., Univ. Nagoya, [2]Grad. Sch. Agr., Univ. Niigata)	1aE01 Chloroplast Relocation Caused by CO_2 in *Physcomitrella patens* Taichi Sugiyama, Ichiro Terashima (Grad. Sch. Sci., Univ. Tokyo)	1aF01 Mechanism of immediate cell death in Arabidopsis roots induced by boron deprivation Daisuke Umeki, Maako Miyamoto, Masaru Kobayashi, Toru Matoh (Grad. Sch. Agr., Kyoto Univ)	1aG01 Characterization of an Arabidopsis NPF protein involved in stomatal regulation Takafumi Shimizu[1,2], Yuri Kanno[1], Shunsuke Watanabe[1], Mitsunori Seo[1] ([1]RIKEN CSRS, [2]Grad. Sch. Sci. Tech., NAIST)	1aH01 Epigenetics controlling flower coloration and transgenerational inheritance in the Japanese morning glory Atsushi Hoshino[1,2], Yasumasa Morita[3], Kiyotaka Nagaki[4] ([1]Natl. Inst. Basic Biol., [2]Sch. Life Sci., SOKENDAI, [3]Fac. Agri., Meijo Univ., [4]Inst. Plant Sci. Res., Okayama Univ.)
9:45			1aC02 Study on membrane transporters associated with blueing of plant pigment anthocyanins Mayuko Naganawa[1], Yuri Kimura[1], Kenji Sako[1], Kumi Yoshida[2], Kin-ichi Oyama[3], Masayoshi Maeshima[1], Yoichi Nakanishi[1] ([1]Grad. Sch. Bioagr., Nagoya Univ., [2]Grad. Sch. Info., Nagoya Univ., [3]RCMS, Nagoya Univ.)	1aD02 Phenotypic analysis of an *Arabidopsis thaliana* ecotype with large biomass under nitrogen deficient conditions Atsushi Mabuchi[1], Keina Monda[1], Yasuhito Sakuraba[2], Juntaro Negi[1], Shuichi Yanagisawa[2], Koh Iba[1] ([1]Dept. Biol., Fac. Sci., Kyushu Univ., [2]Biotech. Res. Center, Univ. Tokyo)	1aE02 How does the transmittance of pea pod affect photosynthesis of seed coat? Shuto Tashiro, Kintake Sonoike (Faculty of Education and Integrated Arts and Sciences, Waseda University)	1aF02 Cell distribution with gravitaxis and photo irradiation Kazunari Ozasa, Mizuo Maeda (Bioengineering Lab., RIKEN)	1aG02 Functional Analysis Of C-type Raf-like Protein Kinases In ABA Signaling. Yoshiaki Kamiyama[1], Misaki Hirotani[1], Fuko Minegishi[1], Mika Nomoto[2], Yasuomi Tada[2], Yoichi Sakata[3], Daisuke Takezawa[4], Scott Peck[5], Taishi Umezawa[1] ([1]BASE, Tokyo Univ. Agric. Tech., [2]Centr. Gene Res., Nagoya Univ., [3]Dept. Bioscience, Tokyo Univ. Agric., [4]Grad. Sch. Sci and Eng., Saitama Univ., [5]University of Missouri, USA)	1aH02 The DNA methylation dynamics of rice shoot apical meristem and its regulatory mechanism. Asuka Higo[1], Fumihito Miura[2], Takashi Ito[2], Ko Shimamoto[3], Hiroyuki Tsuji[1] ([1]Kihara Institute for Biological Research, Yokohama City University, [2]Fac. of Med. Sci., Kyushu University, [3]Grad. Sch. of Biol. Sci., NAIST)
10:00			1aC03 Molecular function analysis of cysytinosin-like protein of *Arabidopsis thaliana* Jia Guo, Mayuko Naganawa, Midori Takemura, Masayoshi Maeshima, Yoichi Nakanishi (Grad. Sch. Bioagr., Nagoya Univ.)	1aD03 The role of the PB1 domain of NIN-Like Proteins in nitrate-inducible gene expression Mineko Konishi, Shuichi Yanagisawa (Biotech. Res. Center, Univ. Tokyo)	1aE03 The Characteristics Of Chloroplast Functions In *Arabidopsis* Photoautotrophic Culture Gen Takenaka, Satomi Takeda (Grad. Sch. Sci., Univ. Osaka Prefecture)	1aF03 Movements of PIN3 while trapping amyloplasts with an infrared laser in Arabidopsis Yoshinori Abe[1], Hiroshi Yoshikawa[2], Masatsugu Toyota[2] ([1]Dept Mol Biol, Saitama Univ, [2]Dept Biochem and Mol Biol, Saitama Univ)	1aG03 [Cancelled]	1aH03 Analysis of central metabolic disorder caused by global genomic hypomethylation Naoya Sugi[1], Thi Ngoc Quynh Le[1], Miyako Kusano[1,2], Kazuki Saito[2,3], Hiroshi Shiba[1] ([1]Univ. of Tsukuba., [2]RIKEN CSRS, [3]Chiba Univ.)

Room I	Room J	Room K	Room L	Room M	Room N	Room O	Time
Flowering/Clock	Vegetative growth	Plant-organism interaction A	Plant-organism interaction B	Environmental responses C	Symposium S03 Understanding the plant survival strategies from the perspective of stem cells (9:30–12:15)	Systems biology	
1aI01 Manipulation of vernalization by a histone demethylase and small compounds Makoto Shirakawa[1], Yukaho Morisaki[1], Eng-Seng Gan[2], Ayato Sato[3], Toshiro Ito[1,2] ([1]Graduate School of Science and Technology, Nara Institute of Science and Technology, [2]Temasek Life Sciences Laboratory, [3]Institute of Transformative Bio-Molecules)	1aJ01 Characterization of small molecules that increase the number of stomata Ayami Nakagawa[1], Shuya Yamada[1], Gregory Perry, J. P.[1], Ayato Sato[1], Kei Murakami[1], Naoyuki Uchida[1], Kenichiro Itami[1], Keiko Torii[1,2,3] ([1]Institute of Transformative Bio-Molecules, Nagoya University, [2]Department of Biology, University of Washington, [3]Howard Hughes Medical Institute)	1aK01 E Functional analysis of camalexin, a phytoalexin in *Arabidopsis thaliana*, against *Pseudomonas syringae* pv. *tomato* DC3000 carrying *AvrRpt2* Mizuki Iwamoto[1], Nobuhiko Nomura[2], Shigeyuki Betsuyaku[2] ([1]Grad. Sch. of Life & Env. Sci., Univ. Tsukuba, [2]Fac. Life & Env. Sci., Univ. Tsukuba)	1aL01 A Mediator subunit protein required for symbiont accommodation Takuya Suzaki[1], Naoya Takeda[2], Hanna Nishida[1], Motomi Hoshino[1], Momoyo Ito[1], Fumika Misawa[1], Yoshihiro Handa[3], Masayoshi Kawaguchi[3] ([1]Univ. Tsukuba, [2]Kwansei Gakuin Univ., [3]NIBB)	1aM01 Analysis of Molecular Mechanism of Ethanol-Inducible Heat Stress Tolerance in Arabidopsis. Yuji Sunaoshi[1,2], Akihiro Matsui[2,3], Maho Tanaka[2,3], Kayoko Mizunashi[2], Motoaki Seki[2,3,4] ([1]Grad. Sch. of Nano-Bioscience, Yokohama City Univ., [2]Plant Genomic Network Res.Team, RIKEN CSRS, [3]Plant Epigenome Regulation Laboratory, RIKEN CPR, [4]Kihara Inst. for Biol. Res., Yokohama City Univ.)	1aO01 E Comparative genomics to understand evolution of Alkaloid biosynthesis and diversification Amit Rai[1], Ryo Nakabayashi[2], Hideki Hirakawa[3], Hiroshi Tsugawa[2], Taiki Nakaya[1], Tetsuya Mori[2], Hiroki Takahashi[4], Shinji Kikuchi[1], Kazuki Saito[1,2], Mami Yamazaki[1] ([1]Chiba University, [2]RIKEN CSRS, [3]KAZUSA DNA Research, [4]Medical Mycology Chiba University)	9:30
1aI02 Reactivation of *FLOWERING LOCUS C* expression by heat after vernalization Takashi Maruoka[1], Makoto Shirakawa[2], Toshiro Ito[2,3], Eng-Seng Gan[3] ([1]Biological Sciences, Nara Institute of Science and Technology, [2]Graduate School of Science and Technology, Nara Institute of Science and Technology, [3]Temasek Life Sciences Laboratory)	1aJ02 Stomatal Closure is Delayed by Excess Pyrophosphate Mariko Asaoka[1], Shin-ichiro Inoue[2], Shizuka Gunji[3], Toshinori Kinoshita[2,4], Masayoshi Maeshima[5], Hirokazu Tsukaya[6,7], Ali Ferjani[1,3] ([1]Tokyo Gakugei University, Department of Biology, [2]Nagoya University, Graduate School of Science, Division of Biological Science, [3]Tokyo Gakugei University, United Graduated School of Education, [4]Nagoya University, Institute of Transformative Bio-Molecules (WPI-ITbM), [5]Nagoya University, Graduate School of Bioagricultural Sciences, [6]The University of Tokyo, Graduate School of Science, Department of Biological Sciences, [7]Exploratory Research Center on Life and Living Systems)	1aK02 Functional analysis of *ACCELERATED CELL DEATH 6* in plant immunity Tomomi Ogata[1], Nobuhiko Nomura[2], Shigeyuki Betsuyaku[2] ([1]Grad. Sch. Life & Env Sci., Univ. Tsukuba, [2]Fuc. Life & Env Sci., Univ. Tsukuba)	1aL02 Roles of NRSYM1 and NRSYM2 in nitrate-induced control of nodulation Hanna Nishida[1], Takamasa Suzuki[2], Momoyo Ito[1], Mika Nomoto[3], Yasuomi Tada[3], Ryo Nishijima[4], Taiji Kawakatsu[4], Masayoshi Kawaguchi[5,6], Takuya Suzaki[1] ([1]Univ. Tsukuba, [2]Chubu Univ., [3]Nagoya Univ., [4]NARO, [5]NIBB, [6]SOKENDAI)	1aM02 Functional Analysis of Mediator Subunits Involved in the Heat Stress Response Naohiko Ohama, Teck Lim Moo, Nam-Hai Chua (TEMASEK LIFE SCIENCES LABORATORY)		1aO02 E Genetic Analysis of Thailand Lime and *Citrus* Genetic Resourses Paweena Chuenwarin[1,2], Sunanta Wiphuwathinee[2], Ratchadawan Bowonchaikittikun[2], Ramonnaporn Chuenjit[2], Anyamanee Auvuchanon[1] ([1]Department of Horticulture, Faculty of Agriculture at Kampaeng Saen, Kasetsart University, Kampaeng Saen Campus, [2]Agricultural Biotechnology, Faculty of Agriculture at Kampaeng Saen, Kasetsart University, Kampaeng Saen Campus)	9:45
1aI03 *In natura* seasonal changes of the daily expression pattern of daily rhythmic genes in *Arabidopsis halleri* Tomoaki Muranaka[1], Mie N. Honjo[1], Tetsuhiro Kawagoe[1], Atsushi J. Nagano[2], Hiroshi Kudoh[1] ([1]CER, Kyoto Univ., [2]Faculty of Agri., Ryukoku Univ.)	1aJ03 E Unravelling temporally coordinated cell divisions in the Arabidopsis root meristem by a motion-tracking microscope system Katsutoshi Imizu[1], Shunsuke Miyashima[2], Tatsuaki Goh[2], Keiji Nakajima[2] ([1]Grad. Sch. Bio. Sci., NAIST, [2]Grad. Sch. Sci. Tech., NAIST)	1aK03 E Assessing the generality of the concentric SA/JA activation pattern appeared at the sites of stimuli in *Arabidopsis*. Akira Hattori[1] ([1]Grad. Sch. Agr. Bio., Univ. Tsukuba, [2]Fac. Life. Env., Univ. Tsukuba)	1aL03 An acyltransferase that is indispensable for converting phytosterols into sterol esters controls root nodule symbiosis Akihiro Yamazaki[1], Yozo Okazaki[1,2], Kazuki Saito[1,3], Kei Hashimoto[1], Kiminori Toyooka[1], Akira Miyahara[4], Miwa Nagae[4], Yosuke Umehara[4], Makoto Hayashi[1] ([1]RIKEN CSRS, [2]Mie University Graduate School and Faculty of Bioresources, [3]Chiba University Graduate School and Faculty of Pharmaceutical Sciences, [4]NIAS Division of Plant Sciences)	1aM03 Evaluation of heat tolerance to short- or long-term stress of *HsfA1* overexpressing tomato plants Yuichi Saito[1], Hirotaka Ariga[1], Ken Hoshikawa[2], Hiroshi Ezura[2], Keisuke Tanaka[3], Izumi Yotsui[1], Yoichi Sakata[1], Teruaki Taji[1] ([1]Dept. of Bioscience Tokyo Univ. of Agriculture, [2]Fac. Life Environ. Sci., Univ. Tsukuba, [3]NODAI Genome Research Center)		1aO03 E Subgenome-classification methods for genomic studies of allopolyploid Arabidopsis and wheat Kentaro K. Shimizu[1,2], Tony Kuo[3], Jun Sese[3,4], Masaomi Hatakeyama[1,5], Tim Paape[1], Gwyneth Halstead-Nussloch[1], Toshiaki Tameshige[2] ([1]University of Zurich, Department of Evolutionary Biology and Environmental Studies, [2]Yokohama City University, Kihara Institute for Biological Studies, [3]AIST, [4]Humanome Lab, [5]Functional Genomics Center Zurich)	10:00

E=Presentation in English

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

Time	Room A	Room B	Room C	Room D	Room E	Room F	Room G	Room H
	Symposium S01 Understanding of field plants and development of innovative techniques toward these plant regulation (9:30–12:30)	Symposium S02 The final phase of the photosynthetic electron transport (9:30–12:30)	Biomembrane/Ion and solute transport	Primary metabolism	Environmental responses of photosynthesi	Environmental responses A	Plant hormones/ Signaling molecules	Epigenetic regulation
10:15			1aC04 [Cancelled]	1aD04 E Molecular mechanism underlying feedback regulation of nitrogen response by glutamine in plants Pengcheng Guo, Shuichi Yanagisawa, Mineko Konishi (Biotechnology Research Center, Univ. Tokyo)	1aE04 Comparative Analysis of Photosynthetic Acclimation to Low Temperature among Ecotypes of *Arabidopsis thaliana* Yuna Kamiura, Ryo Inohana, Hiroshi Ozaki, Ko Noguchi (Sch. Life Sci., Tokyo Univ. Pharm. Life Sci.)	1aF04 Growth angle of lateral roots is regulated by *LZY3* expression level Shogo Mori[1], Moritaka Nakamura[2], Ryuichiro Oshida[3], Takeshi Nishimura[2], Masahiko Furutani[4], Miyo T. Morita[2] ([1]Sch. Agr., Nagoya Univ., [2]NIBB, [3]Grad. Sch. Bioagri. Sci., [4]Col. Life Sci., Fujian Agriculture and Forestry Univ.)	1aG04 Aberrant protein phosphatase 2C leads to ABA insensitivity and high transpiration in parasitic plants Striga hermonthica Hijiri Fujioka[1], Hiroaki Samejima[1,2], Hideyuki Suzuki[3], Masaharu Mizutani[1], Masanori Okamoto[4,5], Yukihiro Sugimoto[1,2] ([1]Grad. School of Agric. Sci., Kobe Univ., [2]JST/JICA SATREPS, [3]Kazusa DNA Research Inst., [4]Ctr. Biosci. Res. & Educ., Utsunomiya Univ., [5]JST/PRESTO)	1aH04 Molecular evidence of local adaptation throughout epigenetic mutations for regulating secondary metabolites of Arabidopsis thaliana accessions Kazumasa Shirai[1], Mitsuhiko Sato[2], Ryo Nakabayashi[3], Ranko Nishi[3], Kazumi Abe[4], Jong-Myong Kim[3], Motoaki Seki[3], Minami Shimizu[3], Kazuo Shinozaki[3], Yutaka Suzuki[4], Kazuki Saito[3,5], Kousuke Hanada[1,3] ([1]Department of Bioscience and Bioinformatics, Kyushu Institute of Technology, [2]Faculty of Medical Sciences, Kyushu University, [3]RIKEN Center for Sustainable Resource Science, [4]Department of Computational Biology and Medical Sciences, Graduate School of Frontier Sciences, The University of Tokyo, [5]Graduate School of Pharmaceutical Sciences, Chiba University)
10:30			1aC05 E Involvement of NGAL1 transcription factor in Boron transport under low and high Boron Munkhtsetseg Tsednee[1], Ricardo Fabiano Giehl[2], Mayuki Tanaka[1], Nicolaus von Wiren[2], Toru Fujiwara[1] ([1]The University of Tokyo, [2]Leibniz Institute of Plant Genetics and Crop Plant Research (IPK), Germany)	1aD05 NIGT1 transcription factor proteins positively modulate phosphorus signaling in a nitrogen condition-dependent manner in Arabidopsis Yoshiaki Ueda[1], Takatoshi Kiba[2], Shuichi Yanagisawa[1] ([1]Biotech. Res. Center, Univ. Tokyo, [2]Grad. Sch. Bioagr. Sci., Nagoya Univ.)	1aE05 Effect of the cyanobacterial bicarbonate transporters targeted to the chloroplast inner envelope membrane on the accumulation of plastid proteins in *Arabidopsis* Susumu Uehara[1], Yasuko Ito-Inaba[2], Takehito Inaba[2] ([1]Grad. Sch. Agr. and Eng., Univ. Miyazaki, [2]Fac. Agr., Univ. Miyazaki)	1aF05 Localization analysis of LZY3, a key factor of gravity signaling, in statocytes Moritaka Nakamura[1], Takeshi Nishimura[1], Chiemi Kondo[2], Masahiko Furutani[3], Masatoshi Taniguchi[4], Miyo T. Morita[1] ([1]NIBB, [2]Sch. Agr., Nagoya Univ., [3]Col. Life Sci., Fujian Agriculture and Forestry Univ., [4]Grad. Sch. Bioagri. Sci.)	1aG05 Protein kinase CK2 α and β subunits reversely regulate ABRE-dependent ABA signaling in *Arabidopsis* Yukari Nagatoshi[1], Miki Fujita[2], Yasunari Fujita[1,3] ([1]JIRCAS, [2]RIKEN CSRS, [3]Univ.Tsukuba)	1aH05 Ribozyme provided from virus vector can induce demethylation in a sequence-specific manner Reika Isoda[1], Wataru Matsunaga[1], Senri Shirakawa[1], Tsuyoshi Inukai[1], Takeshi Matsumura[2], Chikara Masuta[1] ([1]Res.Fac.Agr., Univ. Hokkaido, [2]AIST)
10:45			1aC06 Role of N- and C-terminal of rice silicon transporter Lsi1 in its polar localization Noriyuki Konishi, Jian Feng Ma (IPSR, Okayama Univ.)	1aD06 Nitrate signaling impacts on multiple metabolic pathways via *de novo* biosynthesis of NAD^+ in *Arabidopsis*. Moriaki Saito[1], Atsuko Miyagi[2], Mineko Konishi[1,2], Maki Kawai-Yamada[2], Shuichi Yanagisawa[1] ([1]Biotechnology Research Center, The University of Tokyo, [2]Graduate School of Science and Engineering, Saitama University)	1aE06 Day-Length-dependent-Delayed-Greening1 (DLDG1), a homolog of the cyanobacterial H+-extraction-protein, localizes in chloroplast envelope membrane and regulates qE. Kyohei Harada[1], Takatoshi Arizono[1], Ryoichi Sato[1,2], Natsuhiko Maekawa[1], Mai Duy Luu Trinh[1], Masaru Kono[3], Shinichi Takaichi[4], Shinji Masuda[5] ([1]Department of Life Sciences and Technology, Tokyo Institute of Technology, [2]Division of Environmental Photobiology, National Institute for Basic Biology, [3]School of Science, The University of Tokyo, [4]Department of Molecular Microbiology, Faculty of Life Science, Tokyo University of Agriculture, [5]Center for Biological Resources and Informatics, Tokyo Institute of Technology)	1aF06 Analysis of the molecular function of *RLD* gene family in *Arabidopsis*. Takeshi Nishimura[1], Moritaka Nakamura[1], Masahiko Furutani[3], Masatoshi Taniguchi[2], Miyo T. Morita[1] ([1]NIBB, [2]Graduate School of Bioagricultural Sciences, Nagoya University, [3]College of Life Science, Fujian Agriculture and Forestry University)	1aG06 E A role of the feedforward loop consisting of Dof2.1 and MYC2 transcription factors in jasmonate responses Mengna Zhuo, Yasuhito Sakuraba, Shuichi Yanagisawa (Biotechnology Research Center, The University of Tokyo)	1aH06 Control of histone methylation at the onset of endoreplication Hirotomo Takatsuka, Masaaki Umeda (Graduate School of Science and Technology, Nara Institute of Science and Technology)

Room I	Room J	Room K	Room L	Room M	Room N	Room O	Time
Flowering/Clock	Vegetative growth	Plant-organism interaction A	Plant-organism interaction B	Environmental responses C	Symposium S03 Understanding the plant survival strategies from the perspective of stem cells (9:30–12:15)	Systems biology	
1aI04 Regulation Of Seasonal Sensing Mechanism By Modulating Circadian Clocks Atsuhiro Hirohata[1,2], Yuta Yamatsuta[2], Takashi Araki[1], Motomu Endo[2] ([1]Grad. Biostudies, Kyoto Univ., [2]Grad. Sci. and Tech., NAIST)	1aJ04 E Identification of Key transcription factors that determine pericycle stem cell potential in Arabidopsis Ye Zhang[1], Nobutaka Mitsuda[2], Takeshi Yoshizumi[3], Yoichi Kondo[3], Masaru Takagi[2], Minami Matsui[3], Tatsuo Kakimoto[1] ([1]Grad. Sch. Sci., Univ. Osaka, [2]National Institute of Advanced Industrial Science and Technology, [3]Plant Science Center, RIKEN Yokohama Institute)	1aK04 E Evolutionary process of a pair of R genes, Pit-1 and Pit-2 Yuying Li, Qiong Wang, Huimin Jia, Yoji Kawano (PSC, CAS)	1aL04 E Functional characterization of Rhizobium LCO receptors in the nodulating non-legume *Parasponia* Kana Miyata[1,2], Luuk Rutten[1], Yuda Roswanjaya[1], Rene Geurts[1] ([1]Wageningen Univ., [2]JSPS Overseas Research Fellow)	1aM04 Dissecting the genetic mechanism in heat tolerance of Bs-2, a heat tolerant *A. thaliana* accession Masaaki Ono, Kotaro Nakamura, Izumi Yotsui, Yoichi Sakata, Teruaki Taji (Dept. of Bioscience, Tokyo Univ. Of Agriculture)		1aO04 Characterization of core promoters in plants Kyonoshin Maruyama[1], Yoshiharu Yamamoto[2], Tetsuya Sakurai[3] ([1]Biol. Resources Post-harvest Div., [2]Fac. Appl. Biol. Sci., Gifu Univ., [3]Multi. Sci. Cluster, Kochi Univ.)	10:15
1aI05 Evaluation of effects of external stimuli on circadian rhythms at a single-cell level by using cells isolated from *AtCCA1::LUC Arabidopsis* Shunji Nakamura, Shogo Ito, Tokitaka Oyama (Grad. Sci., Univ. Kyoto)	1aJ05 E A transcriptional cascade of root hair growth in response to environmental signals Michitaro Shibata, Ayako Kawamura, Keiko Sugimoto (RIKEN, CSRS)	1aK05 E OsGAPC1 acts as a NO sensor to trigger disease resistance to rice blast fungus through histone acetylation Ken-Ichi Kosami[1], Jing Su[2], Ko Shimamoto[2], Yoji Kawano[1] ([1]Shanghai Center for Plant Stress Biology, Chinese Academy of Sciences, [2]Laboratory of Plant Molecular Genetics, Grad. Dept. of Biological Science, NAIST)	1aL05 Natural variations in root-associated fungus *Colletotrichum tofieldiae* in *A. thaliana* roots Kei Hiruma[1,2], Takuma Inoue[1], Shigetaka Yasuda[1], Yusuke Saijo[1] ([1]NAIST.Bio, [2]JST, Presto)	1aM05 E Functional Analysis of 70 kDa Heat Shock Proteins in the Regulation of Heat Stress Responsive Gene Expression in Arabidopsis Asad Jan[1], Huimei Zhao[1], Naohiko Ohama[1], Shinya Koizumi[1], Kazuya Kusakabe[1], Junya Mizoi[1], Satoshi Kidokoro[1], Kazuo Shinozaki[2], Kazuko Yamaguchi-Shinozaki[1] ([1]Grad. Sch. Agr. Life Sci., Univ. Tokyo, [2]Center for Sustainable Resource Science, RIKEN)		1aO05 Development of Promoter Prediction Methods Using DNA Sequences Tosei Hiratsuka[1], Yoshiharu Yamamoto[1,2,3] ([1]Grad. Sch. Nat. Sci. Tech., Univ. Gifu, [2]Fac. Appl. Biol. Sci., Univ. Gifu, [3]CSRS., Riken)	10:30
1aI06 Possible action mechanism of new small molecule lengthening circadian period in Arabidopsis thaliana Azusa Ono[1], Hiromi Matsuo[2], Ayato Sato[2], Toshinori Kinoshita[2,3], Norihito Nakamichi[2,3] ([1]School of Science, Nagoya University, [2]Institute of Transformative Bio-molecules, Nagoya University, [3]Graduate School of Science, Nagoya University)	1aJ06 Rhizotaxis Plasticity in Arabidopsis is Modulated by Diffusible Compounds from an Endophytic Fungus, *Srendipita indica* Aoi Inaji[1], Atsushi Okazawa[1], Toshiyuki Ohnishi[2], Daisaku Ohta[1] ([1]Grad. Sch. Life Env Sci., Univ. Osaka Pref, [2]Grad. Sch. Agr., Univ. Shizuoka)	1aK06 E MPK3/6-WRKY33-ALD1-Pipecolic acid Regulatory Loop Contributes to Systemic Acquired Resistance Yiming Wang, Kenichi Tsuda (Max Planck Institute for Plant Breeding Research)	1aL06 E Fungal phosphate export via SYG1 triggers symbiosis-specific lipid biosynthesis in the host of arbuscular mycorrhiza Hayato Maruyama[1], Satoshi Asaeda[1], Kaede Yokoyama[1], Yusaku Sugimura[1], Katsuharu Saito[2], Chikara Masuta[1], Tatsuhiro Ezawa[1] ([1]Grad. Sch. Agri., Hokkaido Univ., [2]Fac. Agri., Shinshu Univ.)	1aM06 Seasonal change of cold-induced calcium signaling and the influence of the volatile chemicals in the atmosphere Hayato Hiraki[1], Manabu Watanabe[2], Matsuo Uemura[1,3], Yukio Kawamura[1,3] ([1]United Grad. Sch. Agri. Sci., Iwate Univ., [2]Field Sci., Agri., Iwate Univ., [3]Agri., Iwate Univ.)		1aO06 Variation of gene regulatory networks of flowering in barley under field conditions Komaki Inoue[1], Kotaro Takahagi[1,2], Yukiko Uehara[1], Minami Shimizu[1], Daisuke Saisho[3], Takakazu Matsuura[3], Asaka Kanatani[3], Jun Ito[2], Hiroyuki Tsuji[2], Takashi Hirayama[3], Keiichi Mochida[1,2,3] ([1]CSRS, RIKEN, [2]KIBR, Univ. Yokohama-City, [3]IPSR, Univ. Okayama)	10:45

E=Presentation in English

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

Time	Room A	Room B	Room C	Room D	Room E	Room F	Room G	Room H
	Symposium S01 Understanding of field plants and development of innovative techniques toward these plant regulation (9:30–12:30)	Symposium S02 The final phase of the photosynthetic electron transport (9:30–12:30)	Biomembrane/Ion and solute transport	Primary metabolism	Environmental responses of photosynthesi	Environmental responses A	Plant hormones/ Signaling molecules	Epigenetic regulation
11:00			1aC07 E Functional analysis of a node-expressed transporter for phytosiderophore in rice Jing Che, Kengo Yokosyo, Naoki Yamaji, Jian Feng Ma (Institute of Plant Science and Resources, Okayama University)	1aD07 Physiological roles of NAD kinases in cyanobacterium Synechocystis sp. PCC 6803 Yuuma Ishikawa[1], Atsuko Miyagi[1], Toshiki Ishikawa[1], Minoru Nagano[2], Masatoshi Yamaguchi[1], Kintake Sonoike[3], Yukako Hihara[1], Yasuko Kaneko[1], Maki Kawai[1] ([1]Grad, Sch. Sci. Engineer., Saitama Univ, [2]Grad, Sch. Sci. Ritsumeikan Univ, [3]Fac. Edu. Integ. Arts Sci., Waseda Univ.)	1aE07 Roles of a galactolipase, Galp1, in acclimation to high light in *Synechococcus elongatus* PCC 7942 Nobuyuki Takatani[1], Kazutaka Ikeda[2], Tatsuo Omata[1] ([1]Grad. Sch. Bioagr. Sci. Nagoya Univ., [2]RIKEN IMS)	1aF07 Gravity Response Observed in Specific Part of *Marchantia polymorpha* Mimi Hashimoto-Sugimoto[1], Takuya Norizuki[2,3], Takashi Ueda[2,4], Miyo T. Morita[1,4,5] ([1]Grad. Sch. Bioagr. Sci., Univ. Nagoya, [2]Div. Cellular Dinamics, NIBB, [3]Grad. Sch. Sci., Univ. Tokyo, [4]Sch. Life Sci., SOKENDAI, [5]Div. Plant Environ. Res., NIBB)	1aG07 Receptor-like kinases that specifically respond to herbivore elicitors in plants Takuya Uemura[1], Masakazu Hachisu[1], Ryosuke Hoshino[1], Keiichirou Nemoto[2], Ayako Yoshida[3], Shigetoshi Miura[1], Makoto Nishiyama[3,4], Chiharu Nishiyama[1], Shigeomi Horito[1], Yoshitake Desaki[1], Tatsuya Sawasaki[5], Gen-ichiro Arimura[1] ([1]Tokyo University of Science, [2]IBRC, [3]Biotechnology research center, [4]CRIIM, [5]PROS)	1aH07 Histone demethylation is involved in gene priming for plant regeneration Sachihiro Matsunaga[1], Hiroya Ishihara[1], Haruka Tenman[1], Satoshi Kadokura[1], Soichi Inagaki[2], Yayoi Inui[1], Takuya Sakamoto[1], Takamasa Suzuki[3], Kengo Morohashi[1], Tetsuji Kakutani[2], Kaoru Sugimoto[1] ([1]Dept. Applied Bio. Sci., Fac. Sci. Tech., Tokyo Univ. Sci., [2]Nat. Inst. Genet., [3]College Biosci. Biotech., Chubu Univ.)
11:15			1aC08 E Cell and tissue specific regulation of sodium homeostasis by major transporters conferring salinity tolerance in rice (*Oryza sativa* L.) Md. Imtiaz Uddin[1], Mohammad Monjur Hossain[2], Md. Abdul Kader[2], Shahin Imran[3], Md. Ashraful Islam[1], Md. Monirul Islam[1], Hosne-ara Begum[1], Md. Harun-or Rashid[1] ([1]Biotechnology Division, Bangladesh Institute of Nuclear Agriculture (BINA), [2]Department of Agronomy, Bangladesh Agricultural University (BAU), [3]Institute of Plant Science and Resources, Okayama University)	1aD08 E Identification and biochemical analysis of a deubiquitinating enzyme as an interactor of C/N regulatory ubiquitin ligase ATL31 in Arabidopsis Yongming Luo, Shigetaka Yasuda, Yu Lu, Yoko Hasegawa, Takeo Sato, Junji Yamaguchi (Fac. Sci. and Grad. Sch. Life Sci., Hokkaido Univ.)	1aE08 Redox Regulation Mechanisms for Switching Chloroplast Metabolism during Day/Night Cycle Keisuke Yoshida, Toru Hisabori (CLS, Tokyo Tech.)	1aF08 Bend-induced cytosolic and nuclear calcium signatures in Arabidopsis roots Yuta Takano[1], Masatsugu Toyota[2] ([1]Dept Biochem and Mol Biol, Saitama Univ, [2]Dept Biochem and Mol Biol, Saitama Univ)	1aG08 Identification of long-distance mobile mRNA in Plants. Ken-ichi Kurotani[1], Hiroki Tsutsui[1], Yu Sawai[1], Takamasa Suzuki[4], Michitaka Notaguchi[1,2,3] ([1]Grad. Sch. Bioagri. Sci., Nagoya Univ., [2]ITbM, Nagoya Univ., [3]PRESTO, Nagoya Univ., [4]Grad. Sch. Biosci. Biotech, Chubu Univ.)	1aH08 Molecular recognition mechanism of species-specific centromeric histone H3 variants in plants Hidenori Takeuchi[1,2], Tetsuya Higashiyama[2,3], Frederic Berger[4] ([1]Inst. Adv. Res., Nagoya Univ., [2]ITbM, Nagoya Univ., [3]Grad. Sch. Sci., Nagoya Univ., [4]GMI, Austria)
11:30			1aC09 High affinity K^+ transporter *AtHAK5* expression is affected by both Internal and external K status. Satomi Kanno[1,2], Ludovic Martin[2], Laurent Nussaume[2], Arain Vavasseur[2], Nathalie Leonhardt[2] ([1]Fac. of Life and Environ. Sci. Univ. of Tsukuba, [2]CEA)	1aD09 Sugar-responsive transcription factor bZIP3 affects leaf development in *Arabidopsis* Miho Sanagi[1], Yu Lu[1], Shoki Aoyama[1], Nobutaka Mitsuda[2], Miho Ikeda[3], Masaru Ohme-Takagi[2,3], Takeo Sato[1], Junji Yamaguchi[1] ([1]Fac. Sci. and Grad. Sch. Life Sci., Hokkaido Univ., [2]Bioproduction Research Institute, National Institute of Advanced Industrial Science and Technology (AIST), [3]Grad. Sch. Sci. Eng., Saitama Univ.)	1aE09 Redox regulation system in heterocysts of nitrogen-fixing cyanobacterium *Anabaena* sp. PCC 7120 Shoko Mihara, Keisuke Yoshida, Ken-ichi Wakabayashi, Toru Hisabori (Lab. Chem. Life Sci., Tokyo Tech.)	1aF09 Long-distance rapid Ca^{2+} and electrical signals in *Mimosa pudica* Takuma Hagihara[1], Tomohiro Miura[2], Hiroaki Mano[3], Mitsuyasu Hasebe[3,4], Masatsugu Toyota[2] ([1]Sci., Univ. Saitama, [2]Grad. Sch. Sci., Univ. Saitama, [3]Evol. Biol., Natl. Inst. Basic Biol., [4]Life Sci., Grad. Univ. Advanced Studies)	1aG09 Development of a micro-grafting chip for Arabidopsis Yaichi Kawakatsu[1], Hiroki Tsutsui[1], Naoki Yanagisawa[2], Yu Sawai[1], Shuka Ikematsu[3], Hideyuki Arata[2], Tetsuya Higashiyama[2,3], Michitaka Notaguchi[1,3,4] ([1]Grad. Sch. Bioagri. Sci., Nagoya Univ., [2]Grad. Sch. Sci., Nagoya Univ., [3]ITbM-WPI, Nagoya Univ., [4]PRESTO, JST)	1aH09 Histone demethylase LDL1 promotes homologous recombination repair via demethylation of H3K4me2 Takeshi Hirakawa[1], Keiko Kuwata[2], Sachihiro Matsunaga[1] ([1]Dept. Applied Bio. Sci., Fac. Sci. Tech., Tokyo Univ. Sci., [2]WPI-ITbM, Nagoya Univ.)
11:45			1aC10 Long-distance signaling in response to Fe-starvation Ryo Tabata[1], Kumiko Ikuta[1], Hana Tamura[1], Takehiro Kamiya[2], Keitaro Tanoi[2], Yoshikatsu Matsubayashi[3], Hitoshi Sakakibara[1] ([1]Grad. Sch. Bioagr. Sci. Nagoya univ., [2]Grad. Sch. Agr. And LifeSch., Univ. Tokyo, [3]Grad. Sch. Sci. Nagoya univ.)	1aD10 Metabolic effect of pyrophosphate on starch accumulation in columella cells of *Arabidopsis* Satoru Kinoshita, Shoji Segami, Masayoshi Maeshima (Grad. Sch. Bioagr. Sci., Nagoya Univ.)	1aE10 CRISPR/Cas9-mediated gene modification of thioredoxin-targeted enzyme in chloroplasts Yuichi Yokochi[1], Florian Hahn[2], Andreas Weber[2], Keisuke Yoshida[1], Ken-ichi Wakabayashi[1], Toru Hisabori[1] ([1]Lab. for Chem. and Life Sci., Tokyo Tech., [2]Inst. of Plant Biochem., Heinrich Heine Univ.)	1aF10 Effects of Glutathione on the Yield of Large Grains in Black Soybean Kenji Henmi, Ken'ichi Ogawa (RIBS Okayama)	1aG10 E ROS and Ca^{2+} signals involved in stress-induced long-distance signaling in *Marchantia polymorpha* Kenji Hashimoto[1], Hiroki Shindo[2], Takeru Itabashi[2], Hikaru Mizoe[2], Kazuyuki Kuchitsu[1,2,3] ([1]Imaging Frontier Center, Tokyo Univ. of Science, [2]Dept. of Appl. Biol. Sci., Tokyo Univ. of Science, [3]Agricultural Interdisciplinary Sci. & Tech. Course, Tokyo Univ. of Sci.)	1aH10 Nuclear lamina protein CRWN regulates gene positioning of a copper transport family gene locus Yuki Sakamoto[1], Mayuko Sato[2], Takamasa Suzuki[3], Kiminori Toyooka[2], Shingo Takagi[4], Sachihiro Matsunaga[1,5] ([1]IFC, RIST, Tokyo Univ. Sci., [2]CSRS, RIKEN, [3]Dept. Biol. Chem., College Biosci. Biotech., Chubu Univ., [4]Dept. Biol. Sci., Grad. Sch.Sci., Osaka Univ., [5]Dept. App. Biol. Sci., Fac. Sci. Tech., Tokyo Univ. Sci.)

Room I	Room J	Room K	Room L	Room M	Room N	Room O	Time
Flowering/Clock	Vegetative growth	Plant-organism interaction A	Plant-organism interaction B	Environmental responses C	Symposium S03 Understanding the plant survival strategies from the perspective of stem cells (9:30–12:15)	Systems biology	
1aI07 Function Analysis of Receiver-like Domain of Central Oscillator PRR Family Constituting Plant Clock Yusuke Takata, Masahide Kobayashi, Hiroki Hurukawa, Takafumi Yamashino (Grad. Sch. Sci., Univ. Nagoya)	1aJ07 Identification of an Arabidopsis mutant with altered root hair formation Kanari Shimada[1], Satoshi Iuchi[2], Atsuko Iuchi[2], Kohji Yamada[1], Keishi Osakabe[1], Yuriko Osakabe[1] ([1]Fac. Biosci. Bioindust., Tokushima Univ., [2]BRC, RIKEN.)	1aK07 E *In planta* bacterial multi-omics illuminates regulatory logic underlying plant-pathogen interactions Tatsuya Nobori, Kenichi Tsuda (Max-Planck Institute for Plant Breeding Research)	1aL07 Mycorrhizal gene coexpression network: a core regulatory module for mycorrhizal formation and functioning under diverse and fluctuating environments Yusaku Sugimura[1], Ai Kawahara[2], Hayato Maruyama[1], Tatsuhiro Ezawa[1] ([1]Grad. Sch. Agri., Hokkaido Univ, [2]Sumitomo Chemical)	1aM07 Effects of topoisomerase inhibitor on cold-acclimation of Arabidopsis Mari Ushiyama, Ryota Mihara, Yasuko Ito-Inaba, Takehito Inaba (Fac. Agr.,Univ.Miyazaki)		1aO07 Annual transcriptome dynamics in natural environments reveals plant seasonal adaptation Atsushi J. Nagano[1], Tetsuhiro Kawagoe[2], Jiro Sugisaka[2], Mie N. Honjo[2], Koji Iwayama[3], Hiroshi Kudoh[2] ([1]Fac. Agr., Ryukoku Univ., [2]Cent. Ecol., Kyoto Univ., [3]Cent. Data Sci., Shiga Univ.)	11:00
1aI08 Mechanisms for sharing time-information among tissues in Arabidopsis thaliana Kyohei Uemoto[1,2], Yumi Kunimoto[2], Takashi Araki[1], Motomu Endo[2] ([1]Grad. Sch. Biostudies., Univ. Kyoto, [2]Grad. Sch. Bio., Univ. NAIST)	1aJ08 Analysis of periodic cellular behaviors during root cap detachment in *Arabidopsis thaliana* Tatsuaki Goh, Koki Ueno, Shunsuke Miyashima, Keiji Nakajima (Grad. Sch. Sci. Tech., NAIST)	1aK08 E Regulatory mechanism of PAMP-triggered immunity by REAL1, a novel component of PRR complex Yukihisa Goto[1,2], Yasuhiro Kadota[2], Hidenori Matsui[1,3], Jan Sklenar[4], Paul Derbyshire[4], Frank Menke[4], Hirofumi Nakagami[1,5], Cyril Zipfel[4,6], Ken Shirasu[1,2] ([1]RIKEN CSRS, [2]Grad. Sch. Sci., Univ. Tokyo, [3]Grad. Sch. Envi life Sci., Univ. Okayama, [4]The Sainsbury Laboratory, [5]MPI for Plant Breeding Research, [6]IPMB., Univ. Zurich)	1aL08 Isolation and characterization of symbiotic microbes in quinoa seeds. Yoshinori Murata, Yasunari Fujita (Japan International Research Center for Agricultural Sciences)	1aM08 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 Yamamoto[1,2] ([1]Grad. Sch. Agr. Sci., Gifu Univ., [2]RIKEN CSRS, [3]Fac. Life and Env. Sci., Tsukuba Univ., [4]JIRCAS, [5]Frontier Research Academy for Young Researchers, Kyushu Institute of Technology)		1aO08 Artificial reproduction of plant seasonal responses in the smart growth chambers Yuko Kurita[1], Hironori Takimoto[2], Mari Kamitani[1], Yoichi Hashida[1], Makoto Kashima[1], Ayumi Tezuka[1], Takanari Tanabata[3], Atsushi J. Nagano[1] ([1]Faculty of Agriculture, Ryukoku Univ., [2]Faculty of Computer Science and Systems Engineering, Okayama Pref. Univ., [3]Kazusa DNA Research Institute)	11:15
1aI09 Cell-type specific circadian clock regulates cell fate Koutarou Torii[1], Keisuke Inoue[1], Keita Bekki[1], Motomu Endo[2] ([1]Grad. Sch. Bio., Univ. Kyoto, [2]Bio. Sci, NAIST)	1aJ09 Comparative analysis of molecular network of root cortex formation in *Arabidopsis* and *Cardamine* Koichi Toyokura[1,2,3], Tatsuaki Goh[2,4], Masato Sakane[2,6], Yrjo Helariutta[3,5], Tatsuo Kakimoto[1], Hiroshi Kudoh[6], Hidehiro Fukaki[2] ([1]Grad. Sch. Sci., Osaka Univ., [2]Grad. Sch. Sci., Kobe Univ., [3]Sainsbury Lab., Univ. Cambridge, [4]Grad. Sch. Sci. Tech., Nara Inst. Sci. Tech., [5]Inst. Biotech., Univ. Helsinki, [6]Center Eco. Res., Kyoto Univ.)	1aK09 E Identification and characterization of revertants of the *dde2/ein2/pad4/sid2*-quadruple mutant, which exhibit disease resistance Shuta Asai, Yu Ayukawa, Asuka Yoshida, Soshi Tsuchiya, Takuya Okubo, Ken Shirasu (Center for Sustainable Resource Science, RIKEN)	1aL09 E Morphological regulation network in the insect galls of Machilus thunbergii in Taiwan Tin-Han Shih[1], Kai-Chieh Chang[1,2], Szu-Hsien Lin[1], Chi-Ming Yang[1] ([1]BRC Academia Sinica, Taipei, Taiwan, [2]Department of Life Science, National Taiwan Normal University, Taipei, Taiwan)	1aM09 Freezing process of Forsythia stems visualized using MRI Masaya Ishikawa[1], Timothy Stait-Gardner[2], Hiroki Murakawa[1], Hideyuki Yamazaki[3], Kazuyuki Kuchitsu[1], William S. Price[2] ([1]Tokyo Univ Sci, [2]Western Sydney Univ, [3]NITE-IPOD)		1aO09 Reproduction of Rice Transcriptome Dynamics under Fluctuating Field Environments by SmartGC Yoichi Hashida[1], Ayumi Tezuka[1], Mari Kamitani[1], Makoto Kashima[1], Yuko Kurita[1], Atsushi J. Nagano[2] ([1]Res. Inst. Food Agr., Univ. Ryukoku, [2]Fac. Agr., Univ. Ryukoku)	11:30
1aI10 Effect of light and temperature fluctuation on *FT* expression under natural conditions Akane Kubota[1], Nayoung Lee[2], Motomu Endo[1], Takato Imaizumi[2] ([1]Div. of Bioscience, NAIST, [2]Dept. of Biology, Univ. of Washington)	1aJ10 Co-option of a factor involved in lateral root development to *Lotus japonicas* nodule organogenesis Takashi Soyano[1,2], Makoto Hayashi[3], Masayoshi Kawaguchi[1,2] ([1]NIBB, [2]SOKENDAI, [3]RIKEN)	1aK10 A positive role for Polycomb repressive complex in systemic immunity and defense priming in *Arabidopsis thaliana* Yuri Tajima[1], Eva-Maria Reimer-Michalski[2], Eliza Po-Iian Loo[1], Barbara Kracher[2], Franziska Turck[2], Masanao Sato[3], Yusuke Saijo[1,2] ([1]NAIST, [2]Max Planck Institute for Plant Breeding Research, [3]Hokkaido Univ.)	1aL10 E ERN1 may function as an additional regulator of NIN to promote infection thread formation in Lotus japonicus Meng Liu[1,2], Takashi Soyano[1,2], Koji Yano[1], Makoto Hayashi[3], Masayoshi Kawaguchi[1,2] ([1]Division of Symbiotic Systems, National Institute for Basic Biology, [2]Department of Basic Biology, School of Life Science, SOKENDAI, [3]Center for Sustainable Resource Science, RIKEN)	1aM10 Regulation of metabolic network under nutritional stresses in Brassica plants Kana Nakayama, Mutsumi Watanabe, Takayuki Tohge (Plant Secondary Metabolism Lab., NAIST)		1aO10 Incorporating neighbor identity into a genome-wide association mapping of insect herbivory Yasuhiro Sato[1], Rie Shimizu-Inatsugi[2], Misako Yamazaki[2], Kentaro K. Shimizu[2], Atsushi J. Nagano[3] ([1]JST PRESTO/Ryukoku University, [2]IEU, University of Zurich, [3]Faculty of Agriculture, Ryukoku University)	11:45

E=Presentation in English

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

Time	Room A	Room B	Room C	Room D	Room E	Room F	Room G	Room H
	Symposium S01 Understanding of field plants and development of innovative techniques toward these plant regulation (9:30–12:30)	Symposium S02 The final phase of the photosynthetic electron transport (9:30–12:30)	Biomembrane/Ion and solute transport	Primary metabolism	Environmental responses of photosynthesi	Environmental responses A	Plant hormones/ Signaling molecules	Epigenetic regulation
12:00			1aC11 Functional analyses of ALMT-family malate transporters in tomato Takayuki Sasaki[1], Michiyo Ariyoshi[1], Toshihiro Obata[2], Izumi Mori[1], Yoko Yamamoto[1] ([1]IPSR, Okayama Univ., [2]Dept. Biochem./Center Plant Sci. Innov., Univ. Nebraska, Lincoln)	1aD11 E Comparative analysis of starch metabolism in diazotrophic and non-diazotrophic cyanobacteria Eiji Suzuki (Fac Bioresour Sci, Akita Pref Univ)	1aE11 The non-photochemical quenching observed in the dark is affected by the growth light condition rather than the organic carbon source in Chlamydomonas reinhardtii Masahiro Misumi, Kintake Sonoike (Edu. Int. Arts. Sci., Univ. Waseda)	1aF11 Acrolein is a common substrate of plant glutathione transferase Rika Kuramitsu[1,3], Sayaka Kanameda[1], Nagisa Matsuura[2], Yasuo Yamauchi[2], Jun'ichi Mano[3] ([1]Fac. Agr., Yamaguchi Univ., [2]Grad. Sch. Agr., Kobe Univ., [3]Sci. Res. Center., Yamaguchi univ.)	1aG11 Functional analysis of *PIP5K7* and *PIP5K8* in *Arabidopsis thaliana* Ryo Kuroda, Mariko Kato, Tomohiko Tsuge, Takashi Aoyama (Institute for Chemical Research, Kyoto University)	1aH11 Exploring biological meanings of the correct centromere distribution in plants Takuya Sakamoto[1], Yuki Sakamoto[2], Yuka Oko[1], Takamasa Suzuki[3], Stefan Grob[4], Ueli Grossniklaus[4], Sachihiro Matsunaga[1] ([1]Dep. App. Biol. Sci., Fac. Sci. Tech., Tokyo Univ. Sci., [2]IFC, RIST, Tokyo Univ. Sci., [3]College. Biosci. Biotch., Chubu Univ., [4]Univ. Zurich)
12:15			1aC12 Investigation of photosynthesis-dependent regulation of the phosphorylation status of plasma membrane H^+-ATPase in stomatal guard cells. Eigo Ando[1], Toshinori Kinoshita[1,2] ([1]Div. Biol. Sci., Grad. Sch. Sci., Nagoya Univ., [2]WPI-ITbM, Nagoya Univ.)	1aD12 E The differential roles of OsNLP1 and OsNLP4 in regulating growth under nitrate condition in rice. Mengyao Wang[1], Takahiro Hasegawa[1], Makoto Hayashi[2], Yoshihiro Ohmori[1], Koji Yano[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)		1aF12 H_2O_2 inactivates carbonyl-detoxifying enzymes to increase carbonyl load that trigger programmed death of tobacco cells. Ryota Terada[1], Md. Sanaullah Biswas[2], Jun'ichi Mano[3] ([1]Fac. Agr., Yamaguchi Univ., [2]Dept. Horticulture. BSMR Agricultural Univ., [3]Sci. Res. Center, Yamaguchi Univ.)	1aG12 Elucidation of the mechanism by which planar polarity is established for root hair development in *Arabidopsis thaliana* Taichi Kishimoto, Mariko Kato, Tomohiko Tsuge, Takashi Aoyama (ICR, Kyoto Univ.)	1aH12 Analysis of transposon regulation by the Polycomb Repressive Complex Masataka Yamada[1], Kosuke Nozawa[2], Atsushi Kato[3], Hidetaka Ito[3] ([1]Sch. Sci., Univ. Hokkaido, [2]Grad. Sch. Life Sci., Univ. Hokkaido, [3]Fac. Sci., Univ. Hokkaido)

Room I	Room J	Room K	Room L	Room M	Room N	Room O	Time
Flowering/Clock	Vegetative growth	Plant-organism interaction A	Plant-organism interaction B	Environmental responses C	Symposium S03 Understanding the plant survival strategies from the perspective of stem cells (9:30–12:15)	Systems biology	
1aI11 Biochemical analysis of DNA-binding ability of a transcription factor, FD, which controls flowering Kasane Bando[1], Keiichirou Nemoto[2], Akira Nozawa[1], Tatsuya Sawasaki[1] ([1]PROS, Ehime Univ., [2]Iwate Biotechnology Research Center)	1aJ11 Differentiation of a single layer of epidermis: identification of regulators acting upstream and downstream of ATML1 Hiroyuki Iida[1], Ayaka Yoshida[1], Nozomi Takada[1], Miharu Ito[1], Gerd Jürgens[2], Shinobu Takada[1] ([1]Dept. Biol. Sci., Grad. Sch. Sci., Osaka Univ, [2]ZMBP, Univ. Tübingen)	1aK11 Analysis of cell wall-derived elicitors during herbivory in rice Tomonori Shinya[1], Yuka Fujiwara[1], Kiwamu Hyodo[1], Yoshihisa Yoshimi[2], Katsuya Hara[2], Yoichi Tsumuraya[2], Toshihisa Kotake[2], Ivan Galis[1] ([1]IPSR, Okayama Univ., [2]Grad. Sch. Sci. Eng., Saitama Univ.)	1aL11 [Cancelled]	1aM11 Prediction of environmental response in field-grown rice using expression-dynamics-QTL Makoto Kashima[1], Ryota Sakamoto[1,2], Hiroki Saito[3,4], Satoshi Okubo[3,5], Shunsuke Adachi[5], Yoichi Hashida[1,5], Kazuki Tomizawa[5], Ayumi Tezuka[1], Ayumi Deguchi[1], Yuko Kurita[1], Atsushi J. Nagano[6] ([1]Res. Inst. for Food and Agri., Ryukoku Univ., [2]Seibi Seni. High Sch., [3]Grad. sch. of Agri., Kyoto Univ., [4]Trop. Agri. Res. Fro., JIRCAS, [5]Inst. of Global Inn. Res., Tokyo Univ. of Agri. and Tech., [6]Facu. of Agri., Ryukoku Univ.)		1aO11 Update of the omics databases PODC and CatchUP Shizuka Koshimizu[1], Yukino Nakamura[1], Misa Saito[1], Maasa Kanno[1], Eiji Nambara[2], Kentaro Yano[1] ([1]Sch. Agri., Meiji Univ., [2]Sch. Cell & Systems Biol., Univ. Toronto)	12:00
1aI12 Quantitative evaluation of the efficiency of a transiently-introduced CRISPR/Cas9 system based on the observation of cellular circadian phenotypes Yuki Kanesaka[1], Masaaki Okada[2], Takashi Araki[1], Tokitaka Oyama[2] ([1]Grad.Sch. Biostudies, Univ.Kyoto, [2]Grad.Sch.Science, Univ. Kyoto)	1aJ12 Analysis of *cop1*-induced Inflorescence Morphology in *Arabidopsis* Mayu Nakagawa, Risa Takeuchi, Takumi Oonuma, Kiyotaka Shibata (Fac. Sci. Engn., Ishinomaki Senshu Univ.)	1aK12 Arabidopsis lipoxygenase 2 controlled by calcium ion catalyzes oxidation of galactolipid to induce green leaf volatile-burst Satoshi Mochizuki, Kenji Matsui (Grad. Sch. Sci. and Tech. for Innov., Univ. Yamaguchi)	1aL12 Cell biological analysis of the infection process in symbiotic interactions between orchids and mycorrhizal fungi Chihiro Miura[1], Miharu Saisho[1], Yoshikatsu Sato[2], Takahiro Yagame[3], Tetsuya Higashiyama[2,4], Masahide Yamato[5], Hironori Kaminaka[1] ([1]Fac. Agr., Tottori Univ., [2]WPI-ITbM, Nagoya Univ., [3]Mizuho Kyo-do Mus., [4]Grad. Sch. Sci., Nagoya Univ., [5]Fac. Edu., Chiba Univ.)	1aM12 Direct and indirect priming by seasonal environments in *Arabidopsis halleri* Mie N. Honjo[1], Tomoaki Muranaka[1], Haruki Nishio[1], Tasuku Ito[1], Naoko Emura[1,2], Hiroshi Kudoh[1] ([1]Center for Ecological Research, Kyoto Univ., [2]Fac. Agr., Kagoshima Univ.)			12:15

E=Presentation in English

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

Time	Room A	Room B	Room C	Room D	Room E	Room F	Room G	Room H
	Symposium S04 Strategies of mechanical optimization in plants (14:00–17:00)	Symposium S05 Metabolisms as Survival Strategy in Plants (14:00–17:00)	Cell cycle/Cell division	Primary metabolism, Secondary metabolism	Photosynthesis, Environmental responses of photosynthesis	Symposium S06 Plant adaptation strategies via ABA-mediated signaling in change of environmental conditions (14:00–17:00)	Plant hormones/ Signaling molecules	Reproductive growth
14:00			1pC01 Identification and characterization of a substrate of *Arabidopsis* MPK4 MAPK required for plant cytokinesis Masanobu Tomita[1], Yudai Mikami[1], Ryutaro Nakaoku[1], Takahiro Hamada[2], Hirofumi Nakagami[2], Takashi Hashimoto[4], Yasunori Machida[5], Michiko Sasabe[1] ([1]Facul. of Agri. & Life Sci., Hirosaki Univ., [2]Grad. Sch. Art Sci., Univ. Tokyo, [3]Max Planck Institute for Plant Breeding Research, [4]Grad. Sch. Biol. Sci., NAIST, [5]Grad. Sch. of Sci., Nagoya Univ.)	1pD01 Possible Regulation of Sucrose-Starch Distribution by a Photosynthesis-Responsive Raf-Like Protein Kinase in *Marchantia polymorpha* Eri Koide[1], Asuka Shintaku[1], Mika Terai[1], Yuko Nomura[2], Izumi Yotsui[2], Noriyuki Suetsugu[1], Hirofumi Nakagami[2,3], Takayuki Kohchi[1], Ryuichi Nishihama[1] ([1]Grad. Sch. Biostudies, Kyoto Univ., [2]RIKEN, CSRS, [3]MPIPZ)	1pE01 Manipulation of the Stomatal Density Affects the Response of Stomatal Opening and CO_2 Assimilation to the Fluctuating Light Kazuma Sakoda[1,2], Tomoo Shimada[3], Shigeo S. Sugano[4,5], Ikuko Hara-Nishimura[6], Yu Tanaka[1,5] ([1]Graduate School of Agriculture, Kyoto University, [2]Research Fellow of Japan Society for the Promotion of Science, [3]Graduate school of Science, Kyoto University, [4]Ritsumeikan Global Innovation Research Organization, [5]JST, PRESTO, [6]Faculty of Science and Engineering, Konan University)		1pG01 E Ancient Arabinogalactans Modulate Auxin Signaling In *Physcomitrella patens* To Regulate Polarity Ooi-Kock Teh[1,2], Junling Ren[3], Mitsuyasu Hasebe[4], Tomomichi Fujita[2] ([1]IAHE, Univ. Hokkaido, [2]Dept Biol. Sci., Univ. Hokkaido, [3]Univ. Louisville, Dept. Biol., [4]NIBB, Division Evol. Biol.)	1pH01 A mechanism controlling stem cell maintenance in rice: Function of the FON signaling and ASP1 corepressor Chie Suzuki, Wakana Tanaka, Hiro-Yuki Hirano (Sch. Sci., Univ. Tokyo)
14:15			1pC02 Dynamic recruitment of sterol biosynthetic machinery to the cell plate ensures the normal cytokinesis in Arabidopsis Yuka Yamaroku[1], Ayaka Fuwa[1], Kazuo Ebine[2,3], Takashi Ueda[2,3], Daisaku Ohta[1] ([1]Grad. Sch. Life Env. Sci., Osaka Pref. Univ., [2]Div. Cellular Dynamics, NIBB, [3]Sch. Life Sci., SOKENDAI)	1pD02 Structure-Function Analysis of a Raf-Like Protein Kinase That Is Involved in Photosynthesis Signaling in *Marchantia Polymorpha* Asuka Shintaku, Eri Koide, Takayuki Kohchi, Ryuichi Nishihama (Grad. Sch. Biostudies, Kyoto Univ.)	1pE02 Effects of chemically synthesized ether-linked PGs on photoinhibition of PSII Haruhiko Jimbo[1], Kaichiro Endo[2], Masato Abe[3], Hajime Wada[1] ([1]Grad. Sch. Arts and Sci., Univ. Tokyo, [2]Malopolska Centre of Biotech., Jagiellonian Univ., Poland, [3]Grad. Sch. Agriculture, Ehime Univ.)		1pG02 E Biochemical analysis of phenylacetic acid methyltransferase gene for auxin metabolism in Arabidopsis Eiko Takubo[1], Makoto Kobayashi[2], Kosuke Fukui[3], Ken-ichiro Hayashi[3], Hiroyuki Kasahara[4] ([1]Grad. Sch. Agric., Tokyo Univ. Agric. Tech., [2]RIKEN CSRS, [3]Dep. Biochem., Okayama Univ. Sci., [4]GIR, Tokyo Univ. Agri. Tech.)	1pH02 The *RI* and *RIL* genes encoding BELL1-type homeodomain transcription factors regulate inflorescence architecture and meristem maintenance in rice Takuyuki Ikeda[1], Wakana Tanaka[1], Taiyo Toriba[1,2], Akiteru Maeno[3], Katsutoshi Tsuda[3], Toshihiko Shiroishi[3], Tetsuya Kurata[4], Tomoaki Sakamoto[5], Masayuki Murai[6], Hiroaki Matsusaka[7], Toshihiro Kumamaru[7], Hiro-Yuki Hirano[1] ([1]Sch. Sci., Univ. Tokyo, [2]Grad. Sch. Life Sci., Tohoku Univ., [3]Natl. Inst. Genet., [4]EditForce Inc., [5]Fac. Life Sci., Kyoto Sangyo Univ., [6]Kochi Univ., [7]Grad. Sch. Agric., Kyushu Univ.)
14:30			1pC03 E Identification and Characterization of a Putative Borealin in Arabidopsis Shinichiro Komaki[1], Yuki Hamamura[2], Maren Hesse[2], Takashi Hashimoto[1], Arp Schnittger[2] ([1]Grad. Sch. Biol. Sci., NAIST, [2]Univ. Hamburg)	1pD03 Function of the serine biosynthetic enzyme 3-phosphoglycerate dehydrogenase in *Marchantia polymorpha* Hiromichi Akashi[1,2], Ayuko Kuwahara[1], Ryuichi Nishihama[3], Yoriko Matsuda[3], Hiromitsu Tabeta[1,4], Eiji Okamura[1], Ali Ferjani[4], Takayuki Kohchi[3], Masami Yokota Hirai[1,2] ([1]RIKEN CSRS, [2]Grad. Sch. Bioagricultural Sci., Nagoya Univ., [3]Grad. Sch. Biostudies, Kyoto Univ., [4]Dept. Biology, Tokyo Gakugei Univ.)	1pE03 Development of biopolymer production system using carbon dioxide and nitrogen fixation abilities of marine purple photosynthetic bacteria Mieko Higuchi-Takeuchi, Keiji Numata (RIKEN CSRS, Biomacromolecules Research Team)		1pG03 CYP79A2-dependent biosynthesis pathway of phenylacetic acid in Arabidopsis. Yuki Aoi[1], Noriko Takeda[2], Yumiko Takebayashi[2], Ken-ichiro Hayashi[3], Hiroyuki Kasahara[1,4] ([1]Grad. Sch. Agric., Tokyo Univ. Agric. Tech., [2]RIKEN CSRS, [3]Dep. Biochem., Okayama Univ. Sci., [4]GIR, Tokyo Univ. Agri. Tech.)	1pH03 E Two quantitative trait loci for panicle length influence panicle architecture in rice. Ayumi Agata[1], Tokunori Hobo[2], Koki Ando[1], Yasuko Fujishiro[1], Takamasa Suzuki[4], Hitoshi Sakakibara[1,3], Sayaka Takehara[2], Miyako Ueguchi-Tanaka[2], Makoto Matsuoka[2], Kazuyuki Doi[1], Motoyuki Ashikari[2], Hidemi Kitano[2] ([1]Grad. Sch. Bioagr. Sci., Nagoya U., [2]Biosci. Biotec. Ctr., Nagoya U., [3]CSRS, RIKEN, [4]Grad. Sch. Biosci. Biotech., Chubu U.)

Room I	Room J	Room K	Room L	Room M	Room N	Room O	Time
Organelles/ Cytoskeleton	Vegetative growth	Plant-organism interaction A	Transcriptional, post-transcriptional/Translational regulations/Protein modification & degradation	Environmental responses B		Systems biology	
1pI01 The checkpoint kinase TOR modulates chloroplast ribosomal RNA synthesis through expression of a nuclear-encoded chloroplast RelA-SpoT homolog (RSH) in a unicellular red alga Sousuke Imamura[1], Yuhta Nomura[2], Tokiaki Takemura[1], Imran Pancha[1], Keiko Taki[1], Kazuki Toguchi[1], Yuzuru Tozawa[2], Kan Tanaka[1] ([1]CLS, Tokyo Tech, [2]Grad. Sch. Sci. and Eng., Saitama Univ.)	1pJ01 Genetic Analysis of Genes Influencing Stem-Cell Homeostasis in *Arabidopsis* Ryuji Tsugeki (Grad. Sch. Sci., Kyoto Univ.)	1pK01 Ⓔ Damage-associated Pep peptides influence root architecture and microbiome 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 Tech., NAIST, [2]Sch. Life Sci. Tech., Tokyo Tech, [3]NIG)	1pL01 Characterization of the *de novo* activated transcription start sites in the *Arabidopsis* genome Takayuki Hata[1], Soichirou Satoh[1], Naoto Takada[1], Mei Kazama[1], Chihiro Hayakawa[1], Makoto Tachikawa[1], Mitsuhiro Matsuo[1], Sergei Kushnir[2], Junichi Obokata[1] ([1]Grad. Sch. of Life and Env. Sci., Kyoto Pref. Univ., [2]Sus. Dev., Vale Inst. of Tech.)	1pM01 Ⓔ Functional complementation of ABA biosynthesis using cell-type specific promoters Takashi Kuromori, Eriko Sugimoto, Kazuo Shinozaki (RIKEN CSRS)		1pO01 Generative Model-based Inference of Gene Expression State Space in Higher Plants Yuichi Aoki[1,2], Takeshi Obayashi[2], Kengo Kinoshita[1,2] ([1]ToMMo, Tohoku Univ., [2]Grad. Sch. Info. Sci, Tohoku Univ.)	14:00
1pI02 Identificaiton of DNA ligase that define the shape of chloroplast nucleoids Yoshiki Nishimura[1], Yusuke Kobayashi[2], Takashi Hamaji[1], Toshiharu Shikanai[1] ([1]Lab. of Plant Mol. Genet., Dep. of Bot., Kyoto Univ., [2]Dep. of Cell Genet., NIG)	1pJ02 Functional analysis of glycosyltransferase SEC in *Arabidopsis thaliana* de-differentiation and shoot regeneration processes Takahiro Kameyama, Umihito Nakagawa, Kazuo Kamemura, Makoto Hayashi, Aya Imamura (Nagahama Inst.of Bio-sci.&tech.)	1pK02 Pattern Recognition Receptor-mediated Control of Plasma Membrane Intrinsic Proteins (PIPs) in Plant Immunity Taishi Hirase[1], Shigetaka Yasuda[1], Lionel Verdoucq[2], Kohji Yamada[3], Iris Finkemeier[4], Hirofumi Nakagami[3,5], Christophe Maurel[2], Yusuke Saijo[1-3] ([1]Grad. Sch. Biological Sciences., NAIST, [2]Biochimie et Physiologie Moleculaire des Plantes., CNRS, [3]Max Planck Institute for Plant Breeding Research, [4]Institute for Plant Biology and Biotechnology., Univ. Munster, [5]CSRS., RIKEN)	1pL02 Gene expression of mucus proteins in tissues of Japanese bunching onion (*Allium fistulosum*) Atsuko Takeuchi, Hiroshi Ueda (Institute of Vegetable and Floriculture Science, NARO)	1pM02 Synthetic promoters for ABA response in Arabidopsis Takumi Tsuchiya[1], Cheng Ri Zhao[1], Sahoo Smita[5], K. Panda Sanjib[5], Natsuki Hayami[1], Kyonoshin Maruyama[6], Satoshi Iuchi[4], Yoshiharu Yamamoto[1,2,3] ([1]Grad. Sch. Nat. Sci. Tech., Univ. Gifu, [2]Fac. appl. Biol. Sci., Univ. Gifu, [3]CSRS., Riken, [4]BRS., Riken, [5]Fac. Bio. Tech., Univ. Assam, [6]JIRCAS., Int. Agri. Riken)		1pO02 Ⓔ Unification of microarray-based and RNAseq-based coexpression data in ATTED-II. Takeshi Obayashi[1], Yuichi Aoki[2] ([1]Grad. Sch. Info. Sci, Tohoku Univ., [2]ToMMo, Tohoku Univ.)	14:15
1pI03 The Pentatricopeptide Repeat Protein PGR3 Regulates the Translation of *NdhG* Encoding a Plastid-Encoded NDH Subunit Haruka Higashi[1], Yoshinobu Kato[1], Tomoya Fujita[2,3], Mari Mito[2], Shintaro Iwasaki[2,4], Yoshiki Nishimura[1], Mizuki Takenaka[1], Toshiharu Shikanai[1] ([1]Grad. Sch. Sci., Kyoto Univ., [2]CPR, RIKEN, [3]IIR, Tokyo Inst. Tech., [4]Grad. Sch. Front. Sci., Univ. Tokyo)	1pJ03 Negative regulation of shoot regeneration competence by endogenous IAA in 2,4-D-induced callus of Arabidopsis Yuki Sakamoto[1], Hitomi Kuwae[2], Hiroyuki Kasahara[3], Munetaka Sugiyama[1] ([1]Grad. Sch. Sci., Univ. Tokyo, [2]Grad. Sch. Agric., Tokyo Univ. Agric. Tech., [3]GIR, Tokyo Univ. Agric. Tech.)	1pK03 Phosphate status-dependent control of Pep1 peptide-mediated pathogen resistance in *Arabidopsis thaliana* Taehong Lee[1], Midori Tanaka[1], Taishi Hirase[1], Shigetaka Yasuda[1], Kei Hiruma[1,2], Yusuke Saijo[1] ([1]NAIST Biological Science, [2]JST PRESTO)	1pL03 Transcriptional regulation in response to 5-aminolevulinic acid in Arabidopsis Mao Imamura[1], Kaho Tsuruyama[1], Sakura Iwamura[2], Minori Sakamoto[2], Shuji Kuroda[2], Tomohide Uno[2], Kengo Kanamaru[2] ([1]Lab Biol. Chem., Fac. Agri., Kobe Univ., [2]Grad. Sch. Agri. Sci., Kobe Univ.)	1pM03 Ⓔ Ethanol mediated drought stress tolerance in plants Khurram Bashir[1], Sultana Rasheed[1], Maho Tanaka[2], Chien Van Ha[1], Yoshiaki Habu[3], Yuuri Tsubui[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], Kazuo Shinozaki[10], Motoaki Seki[1,2,9,11] ([1]Plant Genomic Network Research Team RIKEN CSRS, [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, [9]Graduate School of Science, Nagoya University, [9]Kihara Institute for Biological Research, Yokohama City University, [10]Gene Discovery Research Group CSRS, RIKEN, [11]CREST, JST, 4-1-8 Honcho, Kawaguchi, Saitama, 332-0012, Japan)		1pO03 Exploring novel gene candidates related to parthenocarpy in tomato using gene co-expression network analysis Ken Kamiya[1], Tuan Nam Vu[1], Atsushi Fukushima[3], Shuhei Hao[1], Yoshihito Shinozaki[2], Ning Wang[1,2], Tohru Ariizumi[1,2], Hiroshi Ezura[1,2], Miyako Kusano[1,2,3] ([1]Grad. Sch. Life Env. Sci., Univ. Tsukuba, [2]Fac. Life. Env. Sci., Univ. Tsukuba, [3]CSRS, RIKEN)	14:30

Ⓔ=Presentation in English

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

Time	Room A	Room B	Room C	Room D	Room E	Room F	Room G	Room H
	Symposium S04 Strategies of mechanical optimization in plants (14:00–17:00)	Symposium S05 Metabolisms as Survival Strategy in Plants (14:00–17:00)	Cell cycle/Cell division	Primary metabolism, Secondary metabolism	Photosynthesis, Environmental responses of photosynthesis	Symposium S06 Plant adaptation strategies via ABA-mediated signaling in change of environmental conditions (14:00–17:00)	Plant hormones/ Signaling molecules	Reproductive growth
14:45			1pC04 E Exploring Function of TPX2 Protein in Microtubule Organization in Moss Physcomitrella patens. Elena Kozgunova, Gohta Goshima (Nagoya University, Graduate School of Science)	1pD04 Metabolome analysis for oxalate accumulation in two rice cultivars Atsuko Miyagi[1], Shunsuke Adachi[2], Taiichiro Ookawa[2], Maki Kawai-Yamada[1] ([1]Grad. Sch. Sci. Eng., Saitama Univ., [2]Grad. Sch. Agr., Tokyo Univ. Agri. & Tech.)	1pE04 Localization of low-CO_2 inducible protein B (LCIB) in the chloroplast is determined by net CO_2 concentration and CCM1 in *Chlamydomonas reinhardtii* Chihana Toyokawa, Toshiki Matsuoka, Takashi Yamano, Hideya Fukuzawa (Grad. Sch. Biostudies, Kyoto Univ.)		1pG04 E Spatio-temporal Analysis of Gene Expression and Phytohormones During Tissue-reunion in Incised *Arabidopsis* Flowering Stems. Kazuki Yamada[1,5], Miyuki Nakanowatari[1], Emi Yumoto[3], Yukio Noda[2], Ryuichi Koike[2], Takao Yokota[2], Hisakazu Yamane[2], Hiroki Tsutsui[4], Michitaka Notaguchi[4], Takamasa Suzuki[5], Shinobu Satoh[6], Masashi Asahina[1,2,3] ([1]Grad. Sch. Sci. & Eng., Teikyo Univ., [2]Dept. Biosci., Teikyo Univ., [3]Adv. Instrum. Anal. Cent., Teikyo Univ., [4]Grad. Sch. Bio. Agr. Sci., Nagoya Univ., [5]Biosci, Biotec., Chubu Univ., [6]Life & Environ Sci., Univ. Tsukuba.)	1pH04 Analysis of the Mechanism of Carpel Specification in Rice Shige-Hiro Sugiyama[1], Yukiko Yasui[1,2], Suzuha Ohmori[1,3], Wakana Tanaka[1], Hiro-Yuki Hirano[1] ([1]Grad. Sch. Sci., Univ. Tokyo, [2]Grad. Sch. Sci., Kobe Univ., [3]Sch. Agric., Meiji Univ.)
15:00			1pC05 Identifying transcription factor complexes involved in DNA damage-induced cell cycle arrest Tomonobu Takahashi, Nobuo Ogita, Shoji Taniguchi, Naoki Takahashi, Masaaki Umeda (Nara Institute of Science and Technology)	1pD05 A Novel Glycosyltransferase Family Governing Structural Diversity of Plant-specific Head Groups of Sphingolipid. Toshiki Ishikawa, Maki Kawai-Yamada (Grad. Sch. Sci. Eng., Saitama Univ.)	1pE05 Radiation use efficiency of a recombinant rice line with high leaf photosynthesis rate Chizuru Terasaki[1], Hiroe Yoshida[2], Keisuke Katsura[1], Taiichiro Ookawa[1], Shunsuke Adachi[1] ([1]Graduate School of Agriculture, Tokyo University of Agriculture and Technology, [2]NARO Institute for Agro-Environmental Sciences)		1pG05 The role of TMK signaling during integument development Kaori Miyawaki N[1], Mingzeng Chang[2], Fen Wang[2], Shui Wang[2], Tetsuya Higashiyama[1,3], Zhenbiao Yang[4] ([1]ITbM, Nagoya Univ., [2]Shanghai Center for Plant Stress Biology, [3]Grad.Sch.Sci., Nagoya Univ., [4]Univ. California, Riverside)	1pH05 OsMYB80, an anther-specific transcription factor required for pollen development in rice Makiko Kawagishi-Kobayashi[1], Masaharu Kuroda[2], Kakeru Suzuki[3], Yuzuru Tozawa[3], Atsushi Higashitani[4] ([1]NIAS, NARO, [2]CARC, NARO, [3]Grad. Sch. Sci. Eng., Saitama Univ., [4]Grad. Sch. Life Sci., Tohoku Univ.)
15:15			1pC06 Regulatory mechanism of G2 arrest in response to stresses Naoki Takahashi, Nobuo Ogita, Tomonobu Takahashi, Shoji Taniguchi, Masaaki Umeda (Grad. Sch. Sci. Tech., NAIST)	1pD06 Identification and characterization of WSRK, a key regulatory factor of anaerobic wax ester metabolism in *Euglena gracilis* Yuuki Ishii[1], Mitsuhiro Kimura[1], Takahisa Ogawa[1], Takanori Maruta[1], Masaru Mori[2,3], Takahiro Ishikawa[1] ([1]Dept. Life Sci. Biotechnol., Fac. Life Environ. Sci., Shimane Univ., [2]Institute for Advanced Biosciences, Keio Univ., [3]SFC Grad. Sch. of Media and Governance, Keio Univ.)	1pE06 Improvement of stomatal response leads to enhancement of photosynthesis and biomass production under fluctuating light conditions Haruki Kimura[1], Mimi Hashimoto-Sugimoto[2], Koh Iba[3], Ichiro Terashima[1], Wataru Yamori[1] ([1]Biol. Sci., Sci., Univ. Tokyo, [2]Bioagr. Sci., Nagoya Univ., [3]Biol., Sci., Kyushu Univ.)		1pG06 Feed-forward regulation of auxin signal by reactive oxygen species and reactive carbonyl species in lateral root formation Kazuha Nakahara[1], Md. Sanaullah Biswas[2], Hidehiro Fukaki[3], Izumi Mori[4], Jun'ichi Mano[5] ([1]Fac. Agr., Yamaguchi Univ., [2]Dept. Horticulture, BSMR Agricultural Univ., [3]Grad. Schl. Sci., Kobe Univ., [4]IPSR, Okayama Univ., [5]Sci. Res. Center, Yamaguchi Univ.)	1pH06 E Gibberellin Precursor Is Involved in Sexual Organ Formation in the Liverwort *Marchantia polymorpha* Rui Sun, Ran Wang, Ryunosuke Kusunoki, Keisuke Inoue, Ryuichi Nishihama, Shohei Yamaoka, Takayuki Kohchi (Grad. Sch. Biostudies, Kyoto Univ.)
15:30			1pC07 Role of histone methylation in cell cycle progression in rice plants Shinichiro Suzuki, Hirotomo Takatsuka, Masaaki Umeda (Graduate School of Science and Technology, Nara Institute of Science and Technology)	1pD07 Analysis of sugar component of sugi immature male flower bud Tomohiro Igasaki[1], Shojiro Hishiyama[2], Koichi Kakegawa[2] ([1]Forestry and Forest Products Research Institute, [2]Forestry and Forest Products Research Institute)	1pE07 Photosynthetic characteristics in the Arabidopsis mutant *ihc1* with enhanced cuticle permeability due to abnormal cuticle formation. Keina Monda[1], Ryoma Tohmori[1], Sho Takahashi[1], Juntaro Negi[1], Atsushi Mabuchi[1], Ichiro Terashima[2], Wataru Yamori[2], Koh Iba[1] ([1]Dept. Biol., Fac. Sci., Univ. Kyushu, [2]Dept. Biol., Sch. Sci., Univ. Tokyo)		1pG07 Search for novel transcription factors involved in primitive auxin response in *Klebsormidium nitens* Kanami Sesoko, Koichi Hori, Mie Shimojima, Hiroyuki Ohta (School of Life Science and Technology, Tokyo Institute of Technology)	1pH07 A methyltransferase family gene involved in sexual organ formation in the liverwort *Marchantia polymorpha* Shogo Kawamura, Shohei Yamaoka, Ryunosuke Kusunoki, Rui Sun, Ryuichi Nishihama, Takayuki Kohchi (Graduate School of Biostudeis, Kyoto University)

Room I	Room J	Room K	Room L	Room M	Room N	Room O	Time
Organelles/ Cytoskeleton	Vegetative growth	Plant-organism interaction A	Transcriptional, post-transcriptional/Translational regulations/Protein modification & degradation	Environmental responses B		Systems biology	
1pI04 Functional analysis of a mitochondrial P-class PPR protein in *Physcomitrella patens* Mizuho Ichinose[1,2], Mamoru Sugita[1] ([1]Center for Gene Res., Nagoya Univ., [2]ITbM, Nagoya Univ.)	1pJ04 Analyses of plant cellular plasticity in Arabidopsis protoplasts from differentiated cells. Yuki Sakamoto[1,2], Takamasa Suzuki[3], Keiko Sugimoto[1,2] ([1]Grad. Sch. Sci., Univ. Tokyo, [2]CSRS, RIKEN, [3]Col. Biosci. Biotech., Chubu Univ.)	1pK04 Functional analysis of glucan synthase-like genes in *Arabidopsis thaliana* under phoshpate starvation Kentaro Okada, Koei Yachi, Kei Hiruma, Yusuke Saijo (Grad. Sch. Biol. Sci., NAIST)	1pL04 Coordinated transcriptional regulation of isopentenyl diphosphate biosynthetic pathway enzymes in plastids by Arabidopsis response regulator 14 Ikumi Okubo[1], Masashi Shindo[1], Hirokazu Hashikawa[2], Yusuke Takabayashi[2], Kazuto Mannen[2], Fumihiro Yanbe[2], Toshiyuki Waki[2], Seiji Takahashi[2], Toru Nakayama[2] ([1]School of Engineering, Tohoku University, [2]Graduate School of Engineering, Tohoku University)	1pM04 Tuning water use efficiency and drought tolerance in wheat using ABA receptors Masanori Okamoto[1,2], Fumitaka Abe[3], Jun Kikuchi[4], Ryousuke Mega[5] ([1]Utsunomiya Univ., [2]PRESTO, JST, [3]NARO, [4]RIKEN, [5]Tottori Univ.)		1pO04 Quantitative Measurement of Plant Proteins using MRM Assays by Mass Spectrometry Hitoshi Mori (Bioagr. Nagoya Univ.)	14:45
1pI05 Pentatricopeptide repeat proteins involved in post-transcriptional regulation of plastid ndh genes Ayaka Ito[1], Chieko Sugita[1], Mizuho Ichinose[1,2], Yoshinobu Kato[3], Hiroshi Yamamoto[3], Toshiharu Shikanai[3], Mamoru Sugita[1] ([1]Centr. Gene Res., Nagoya Univ., [2]ITbM, Nagoya Univ., [3]Grad. Sci., Kyoto Univ.)	1pJ05 Two R2R3-MYB Transcription Factors Induce Pluripotency with Different Ways in *Marchantia polymorpha* Yukiko Yasui[1], Shigeyuki Tsukamoto[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.)	1pK05 Functional requirements for BAK1 in beneficial interaction with the mutualistic fungus *Colletotrichum tofieldiae* in *Arabidopsis thaliana* Takuma Inoue[1], Shigetaka Yasuda[1], Kei Hiruma[1,2], Taishi Hirase[1], Yuki Suzuki[1], Yusuke Saijo[1] ([1]Grad. Sch. Sci. Tech., NAIST, [2]JST PRESTO)	1pL05 Transcriptional regulation of GA biosynthetic genes by GAF1 and its interactors Takeshi Ito, Takayoshi Katsube, Jutarou Fukazawa, Yohsuke Takahashi (Grad. Sch. Sci., Hiroshima Univ.)	1pM05 A monitoring of plant drought stress under excess light by leaf reflectance Kaori Kohzuma, Kouki Hikosaka (Tohoku Univ., Life Science)		1pO05 E Anthesis rate prediction of greenhouse tomatoes through metabolomics using Lasso regularized linear regression model Ratklao Siriwach[1], Jun Matsuzaki[1], Takeshi Saito[2], Muneo Sato[1], Yuji Sawada[1], Masanori Arita[1,3], Tadahisa Higashide[2], Kentaro Yano[4], Masami Yokota Hirai[1] ([1]RIKEN Center for Sustainable Resource Science(CSRS), [2]Institute of Vegetable and Floriculture Science, [3]National Institute of Genetics, [4]Bioinformatics Laboratory, Department of Life Sciences, School of Agriculture, Meiji University)	15:00
1pI06 The P-class pentatricopeptide repeat protein is needed for accumulation of the psbI-ycf12 dicistronic mRNA in Physcomitrella chloroplasts Tetsuo Ebihara[1], Takuya Matsuda[1], Chieko Sugita[1], Mizuho Ichinose[1,2], Hiroshi Yamamoto[3], Toshiharu Shikanai[3], Mamoru Sugita[1] ([1]Centr. Gene Res., Nagoya Univ., [2]ITbM, Nagoya Univ., [3]Grad. Sch. Sci., Kyoto Univ.)	1pJ06 Functional analysis of Marchantia polymorpha CLE gene Yuki Hirakawa[1], Touko Fujimoto[1], Naoyuki Uchida[2], Shinichiro Sawa[3], Kimitsune Ishizaki[4], Ryuichi Nishihama[5], Takayuki Kohchi[5], Tomohiro Kiyosue[1], John Bowman[6] ([1]Sch.Sci., Gakushuin Univ., [2]ITbM, Nagoya Univ., [3]Grad. Sch. Sci. Tech., Kumamoto Uni., [4]Grad. Sch. Sci., Kobe Uni, [5]Grad. Sch. Biostud., Kyoto Univ., [6]Sch. Biol. Sci., Monash Univ.)	1pK06 Regulatory mechanism of WRKY45-transcriptional activity by rice immune factor PBI1. Shusuke Shigeta[1], Kouta Ichimaru[1], Kenichi Harada[2], Kento Inoue[1], Shunsuke Ando[1], Satomi Yoshimura[1], Koji Yamaguchi[1], Chojiro Kojima[2,3], Tsutomu Kawasaki[1] ([1]Dept. Adv. Biosci. Kindai Univ, [2]Instit. for Protein Res. Osaka Univ, [3]Grad. Sch Engineer. Yokohama Nat. Univ)	1pL06 Functional difference of three classes of AUXIN RESPONSE FACOTR in land plants Hirotaka Kato, Sumanth Mutte, Dolf Weijers (Lab. Biochem., Wageningen UR)	1pM06 Regulatory mechanism of B3 MAPKKK-mediated SnRK2 activation in the moss *Physcomitrella patens* Tsukasa Toriyama[1], Masashi Saruhashi[2], Daisuke Takezawa[2], Izumi Yotsui[1], Teruaki Taji[1], Yoichi Sakata[1] ([1]Dept Bio, Tokyo Univ. Agric., [2]Inst. for Env. Sci. and Tech., Saitama Univ.)		1pO06 Rice metabolite changing during the ripening period Masataka Wakayama[1,2], Yoshiro Kita[1], Yohei Abe[3], Yujin Ashino[1], Tatsuki Ogura[1], Rie Kadowaki[1], Tomoyoshi Soga[1,2], Masaru Tomita[1,2] ([1]Inst. Adv. Biosci., Keio Univ., [2]Grd. Sch. Media Gov., Keio Univ., [3]Yamagata Pref. Agric. Res. Cent.)	15:15
1pI07 Potential advantages of having two DNA-binding domains of HMGB proteins localized in organelle nucleoids Mari Takusagawa[1], Yusuke Kobayashi[1], Yoichiro Fukao[2], Kumi Hidaka[1], Masayuki Endo[3], Hiroshi Sugiyama[1,3], Isamu Miyakawa[4], Toshiharu Shikanai[1], Osami Misumi[4], Yoshiki Nishimura[1] ([1]Grad. Sch. Sci., Kyoto Univ., [2]Dept. Bioinfo., Ritsumeikan Univ., [3]iCeMS, Kyoto Univ., [4]Grad. Sch. Sci. Tech. Innov., Yamaguchi Univ.)	1pJ07 Analysis of roles of ROS-producing enzyme MpRbohA in the apical meristematic zones of *Marchantia polymorpha* Yuki Hagiwara[1], Daisuke Miyamoto[1], Tomohiro Takagawa[1], Kenji Hashimoto[2], Ryuichi Nishihama[3], Kimitsune Ishizaki[4], Takayuki Kohchi[3], Kazuyuki Kuchitsu[1,2] ([1]Dept. of Appl. Biol. Sci., Tokyo Univ. of Science, [2]Imaging Frontier Center, Tokyo Univ. of Science, [3]Grad. Sch. of Biostudies, Kyoto Univ., [4]Grad. Sch. of Sci., Kobe Univ.)	1pK07 Inhibition of photosynthetic activity results in chloroplastic ROS burst during plant immune responses Takaya Ogawa[1], Hiroaki Adachi[2], Miki Yoshioka[1], Daisuke Sugiura[1], Hirofumi Yoshioka[1] ([1]Grad. Sch. Agr. Univ. Nagoya, [2]The Sainsbury Lab.)	1pL07 ER stress-responsive transcription factors bZIP17 and bZIP28 regulate root elongation June-Sik Kim[1], Yuki Sakamoto[2], Fuminori Takahashi[1], Mikiko Kojima[1], Kaoru Urano[1], Hitoshi Sakakibara[1], Sachihiro Matsunaga[3], Kazuko Yamaguchi-Shinozaki[4], Kazuo Shinozaki[1] ([1]RIKEN CSRS, [2]IFC, RIST, Tokyo Univ. Sci., [3]Dept. Applied Bio. Sci., Fac. Sci. Tech., Tokyo Univ. Sci., [4]Grad. Sch. Agri. Life Sci., Univ. Tokyo)	1pM07 Inter-organ transport of ABA molecules and/or their 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], 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]Japan Science and Technology Agency, PRESTO)		1pO07 E Evaluation of various seaweeds by water-soluble metabolites Shahlizah Sahul Hamid[1,2], Masataka Wakayama[1,2], Kensuke Ichihara[3], Katsutoshi Sakurai[4], Yujin Ashino[1], Rie Kadowaki[1], Tomoyoshi Soga[1,2], Masaru Tomita[1,2] ([1]Inst. Adv. Bio. Sci., Keio Univ., [2]Grad. Sch. Media and Governance, [3]Field Sci. Center., Hokkaido Univ., [4]Yamagata Prefectural Fishery Institute)	15:30

E=Presentation in English

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

Time	Room A	Room B	Room C	Room D	Room E	Room F	Room G	Room H
	Symposium S04 Strategies of mechanical optimization in plants (14:00–17:00)	Symposium S05 Metabolisms as Survival Strategy in Plants (14:00–17:00)	Cell cycle/Cell division	Primary metabolism, Secondary metabolism	Photosynthesis, Environmental responses of photosynthesis	Symposium S06 Plant adaptation strategies via ABA-mediated signaling in change of environmental conditions (14:00–17:00)	Plant hormones/ Signaling molecules	Reproductive growth
15:45			1pC08 E Distinct regulation of G2 progression in the root epidermis Teruki Sugiyama, Masaaki Umeda (Nara Institute of Science and Technology)	1pD08 Identification of a transcription factor regulating the expressions of chlorophyll biosynthetic genes Chihiro Oda-Yamamizo[1,2], Akemi Ohmiya[3], Nobutaka Mitsuda[4], Shingo Sakamoto[4], Norihito Nakamichi[5], Yasunari Fujita[1,6] ([1]Biol. Resources Post-harvest Div., JIRCAS, [2]JSPS Fellow, [3]Inst. Vegeta. and Flori. Sci., NARO, [4]AIST, [5]ITbM, Nagoya Univ., [6]Grad. Sch. Life Environ. Sci., Univ. Tsukuba)	1pE08 HCO_3^- utilization of underwater photosynthesis in the heterophyllous amphibious plant *Hygrophila difformis* Genki Horiguchi, Naoki Hirotsu (Grad. Sch. Life Sci., Univ. Toyo)		1pG08 Roles of CLE peptide signaling in response to environmental stimuli Akie Shimotohno, Hiroo Fukuda (The University of Tokyo)	1pH08 Jasmonic acid controls petal growth and senescence in *Arabidopsis*. Akira Uemura, Nobutoshi Yamaguchi, Toshiro Ito (Graduate School of Biological Sciences, Nara Institute of Science and Technology)
16:00			1pC09 Ploidy effects on root growth and chromosome behavior in *Arabidopsis thaliana* Suzuka Kikuchi[1], Eri Kondo[1], Munetaka Sugiyama[2], Akitoshi Iwamoto[1] ([1]Dept. Biol., Tokyo Gakugei Univ., [2]Bot. Gard., Grad. Sch. Sci., Univ. Tokyo)	1pD09 E Chlorophyll Degradation Pathways in Chl-deficient Mutants of Rice (Oryza sativa) Szu-Hsien Lin[1], Minh-Khiem Nguyen[2], Tin-Han Shih[1], Chi-Ming Yang[1] ([1]Biodiversity Research Center, Academia Sinica, [2]Faculty of Applied Science, Ton Duc Thang University)	1pE09 Single particle analysis of Photosystem I-IsiA supercomplex by Cryo-electron microscopy Fusamichi Akita[1,2], Ryo Nagao[1], Koji Kato[1], Yoshiki Nakajima[1], Jian-Ren Shen[1], Naoyuki Miyazaki[3] ([1]RIIS., Okayama Univ., [2]PRESTO, JST, [3]IPR., Osaka Univ.)		1pG09 A leaf-derived phloem mobile peptide integrates shoot nitrogen status to systemically regulate root nitrogen acquisition Ryosuke Ota, Yuri Ohkubo, Mari Ogawa-Ohnishi, Yoshikatsu Matsubayashi (Grad. Sch. Sci., Nagoya Univ.)	1pH09 Identification of The *Arabidopsis FIREWORKS* Gene Involved in Global Proliferative Arrest Sho Imai[1], Hikaru Hirozawa[1], Takamasa Suzuki[2], Keio Kokaji[3], Nobuyoshi Mochizuki[3], Akira Nagatani[3], Chiharu Ueguchi[1] ([1]Biosci. Biotech. Center, Nagoya Univ., [2]Col. Biosci. Biotech., Chubu Univ., [3]Grad. Sch. Sci., Kyoto Univ.)
16:15			1pC10 Involvement of ATP-dependent protease ClpXP and the cell enlargement under acid stress in Cyanobacterium *Synechocystis* sp, PCC6803 Hidetaka Kohga[1], Mirai Kanamaru[1], Yoshikazu Saitou[2], Ayami Nakahara[1], Akiko Imaida[1], Junji Uchiyama[1,3], Hisataka Ohta[1,3] ([1]Grad. Sch. of Sci., Tokyo univ. of Sci., [2]Fac. of Ind. Sci. and Tech., Tokyo univ. of Sci., [3]Fac. of Sci., Tokyo univ. of Sci.)	1pD10 E Studies on rapid color change of immature black soybean's seed coat Yada Teppabut[1], Yuhsuke Nakane[1], Reo Sawaguchi[1], Kin-ichi Oyama[2], Tadao Kondo[1], Kumi Yoshida[1] ([1]Graduated School of Informatics, Nagoya University, [2]Research Center for Materials Science, Nagoya University)			1pG10 Mechanistic insight into CIF peptide ligands binding and signalling activation in Casparian strip formation Satohiro Okuda[1], Satoshi Fujita[2], Veronica G. Doblas[2], Andrea Moretti[1], Niko Geldner[2], Michael Hothorn[1] ([1]Dep. Botany and Plant Biol., Univ. Geneva, [2]Dep. Plant Mol. Biol., Univ. Lausanne)	1pH10 The seasonal synchrony system for flowering and senescence in *Arabidopsis* Chitose Kami, Hiroshi Kudoh (Kyoto University, The Center for Ecological Research)

Room I	Room J	Room K	Room L	Room M	Room N	Room O	Time
Organelles/ Cytoskeleton	Vegetative growth	Plant-organism interaction A	Transcriptional, post-transcriptional/Translational regulations/Protein modification & degradation	Environmental responses B			
1pI08 E GUN1 regulates tetrapyrrole biosynthesis in Arabidopsis Tatsuru Masuda[1], Takayuki Shimizu[1], Nobuyoshi Mochizuki[2], Akira Nagatani[2], Satoru Watanabe[3], Kacprzak Sylwia[4], Haruko Okamoto[4], Terry Matthew[4] ([1]Grad. Sch. Arts Sci., Univ. Tokyo, [2]Grad. Sch. Sci, Kyoto Univ., [3]Dept. Biosci., Tokyo Agricul. Univ., [4]Sch. Biol. Sci., Univ. Southampton)	1pJ08 Epi-alleles involved in shoot regeneration efficiency Tatsumi Hirasawa[1], Hiroki Maeji[1], Hanae Ohta[1], Akiko Yamamoto[2], Hidetoshi Saze[3], Atsushi J. Nagano[4], Shin Takeda[2], Tsukaho Hattori[2], Taisuke Nishimura[1] ([1]Dept. of Bioeng., Nagaoka Univ. of Tech., [2]Biosci. and Biotech. Center, Nagoya Univ., [3]Okinawa Inst. of Sci. & Tech. Grad. Univ., [4]Ryukoku Univ.)	1pK08 Visualization of plant-to-plant communication via green leaf volatiles Yuri Aratani, Masatsugu Toyota (Saitama University)	1pL08 Elucidation of cis-element binding affinity of VNS family transcription factors, master regulators of water conducting cell formation Nobuhiro Akiyoshi[1], Yoshimi Nakano[1], Yusuke Kunigita[1], Misato Ohtani[1,2], Taku Demura[1,2] ([1]NAIST, [2]RIKEN CSRS)	1pM08 Identification of protein kinases that regulate the activation of ABA-unresponsive subclass I SnRK2s in Arabidopsis 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.)			15:45
1pI09 Functional analyses of Ghost White gene in tomato Yuuji Kinjyou[1], Yuri Suzuki[1], Gou Ma[1], Kenta Shirasawa[2], Yoshihiro Okabe[3], Hiroshi Ezura[3], Reiko Motohashi[1] ([1]Agri., Shizuoka Univ., [2]Kazusa DNA Res. Inst., [3]Grad. Life and Env. Sci., Univ. Tsukuba)	1pJ09 E Chromatin remodeling factors are required for de-novo shoot regeneration in Arabidopsis thaliana Mariana Diaz, Kaoru Sugimoto, Takuya Sakamoto, Sachihiro Matsunaga (Matsunaga laboratory, Tokyo University of Science)	1pK09 Rain evokes a primitive immune response in *Arabidopsis thaliana* Mamoru Matsumura[1], Mika Nomoto[1,2], Tomotaka Itaya[1], Mizuki Iwamoto[3], Takamasa Suzuki[4], Hironaka Tsukagoshi[5], Masatsugu Toyota[6], Shigeyuki Betsuyaku[7], 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 Life and Environ. Sci., Univ. of Tsukuba, [4]Col. of BioSci. and Biotech., Chubu Univ., [5]JST, PRESTO, [6]Fac. of Agri., Meijo Univ., [7]Grad. Sch. of Sci and Eng., Saitama Univ)	1pL09 Transcriptional regulation of OsPR7 encoding cysteine endopeptidase in rice Akifumi Nishimura[1], Hiroyuki Hirai[2], Takehito Furukawa[2], Hideo Nakashita[3], Fang-Sik Che[1,2] ([1]Grad. Sch. of Bio-sci. Nagahama Inst. of Bio-Sci and Tech., [2]Dept. of Biosci., Nagahama Inst. of Bio-Sci. and Tech., [3]Dept. Biosci., Fukui Pref. Univ.)	1pM09 Insights into the functional evolution of plant SnRK2 family Akihisa Shinozawa[1], Ryoko Otake[1], Andrew C. Cuming[2], Kenji Komatsu[3], Daisuke Takezawa[4], Taishi Umezawa[5], Teruaki Taji[1], Takahisa Hayashi[1], Yoichi Sakata[1] ([1]Dept Bioscience, Tokyo Univ. Agric., [2]Univ.of Leeds, Dept., [3]Dep. of Bioresource Development, Tokyo Univ. Agric., [4]Grad. Sch. Sci and Eng., Univ. Saitama., [5]BASE, Tokyo University of Agriculture and Technology)			16:00
1pI10 Holliday junction resolvase MOC1 maintains the integrity of chloroplast and mitochondrial DNA in the moss *Physcomitrella patens* Yusuke Kobayashi[1], Masaki Odahara[2,3], Yasuhiko Sekine[3], Shin-ya Miyagishima[1] ([1]Dept. Cell Genetics, NIG, [2]CSRS, RIKEN, [3]Dept. Life Sci., Rikkyo Univ.)	1pJ10 E Heat-mediated *in vitro* Shoot Regeneration in Arabidopsis Tatsuya Takahashi[1,2], Alice Lambolez[1], Ayako Kawamura[1], Takamasa Suzuki[3], Bart Rymen[1], Akira Iwase[1], Katja Jager[4], Philip A. Wigge[4], Kengo Morohashi[2], Keiko Sugimoto[1] ([1]Yokohama Inst., RIKEN, [2]Grad. Sch. Sci., Tokyo Univ. of Science, [3]Grad. Sch. Sci., Univ. Chubu, [4]Sainsbury Lab., Univ. Cambridge)	1pK10 E Cysteine-rich receptor-like kinase CRK2 directly regulates NADPH oxidase RBOHD in *Arabidopsis* Sachie Kimura[1], Kerri Hunter[1], Anne Rokka[2], Masatsugu Toyota[3,4], Hirofumi Nakagami[5], Michael Wrzaczek[1] ([1]Organismal and Evolutionary Biology Research Programme, Univ. Helsinki, [2]Turku Centre for Biotechnology, Univ. Turku and Abo Akademi Univ., [3]Department of Biochemistry and Molecular Biology, Saitama Univ., [4]Department of Botany, Univ. Wisconsin-Madison, [5]Protein Mass Spectrometry Group, Max-Planck Institute for Plant Breeding Research)	1pL10 Boron-Dependent Transcriptional Regulation of *NIP5;1* Is Coordinated with Its mRNA Degradation in *Arabidopsis thaliana*. Mayuki Tanaka[1], Naoyuki Sotta[1], Satoshi Naito[2,3], Toru Fujiwara[1] ([1]Grad. Sch. Agri. Life Sci., Univ. Tokyo, [2]Grad. Sch. Life Sci., Hokkaido Univ, [3]Grad. Sch. Agri., Hokkaido Univ)	1pM10 E Comparative RNA-Seq analysis revealed osmotic stress tolerance mechanisms in the hyper-tolerant indica rice variety Sanjib Kumar Panda (Assam University, Silchar, India)			16:15

E=Presentation in English

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

Time	Room A	Room B	Room C	Room D	Room E	Room F	Room G	Room H
	Symposium S04 Strategies of mechanical optimization in plants (14:00–17:00)	Symposium S05 Metabolisms as Survival Strategy in Plants (14:00–17:00)		Primary metabolism, Secondary metabolism		Symposium S06 Plant adaptation strategies via ABA-mediated signaling in change of environmental conditions (14:00–17:00)	Plant hormones/ Signaling molecules	Reproductive growth
16:30				1pD11 Mapping of hydrangea blue-complex and aluminum species in hydrangea sepals by cryo-TOF-SIMS analysis Takaaki Ito[1], Dan Aoki[2], Kazuhiko Fukushima[2], Kumi Yoshida[3] ([1]Grad. Sch. Info. Sci., Nagoya Univ., [2]Grad. Sch. Bioagricultural. Sci., Nagoya Univ., [3]Grad. Sch. Informatics, Nagoya Univ.)			1pG11 Functional analysis of homologs of jasmonate receptor COI1 in rice Hideo Inagaki[1], Hibiki Ito[2], Yuki Fukumoto[2], Ayaka Yajima[2], Xi Chen[3], Miyuki Shimosato[2], Emi Hasett[2], Kodai Hatakeyama[2], Yuko Hirakuri[2], Masanobu Ishitsuka[1], Tomoko Sakazawa[2], Emi Yumoto[4], Masashi Asahina[1,2,4], Kengo Hayashi[5], Yasuhiro Ishimaru[5], Yousuke Takaoka[5,6], Minoru Ueda[5,7], Kazunori Okada[8], 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]Advanced Instrumental Analysis Center of Teikyo Univ., [5]Grad. Sch. Sci., Tohoku Univ., [6]JST-PRESTO, [7]Grad. Sch. Life Sci., Tohoku Univ., [8]BRC, The Univ. of Tokyo)	1pH11 Dynamic epigenetic flexibility underlies somaclonal sex conversions in hexaploid persimmon tree Kanae Masuda[1], Takashi Akagi[1], Tomoya Esumi[2], Ryutaro Tao[1] ([1]Grad. Sch. Agr., Univ. Kyoto, [2]Inst. Agr. Life Sci., Univ. Shimane)
16:45				1pD12 Physiological and transcriptional comparisons of nitrogen responses among eight different rice cultivars Taro Kadowaki[1], Kazuhiro Nakashima[1], Yonghyun Kim[1], Yoshiaki Ueda[2], Shuichi Yanagisawa[2], Mitsue Miyao-Tokutomi[1] ([1]Grad. Sch. Agricul. Sci., Tohoku Univ., [2]Biotech. Res. Center, Univ. Tokyo)			1pG12 Combined hormonome and transcriptome profiling of barley throughout the life-course under field conditions reveals conserved, genotype- and life-stage specific physiological states Takashi Hirayama[1], Daisuke Saisho[1], Kotaro Takahagi[2,3], Takakazu Matsuura[1], Asaka Kanatani[1], Komaki Inoue[2], Yukiko Uehara-Yamaguchi[2], Minami Shimizu[2], Keiichi Mochida[1,2,3] ([1]IPSR, Okayama Univ., [2]CSRS, RIKEN, [3]KIBR, Yokohama City Univ.)	1pH12 Roles of Hordium vulgare tonoplast intrinsic proteins, HvTIPs, in barley seeds Shigeko Utsugi, Maki Katsuhara (IPSR, OKAYAMA UNIV.)

Room I	Room J	Room K	Room L	Room M	Room N	Room O	Time
Organelles/ Cytoskeleton	Vegetative growth	Plant-organism interaction A	Transcriptional, post-transcriptional/Translational regulations/Protein modification & degradation	Environmental responses B			
1pI11 Exploration of Arabidopsis GLK1 protein complex using complemented line Tomomi Horinouchi, Hinako Yuasa, Yasuko Ito-Inaba, Takehito Inaba (Fac. Agr.,Univ. Miyazaki)	1pJ11 Ⓔ WIND1-mediated tracheary elements formation in Arabidopsis Akira Iwase[1], Yuki Kondo[2], Momoko Ikeuchi[1], Bart Rymen[1], Ayako Kawamura[1], Arika Takebayashi[1], Takamasa Suzuki[3], Nobutaka Mitsuda[4], Hiroo Fukuda[2], Keiko Sugimoto[1] ([1]CSRS, RIKEN, [2]Dept. Biol. Sci., The Univ. Tokyo, [3]Dept. Biol. Chem. Biosci. Biotech., Chubu Univ., [4]Biopro. Res. Inst., AIST)	1pK11 The Relation between Oxidative Burst and Broad-spectrum Disease Resistance Conferred by Overexpression of Rice RLCK-VII Protein BSR1 Yasukazu Kanda[1,2], Yoko Nishizawa[1], Takashi Kamakura[2], Masaki Mori[1,2] ([1]NIAS, [2]Grad. Sch. of Science and Technology, Tokyo Univ. of Sci.)	1pL11 Analysis of cohesive nature of JAZ2 protein in rice Yu Joshima, Nagisa Hakamata, Hinako Kaseda, Tsukaho Hattori, Shin Takeda (Biosci. Biotech. Center, Nagoya Univ.)	1pM11 Ⓔ Identification of an Arabidopsis protein family that regulates SnRK2 kinases in ABA signaling Yohei Takahashi, Jingbo Zhang, Po-Kai Hsu, Paulo De Oliveira Ceciliato, Jiyoung Park, Felix Hauser, Julian I. Schroeder (University of California, San Diego)			16:30
	1pJ12 Functional analysis of a transcription factor OsPIL7 involved in leaf morphogenesis. Takayuki Hashimoto[1], Daisuke Todaka[1], Yu Zhao[1], Kazuo Shinozaki[2], Kazuko Yamaguchi-Shinozaki[1] ([1]Grad. Sch. Agr. Life Sci., Univ. Tokyo, [2]Center for Sustainable Resource Science, RIKEN)	1pK12 Ⓔ Comparative Genomics Reveals Genomic Plasticity Mediated by Transposable Elements in the Fungal Phytopathogen *Colletotrichum higginsianum* Ayako Tsushima[1,2], Pamela Gan[2], Naoyoshi Kumakura[2], Mari Narusaka[3], Yoshitaka Takano[4], Yoshihiro Narusaka[3], Ken Shirasu[1,2] ([1]Grad. Sch. Sci., Univ. Tokyo, [2]CSRS RIKEN, [3]RIBS Okayama, [4]Grad. Sch. Agric., Kyoto Univ.)	1pL12 Ⓔ Boron Transporter (BOR1) is Involved in Nitrate-dependent Growth Promotion in Arabidopsis thaliana Qing Wang, Naoyuki Sotta, Toru Fujiwara (Graduate School of Agricultural and Life Sciences, The University of Tokyo)	1pM12 Evaluation of Environmental Stress Response of Crops using "RIPPS", an Automated Phenotyping System Miki Fujita[1], Saya Kikuchi[1], Masami Toyoshima[2], Yasunari Fujita[2,3], Kazuo Shinozaki[1] ([1]RIKEN CSRS, [2]JIRCAS Biol. Resources Post-harvest Div., [3]Univ. Tsukuba)			16:45

Ⓔ=Presentation in English

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

Time	Room A	Room B	Room C	Room D	Room E	Room F	Room G	Room H
		Symposium S07 Find out the mechanism supporting C4 photosynthesis (9:00–11:45)	Cell wall	Secondary metabolism	Photosynthesis	The 15th Database Workshop (9:00–12:00)	Plant hormones/ Signaling molecules	Reproductive growth
9:00			2aC01 A Point Mutation in a Putative Glycosyltransferase Decreases Boron Requirement Through Reduction of Rhamnogalacturonan II Yuto Nozaki, Hiroya Funakawa, Izumi Aibara, Kyoko Miwa (Grad. Sch. Environ. Sci., Hokkaido Univ.)	2aD01 Isolation of dehydrogenase genes involved in gallate biosynthesis in *Eucalyptus camaldulensis* Ko Tahara[1,2], Mitsuru Nishiguchi[1], Shin-Ichi Miyazawa[1], Takafumi Miyama[1], Juliane Mittasch[2], Carsten Milkowski[2] ([1]Forestry and Forest Products Research Institute, [2]Martin Luther University Halle-Wittenberg)	2aE01 Effects of co-overproduction of Rubisco and Rubisco activase on photosynthesis in rice Mao Suganami[1], Yuji Suzuki[2], Youshi Tazoe[1], Amane Makino[1] ([1]Grad. Sch. Agr. Sci., Tohoku Univ., [2]Fac. Agr., Iwate Univ.)		2aG01 Mechanism of ABCG14-mediated root-to-shoot cytokinin transport Mayu Kamiya[1], Jyun Inaba[2], Yumiko Takebayashi[2], Mikiko Kojima[2], Takatoshi Kiba[1], Hitoshi Sakakibara[1] ([1]Grad. Sch. Bioagr. Sci., Univ Nagoya, [2]RIKEN CSRS)	2aH01 Exploration of *Feminizer*, the sex determination factor on X chromosome in Liverwort *Marchantia polymorpha* Miyuki Iwasaki[1], Shohei Yamaoka[1], Tomoaki Kajiwara[2], Motoki Miyazaki[2], Noriyuki Suetsugu[1], Yoshihiro Yoshitake[1], Ryuichi Nishihama[1], Katsuyuki T. Yamato[3], Takayuki Kohchi[1] ([1]Laboratory of Plant Molecular Biology, Graduate School of Biostudies, Kyoto University, [2]Faculty School of Agriculture, Kyoto University, [3]Graduate School of Biology-oriented Science and technology, Kindai University)
9:15			2aC02 Analysis of Arabidopsis mutant defective in KDO biosynthesis Toshiro Shimizu, Masaki Nakamichi, Rinako Ujiie, Mizuki Noguchi, Masaru Kobayashi, Naoki Mori, Toru Matoh (Grad.Sch.Agr., Kyoto Univ)	2aD02 Structure Function Analysis of L/ODC, ADC and DapDC Hajime Sato[1,2], Wakana Iwasaki[2], Yohei Kurihara[1], Mizuki Murakami[1], Mikako Shirouzu[2], Masanobu Uchiyama[2,3], Kazuki Saito[1,2], Mami Yamazaki[1] ([1]Chiba University, [2]RIKEN, [3]the University of Tokyo)	2aE02 Photosynthetic characteristics in transgenic rice with overproduced Rubisco activase So Konno[1], Mao Suganami[1], Yoshiya Ota[1], Daisuke Takagi[1], Youshi Tazoe[1], Yuji Suzuki[2], Amane Makino[1] ([1]Grad. Sch. Agr.Sci., Tohoku Univ., [2]Fac. Agr., Iwate Univ.)		2aG02 Regulation of flowering via gibberellin signaling Jutarou Fukazawa, Yuki Ohashi, Kanako Nakai, Ryuhei Takahashi, Takeshi Ito, Yohsuke Takahashi (Grad.Sch.Sci., Univ. Hiroshima)	2aH02 Regulation of sexual organ formation by an MpBONOBO transcriptional complex in *Marchantia polymorpha* Misaki Saito[1], Shohei Yamaoka[1], Yoshihiro Yoshitake[1], Nobutaka Mitsuda[2], Ryuichi Nishihama[1], Takayuki Kohchi[1] ([1]Grad. Sch. Bio., Kyoto Univ., [2]Bioproduction Research Inst., AIST)
9:30			2aC03 Characterization of an Ancestral Type of Xyloglucan endotransglucosylase/hydrolase , Endoglucanase16, from Marchantia polymorpha Konan Ishida[1], Takeshi Kuroha[1], Kimitsune Ishizaki[2], Takumi Higaki[3], Satoshi Naramoto[1], Ryusuke Yokoyama[1], Toshihisa Kotake[4], Kazuhiko Nishitani[1] ([1]Grad. Sch. Life Sci., Tohoku Univ., [2]Grad. Sch. Sci., Kobe Univ., [3]IROAST., Kumamoto Univ., [4]Grad. Sch. Sci and Eng., Saitama Univ.)	2aD03 Identification of genes regulated by a jasmonate- and NaCl-responsive transcription factor JRE3 in tomato. Tsubasa Shoji[1], Ayman Abdelkareem[1], Chonprakun Thagun[1], Shunshuke Imanishi[2], Takashi Hashimoto[1] ([1]NAIST Bio, [2]NARO)	2aE03 Excess Phosphorus Supply inhibits growth by the decreases in Rubisco activation and anti-oxidant systems in rice plants Daisuke Takagi[1], Youshi Tazoe[1], Mao Suganami[1], Akihiro Ueda[2], Yuji Suzuki[3], Amane Makino[1] ([1]Graduate School of Agricultural Science, Tohoku University, Japan., [2]Graduate School of Biosphere Science, Hiroshima University, Japan., [3]Faculty of Agriculture, Iwate University, Japan.)		2aG03 Physiological and genetic analysis of ethylene in Marchantia polymorpha*Marchantia polymorpha* Hiroyasu Motose[1], Asuka Katayose[1], Yasutaka Kubo[2], Taku Takahashi[1] ([1]Faculty of Science, Okayama Univ., [2]Faculty of Agriculture, Okayama Univ.)	2aH03 Essential roles of autophagy in pollen maturation and seed development in rice Kazuyuki Kuchitsu[1,2], Yuri Sera[1], Shigeru Hanamata[2,3], Jumpei Sawada[1], Togo Fukunaga[1], Kazunori Ogawa[1], Shingo Sakamoto[4], Seijiro Ono[5], Kentaro Kaneko[3], Yudai Mitsui[3], Nobutaka Mitsuda[4], Ken-ichi Nonomura[5], Toshiaki Mitsui[3], Takamitsu Kurusu[2,6] ([1]Dept. Appl. Biol. Sci., Tokyo Univ. of Sci., [2]Imaging Frontier Center, Tokyo Univ. of Sci., [3]Niigata Univ., [4]AIST, [5]Natl. Inst. Genetics, [6]Suwa Uni. of Sci.)
9:45			2aC04 E Overlapping Shifts: Switching of Cellulose Synthase Machinery During Xylem Transdifferentiation Yoichiro Watanabe[1,2], Rene Schneider[3], Sarah Barkwill[2], Lacey Samuels[2], Staffan Persson[3], Shawn Mansfield[2] ([1]Nara Institute of Science and Technology, [2]University of British Columbia, [3]University of Melbourne)	2aD04 Interaction and its functional correlation of factors constituting the biosynthetic machinery of natural rubber from *Hevea brasiliensis* Kouji Kojima[1], Makoto Yamaguchi[1], Tomoki Ishii[1], Miki Hiromori[1], Toshiyuki Waki[1], Satoshi Yamashita[2], Yuzuru Tozawa[3], Haruhiko Yamaguchi[4], Yukino Inoue[4], Kazuhisa Fushihara[4], Toru Nakayama[1], Seiji Takahashi[1] ([1]Grad. Eng., Tohoku Univ., [2]Grad. Natural Sci. Tech., Kanazawa Univ., [3]Grad. Sci. Eng., Saitama Univ., [4]Sumitomo Rubber Ind., Ltd.)	2aE04 Increase in grain yield of transgenic rice plants with overproduced Rubisco content grown in an isolated paddy field from 2016 to 2018 Dong Kyung Yoon[1], Mari Watanabe[1], Mao Suganami[1], Serina Imaruoka[1], Maki Ogura[1], Keiki Ishiyama[1,2], Youshi Tazoe[1], Hiroyuki Ishida[1], Yuji Suzuki[2], Tadahiko Mae[1], Amane Makino[1] ([1]Grad. Sch. Agr. Sci. Tohoku Univ., [2]Fac. Agr., Iwate Univ.)		2aG04 Function analysis of *D14* knockout in a strawberry *Fragaria vesca* using CRISPR/Cas9 system Tomoko Miyaji[1], Shoya Tagami[1], Kohei Sakaguchi[1], Kanari Shimada[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)	2aH04 A GDSL-family esterase regulates pollen cell wall structure in Arabidopsis Daisuke Tsugama[1,2], Kaien Fujino[1] ([1]Dept. Agri., Hokkaido Univ., [2]ANESC., Univ. Tokyo)

Room I	Room J	Room K	Room L	Room M	Room N	Room O	Time
Organelles/Cytoskeleton	Vegetative growth	Plant-organism interaction A		Environmental responses B		Others (New technology, Bioresources)	
2aI01 ANGUSTIFOLIA Regulates Actin Filament Alignment for Centripetal Nuclear Positioning in Arabidopsis Leaves Kosei Iwabuchi[1], Haruna Ohnishi[2], Kentaro Tamura[3], Yoichiro Fukao[4], Tomoyuki Furuya[5], Koro Hattori[5], Hirokazu Tsukaya[5,6], Ikuko Hara-Nishimura[1] ([1]Fac. Sci. Eng., Konan Univ., [2]Grad. Sch. Sci., Kyoto Univ., [3]Sch. Food Nutri. Sci., Univ. Shizuoka, [4]Coll. Life Sci., Ritsumeikan Univ., [5]Grad. Sch. Sci., Univ. Tokyo, [6]ExCELLS, NINS)	2aJ01 Establishment and maintenance of stem cells during axillary meristem formation in rice Wakana Tanaka, Hiro-Yuki Hirano (Grad. Sch. Sci., Univ. Tokyo)	2aK01 Effect of 660nm irradiation to activate phytochrome signaling and to control the Western flower thrips damage Takeshi Ohya[1], Nobuo Kanemistu[2], Tamito Sakurai[3], Hiroshi Abe[4] ([1]kanagawa Agricultural Technology Center, [2]Mera Group Corporation Kyoritsudensho Co.,Ltd, [3]Central Region Agricultural Research Center, NARO, [4]RIKEN BioResource Center)		2aM01 Comparison of ultrastructure and excretion function of the salt glands between adaxial and abaxial leaf surfaces in *Zoysia japonica* Masahiro Koyama, Mitsutaka Taniguchi, Takao Oi (Grad. Sch. Bioagri., Univ. Nagoya)		2aO01 Functional analysis of the regulatory domains of the rice glutamate decarboxylases (GADs) by targeted mutagenesis Kazuhito Akama[1,2], Naoki Okamoto[2], Honoka Ozaki[1], Masako Kanesaki[1] ([1]Fac. Life & Environ. Sci., Shimane Univ., [2]Grad. School Nat. Sci. & Tech., Shimane Univ.)	9:00
2aI02 Function of actin filaments in flower opening and closure Ayaka Okita, Sumie Ishiguro (Bio-Agric., Nagoya Univ.)	2aJ02 Control of subcellular localization of a KNOX transcription factor in rice. Katsutoshi Tsuda[1,2], Ken-ichi Nonomura[1,2] ([1]National Institute of Genetics, Experimental Farm, [2]Graduate University for Advanced Studies)	2aK02 Development of a simple and quantitative method to evaluate the disease resistance of Arabidopsis against *Pseudomonas syringae* and characterization of novel putative plant defense activators. Masataka Nakano[1], Nobutaka Kitahata[1,2], Takako Ishiga[3], Yasuhiro Ishiga[3], Kazuyuki Kuchitsu[1,2] ([1]Dept. Appl. Biol. Sci., Tokyo Univ. of Sci., [2]Imagimg Frontier Center, Tokyo Univ. of Sci., [3]Faculty of Life & Envi. Sci., Univ. of Tsukuba.)		2aM02 Natural variation of tissue-specific Na^+ accumulation in young quinoa seedlings Yasufumi Kobayashi[1], Masami Toyoshima[1], Yasuo Yasui[2], Yasunari Fujita[1,3] ([1]Biol. Resources Post-harvest Div., JIRCAS, [2]Grad. Sch. Agri. Sci., Kyoto Univ., [3]Grad. Sch. Life Environ. Sci., Univ. Tsukuba)		2aO02 CRISPR/Cas9-mediated gene targeting in Arabidopsis using sequential transformation Daisuke Miki, Wenxin Zhang, Peng Fangnan, Wenjie Zeng, Zhu Jian-Kang (Shanghai Center for Plant Stress Biology (PSC), CAS)	9:15
2aI03 The regulatory mechanisms of plant growth by cytoplasmic streaming. Motoki Tominaga[1,2,3], Hirotomo Takatsuka[4], Zhongrui Duan[1], Shun Kawabata[2], Misato Tanaka[2], Takashi Haraguchi[5], Takehiko Kanazawa[6], Kohji Ito[5], Takashi Ueda[6], Masaaki Umeda[4] ([1]Fac. Educ. Integrated Arts. Sci., Univ. Waseda, [2]Grad. Sch. Adv. Sci. and Eng., Univ. Waseda, [3]JST-ALCA, [4]Grad. Sch. Sci. Tech., NAIST, [5]Grad. School Sci., Univ. Chiba, [6]Div. Cellular Dynamics, NIBB)	2aJ03 Functional Analysis of LATERAL ORGAN BOUNDARIES Transcription Factors Involved in Cytokinin Signaling-Regulated Radial Growth Miyu Imamura[1], Yurina Shimada[1], Masaki Ito[1], Nobutaka Mitsuda[2], Yuki Kondo[3], Masaru Ohme-Takagi[2,4], Takafumi Yamashino[1] ([1]Grad. Sch. Bio. 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.)	2aK03 Ⓔ Update on mechanisms of NERICA rice direct defense against insect herbivores Joackin B. Andama[1,2], Tomonori Shinya[1], Ivan Galis[1] ([1]IPSR, Okayama Univ., [2]Abi Zonal Agric. Res. Dev. Inst., (NARO, Uganda))		2aM03 Identification of upstream factors that regulate SnRK2-activity under osmotic stress conditions. Azusa Fukui[1], Fumiyuki Soma[1], Junro Mogami[1], Karin Sato[1], Yuta Sato[1], Fuminori Takahashi[2], Kazuo Shinozaki[2], Kazuko Yamaguchi-Shinozaki[1] ([1]Grad. Sch. Agr. Life Sci., Univ. Tokyo, [2]Center for Sustainable Resource Science, RIKEN)		2aO03 Genome editing in commercial cultivar tomatoes by CRISPR/Cas9 Chihiro Abe, Risa Ueta, Ryosuke Hashimoto, Yuriko Osakabe, Keishi Osakabe (Grad. Sch. bio., Univ. Tokushima)	9:30
2aI04 A novel ROP-actin pathway regulates bordered cell wall deposition in xylem vessels Yuki Sugiyama[1,2], Yoshinobu Nagashima[1], Mayumi Wakazaki[3], Mayuko Sato[3], Hiroo Fukuda[1], Yoshihisa Oda[2,4] ([1]Grad. Sch. Sci., Univ. Tokyo, [2]Cent. Front. Res., NIG, [3]RIKEN, CSRS, [4]Dep. Genet., SOKENDAI)	2aJ04 Mechanisms to increased cell size during cell proliferation phase in Arabidopsis *angustifolia3* mutant. Kazune Ezaki[1], Hirokazu Tsukaya[1,2] ([1]Grad. Sch. Sci, Univ. of Tokyo, [2]ExCELLS, NINS)	2aK04 ER-body system is involved in production of volatile compounds to suppress feeding motivation of the blowfly *Phormia regina* Somare Mizuho[1], Toru Maeda[2], Junpei Takagi[3], Tadashi Kunieda[4], Kenji Yamada[5], Mamiko Ozaki[2], Ikuko Hara-Nishimura[1,3] ([1]Grad. Shc. of Nat. Sci., Konan Univ., [2]Grad. Shc. of Sci., Kobe Univ., [3]Fac. Sci. Eng., Konan Univ., [4]Div. of Biol. Sci., NSIST, [5]Malopolska Center Biotechnol., Jagiellonian Univ.)		2aM04 Analysis of surface lipid synthesis system in Marchantia polymorpha Yuya Takahashi[1], Koichi Hori[1], Kimitsune Ishizaki[2], Mie Shimojima[1], Hiroyuki Ohta[1] ([1]School of Life Science and Technology, Tokyo Institute of Technology, [2]Department of Biology, School of Science, Kobe University)		2aO04 Control of plant gene expression by using CRISPR/dCas9 system. Risa Ueta, Tomoko Miyaji, Naoki Wada, Yuriko Osakabe, Keishi Osakabe (Faculty of Bioscience and Bioindustry, Tokushima University)	9:45

Ⓔ=Presentation in English

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

Time	Room A	Room B	Room C	Room D	Room E	Room F	Room G	Room H
		Symposium S07 Find out the mechanism supporting C4 photosynthesis (9:00–11:45)	Cell wall	Secondary metabolism	Photosynthesis	The 15th Database Workshop (9:00–12:00)	Plant hormones/ Signaling molecules	Reproductive growth
10:00			2aC05 Quantitative Evaluation of the Spatial Pattern of Secondary Cell Wall Distribution in Arabidopsis inflorescence stem Miyuki Nakata[1], Shingo Sakamoto[1], Masahiro Takahara[2], Nobutaka Mitsuda[1] ([1]Bioprod. Res. Inst., AIST, [2]Acacia Horticulture)	2aD05 Morphological and metabolic differentiation of laticifer and idioblast cells in Catharanthus roseus Mai Uzaki[1], Kotaro Yamamoto[2], Katsutoshi Takahashi[3], Miwa Ohnishi[4], Yuko Kurita[5], Chizuko Shichijo[1], Atsushi J. Nagano[5], Kimitsune Ishizaki[1], Hidehiro Fukaki[1], Tetsuro Mimura[1] ([1]Grad.Sch. Sci., Kobe Univ., [2]Dept. Biol. Chem., John Innes Centre, [3]AIST, [4]Eng. Boil. Res. C, Kobe Univ., [5]Fac. Agric., Ryukoku Univ.)	2aE05 Function of thylakoidal anion transporters in the marine diatom, Thalassiosira pseudonana Ryousuke Amano, Yoshinori Tsuji, Yusuke Matsuda (Department of Bioscience, Kwansei-Gakuin University)		2aG05 Biological property of a newly developed chemical agonist at HTL/KAI2 Kosuke Fukui[1], Tadao Asami[2], Ken-ichiro Hayashi[1] ([1]Okayama Univ. of Sci., [2]Grad. Sch. Agric. and Life Sci., The Univ. of Tokyo)	2aH05 Role of cyclic AMP at the reproductive stage in *Marchantia polymorpha* Chiaki Yamamoto[1], Fumio Takahashi[1], Noriyuki Suetsugu[2], Takayuki Kohchi[2], Masahiro Kasahara[1] ([1]Grad. Sch. Sci., Univ. Ritsumeikan, [2]Grad. Sch. Sci., Univ. Kyoto)
10:15			2aC06 Improvement of enzymatic saccharification in poplar by ectopic expression of an R3-type small MYB gene Naoki Takata[1], Chiaki Hori[2], Ken'ichiro Matsumoto[2], Pui Ying Lam[3], Yuki Tobimatsu[3], Soichiro Nagano[4] ([1]Forest Bio Res. Cent., For. Forest Prod. Res. Inst., [2]Grad. Sch. Eng., Hokkaido Univ., [3]RISH, Kyoto Univ., [4]Forest Tree Breeding Cent., For. Forest Prod. Res. Inst.)	2aD06 The multi-metabolomics strategy to identify monoterpene indole alkaloids and their localization in *Catharanthus roseus* Ryo Nakabayashi[1], Tetsuya Mori[1], Kei Hashimoto[1], Kiminori Toyooka[1], Yutaka Yamada[1], Hiroshi Tsugawa[1], Kazuki Saito[1,2] ([1]RIKEN CSRS, [2]Chiba Univ.)	2aE06 Specific interaction between *A. thaliana* Trx y2 and Prx Q. Keizo Teshima, Mizuki Aikawa, Yuya Maehama, Naoki Nakagawa (Grad. Sch. Biosphere Sci., Hiroshima Univ.)		2aG06 Transcription Factor D53 Is Involved in the Determination of the Gemma Number Formed in Gemma Cups of *Marchantia polymorpha* Aino Komatsu[1], Yohei Mizuno[1], Kyoichi Kodama[2], Shota Shimazaki[1], Satoshi Naramoto[1], Kimitsune Ishizaki[3], Junko Kyozuka[1] ([1]Grad. Sch., Life Sci., Tohoku Univ., [2]Fac. Sci., Tohoku Univ., [3]Grad. Sch. Sci., Kobe Univ.)	2aH06 Analysis of male germ cell behavior in pollen based on biolistic delivery of exogenous genes Shiori Nagahara[1], Daisuke Kurihara[1,2], Tetsuya Higashiyama[1,3], Yoko Mizuta[1,2] ([1]WPI-ITbM, Nagoya Univ., [2]JST, PRESTO, [3]Grad. Sch. Sci., Nagoya Univ.)
10:30			2aC07 Cell wall regulatory mechanism by polysaccharide chains of arabinogalactan proteins (AGPs) in Arabidopsis Ryoya Okawa, Mari Ohnishi, Yoshikatsu Matsubayashi (Grad. Sch. Sci., Univ. Nagoya)	2aD07 Metabolomic genome-wide association study using soybean core collections under drought stress Kai Uchida[1], Yuji Sawada[1], Hiromi Kajiya-Kanegae[3], Mami Okamoto[1], Muneo Sato[1], Yutaka Yamada[1], Mai Tsuda[2], Yusuke Toda[3], Yuji Yamazaki[4], Hisashi Tsujimoto[4], Akito Kaga[5], Mikio Nakazono[6], Hiroyoshi Iwata[3], Toru Fujiwara[3], Masami Yokota Hirai[1] ([1]RIKEN CSRS, [2]Grad. Sch. Life and Env. Sci., Univ. Tsukuba, [3]Grad. Sch. of Agric. and Life Sci., Univ. Tokyo, [4]ALRC, Tottori Univ., [5]Institute of Crop Science, NARO, [6]Grad. Sch. of Bioagr. Sci., Univ. Nagoya)	2aE07 The *m*-type thioredoxin negatively regulates PSI cyclic electron transport. Yuki Okegawa, Ken Motohashi (Fac. Life Sci., Kyoto Sangyo Univ.)		2aG07 bZIP family transcription factors regulate the plant organ development via modulating the brassinosteroid signal pathway Hideki Yoshida[1,2], Zenpei Shimatani[3,4], Toshinori Suzuki[3], Rie Terada[3], Miyako Ueguchi-Tanaka[2], Makoto Matsuoka[2], Hiroyuki Tsuji[1] ([1]KIBR, Yohohama City Univ., [2]BBC, Nagoya Univ., [3]Grad. Sch. Agri., Meijo Univ., [4]Grad. Sch. Tech. Innov., Kobe Univ.)	2aH07 Key activation factor of male and female cells for sexual reproduction in Arabidopsis Kumi Matsuura-Tokita[1], Ayaka Ueda[1], Hiroyuki Kitano[2], Hideto Ito[1,2,3], Ayato Sato[2], Takamasa Suzuki[4], Takeshi Nakano[5], Kenichiro Itami[1,2,3], Tetsuya Higashiyama[1,2] ([1]Grad. Sch. Sci., Nagoya Univ., [2]WPI-ITbM, Nagoya Univ., [3]JST ERATO, [4]Col. Biosci. Biotech., Chubu Univ., [5]CSRS, RIKEN)
10:45			2aC08 Accumulation and extrusion of root-cap mucilage in *Arabidopsis thaliana* Kazuki Maeda[1], Tadashi Kunieda[2], Kentaro Tamura[3], Kyoko Hatano[4], Ikuko Hara-Nishimura[5], Tomoo Shimada[1] ([1]Grad. Sch. of Sci., Univ. Kyoto, [2]Div. of Biol. Sci., NAIST, [3]Sch. Food & Nutritional Sci., Univ. Shizuoka, [4]Grad. Sch. of Human and Env. studies., Univ. Kyoto, [5]Fac. Sci. Eng., Konan Univ.)	2aD08 E Physico-chemical and cooking characteristics of rice varieties Mahbuba Khatoon[1], Dr. Md.Tariqul Islam[2] ([1]CROP PHYSIOLOGY DIVISION, BINA, MYMENSINGH, BANGLADESH, [2]CROP PHYSIOLOGY DIVISION, BINA, MYMENSINGH, BANGLADESH)	2aE08 A novel subunit of the chloroplast NDH complex was acquired via the tandem duplication of an assembly factor gene Yoshinobu Kato[1], Masaki Odahara[2], Toshiharu Shikanai[1] ([1]Grad. Sch. Sci., Kyoto Univ., [2]RIKEN)		2aG08 BRASSINOSTEROID-RELATED HOMEOBOX-1 (BHB1) negatively regulates Brassinosteroid responses Reika Hasegawa[1], Kenjiro Fujita[2,3], Yuichiro Tanaka[2,3], Hironori Takasaki[1], Miho Ikeda[1], Ayumi Yamagami[2], Nobutaka Mitsuda[4], Takeshi Nakano[2], Masaru Ohme-Takagi[1] ([1]Grad. Sch. Science and Engineering., Univ. Saitama, [2]Riken CSRS, [3]Grad. Sch. Agriculture., Univ. Meiji, [4]AIST. Bioproduction Research Institute)	2aH08 E Establishment of an in vitro fertilization system in wheat (Triticum aestivum L.) Tety Maryenti[1], Norio Kato[1,2,3], Masako Ichikawa[3], Takashi Okamoto[1,2] ([1]Tokyo Metropolitan University, Dept of Biol Sci, [2]RIKEN Cluster for Science, Plant Breeding Innovation Laboratory, [3]Japan Tobacco Inc., Plant Innovation Center)

Room I	Room J	Room K	Room L	Room M	Room N	Room O	Time
Organelles/Cytoskeleton	Vegetative growth	Plant-organism interaction A		Environmental responses B		Others (New technology, Bioresources)	
2aI05 Visualization of organelle dynamics during spermiogenesis in *Marchantia polymorpha* Naoki Minamino[1], Takuya Norizuki[1,2], Kazuo Ebine[1,3], Takashi Ueda[1,3] ([1]National Inst., for Basic Biology, [2]Grad. Sch. Sci., The Univ. Tokyo, [3]SOKENDAI)	2aJ05 E Regulation of margin cell division in Arabidopsis cotyledon Lian Xu[1], Yuli Jian[2], Shingo Nagawa[1] ([1]FAFU-UCR Joint Center and Fujian Provincial Key Laboratory of Haixia Applied Plant Systems Biology, Haixia Institute of Science and Technology, Fujian Agriculture and Forestry University, [2]Shanghai Center for Plant Stress Biology, CAS)	2aK05 Induction mechanism of hypersensitive cell death induced by effector protein IPPT derived from plant pathogenic bacteria *Acidovorax avenae* Minami Nakamura[1], Machiko Kondo[2], Takehito Furukawa[2], Takemasa Kawaguchi[1], Kohki Yamada[1], Fang-Sik Che[1,2] ([1]Graduate School of Bioscience, Nagahama Institute of Bio-Science and Technology, [2]Depertment of Bio-Sscience, Nagahama Institute of Bio-Science and Technology)		2aM05 Functional analysis of the antagonistic roles of class I and II RPD3-like histone deacetylases in response to environmental stresses Minoru Ueda[1,2], Akihiro Ito[3,4], Akihiro Matsui[1,5], Takehiro Suzuki[6], Maho Tanaka[1,5], Junko Ishida[1,5], Naoshi Dohmae[6], Minoru Yoshida[3,7], Motoaki Seki[1,2,5,8] ([1]Plant Genomic Network RT, RIKEN, [2]CREST, JST, [3]Chemical Genomics RG, RIKEN, [4]Dept. Mol. Biol., Tokyo Univ. Pharmacy & Life Sci., [5]Plant Epigenome Regulation Lab., RIKEN, [6]Biomolecular Characterization Unit, RIKEN, [7]Grad. Sch. Agr. & Life Sci., Univ. Tokyo, [8]Kihara Inst., Yokohama City Univ.)		2aO05 Enhanced FnCpf1-mediated genome editing using crRNA with short target sequence in rice Masafumi Mikami[1,2], Masaki Endo[2], Seiichi Toki[1,2,3] ([1]Grad. Sch. Nanobiol., Yokohama City Univ., [2]NIAS, NARO, [3]Kihara. Inst. Biol. Res., Yokohama City Univ.)	10:00
2aI06 The novel nuclear protein SANP1 is involved in root penetration into agar medium Chieko Goto[1,2,3], Kentaro Tamura[1,4], Ikuko Hara-Nishimura[5], Marie-Edith Chaboute[2] ([1]Grad. Sch. Sci., Kyoto Univ., [2]IBMP, CNRS, unistra Strasbourg France, [3]Grad. Sch. Agri. & Life Sci., Univ. Tokyo, [4]Sch. Food & Nutritional Sci., Univ. Shizuoka, [5]Fac. Sci. Eng., Konan Univ.)	2aJ06 Characterization of cambium stem cell activity during secondary growth in the hypocotyl of Arabidopsis Dongbo Shi[1], Vadir Lopez[1], Ivan Lebovka[1], Pablo Sanchez[2], Virginie Jouannet[1], Thomas Greb[1] ([1]Centre for Organismal Studies Heidelberg, Department of Developmental Physiology, [2]The Gregor Mendel Institute of Molecular Plant Biology)	2aK06 Relationship between defense priming and sustained upregulation of WRKY transcript levels induced by *Hyaloperonospora arabidopsidis* infection in *Arabidopsis* Kanoknipa Sukaoun[1], Tokuji Tsuchiya[2] ([1]Grad. Sch. ALS., Nihon Univ., [2]Coll. Biores. Sci., Nihon Univ.)		2aM06 Analysis of leaf growth regulation under mild salt stress condition Mika Fujii[1], Miho Ikeda[1], Nobutaka Mitsuda[2], Masaru Ohme-Takagi[1] ([1]Grad.Sch.Science and Engineering.,Saitama Univ., [2]AIST)		2aO06 Involvement of alternative non-homologous end joining pathways (altNHEJ) in *Agrobacterium*-mediated stable transformation of rice Ayako Nishizawa-Yokoi[1,2], Hiroaki Saika[1], Lan-Ying Lee[3], Stanton B. Gelvin[3], Seiichi Toki[1,4] ([1]NIAS, NARO, [2]JST, PRESTO, [3]Purdue University, [4]Kihara Inst. Biol. Res., Yokohama City Univ.)	10:15
2aI07 Estimation of intracellular ATP concentration from the flagellar beat frequency of the unicellular green alga Chlamydomonas reinhardtii Wakako Takano[1], Toru Hisabori[2], Ken-ichi Wakabayashi[2] ([1]Sch Life Biotech, Tokyo tech, [2]CLS, Tokyo Tech)	2aJ07 E Investigation of the expression pattern of AtRecQ gene family during vegetative and reproductive development in *Arabidopsis thaliana* Amit Kumar Dutta[1,2], Mst Momtaz Sultana[1,2], Takushi Hachiya[1], Tsuyoshi Nakagawa[1] ([1]Dept. Mol. Func. Genomics, Int. Center Sci. Res., Shimane Univ., [2]The United Graduate School of Agricultural Sciences (UGSAS), Tottori Univ.)	2aK07 The characterization of LPS-induced 65 AtLBR-2-dependent up-regulated genes Sayaka Iizasa[1,2], Ei'ichi Iizasa[3], Keiichi Watanabe[2], Yukio Nagano[2] ([1]Cntr. for Higher Edu., Kagoshima Univ., [2]Grad. Sch. Agric., Saga Univ., [3]Dept. Immunol., Grad. Sch. Med. and Dent. Sci., Kagoshima Univ.)		2aM07 Simple physical-based model of transpiration and water uptake of plants for physio-ecological study Tsuneo Kuwagata, Horoki Ikawa (NARO Institute for Agro-Environmental Sciences)		2aO07 Efficient reverse genetic screening by CRISPR/Cas9-based genome editing in the green alga Coccomyxa sp. strain KJ Akira Nukazuka[1], Yuya Yoshimitsu[1], Shigeaki Harayama[2] ([1]DENSO Corporation, [2]Chuo Univ.)	10:30
2aI08 GFP or TagRFP multimerization artifactually adhere organelle membrane and inhibit plant growth Shoji Segami[1], Satoru Kinoshita[1], Takashi Shimada[2], Tomoo Shimada[3], Ikuko Hara-Nishimura[4], Masayoshi Maeshima[1] ([1]Grad. Sch. Bioagr. Sci., Nagoya Univ., [2]Grad. Sch. Horticulture, Chiba Univ., [3]Grad. Sch. Sci., Kyoto Univ., [4]Fac. Sci. Eng., Konan Univ.)	2aJ08 E Spatial regulation involved in bi-directional differentiation of vascular cells in *Arabidopsis* Alif Meem Nurani[1], Yuki Kondo[1], Yuki Sakamoto[2], Kazuo Ebine[3,4], Sachihiro Matsunaga[5], Takashi Ueda[3,4], Hiroo Fukuda[1] ([1]Grad. Sch. Sci., Univ. Tokyo, [2]IFC, RIST, Tokyo Univ. Sci., [3]Div. Cellular Dynamics, NIBB, [4]Sch. Life Sci., SOKENDAI, [5]Sci. Tech., Tokyo. Univ. Sci.)	2aK08 E PUB4, a novel CERK1 interactor, positively regulate chitin-induced immune signaling Yoshitake Desaki[1,2], Shohei Takahashi[1], Saki Matsui[1], Ikuya Yoshimi[1], Masaki Kohari[1], Emi Yumoto[3], Koji Miyamoto[4], Naoto Shibuya[1], Hanae Kaku[1] ([1]Dept. Life Sciences, Sch. Agriculture, Meiji University, [2]Dept. Biological Science and Technology, Fac. Industrial Science and Technology, Tokyo University of Science, [3]Advanced Instrumental Analysis Center of Teikyo University, [4]Dept. Biosciences, Fac. Science and engineering, Teikyo University)		2aM08 Suberin at the exodermis act as constitutive barrier to radial oxygen loss in *Echinochloa* Masato Ejiri, Katsuhiro Shiono (Grad. Sch. Biosci. & Biotech., Fukui Pref. Univ.)		2aO08 A Forward Genetics-based Genome Editing of a Green Alga Coccomyxa Improved Its Oil Productivity Yoko Ide[1], Jumpei Hayakawa[2], Yuya Yoshimitsu[1], Satoko Komatsu[1], Shuua Tagiri[2], Hiyori Fukahori[2], Sousuke Imamura[2,3], Shigeaki Harayama[2] ([1]DENSO CORP., [2]Dep. Biol. Sci., Chuo Univ., [3]Tokyo Institute of Technology)	10:45

E=Presentation in English

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

Time	Room A	Room B	Room C	Room D	Room E	Room F	Room G	Room H
		Symposium S07 Find out the mechanism supporting C4 photosynthesis (9:00–11:45)	Cell wall	Secondary metabolism	Photosynthesis	The 15th Database Workshop (9:00–12:00)	Plant hormones/ Signaling molecules	Reproductive growth
11:00			2aC09 Identification of characteristic gene expression in interfamily grafting of *Nicotiana* Michitaka Notaguchi[1,2,3], Ryo Tabata[1], Koji Okayasu[1], Yu Sawai[1], Takamasa Suzuki[4], Ken-ichi Kurotani[1] ([1]Grad. Sch. Bioagri. Sci., Nagoya Univ., [2]ITbM, Nagoya Univ., [3]PRESTO, Nagoya Univ., [4]Grad. Sch. Biosci. Biotech, Chubu Univ.)	2aD09 Mechanism of glucosinolate breakdown under sulfur deficiency Ryosuke Sugiyama, Ayuko Kuwahara, Masami Yokota Hirai (RIKEN CSRS)	2aE09 Low temperature stimulates ferredoxin-independent cyclic electron flow within photosystem I of thylakoid membranes in *wheat leaves* Hiroaki Ihara, Chikahiro Miyake (Grad. Sch. Agri., Univ. Kobe)		2aG09 Interaction between strigolactone and brassinosteroid on leaf angle in rice Masato Shindo, Koichiro Shimomura, Mikihisa Umehara (Grad. Sch. Life Sci., Toyo Univ.)	2aH09 Structural and functional analyses of the cysteine-rich domain of *Arabidopsis* Gex1 protein required for polar nuclear fusion Shuh-ichi Nishikawa[1], Chiharu Suzuki[2], Shin Kawano[3], Nobuhisa Watanabe[4], Toshiya Endo[3] ([1]Fac. Sci., Niigata Univ., [2]Fac. Sci., Niigata Univ., [3]Fac. Life Sci., Kyoto Sangyo Univ., [4]NUSR, Nagoya Univ.)
11:15			2aC10 Analysis of regulatory mechanisms of intercellular space formation in land plants Miya Mizutani[1], Yuki Hayashi[1], Kimitsune Ishizaki[2], Ryuichi Nishihama[3], Toshinori Kinoshita[1,4], Takayuki Kohchi[3], Tetsuya Higashiyama[1,4], M. Masahiro Kanaoka[1] ([1]Grad. Sch. Sci., Nagoya Univ., [2]Grad. Sch. Sci., Kobe Univ., [3]Grad. Sch. Biostudies, Kyoto Univ., [4]ITbM, Nagoya Univ.)	2aD10 Alteration of glucosinolate metabolism by light conditions in *Arabidopsis* leaf Tomomi Ichinose[1], Yuzo Yamazaki[2], Daisuke Miura[3], Sun-Ju Kim[4], Akiko Maruyama-Nakashita[1] ([1]Fac.Agr.Kyushu Univ., [2]Shimadzu Corporation, [3]AIST, [4]Chungnam National Univ.)	2aE10 Ferredoxin-independent cyclic electron flow within photosystem I (PSI) of thylakoid membranes in *wheat leaves* Kanae Kadota[2,5], Riu Furutani[1], Amane Makino[3,5], Yuji Suzuki[4,5], Shinya Wada[4,5], Chikahiro Miyake[2,5] ([1]Fac. Agri. Kobe Univ., [2]Fac. Agri. Grad. Sch. Kobe Univ., [3]Fac. Agri. Grad. Sch. Tohoku Univ., [4]Fac. Agri. Iwate Univ., [5]Core Research for Environmental Science and Technology)			2aH10 Hunting Of Zygote Polarity Regulators By Transcriptomic Approach Yusuke Kimata[1], Takamasa Suzuki[2], Miya Mizutani[1,3], Tomomi Yamada[1,3], M. Masahiro Kanaoka[1,3], Tetsuya Higashiyama[1,3], Minako Ueda[1,3] ([1]Grad. Sch. Sci., Nagoya Univ., [2]College of Bioscience and Biotechnology, Chubu Univ., [3]Institute of Transformative Bio-Molecules (ITbM), Nagoya Univ.)
11:30			2aC11 Tissue-specific expression of genes related to tissue reunion and vascular differentiation in incised Arabidopsis inflorescence stems Yusuke Oba[1], Sakura Yoshihara[1], Tsutomu Aohara[1], Keita Matsuoka[2], Masashi Asahina[2], Yuki Kondo[3], Shinobu Satoh[1] ([1]Grad. Sch. Life and Envi. Sci., Univ. Tsukuba, [2]Bio. Sci., Univ. Teikyo, [3]Grad. Sch. Sci., Univ. Tokyo)	2aD11 Functional Analysis of the Phytochelatin Synthases in the Biosynthesis of *S*-Alk(en) ylcysteine Sulfoxides in Garlic Yumina Oiwa[1], Masayo Asano[1], Hideyuki Suzuki[2], Yukihiro Kodera[3], Tadamitsu Tsuneyoshi[3], Kazuki Saito[1], Naoko Yoshimoto[1] ([1]Grad. Sch. Pharm. Sci., Chiba Univ., [2]Kazusa DNA Research Institute, [3]Wakunaga Pharmaceutical Co., Ltd.)	2aE11 E A photosystem I assembly factor, CGL71, is involved in a PSI RC assembly in the green alga *Chlamydomonas reinhardtii* Sreedhar Nellaepalli[1,2], Yuichiro Takahashi[1,2] ([1]Research Institute for Interdisciplinary Science, Okayama University, [2]JST-CREST)			2aH11 Functional analysis of ENDOSEPRM3 in Arabidopsis Hironori Takasaki[1], Miho Ikeda[1], Yilin Zhang[1], Daisuke Maruyama[2], Nobutaka Mitsuda[3], Tetsu Kinoshita[2], Masaru Ohme-Takagi[1] ([1]Grad. Sch. Sci. Eng., Univ. Saitama, [2]Kihara Inst.Biol. Res., Univ., Yokohama City, [3]Bioprod. Res. Inst., AIST)
11:45			2aC12 Analysis of contribution of GSL family to low-Ca tolerance in *Arabidopsis thaliana* Yusuke Shikanai[1], Mayu Asada[1], Shunsaku Kuroki[2], Mutsumi Yamagami[3], Shuji Shigenobu[4], Katsushi Yamaguchi[4], Takehiro Kamiya[1], Toru Fujiwara[1] ([1]Grad. Sch. Agric. Sci., Univ. Tokyo, [2]Fac. Agric., Univ. Tokyo, [3]Inst. Environ. Sci., [4]Natl. Inst. Basic Biol.)	2aD12 Functional Analysis of LeDI-2, a Small Protein Specifically Expressed Upon Shikonin Production in *Lithospermum erythrorhizon* Takuji Ichino[1], Kanade Tatsumi[1], Taku Tsuyama[2], Kazufumi Yazaki[1] ([1]RISH, Kyoto Univ., [2]Fac. Agri., Univ. Miyazaki)	2aE12 E Pet9, a rhodanese-like domain protein, involved in the biogenesis of the cytochrome *b6f* complex in maize Yukari Asakura[1], Rosalind Williams-Carrier[2], Alice Barkan[2], Masato Nakai[1] ([1]Inst. Protein Res., Osaka Univ., [2]Inst. Mol. Biol., Univ. Oregon, USA)			2aH12 Phosphatidylinositol 4-phosphate 5-kinase genes, the PtdIns(4,5)P_2 producing enzyme, are responsible for pollen development in *Arabidopsis* Mariko Kato, Machiko Watari, Takashi Fujiwara, Takashi Aoyama (Inst. Chem. Res., Kyoto Univ.)

Room I	Room J	Room K	Room L	Room M	Room N	Room O	Time
Organelles/Cytoskeleton	Vegetative growth	Plant-organism interaction A		Environmental responses B		Others (New technology, Bioresources)	
2aI09 Cell Cycle Dependent Changes in Localization of *Arabidopsis* Intermediate Filament Motif Protein in Transgenic Tobacco BY-2 Cells and the Expression of a Homologous Gene. Hitomi Yamashita[2], Hikaru Utsunomiya[1], Tsuyoshi Kaneta[1] ([1]Grad. Sch. Sci. & Eng., Ehime Univ., [2]Fac. Sci., Ehime Univ.)	2aJ09 A study of cambial cell identity by VISUAL-single cell analysis Shunji Yamada, Hiroo Fukuda, Yuki Kondo (Grad. Sch. Sci., Univ. of Tokyo)	2aK09 E Interference of *Arabidopsis thaliana* growth and immune system by Rhizobiales commensal bacteria Ryohei Thomas Nakano[1,2], Ruben Garrido-Oter[1,2], Pawel Bednarek[3], Paul Schulzre-Lefert[1,2] ([1]Max Planck Institute for Plant Breeding Research (MPIPZ), [2]Cluster of Excellence on Plant Sciences (CEPLAS), [3]Polish Academy of Sciences)		2aM09 E Photosynthesis and Yield Performance of Sesame Genotypes under Different Water Logging Period Dr. Md. Tariqul Islam[1], Mahbuba Khatoon[2] ([1]CROP PHYSIOLOGY DIVISION, BINA, MYMENSINGH, BANGLADESH, [2]CROP PHYSIOLOGY DIVISION, BINA, MYMENSINGH, BANGLADESH)		2aO09 E Establishment of Agrobacterium-mediated transient transformation in *Marchantia polymorpha* Hidekazu Iwakawa, Hirofumi Nakagami (Max Planck Institute for Plant Breeding Research)	11:00
2aI10 Straight organ growth requires NEK6-dependent dampening of microtubule response to mechanical stress Shogo Takatani[1], Stéphane Verger[1], Takashi Okamoto[2], Taku Takahashi[2], Olivier Hamant[1], Hiroyasu Motose[2] ([1]Plant Development and Reproduction Laboratory, ENS de Lyon, [2]Grad. Sch. Nat. Sci. & Tech., Okayama Univ.)	2aJ10 Analysis of cell fate determination with a novel culture system for phloem companion cell differentiation Takayuki Tamaki[1], Satoyo Oya[1], Makiko Naito[1], Yasuko Ozawa[1], Mayuko Sato[2], Mayumi Wakazaki[2], Kiminori Toyooka[2], Hiroo Fukuda[1], Yuki Kondo[1] ([1]Grad. Sch. Sci., Univ. of Tokyo, [2]RIKEN, CSRS)	2aK10 E The suppression of immune responses in nematode-resistant plant *Solanum torvum* by root-knot nematode, *Meloidogyne arenaria* Kazuki Sato[1], Yasuhiro Kadota[1], Pamela Gan[1], Taketo Uehara[2], Takahiro Bino[3], Katsushi Yamaguchi[3], Yasunori Ichihashi[4,5], Hideaki Iwahori[6], Noriko Maki[1], Shuji Shigenobu[3], Takamasa Suzuki[7], Ken Shirasu[1,8] ([1]RIKEN CSRS, [2]National Agriculture and Food Research Organization, [3]National Institute for Basic Biology, [4]RIKEN BRC, [5]JST PRESTO, [6]Ryukoku Univ., [7]Chubu Univ., [8]Univ. Tokyo)		2aM10 Genetic analysis of acquired osmotolerance in Arabidopsis thaliana using acquired tolerant mutants Masashi Tamura, Satoru Kunitake, Izumi Yotsui, Yoichi Sakata, Teruaki Taji (Department of Bioscience, Tokyo Univ. of Agriculture)		2aO10 Transient expression system "Tsukuba system" for production of recombinant proteins in plants. Kenji Miura, Ken Hoshikawa, Tsuyoshi Yamamoto, Miyo Takaoka, Hiroshi Ezura (Faculty of Life and Environmental Sciences/ Tsukuba-Plant Innovation Research Center, University of Tsukuba)	11:15
2aI11 The microtubule-associated protein family, CORD, is required for phragmoplast formation in mitosis Takema Sasaki[1], Takashi Murata[2,3], Kohei Otomo[4], Motosuke Tsutsumi[4], Tomomi Nemoto[4], Mitsuyasu Hasebe[2,3], Yoshihisa Oda[1,5] ([1]Center for Frontier Research, National Institute of Genetics, [2]Division of Evolutionary Biology, National Institutes of Basic Biology, [3]Department of Basic Biology, The Graduate University for Advanced Studies (SOKENDAI), [4]Nikon Imaging Center, Hokkaido University, [5]Department of Genetics, The Graduate University for Advanced Studies (SOKENDAI))	2aJ11 A role of auxin biosynthesis in initial vascular development in Arabidopsis roots Kyoko Ohashi-Ito[1], Kuninori Iwamoto[1], Mikiko Kojima[2], Hitoshi Sakakibara[2,3], Hiroo Fukuda[1] ([1]Grad. Shc. Sci., The Univ. Tokyo, [2]CSRS, RIKEN, [3]Grad. Sch. Bioagri. Sci., Nagoya Univ.)	2aK11 E Expression dynamics of subtilases in the haustorium of the parasitic plant *Phtheirospermum japonicum* Satoshi Ogawa[1], Takanori Wakatake[1,2], Juliane K. Ishida[1,2], Satoko Yoshida[1,3], Yasunori Ichihashi[1,4], Ken Shirasu[1,2] ([1]RIKEN, CSRS, [2]Grad. Sch. of Sci., Univ. of Tokyo, [3]Grad. Sch. of Bio. Sci., NAIST, [4]JST, PRESTO)		2aM11 Genetical analysis of natural variation in salt tolerance among Arabidopsis thaliana accessions Yu Ito, Izumi Yotsui, Yoichi Sakata, Teruaki Taji (Dept of Bioscience, Tokyo Univ. of Agriculture)		2aO11 Establishment and metabolic profiling of light-emitting plants using luciferin-luciferase system Yuji Sawada, Kai Uchida, Masami Yokota Hirai (RIKEN Center for Sustainable Resource Science)	11:30
2aI12 Fluorescent microscopic observation of actin filaments and microtubules directly fused with fluorescent proteins in plant cells Saku Kijima[1], Nobutaka Mitsuda[1], Taro Uyeda[2] ([1]Bioproduction Res. Inst., AIST, [2]Dept. Physics, Waseda Univ.)	2aJ12 Functional analysis of HR0109 transcription factor that regulates cell division and differentiation in plants. Mikiya Takahashi[1], Miho Ikeda[1], Nobutaka Mitsuda[2], Masaru Ohme-Takagi[1,2] ([1]Grad. Sch. Sci., Univ. Saitama, [2]Bioproduction Research institute, National Institute of Advanced Industrial Science and Technology)	2aK12 Overexpression and subcellular localization analyses of the candidates for genes of salicylic acid synthetic pathway Hirotomo Komori, Sayaka Imano, Shinpei Katou (Katou Shinpei lab., Fac. Agr., Shinshu Univ.)		2aM12 Isolation and characterization of acquired osmotolerance defective (aod) mutants from A. thaliana Bu-5 Takashi Koyama[1], Ryohei Yoshihara[2], Shigeki Nozawa[2], Yoshihiro Hase[2], Issay Narumi[2], Izumi Yotsui[1], Yoichi Sakata[1], Teruaki Taji[1] ([1]Department of Bio Science; Tokyo University Of Agriculture, [2]Ion beam Mutagenesis Research Group; Quantum Beam Science Directorate)		2aO12 Accelerating Soybean Breeding in a CO_2-Supplemented Growth Chamber Yukari Nagatoshi[1], Yasunari Fujita[1,2] ([1]Japan International Research Center for Agricultural Sciences(JIRCAS), [2]Univ. Tsukuba)	11:45

E=Presentation in English

● Day 2, Thu., March 14, PM (13:30–16:00)

Time	Room A	Room B	Room C	Room D	Room E	Room F	Room G	Room H
	Symposium S08 How to inherit and rewrite cellular memory in plants (13:30–16:00)	Symposium S09 Plant mineral transporters: from function to structure and modelling (13:30–16:00)	Photoreceptors/ Photoresponses		Photosynthesis	Flowering/Clock		Membrane trafficking
13:30			2pC01 Forward Genetic Analysis of Phytochrome-Mediated Alternative Promoter Selection Nanako Katake, Jaewook Kim, Tomokazu Ushijima, Tomonao Matsushita (Fac. Agr., Kyushu Univ.)		2pE01 Enhancement of charge separation in the photosynthetic reaction center of the green sulfur bacterium *Chlorobaculum tepidum* with external phylloquinons Chihiro Azai[1], Su Lin[2,3], Kein E. Redding[2] ([1]Col. Life Sci., Ritsumeikan Univ., [2]The Biodesign Inst., Arizona State Univ., [3]Sch. Mol. Sci., Arizona State Univ.)	2pF01 A primordial flowering module underlies the protective response of algal photosynthesis Ryutaro Tokutsu[1], Konomi Kamada-Fujimura[1], Takuya Matsuo[2], Tomohito Yamasaki[3], Jun Minagawa[1] ([1]Div. Envir. Photobiol., NIBB, [2]Cent. Gene Res., Nagoya Univ., [3]Sci. Technol. Dep., Kochi Univ.)		2pH01 Dynamic relationship between ER exit sites and moving Golgi stacks in plant cells Junpei Takagi[1], Tomoo Shimada[2], Ikuko Hara-Nishimura[1] ([1]Fac. of Sci. and Eng., Konan Univ., [2]Grad. Sch. of Sci., Kyoto Univ.)
13:45			2pC02 Cis-Element Analysis of Phytochrome-Mediated Alternative Promoter Selection in Arabidopsis Jaewook Kim[1], Mika Nomoto[2], Yasuomi Tada[2], Tomonao Matsushita[1] ([1]Fac. Agr., Kyushu Univ., [2]Gene Research Center, Nagoya Univ.)		2pE02 Theoretical Model of Exciton States and Ultra-fast Energy Transfer in Heliobacterial Type-I Homodimeric Reaction Center Akihiro Kimura, Shigeru Itoh (Dept Physics, Grad Sch. Sci., Nagoya Univ)	2pF02 Floral induction by day lengths and environmental stresses in a duckweed, *Wolffiella hyalina*. Minako Isoda, Shogo Ito, Tokitaka Oyama (Dept. Bot., Grad. Sch. Sci., Kyoto Univ.)		2pH02 Mechanisms of membrane trafficking regulating male gametogenesis in *Arabidopsis* Kazuo Ebine[1,2], Takashi Ueda[1,2] ([1]Div. Cellular Dynamics, NIBB, [2]Sch. Life Sci., SOKENDAI)
14:00			2pC03 Both phytochrome phytochrome B proteins in shoots and roots are involved in the regulation of -mediated regulatory mechanism of phosphorus acquisition Yasuhito Sakuraba[1], Satomi Kanno[1], Atsushi Mabuchi[2], Keina Monda[2], Koh Iba[2], Shuichi Yanagisawa[1] ([1]Biotech. Res. Center, Univ. Tokyo, [2]Dept. Biol., Fac. Sci., Kyushu Univ.)		2pE03 Spectroscopic analyses of the D1-S169A mutant of photosystem II for understanding the water oxidation mechanism Yuichiro Shimada[1], Tomomi Kitajima-Ihara[1], Ryo Nagao[1,2], Takumi Noguchi[1] ([1]Grad. Sch. Sci., Nagoya Univ., [2]RIIS, Okayama Univ.)	2pF03 A mechanical model for circadian clock in KaiC: Harmonic oscillator in CI-ATPase as pacemaker for stable periodicity Kumiko Ito-Miwa[1], Tomoaki Muranaka[2], Takao Kondo[1] ([1]Grad. Sch. Sci., Nagoya Univ., [2]Center for Ecological Research, Kyoto Univ.)		2pH03 Regulatory Mechanisms of Biogenesis of the Oil Body in *Marchantia polymorpha* Takehiko Kanazawa[1,2], Takashi Ueda[1,2] ([1]Cellular Dynamics, NIBB, [2]Life Sci., SOKENDAI)
14:15			2pC04 Far-red high-irradiance response signaling regulates reproductive induction in *Marchantia polymorpha* Keisuke Inoue, Ryuichi Nishihama, Takashi Araki, Takayuki Kohchi (Grad. Sch. Biostudies, Univ. Kyoto)		2pE04 Post-translational modification of D1 protein in PSII repair cycle Yusuke Kato[1], Dogra Vivek[2], Li Mingyue[2], Hiroshi Kuroda[3], Yuichiro Takahashi[3], Kim Chanhong[2], Wataru Sakamoto[1] ([1]IPSR Okayama University, [2]Shanghai Center for Plant Stress Biology and Center of Excellence in Molecular Plant Sciences, Chinese Academy of Sciences, China, [3]Research Institute for Interdisciplinary Science, Okayama University)	2pF04 A mechanical model for circadian clock in KaiC: Loose coupling between two ATPases in KaiC sustains robust oscillation Kumiko Ito-Miwa[1], Tomoaki Muranaka[2], Takao Kondo[1] ([1]Grad.Sch. Sci.,Nagoya Univ., [2]Center for Ecological Research, Kyoto Univ.)		2pH04 Search for the molecular determinants for plasma membrane localization of a cuticle-related transporter ABCG11 in Arabidopsis Hirokazu Tanaka[1], Satomi Tai[2], Yuki Hashiguchi[2], Megumi Eguchi[1], Keita Mitani[1], Tatsuo Kakimoto[2] ([1]Sch. Agri., Meiji Univ., [2]Grad. Sch. Sci., Osaka Univ.)
14:30			2pC05 The analysis of MYB involved in light signaling as a negative factor in *Arabidopsis thaliana* Setsuko Shimada[1], Yukio Kurihara[1], Takachika Munesada[1,2], Yoko Horii[1], Tomoko Kuriyama[1], Mika Kawashima[1], Minami Matsui[1] ([1]RIKEN CSRS, [2]Grad. Sch. NanoBioscience., Yokohama City Univ.)		2pE05 Structural changes of oxygen-evolving PSII during S-state transitions revealed by XFEL Michihiro Suga[1], Fusamichi Akita[1], Keitaro Yamashita[2], Yoshiki Nakajima[1], Minoru Kubo[3], Go Ueno[5], Honjie Li[1], Takahiro Yamane[1], Yasufumi Umena[1], Shin-Ichiro Yonekura[1], Long-Jiang Yu[1], Hironori Murakami[5], Takashi Nomura[3], Seiki Baba[4], Takashi Kumasaka[4], Masaki Yamamoto[5], Hideo Ago[5], Jian-Ren Shen[1] ([1]Research Institute for Interdisciplinary Science, Okayama University, [2]University of Tokyo, [3]University of Hyogo, [4]Japan Synchrotron Radiation Research Institute, [5]RIKEN SPring-8 Center)	2pF05 Circadian oscillation of cyanobacterial clock protein KaiC under anaerobic conditions Megumi Fujimoto, Yoshitaro Sambayashi, Chihiro Azai, Kazuki Terauchi (Grad. Sch. Life Sci., Ritsumeikan Univ.)		2pH05 GPI-anchoring is required for the proper transport and glycan assembly of arabinogalactan protein precursor Daiki Nagasato[2], Yuto Sugita[2], Yuhei Tsuno[2], Ken Matsuoka[1,2,3] ([1]Fac. Agr., Kyushu Univ., [2]Grad. Sch. Bio-Env. Sci.、Kyushu Univ., [3]Biotron Appl. Ctr., Kyushu Univ.)

Room I	Room J	Room K	Room L	Room M	Room N	Room O	Time
Organelles/Cytoskeleton	Vegetative growth	Plant-organism interaction A, B		Environmental responses C			
2pI01 HIGH STEROL ESTER 1 Has a Key Role in Plant Sterol Homeostasis on Endoplasmic Reticulum Takashi Shimada[1], Tomoo Shimada[2], Yozo Okazaki[3], Yasuhiro Higashi[4], Kazuki Saito[4,5], Keiko Kuwata[6], Kaori Oyama[7], Misako Kato[7], Yoshitaka Takano[8], Takashi Ueda[9,10,11], Akihiko Nakano[12], Haruko Ueda[13], Ikuko Hara-Nishimura[13] ([1]Grad. Sch. of Horticulture, Chiba Univ., [2]Grad. Sch. of Sci., Kyoto Univ., [3]Mie Univ., [4]RIKEN Center for Sustainable Resource Science, [5]Grad. Sch. of Pharmaceutical Sciences, Chiba Univ., [6]Nagoya Univ., [7]Ochanomizu Univ., [8]Grad. Sch. of Agri., Kyoto Univ., [9]National Institute for Basic Biology, [10]JST PRESTO, [11]SOKENDAI, [12]RIKEN Center for Advanced Photonics, [13]Konan Univ.)	2pJ01 The roles of GSK3-BES1 signaling module in *Marchantia polymorpha* Tomoyuki Furuya[1], Kimitsune Ishizaki[2], Ryuichi Nishihama[3], Takayuki Kohchi[3], Hiroo Fukuda[1], Yuki Kondo[1] ([1]Grad. Sch. Sci., Univ. Tokyo, [2]Grad. Sch. Sci., Kobe Univ., [3]Grad. Sch. Biostudies, Kyoto Univ.)	2pK01 E Field Analyses For Structural Dynamics Of Rice Associated Microbiome Yuniar Devi Utami[1], Masako Fuji[1], Yukiko Shimizu[1], Yuichi Hongoh[2], Yutaka Sato[3], Yusuke Saijo[1] ([1]Grad. Sch. Sci. Tech., NAIST, [2]Sch. Life Sci. Tech., Tokyo Tech., [3]NIG)		2pM01 Cold-inducible expression of Arabidopsis *DREB1* genes regulated by circadian clock components Satoshi Kidokoro[1], Hiroki Haraguchi[1], Tomona Ishikawa[1], Satomi Toda[1], Kazuo Shinozaki[2], Kazuko Yamaguchi-Shinozaki[1] ([1]Grad. Sch. Agr. Life Sci., Univ. Tokyo, [2]Center for Sustainable Resource Science, RIKEN)			13:30
2pI02 Identification of components and functional analysis of ER-plasma membrane contact sites Kazuya Ishikawa[1], Kentaro Tamura[2], Yoichiro Fukao[3], Tomoo Shimada[1] ([1]Grad. Sch. Sci., Kyoto Univ., [2]Sch. Food & Nutrition Sci., Univ. Shizuoka., [3]Dept. Bioinfo., Ritsumeikan Univ.)	2pJ02 Analysis of Arabidopsis *DROL1* gene dependent splicing Takamasa Suzuki[1], Yuki Ueno[1], Yusuke Kimata[2], Hideki Tanaka[1], Hibiki Akeda[1], Toru Kato[1], Yuki Sugita[1], Tsutae Kawai[1], Tetsuya Higashiyama[2,3], Kenzo Nakamura[1] ([1]Col. Biosci. Biotech., Chubu Univ., [2]Div. Biol. Sci., Grad. Sch. Sci., Nagoya Univ., [3]WPI-ITbM, Nagoya Univ.)	2pK02 E Three-dimensional reconstruction of the internal structure of a haustorium in parasitic plants Natsumi Masumoto[1], Yuki Suzuki[1,3], Songkui Cui[1,2], Mayumi Wakazaki[2], Mayuko Sato[2], Arisa Shibata[2], Kie Kumaishi[4], Yasunori Ichihashi[4], Ken Shirasu[2,5], Yoshinobu Sato[1], Kiminori Toyooka[2], Satoko Yoshida[1,2] ([1]NAIST, Grad. Sch. Sci. Tech., [2]RIKEN, CSRS, [3]Osaka Uni., [4]RIKEN, BRC, [5]Univ. Tokyo, Grad. Sch. Sci.)		2pM02 Functional Analysis of Protein Kinases that Is Involved 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)			13:45
2pI03 Functional Analysis of the ER-Body-Formation Factor NAI2 in *Arabidopsis* Tadashi Kunieda[1,2], Keiko Kuwata[3], Kenji Yamada[4], Taku Demura[2], Ikuko Hara-Nishimura[1] ([1]Fac. of Sci. and Eng., Konan Univ., [2]Div. of Biol. Sci., NAIST, [3]WPI-ITbM, Nagoya Univ., [4]Malopolska Center Biotechnol., Jagiellonian Univ.)	2pJ03 The transcription factor regulating seed coat cuticle is involved in seed longevity Yoshimi Oshima[1], Takako Narumi[2], Yasuko Kaneko[3], Toshiki Ishikawa[4], Maki Kawai-Yamada[4], Masaru Ohme-Takagi[5], Nobutaka Mitsuda[1] ([1]Bioprod. Res. Inst., Natl. Adv. Ind. Sci. & Tech. (AIST), [2]Fac. Agr. Kagawa univ., [3]Fac. Educ., Saitama Univ., [4]Grad. Sch. Sci & Eng., Saitama univ., [5]Inst. Envir. Sci. & Tech. (IEST), Saitama univ.)	2pK03 E Ethylene signaling is involved in host-parasitic plant interaction via regulation of haustorium development Songkui Cui[1,2], Ken Shirasu[2], Satoko Yoshida[1,2] ([1]Nara Inst. Sci. Tech., [2]RIKEN)		2pM03 Analysis of the subcellular localization of HTS1 protein under high temperature stress Takuya Ogata[1], Yasunari Fujita[1,2] ([1]Biol. Resources Post-harvest Div., JIRCAS, [2]Grad. Sch. Life Environ. Sci., Univ. Tsukuba)			14:00
2pI04 Analysis on the function and localization control of the new factor, APEM6, which is involved in peroxisome biogenesis Akane Kamigaki[1], Mikio Nishimura[2], Shoji Mano[1,3] ([1]NIBB, Dept.Cell Biol., [2]Konan Univ., Facl. Sci., [3]Sokendai, Dept.Basic Biol.)	2pJ04 *Arabidopsis thaliana IDD4* gene is a novel factor for seed germination control Takuya Aoyanagi[2], Akiko Kozaki[1] ([1]Grad. Sch. Sci., univ. Shizuoka, [2]Grad. Sch. Integrated Science and Technology., univ. Shizuoka)	2pK04 Involvement of gibberellin and branching factor in Paris-type arbuscular mycorrhizal symbiosis in *Eustoma grandiflorum* Takaya Tominaga[1], Chihiro Miura[2], Naoya Takeda[3], Yuri Kanno[4], Yoshihiro Takemura[2], Mitsunori Seo[4], Masahide Yamato[5], Hironori Kaminaka[2] ([1]Dept. Agr. Sci., Grad. Sch. Sust. Sci., Tottori Univ., [2]Fac. Arg., Tottori Univ., [3]Schl. Sci. Tech., Kwansei Gakuin Univ., [4]RIKEN CSRS, [5]Fac. Edu., Chiba Univ.)		2pM04 Excess supply of nitrogen mitigate phosphate-starvation stress via the activation of autophagy in plants Yushi Yoshitake[1], Sakuya Nakamura[2], Masanori Izumi[2,3,4], Hiroyuki Ohta[1,5], Mie Shimojima[1] ([1]Sch. Life Sci. Tech., Titech, [2]Grad. Sch. Life Sci., Univ. Tohoku, [3]FRIS, Univ. Tohoku, [4]PREST, JST, [5]OPERA, JST)			14:15
2pI05 GFS9 has a role in piecemeal autophagy of plastids in dark-grown seedlings of Arabidopsis Hiroyuki Ishida[1,6], Hiromi Ishida[1,6], Masanori Izumi[2,3,4], Makoto Hayashi[5], Amane Makino[1], Klaas van Wijk[6] ([1]Grad. Schl. Agr. Sci., Tohoku Univ., [2]Grad. Schl. Life Sci., Tohoku Univ., [3]FRIS, Tohoku Univ., [4]PRESTO, JST, [5]Dept. Biosci., Nagahama Inst. Biosci. Tech., [6]SIPS, Cornell Univ.)	2pJ05 Analysis of transcription factors act downstream of ETT genes in rice embryogenesis Misuzu Nosaka-Takahashi[1], Toshiya Suzuki[1], Sae Shimizu-Sato[1], Nhung Ta Kim[1], Hirokazu Takahashi[2], Takamasa Suzuki[3], Atsushi Toyoda[1], Mikio Nakazono[2], Yutaka Sato[1] ([1]NIG, [2]Grad. Sch. Bioagricultural Sci., Nagoya Univ., [3]Grad. Sch. Biosci. Biotech., Chubu Univ.)	2pK05 Global transcriptome analyses reveal that infection of chrysanthemum stunt viroid (CSVd) affects gene expression profile in chrysanthemum plants, but the siRNAs generated from CSVd RNA genome may not be directly involved in gene silencing that provokes pathogenicity. Hiroki Takino[1], Sakihito Kitajima[2], Saki Hirano[1], Mariko Oka[3], Takakazu Matsuura[4], Yoko Ikeda[4], Mikiko Kojima[5], Yumiko Takebayashi[5], Hitoshi Sakakibara[5], Masanobu Mino[1] ([1]Grad. Sch. Life and Environ. Sci., Kyoto Prefectural Univ., [2]Dep. Applied Biol., Kyoto Inst. of Tech., [3]Fac. Agric., Tottori Univ., [4]Okayama Univ. Inst. Plant Sci. Resour., [5]RIKEN CSRS)		2pM05 Improvements of Plant Growth and developments under Ultra-High CO2 condition in International Space Station Takuya Furuichi, Shiho Matsunami, Aya Kato, Erika Nakazawa, Yui Nagao, Hiroko Fujita (Dept. Human Life Sciences, Nagoya Univ. of Economics)			14:30

E=Presentation in English

● Day 2, Thu., March 14, PM (13:30–16:00)

Time	Room A	Room B	Room C	Room D	Room E	Room F	Room G	Room H
	Symposium S08 How to inherit and rewrite cellular memory in plants (13:30–16:00)	Symposium S09 Plant mineral transporters: from function to structure and modelling (13:30–16:00)	Photoreceptors/ Photoresponses		Photosynthesis	Flowering/Clock		Membrane trafficking
14:45			2pC06 E AT-hook transcription factors repress petiole growth by antagonizing PIF4 David S Favero[1,4,5], Ayako Kawamura[1], Jae-Hoon Jung[2], Takamasa Suzuki[3], Katja E Jaeger[2], Philip A. Wigge[2], Michael M Neff[4,5], Keiko Sugimoto[1,6] ([1]Cen. Sus. Res. Sci., RIKEN, [2]Sains. Lab. Univ. Cambridge, UK, [3]Dep. Biol. Chem., Chubu Univ., [4]Dep. Crop and Soil Sci, Wash. State Univ., USA, [5]Mol. Plant Sci. Grad. Prog., Wash. State Univ., USA, [6]Dep. Biol. Sci., Univ. Tokyo)		2pE06 Cryo-EM structure of PSII-FCPII super-complex from a diatom Ryo Nagao[1], Fusamichi Akita[1,2], Koji Kato[1], Takehiro Suzuki[3], Kentaro Ifuku[4], Ikuo Uchiyama[5], Yasuhiro Kashino[6], Naoshi Dohmae[3], Seiji Akimoto[7], Naoyuki Miyazaki[8], Jian-Ren Shen[1] ([1]RIIS, Okayama Univ., [2]JST, PRESTO, [3]RIKEN CSRS, [4]Grad. Sch. Bio., Kyoto Univ., [5]NIBB, [6]Grad. Sch. Sci., Univ. Hyogo, [7]Grad. Sch. Sci., Kobe Univ., [8]IPR., Osaka Univ.)	2pF06 Day-length dependent flowering time regulation in tomato. Chie Moriya, Koji Goto (Research Inst. for Biological Sciences, Okayama Pref.)		2pH06 The adaptor protein complex AP-4 plays a role in vacuolar targeting of a borate transporter BOR1. Takuya Hosokawa[1], Akira Yoshinari[1,2], Tadashi Kunieda[3,4], Tomoo Shimada[5], Ikuko Hara-Nishimura[3], Junpei Takano[1] ([1]Grad. Sch. Life Env. Sci., Osaka Pref. Univ., [2]WPI-ITbM, Nagoya Univ., [3]Fac. Sci. Eng., Konan Univ., [4]Grad. Sch., Biosci., NAIST., [5]Grad. Sch. Sci., Kyoto Univ.)
15:00			2pC07 Finding of novel Phy-Cry fusion gene from marine metagenome and its genome and functional analysis. Yuko Makita[1], Setsuko Shimada[1], Aya Suehisa[1], Tomoko Kuriyama[1], Manami Hirata[1], Mika Kawashima[1], Yukio Kurihara[1], Haruyo Yamaguchi[2], Shigekatsu Suzuki[2], Tsuyoshi Watanabe[3], Kazutoshi Yoshitake[4], Keiji Fushimi[5], Rei Narikawa[5], Masanobu Kawachi[2], Takashi Gojobori[7], Minami Matsui[1] ([1]CSRS, RIKEN, [2]NIES, [3]FRA, TNFRI, [4]Tokyo Univ, [5]Shizuoka Univ, [6]Kyusyu Univ, [7]Waseda Univ, [8]FRA, NRIA)		2pE07 Phycobilisome-CpcL-Photosystem I Supercomplex Under Nitrogen Starvation Condition Mai Watanabe[1,2], Masahiko Ikeuchi[2], Annegret Wilde[1] ([1]Inst. for Biol. III, A-L-Univ. Freiburg, [2]Dept. of Life Sci. (Biol.), Univ. of Tokyo)	2pF07 Florigen in cactus Natsuki Hasegawa[1], Keisuke Tanaka[2], Hirokazu Takahashi[3], Tomoaki Nishiyama[4], Yuki Sakamoto[5], Dario Copeti[6], Hisato Kobayashi[2,7], Mikio Nakazono[3], Kentaro K. Shimizu[1,6], Sachihiro Matsunaga[8], Hiroyuki Tsuji[1] ([1]Kihara Institute for Biological Research, Yokohama City University, [2]NODAI Genome Research Center, Tokyo University of Agriculture, [3]Graduate School of Bioagricultural Sciences, Nagoya University, [4]Advanced Science Research Center, Kanazawa University, [5]Imaging Frontier Center, Research Institute for Science and Technology, Tokyo University of Science, [6]Department of Evolutionary Biology and Environmental Studies, University of Zurich, [7]Nara Medical University, [8]Department of Applied Biological Science, Faculty of Science and Technology, Tokyo University of Science)		2pH07 E The high-affinity potassium transporter AtHAK5 undergoes degradation upon high K^+ supply Marcel P. Beier[1], Kehan Su[1], Daichi Nagata[2], Junpei Takano[1] ([1]Grad. Sch. Life Env. Sci., Osaka Pref. Univ., [2]Grad. Sch. Agri., Hokkaido Univ.)
15:15			2pC08 Functional complementation analysis of *Arabidopsis* mutants with novel *PHY-CRY* gene from green algae Manami Hirata[1,2], Yuko Makita[1], Setsuko Shimada[1], Aya Suehisa[1], Tomoko Kuriyama[1], Mika Kawashima[1], Haruyo Yamaguchi[3], Shigekatsu Suzuki[3], Masanobu Kawachi[3], Masaaki Sakuta[2], Minami Matsui[1] ([1]CSRS., Riken, [2]Bio., Univ. Ochanomizu, [3]NIES)		2pE08 Characterization of New type of chromatic acclimation regulating phycoerythrocyanin and rod-shaped phycobilisome in cyanobacteria Yuu Hirose[1], Song Chihong[2], Mai Watanabe[3], Chinatsu Yonekawa[1], Kazuyoshi Murata[2], Masahiko Ikeuchi[3], Toshihiko Eki[1] ([1]Toyohashi Unv. of Tech., [2]National Institute of Physiological Sciences, [3]The University of Tokyo)	2pF08 Imaging and functional analysis of cytokinin signaling of the shoot apical meristem in rice on flowering Moeko Sato[1], Hidemi Kitano[2], Hiroyuki Tsuji[1] ([1]Kihara Institute for Biological Research, Yokohama City University, [2]Biosci. Biotec. Ctr., Nagoya University)		
15:30			2pC09 Creation of blue-light-responsive CheA by fusion of two different-class histidine kinases Yusuke Fukuhara, Mamiko Shimoji, Masahiro Kasahara, Kazuki Terauchi, Chihiro Azai (Grad. Sch. Life Sci., Univ. Ritsumei)		2pE09 Excitation relaxation dynamics of carotenoids having antenna function Kohei Kagatani[1], Ryo Nagao[2], Jian-Ren Shen[2], Reona Toyofuku[3], Tatsuya Tomo[3], Seiji Akimoto[1] ([1]Grad. Sch. Sci., Kobe Univ., [2]RIIS, Okayama Univ., [3]Fac. Sci., Tokyo Univ. Sci.)	2pF09 *SbPRR37* is involved in low night temperature induced flowering in *Sorghum bicolor* Shumpei Hashimoto, Takahiro Tezuka, Shuji Yokoi (Grad. Sch. Life Environ. Sci., Osaka Pref. Univ.)		

Room I	Room J	Room K	Room L	Room M	Room N	Room O	Time
Organelles/Cytoskeleton	Vegetative growth	Plant-organism interaction A, B		Environmental responses C			
2pI06 Toward Understanding How the Number of Mitochondria is Regulated by Autophagy during Spermiogenesis in Marchantia polymorpha Takuya Norizuki[1,2], Naoki Minamino[2], Takehiko Kanazawa[2,3], Takashi Ueda[2,3] ([1]Grad. Sch. Sci., Univ. Tokyo, [2]Natl. Inst. Basic Biol, [3]Dept. Basic Biol., SOKENDAI)	2pJ06 Live-cell imaging of early embryogenesis in Arabidopsis Minako Ueda[1], Yusuke Kimata[1], Sayuri Tanaka[1], Takehide Kato[2], Takumi Higaki[3], Daisuke Kurihara[1], Tomomi Yamada[1], Naoe Ando[1], Miyo T. Morita[4], Shoji Segami[1], Masayoshi Maeshima[1], Seiichiro Hasezawa[5], Keiko Kuwata[1], Ayato Sato[1], Takamasa Suzuki[6], Tetsuya Higashiyama[1], Masao Tasaka[2] ([1]Nagoya University, [2]Nara Institute of Science and Technology, [3]Kumamoto University, [4]National Institute for Basic Biology, [5]The University of Tokyo, [6]Chubu University)	2pK06 Leaf ER bodies are involved in defense against herbivory in *Arabidopsis thaliana* Akiko Nakazaki[1], Kenji Yamada[2], Tadashi Kunieda[3], Ryosuke Sugiyama[4], Masami Yokota Hirai[4], Kentaro Tamura[5], Ikuko Hara-Nishimura[6], Tomoo Shimada[1] ([1]Grad. Sch. of Sci., Univ. Kyoto, [2]Malopolska Center of Biotechnology, Univ. Jagiellonian, [3]Div. of Biol. Sci., NAIST, [4]RIKEN CSRS, [5]Sch. Food & Nutritional Sci., Univ. Shizuoka, [6]Fac. of Sci. and Eng., Konan Univ.)		2pM06 Diel Oxygen Concentration And Gene Expression Dynamics In Submerged Deepwater Rice Yoshinao Mori[1], Timothy Colmer[2], Motoyuki Ashikari[1], Ole Pedersen[2,3], Keisuke Nagai[1] ([1]Bioscience and Biotechnology Center, Nagoya University, [2]UWA School of Agriculture and Environment, Faculty of Science, The University of Western Australia, [3]Department of Biology, University of Copenhagen)			14:45
2pI07 Cooperative contribution of autophagy and a chloroplast-associated ubiquitination to oxidative damage management and starvation response Yuta Kikuchi[1], Sakuya Nakamura[1], Jesse Woodson[2], Hiroyuki Ishida[3], Jun Hidema[1], Paul Jarvis[4], Masanori Izumi[1,5,6] ([1]Grad. Sch. Life Sci., Tohoku Univ., [2]Sch. Plant Sci., Univ. Arizona, [3]Grad. Sch. Agri. Sci., Tohoku Univ., [4]Dep. Plant Sci., Univ. Oxford, [5]FRIS, Tohoku Univ., [6]PRESTO, JST)	2pJ07 A regulatory cascade involving miR319 and TCP transcription factors operates in leaf development Tomotsugu Koyama[1], Nobutaka Mitsuda[2], Motoaki Seki[3], Koji Takahashi[4,5], Toshinori Kinoshita[4,5], Masaru Ohme-Takagi[6] ([1]Suntory Foundation for Life Sicences, [2]Bioproduction Res. Inst., AIST, [3]Center for Sustainable Resource Science, RIKEN, [4]Grad. Sch. Sci., Nagoya Univ., [5]ITbM, Nagoya Univ., [6]Grad. Sch. Sci., Saitama Univ.)	2pK07 E Single molecule signaling analysis; Ca2+-dependent protein kinase recognizes the suppressor signals of Phytophthora infestans to control hypersensitive cell death in plant cell Naotaka Furuichi[1], Masahiro Ohta[2] ([1]Advisory Board, AAAS., [2]Grad. Sci. and Tech, Niigata U.)		2pM07 Effects of oxidized glutathione feeding on seedling growth of *Picea jezoensis*, *Picea glehnii* and *Abies jezoensis* under two light conditions. Ken'ichi Ogawa (Res. Inst. Biol. Sci., Okayama (RIBS OKAYAMA))			15:00
2pI08 Plant autophagy eliminates dysfunctional mitochondria caused by ultraviolet B damage Sakuya Nakamura[1], Jun Hidema[1], Kohei Otomo[2], Tomomi Nemoto[2], Hiroyuki Ishida[3], Masanori Izumi[1,4,5] ([1]Grad. Sch. Life Sci., Tohoku Univ., [2]RIES, Hokkaido Univ., [3]Grad. Sch. Agri. Sci., Tohoku Univ., [4]FRIS, Tohoku Univ., [5]PRESTO, JST)	2pJ08 Comparative analysis of pitcher and flat leaf development in the carnivorous plant *Cephalotus follicularis* Hideki Narukawa[1], Gergo Palfalvi[1,2], Mitsuyasu Hasebe[1,2] ([1]NIBB, [2]SOKENDAI)	2pK08 E Investigating the role of Cyclic Nucleotide Gated Ion Channel 2 in auxin-induced Ca2+ signaling Sonhita Chakraborty[1], Masatsugu Toyota[2], Wolfgang Moeder[1], Simon Gilroy[3], Keiko Yoshioka[1] ([1]University of Toronto, Department of Cells and Systems Biology, Toronto, Canada, [2]Saitama University, Graduate School of Science and Engineering, Saitama, Japan, [3]University of Wisconsin, Department of Botany, Madison, United States)		2pM08 Functional analyses of *SPX* genes under phosphorus starvation in *Nannochloropsis* Kumiko Okazaki[1], Koichi Hori[2], Shinsuke Shimizu[2], Shohei Sawa[1], Seiji Nomura[3], Fumihiko Saito[3], Akihide Takami[3], Takashi Yamamoto[1], Hiroyuki Ohta[2], Atsushi Sakamoto[1] ([1]Grad. Sch. Sci., Hiroshima Univ., [2]Sch. Life Sci. Tech., Tokyo Inst. Tech., [3]Tech. Res. Ctr., Mazda Motor Co., Ltd.)			15:15
2pI09 The BPP family is involved in morphogenesis of leaf epidermal cells. Takehide Kato[1], Jeh Haur Wong[1], Rie Shimizu[1], Nene Kinoshita[1], Takumi Higaki[2], Takashi Hashimoto[1] ([1]Div. of Biol. Sci., Grad. Sch. of Sci. and Tech., NAIST, [2]IROAST, Univ. Kumamoto)	2pJ09 Analysis Of The Rice Mutant That Shows Aberrant Polarity In The Fourth Leaf Takumi Tezuka[1], Toshiki Kobayashi[1], Tomokazu Watanabe[1], Rie Satoh[2], Hiroetsu Wabiko[1], Nobuhiro Nagasawa[1], Namiko Satoh-Nagasawa[1] ([1]Akita Pref. Univ., [2]Grad. Sch. Biores. Sci. Akita Pref. Univ.)			2pM09 Development of high-throughput RNA-Seq library preparation method and its application to analysis on temperature-response of Arabidopsis thaliana Mari Kamitani, Makoto Kashima, Ayumi Tezuka, Atsushi J. Nagano (Research Institute for Food and Agriculture, Ryukoku University)			15:30

E=Presentation in English

● Day 3, Fri., March 15, AM (9:00–12:00)

Time	Room A	Room B	Room C	Room D	Room E	Room F	Room G	Room H	Room I
	JTPB2019	JTPB2019	Photoreceptors/Photoresponses		Photosynthesis	JTPB2019	JTPB2019		Organelles/Cytoskeleton
9:00			3aC01 RPT2 Modulation of Photosensitivity of phot1 in hypocotyl phototropism of *Arabidopsis* Taro Kimura[1], Tomoko Mayama-Tsuchida[2], Tatsuya Sakai[1] ([1]Grad. Sch. Sci. Tech., Niigata Univ., [2]RIKEN PSC)		3aE01 Exciton Quenching by Oxidized Chlorophyll$_z$ in the Adjacent Monomer in Photosystem II Dimer Yutaka Shibata[1], Ahmed Mohamed[1], Hiroshi Fukumura[1], Shigeru Ito[2], Keisuke Kawakami[3], Jian-Ren Shen[4] ([1]Grad. School of Sci. Tohoku Univ., [2]Grad. School of Sci. Nagoya Univ., [3]OCARINA, Osaka City Univ., [4]RIIS, Okayama Univ.)			3aI01 Analysis of mitochondria-chloroplast interaction Kazusato Oikawa[1], Takuto Imai[1], Yutaka Kodama[1,2], Keiji Numata[1] ([1]CSRS., RIKEN, [2]Bio. Res. Edu. Center., Univ. Utsunomiya)
9:15			3aC02 Molecular Genetic Analysis of the PIN Indepent Pathway Inducing the Phototropic Rsponses in Arabidopsis. Keita Kawaura[1], Mami Yoshioka[1], Ken Haga[2], Tatsuya Sakai[1] ([1]Grad. Sch. Sci & Tech., Niigata Univ., [2]Faculty of Fund. Eng., Nippon Inst. of Tech.)		3aE02 Establishment of energy transfer pathway in cyanobacterium during the accumulation process of chlorophyll *f* Toshiyuki Shinoda[1], Keishi Arai[2], Hiroki Tabushi[2], Seiji Akimoto[3], Tatsuya Tomo[1,2] ([1]Grad. Sch. Sci., Tokyo Univ. Sci., [2]Fac. Sci., Tokyo Univ. Sci., [3]Grad. Sch. Sci., Kobe Univ.)			3aI02 The role of ppGpp synthesis in the chloroplast biogenesis during early leaf development 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)
9:30			3aC03 The regulatory function of C-terminal domain of BLUS1 in the blue light signaling for stomatal opening Sakurako Hosotani[1], Shigekazu Koya[2], Ken-ichiro Shimazaki[2], Atsushi Takemiya[1] ([1]Grad. Sch. Sci. Tech. Innov., Yamaguchi Univ., [2]Grad. Sch. Sci., Kyushu Univ.)		3aE03 Role of carotenoids in the acclimation of the cyanobacterium *Synechocystis* sp. PCC 6803 to very high light Taichi Izuhara[1], Konatsu Nakazawa[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)			3aI03 Genetic characterization of the stringent-response factors, RSHs, in *Arabidopsis thaliana* Sumire Ono[1], Doshun Ito[1], Shinji Masuda[2] ([1]School of Life Science and Technology, Tokyo Institute of Technology, [2]Center for Biological Resources and Informatics, Tokyo Institute of Technology)
9:45			3aC04 Functional analysis of a signaling component phosphorylated in response to blue light in stomatal guard cell Shota Yamauchi[1], Naoyuki Sugiyama[2], Ken-ichiro Shimazaki[3], Atsushi Takemiya[1] ([1]Grad. Sch. Sci. Tech. Innov., Yamaguchi Univ., [2]Grad. Sch. Pharm., Kyoto Univ., [3]Grad. Sch. Sci., Kyushu Univ.)		3aE04 Defect of photosynthetic activity in the *cruC* gene mutant of the green sulfur bacterium *Chlorobaculum tepidum*, which lost the ability to synthesize carotenoid glucoside ester Jiro Harada[1], Chihiro Azai[2], Taku Inoue[2], Shogo Fujimoto[3], Shinji Masuda[4], Ken Yamamoto[1], Daisuke Kosumi[5] ([1]Department of Medical Biochemistry, Kurume University School of Medicine, [2]College of Life Sciences, Ritsumeikan University, [3]Graduate School of Science and Technology, Department of Physics, Kumamoto University, [4]Center for Biological Resources and Informatics, Tokyo Institute of Technology, [5]Institute of Pulsed Power Science, Kumamoto University)			3aI04 Analysis of the Plastid-to-nucleus Signaling in Arabidopsis Seedling De-etiolation Nobuyoshi Mochizuki, Akira Nagatani (Grad. Sch. Sci., Kyoto Unive.)
10:00			3aC05 Relationship between stomatal movement and malate synthesis in guard cells 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.)		3aE05 Crysatalization and enzymatic reactivity of ferredoxin NADP$^+$ oxidoreductase from *Rhodopseudomonas palustris* Daisuke Seo[1], Norifumi Muraki[2], Genji Kurisu[3] ([1]Graduate School of Natural Science and Technology, Kanazawa University, [2]Institute for Molecular Science, National Institute of Natural Science, [3]Institute for Protein Research, Osaka University)			3aI05 DNA virus-mediated massive gene transfer in the primary endosymbiotic evolution of a photosynthetic amoeba Mitsuhiro Matsuo[1], Atsushi Katahata[1], Makoto Minakuchi[1], Yohei Minakuchi[2], Hideki Noguchi[2], Atsushi Toyoda[2], Asao Fujiyama[2], Yutaka Suzuki[3], Soichirou Satoh[1], Takuro Nakayama[4], Ryoma Kamikawa[5], Mami Nomura[6], Yuji Inagaki[4], Ken-ichiro Ishida[6], Junichi Obokata[1] ([1]Grad. Sch. of Life and Env., Kyoto Prefect. Univ., [2]Ctr. Info. Biol., N.I.G., [3]Grad. Sch. of FronAer Sci, Univ. of Tokyo, [4]Ctr. Comp. Sci., Univ. of Tsukuba, [5]Env., Grad. Sch. of Human & Env., Kyoto Univ., [6]Grad. Sch. of Life & Env. Sci., Univ. of Tsukuba)
10:15			3aC06 Functional analysis of the PP2C-Ds that regulate stomatal movements Mitsumasa Akiyama[1], Shin-ichiro Inoue[1], Yohei Takahashi[1], Maki Hayashi[1], Hodaka Sugimoto[1], William M Gray[2], Toshinori Kinoshita[1,3] ([1]Grad. Sch. Sci., Univ. Nagoya, [2]Department of Plant Biology, University of Minnesota, [3]Nagoya University., WPI-ITbM)		3aE06 Alternative cyclic electron transfer pathways of photosynthesis found in the purple bacterium, *Rubrivivax gelatinosus* Kenji Nagashima[1], Sakiko Nagashima[1,2], Takeshi Sato[1], Kazuhito Inoue[1,3] ([1]Res. Inst. Integ. Sci., Kanagawa Univ., [2]Dept. Biol. Sci., Fac. Sci., Tokyo Metropolitan Univ., [3]Dept. Biol. Sci., Fac. Sci., Kanagawa Univ.)			3aI06 Discovery of a dynamic feature of chloroplast nucleoids in response to the light/dark cycle Seika Ishihara[1], Kohta Sakashita[1], Yusuke Ishida[1], Yoshitaka Kimori[2], Kosei Iwabuchi[1], Ikuko Hara-Nishimura[1] ([1]Fac. Sci. Eng., Konan Univ., [2]Fac. Environ. Info. Sci., Fukui Univ. Tech.)

Room J	Room K	Room L	Room M	Room N	Room O	Time
Vegetative growth	Plant-organism interaction B	Transcriptional, post-transcriptional/ Translational regulations/Protein modification & degradation	Environmental responses B			
3aJ01 Specific lipids mediate radial positional signaling in Arabidopsis Kenji Nagata[1], Toshiki Ishikawa[2], Taku Takahashi[3], Mitsutomo Abe[1] ([1]Grad. Sch. Sci., Univ. Tokyo, [2]Grad. Sch. Sci. Eng., Saitama Univ., [3]Grad. Sch. Sci., Okayama Univ.)	3aK01 Exploration of novel arbuscular mycorrhizal symbiosis signals transduced by *D14L*/*KAI2* pathway Hiromu Kameoka[1,2], Yoshihiro Kobae[3], Junko Kyozuka[4], Masayoshi Kawaguchi[5] ([1]Grad. Sch. Life & Environ. Sci., Osaka Pref. Univ., [2]JSPS Research Fellow, [3]Col. Agri. Food & Environ. Sci., Rakuno Gakuen Univ., [4]Grad. Sch. Life Sci., Tohoku Univ., [5]NIBB, Dept. Symbio. Sys.)	3aL01 E CFI 25 subunit of cleavage factor I is essential for plant development and 3'UTR polyadenylation site determination Xiaojuan Zhang[1], Naoki Takahashi[2], Masaaki Umeda[2], Marta Garcia-Leon[3], Vicente Rubio[3], Tsuyoshi Furumoto[4], Takashi Aoyama[1], Tom Tsuge[1] ([1]ICR Inst., Univ. Kyoto, [2]Grad. Sch. Sci., NAIST, [3]CNB-CSIC, Spain, [4]Faculty of Agriculture, Univ. Ryukoku)	3aM01 E Different roles of two variants of a half-size ABC transporter in Al accumulation and detoxification of buckwheat Gui Jie Lei, Kengo Yokosho, Naoki Yamaji, Miho Fujii-Kashino, Jian Feng Ma (Institute of Plant Science and Resources, Okayama University)			9:00
3aJ02 Transomics approach to the AN3 function related to the regulation of primary metabolism in *Arabidopsis thaliana* Mamoru Nozaki[1], Kensuke Kawade[1,2,3,4], Gorou Horiguchi[5], Shuji Shigenobu[2,4], Katsushi Yamaguchi[2], Yuji Sawada[4], Masami Yokota Hirai[4], Hirokazu Tsukaya[1,6] ([1]ExCELLs, [2]NIBB, [3]SOKENDAI, [4]RIKEN CSRS, [5]Res. Cent. Life Sci., Rikkyo Univ., [6]Grad. Sch. Sci., Univ. Tokyo)	3aK02 Evidence of non-tandemly repeated rDNAs and their intragenomic heterogeneity in Rhizophagus irregularis Taro Maeda[1], Yuuki Kobayashi[1], Hiromu Kameoka[2], Nao Okuma[1,2], Naoya Takeda[4], Katsushi Yamaguchi[1], Takahiro Bino[1], Shuji Shigenobu[1,3], Masayoshi Kawaguchi[1,3] ([1]National Institute for Basic Biology, [2]Osaka Prefecture University, [3]the Graduate University for Advanced Studies, [4]Kwansei Gakuin University)	3aL02 E Understanding CSN-mediated regulation through its interaction with RNA processing factors Tom Tsuge[1], Xiaojuan Zhang[1], Mika Nomoto[2], Marta Garcia-Leon[3], Naoki Takahashi[4], Mariko Kato[1], Masaaki Umeda[4], Vicente Rubio[3], Yasuomi Tada[2], Tsuyoshi Furumoto[5], Takashi Aoyama[1] ([1]ICR, Kyoto Univ., [2]CGR, Nagoya Univ., [3]CNB, CSIC, [4]Grad. Sch. Sci. Tech., NAIST, [5]Grad. Sch. Agr., Ryukoku Univ.)	3aM02 Single-population GWAS of *AtMATE* expression level in *Arabidopsis thaliana* accessions Yuki Nakano[1], Kazutaka Kusunoki[1], Haruka Maruyama[2], Hiroyuki Koyama[1,2], Yuriko Kobayashi[1,2] ([1]Uni. Grad. Sch. of Agr. Sci, Univ. Gifu, [2]Appl. Biol. Sci., Univ. Gifu)			9:15
3aJ03 Roles of an Arabidopsis PtdIns(3)P-binding Protein AtFYVE2 in Autophagy and Leaf Senescence Yuki Fujiki[1,2], Mariko Okabe[1], Youngsook Lee[3], Ikuo Nishida[1,2] ([1]Fac. Sci., Saitama Univ., [2]Grad. Sch. Sci. & Eng., Saitama Univ, [3]Dept. Life Sci., POSTECH.)	3aK03 E Molecular trafficking pathways associated with the interaction between parasitic plant and host plant Koh Aoki, Kohki Shimizu, Rika Takada, Yusuke Takagaki (Grad. Sch. Life Environ. Sci., Osaka Pref. Uni.)	3aL03 Elucidation of translational change of non-protein-coding ORFs upon light exposure from darkness in Arabidopsis. Yukio Kurihara[1], Yuko Makita[1], Haruka Shimohira[1], Tomoya Fujita[2,3], Shintaro Iwasaki[2], Minami Matsui[1] ([1]Synthetic Genomics Research Group, RIKEN Center for Sustainable Resource Science, [2]RNA Systems Biochemistry Laboratory, RIKEN, [3]Cell Biology Center, Institute of Innovative Research, Tokyo Institute of Technology)	3aM03 Physiological roles of AtPCS1 in toxic metal tolerance of root apical meristem Shimpei Uraguchi[1], Yuka Sone[1], Yuto Ohtsuka[1], Ayaka Ohmori[1], Arunee Wongkaew[2], Naoko Ohkama-Ohtsu[2], Ryosuke Nakamura[1], Yasukazu Takanezawa[1], Stephan Clemens[3], Masako Kiyono[1] ([1]Sch. Pharm., Kitasato Univ., [2]Inst. Agri., Tokyo Univ. Agri. Tech., [3]Univ. Bayreuth)			9:30
3aJ04 Relationship Among Four NAC Transcription Factor Genes *SZK1*, *3*, *4* And *SRIW1* And Their Roles In Leaf Abaxialization In *as2 rpl4d* Gorou Horiguchi[1,2], Shugo Maekawa[1], Iwai Ohbayashi[3], Munetaka Sugiyama[4], Hirokazu Tsukaya[5,6] ([1]Dept. Life Sci., Coll. Sci., Rikkyo Univ., [2]Res. Cent. Life Sci., Coll. Sci., Rikkyo Univ., [3]HIST, Fujian Agricult. Forest. Univ., [4]Bot. Gard., Grad. Sch. Sci., Univ. Tokyo, [5]Grad. Sch. Sci., Univ. Tokyo, [6]ExCELLS, NINS)	3aK04 Translation of mobile *GUS-tRNAmet* mRNA from host into the shoot of a stem parasitic plant, *Cuscuta campestris* Kohki Shimizu, Koh Aoki (Grad. Sch. Life and Environ. Sci., Osaka Pref. Univ.)	3aL04 Identification of Arabidopsis CCR4-NOT complexes with variable combinations of deadenylase subunits Toshihiro Arae[1], Riko Imahori[2], Yuya Suzuki[1], Yukako Chiba[1,3] ([1]Grad. Schl. Life Sci., Hokkaido Univ., [2]Schl. Life Sci., Hokkaido Univ., [3]Fac. Sci., Hokkaido Univ.)	3aM04 E Glutathione and its biosynthesis intermediates alleviate cesium stress in *Arabidopsis thaliana* Eri Adams, Takae Miyazaki, Shunsuke Watanabe, Mitsunori Seo, Ryoung Shin (RIKEN Center for Sustainable Resource Science)			9:45
3aJ05 Functional analyses of the ribosomal protein RPL12B and the RING-type ubiquitin ligase SZK2 in ribosome stress signaling Shugo Maekawa[1], Kanae Fukada[1], Masahiro Takahara[1], Hirokazu Tsukaya[2,3], Gorou Horiguchi[1,4] ([1]Department of Life Science, College of Science, Rikkyo University, [2]Graduate School of Science, The University of Tokyo, [3]Exploratory Research Center on Life and Living Systems, NINS, [4]Research Center for Life Science, College of Science, Rikkyo University)	3aK05 Expression of cell division- and vascular development- related genes of host plant are transiently up-regulated in the parasitic interface with a stem parasitic plant, *Cuscuta campestris* Shota Yamamoto, Koh Aoki (Grad. Sch. Life and Env. Sci., Osaka Pref. Univ.)	3aL05 Fine-tuning of qE quenching by microRNA in *Chlamydomonas reinhardtii* Tomohito Yamasaki[1], Ryutaro Tokutsu[2], Jun Minagawa[2] ([1]Sci and Tech., Kochi univ., [2]Photobiol., NIBB)	3aM05 The suppression mechanism of stomatal development under submerged condition in Rorippa aquatica Tatsushi Umase, Shuka Ikematsu, Fuko Noguchi, Tomoaki Sakamoto, Seisuke Kimura (Kyoto-sangyo Univ.)			10:00
3aJ06 Mathematical and morphological analysis of "monospirostichy", a special kind of spiral phyllotaxis unique to Costaceae plants Takaaki Yonekura, Munetaka Sugiyama (Botanical Gardens, Grad. Sch. Sci., Univ. Tokyo)	3aK06 Epidermal cells patterning-related genes are involved in the holdfast formation of a stem parasitic plant, *Cuscuta campestris* Daiki Fujiwara, Koh Aoki (Grad. Sch. Life Env. Sci., Osaka Pref. Univ.)	3aL06 miR319-Mp*RKD* Regulation Is Involved in the Asexual Reproduction Organ Formation in *Marchantia polymorpha* Kazutaka Futagami[1], Masayuki Tsuzuki[2], Takahiro Hamada[1,3], Yuichiro Watanabe[1] ([1]Grad. Sch. Arts and Sci., Univ. Tokyo, [2]Dept. Mol. Cel. Dev. Biol., Univ. Michigan, [3]JST, PRESTO)	3aM06 Possible involvement of *trans-acting siRNA3* in response to low nitrogen in *Arabidopsis* Sho Nishida[1], Makiha Fukuda[2,3], Yusuke Kakei[4,5], Yukihisa Shimada[4], Toru Fujiwara[3] ([1]Grad. Sch. Biosphere Sci., Hiroshima Univ., [2]Fac. Sci. Technol., Tokyo Univ. Sci., [3]Grad. Sch. Agri. Life Sci., Univ. Tokyo, [4]Kihara Inst. Biol. Res., Yokohama City Univ., [5]Inst. Veg. Flor. Sci., NARO)			10:15

E=Presentation in English

● Day 3, Fri., March 15, AM (9:00–12:00)

Time	Room A	Room B	Room C	Room D	Room E	Room F	Room G	Room H	Room I
	JTPB2019	JTPB2019	Photoreceptors/Photoresponses		Photosynthesis	JTPB2019	JTPB2019		Organelles/Cytoskeleton
10:30			3aC07 Functional characterization of protein kinases that interact with blue light-receptor phototropins in Arabidopsis stomatal opening Shin-ichiro Inoue[1], Yohei Takahashi[1], Maki Hayashi[1], Masaki Okumura[1], Tatsuya Sawasaki[2], B. Michael Palmgren[3], Toshinori Kinoshita[4] ([1]Grad. Sch. Sci., Nagoya Univ., [2]Proteo-Science Center, Ehime Univ., [3]Dept. Plant. Environ. Sci. Univ. Copenhagen, [4]ITbM., Nagoya Univ.)		3aE07 Transcription patterns of photosynthesis-related genes in the green filamentous bacterium *Chloroflexus aurantiacus* under ANaerobic Light, Aerobic Light, and Aerobic Dark conditions Kazaha Izaki, Shin Haruta (Grad. Sch. Sci., Univ. Tokyo Metropolitan)				3aI07 Digalactosyldiacylglycerol is required for rapid formation of thylakoid membrane during etioplast-chloroplast differentiation in Arabidopsis Sho Fujii[1], Noriko Nagata[2], Tatsuru Masuda[1], Hajime Wada[1], Koichi Kobayashi[3] ([1]Grad. Sch. Arts Sci., Univ. Tokyo, [2]Fac. Sci., Japan Women's Univ., [3]Fac. Arts Sci., Osaka Pref. Univ.)
10:45			3aC08 Cytosolic phototropin can not induce the chloroplast avoidance and cold-avoidance responses. Kotoko Sasaki, Yasuhide Osaki, Yutaka Kodama (Center for Bioscience Research and Education, Utsunomiya University)		3aE08 Genetically and morphologically distinct two heterocystous cyanobacteria analyzed by Raman scattering microscopy Kouto Tamamizu, Shigeichi Kumazaki (Grad. Sch. Sci., Univ. Kyoto)				3aI08 Isolation and characterization of Arabidopsis mutants with reduced chlorophyll fluorescence in guard cells Boseok Song, Sho Yamagaki, Koh Iba, Juntaro Negi (Dept. Biol., Fac. Sci., Kyushu Univ.)
11:00			3aC09 Chloroplast outer membrane-localized phototropin induces the chloroplast avoidance response Eiji Gotoh[1], Kazuhiro Ishishita[1], Takeshi Higa[2], Shin-ichiro Inoue[3], Noriyuki Suetsugu[4], Masamitsu Wada[5] ([1]Fac. Agr., Kyushu Univ, [2]Inst. Protein Res., Osaka Univ, [3]Grad. Sch. Sci., Nagoya Univ, [4]Grad. Sch. Bio., Kyoto Univ, [5]Grad. Sch. Sci and Eng., Tokyo Metro Univ)		3aE09 Trials to enhance nitrogenase activity of a transformant carrying the *nif* gene cluster in the non-diazotrophic cyanobacterium *Synechocystis* sp. PCC 6803 Konomi Yokomizo, Hiroya Kotani, Ryoma Tsujimoto, Haruki Yamamoto, Yuichi Fujita (Grad. Sch. Bioagricultual. Sci., Univ. Nagoya)				3aI09 High-throughput screening of algal mutant cells based on CO_2-dependent protein relocation by intelligent image-activated cell sorting Takashi Yamano[1], Chihana Toyokawa[1], Toshiki Matsuoka[1], Nao Nitta[2,3], Takeaki Sugimura[2,3], Akihiro Isozaki[2], Takanori Iino[2], Takuro Ito[2,3], Keisuke Goda[2,3], Hideya Fukuzawa[1] ([1]Graduate School of Biostudies, Kyoto University, [2]School of Science, The University of Tokyo, [3]JST)
11:15			3aC10 Phosphoproteomic analysis of SnRK2 downstream factors responsible for red-light responses in the moss Physcomitrella patens Kazuki Udagawa[1], Shoko Kageyama[1], Ryoko Otake[1], Akihisa Shinozawa[1], Taishi Umezawa[2], Takumi Tomoi[3,4], Tomomichi Fujita[5], Andrew C. Cuming[6], Izumi Yotsui[1], Teruaki Taji[1], Yoichi Sakata[1] ([1]Dept. Bioscience, Tokyo Univ. Agric., [2]Grad.Sch. Bio-Applications and Systems Engneering, Tokyo Univ. Agric.and Tech., [3]Grad.Sch.of Life Sci., Hokkaido Univ, [4]OIIB, [5]Fac. Sci., Hokkaido Univ, [6]University of Leeds, UK)		3aE10 Elucidation of the ammonium toxicity in PII-less mutant and the mechanisms of ammonium tolerance involving PII protein in cyanobacteria Takayuki Sakamoto[1], Yajun Chang[1], Nobuyuki Takatani[1], Kazuma Uesaka[1,2], Kunio Ihara[2], Tatsuo Omata[1] ([1]Grad. Sch. Bioagr. Sci., Nagoya Univ., [2]Ctr. Gene Res., Nagoya Univ.)				3aI10 Characterization of phosphoproteins in thylakoid membranes using Phos-tag Keiji Nishioka[1], Yusuke Kato[1], Shin-ichiro Ozawa[2], Yuichiro Takahashi[2], Wataru Sakamoto[1] ([1]Inst. Plant Sci. Res., Okayama Univ., [2]Res. Inst. Interdisciplinary Sci., Okayama Univ.)
11:30			3aC11 Phosphorylation of Rice CPD Photolyase and Its Transport to the Chloroplast Mika Teranishi, Chiharu Komatsu, Mamoru Hara, Hiroko Yamaguchi, Jun Hidema (Grad. Sch. Life Sci., Tohoku Univ.)		3aE11 Study of Glycolate Metabolism in Photorespiration of *Synechocystis* sp. PCC 6803 Kotaro Kobayashi[1], Stefan Timm[2], Martin Hagemann[2], Iwane Suzuki[3] ([1]Grad. Sch. Life Env. Sci., Univ. Tsukuba, [2]Dept. Plant Physiol., Univ. Rostock, [3]Fac. Life Environ. Sci., Univ. Tsukuba)				3aI11 The Role of Phosphorylation of Chloroplast Ca^{2+} Binding Protein CAS in Light-Dependent Stomatal Opening Yuna Uemura, Yuki Kirishima, Masaki Mizuno, Yoko Ishizaki, Takashi Shiina (Grad. Life and Env. Sci., Kyoto Pref. Univ.)
11:45			3aC12 E African Rice Species (*O. glaberrima*, *O. barthii* and *O. sativa*) Exhibit Hypersensitivity to UVB Radiation Caused by Lower Specific Activity and Amount of CPD Photolyase. Gideon Mmbando, Mika Teranishi, Jun Hidema (Tohoku University, Graduate School of Life Sciences)		3aE12 Establishment of energy transfer pathway in photosystem I complex during the accumulation process of chlorophyll *f* Toshiyuki Shinoda[1], Keishi Arai[2], Seiji Akimoto[3], Tatsuya Tomo[1,2] ([1]Grad. Sch. Sci., Tokyo Univ. Sci., [2]Fac. Sci., Tokyo Univ. Sci., [3]Grad. Sch. Sci., Kobe Univ.)				3aI12 Structure-function analysis of the cargo transporter KCBP kinesin in P. patens Mari Yoshida, Moe Yamada, Gohta Goshima (Grad. Sch. Sci., Nagoya Univ)

Room J	Room K	Room L	Room M	Room N	Room O	Time
Vegetative growth	Plant-organism interaction B	Transcriptional, post-transcriptional/ Translational regulations/Protein modification & degradation	Environmental responses B			
3aJ07 Quantitative 3D observation of cells in twisting Arabidopsis petiole Yuta Otsuka[1], Hirokazu Tsukaya[1,2] ([1]Grad. Sch. Sci., Univ. Tokyo, [2]ExCELLS, NINS)	3aK07 Identification of resistance genes in tomato introgression lines that show post-germination resistance to a root parasitic plant, *Phelipanche aegyptiaca* Junna Saito, Koh Aoki (Grad. Sch. Life and Env. Sci., Osaka Pref Univ.)	3aL07 Biochemical characterization of microRNA precursor processing by Dicer-Like1 in Arabidopsis Rikako Hirata[1], Tomoya Makabe[1], Kei-ichiro Mishiba[1], Nozomu Koizumi[1], Hamdan Samir M.[2], Yuji Iwata[1] ([1]Grad. Life. Environ. Sci., Univ. Osaka Pref., [2]King abdullah Univ. Sci. Tech.)	3aM07 Ion profiles of acid-tolerant plant species distributed in solfatara fields. Jun Wasaki[1], Akihiro Yamamoto[1], Takato Saito[1], Hiromi Tsubota[2], Toshihiro Watanabe[3], Takayuki Nakatsubo[1] ([1]Grad. Sch. Biosphere Sci., Hiroshima Univ., [2]Grad. Sch. Sci., Hiroshima Univ., [3]Res. Fac. Agr., Hokkaido Univ.)			10:30
3aJ08 E Arabidopsis zinc-finger-like protein ASYMMETRIC LEAVES2 (AS2) bound exon 1 of ETTIN (ARF3) and maintain gene body DNA methylation in ETTIN together with nucleolar proteins Simon Vial-Pradel[1], Mika Nomoto[2,4], Hiro Takahashi[3], Sayuri Ando[1], Masataka Suzuki[1], Shoko Kojima[1], Yasuomi Tada[2,4], Yasunori Machida[2], Chiyoko Machida[1] ([1]Graduate School of Bioscience and Biotechnology, Chubu University, [2]Graduate School of Science, Nagoya University, [3]Graduate School of Medical Sciences, Kanazawa University, [4]Center for Gene Research, Nagoya University)	3aK08 E Implication of mobile small RNAs for common functions in different host-parasitic plant complexes Subhankar Bera[1], Kohki Shimizu[1], Keisuke Tanaka[2], Shunsuke Yajima[2], Katsushi Yamaguchi[3], Shigenobu Shuji[3], Koh Aoki[1] ([1]Osaka Prefecture University, Osaka, Japan, [2]NODAI Genome Research Center, Tokyo University of Agriculture, Japan, [3]National Institute for Basic Biology, Japan)	3aL08 E Genome wide analysis of nutrient-dependent translational regulation Naoyuki Sotta[1], Yukako Chiba[2], Hirofumi Fukuda[1], Mayuki Tanaka[1], Seidai Takamatsu[2], Yui Yamashita[2], Kyoko Miwa[2], Masami Yokota Hirai[3], Satoshi Naito[2], Toru Fujiwara[1] ([1]Univ Tokyo, [2]Hokkaido Univ, [3]RIKEN)	3aM08 E Chemical screening identified that lipid signaling pathways regulate early aluminum-inducible malate secretion in Arabidopsis Liujie Wu[1], Ayan Sadhukhan[1], Yuriko Kobayashi[1], Naohisa Ogo[2], Mutsutomo Tokizawa[1], Raj Kishan Agrahari[1], Hiroki Ito[1], Akira Asai[2], Hiroyuki Koyama[1] ([1]Applied Biological Sciences, Gifu University, Gifu 501-1193, Japan., [2]Graduate Division of Pharmaceutical Sciences, University of Shizuoka, Shizuoka 422-8526, Japan.)			10:45
3aJ09 Roles of nucleolar proteins for nuclear localization of zinc-finger-like protein ASYMMETRIC LEAVES2 (AS2) in leaf development of Arabidopsis thaliana Sayuri Ando[1], Takumi Ogawa[2], Shuichiro Goto[2], Shoko Kojima[1], Yuki Sakamoto[3], Sachihiro Matsunaga[3], Yasunori Machida[4], Chiyoko Machida[1] ([1]Grad. Sch. Biosci. Biotech., Chubu Univ, [2]Sch. Biosci. Biotech., Chubu Univ, [3]Bio Sci., Tokyo Univ of Sci, [4]Grad. Sch. Sci., Nagoya Univ)	3aK09 Natural variations of interactions with a root-colonizing endophytic fungus and indole glucosinolates in *Arabidopsis thaliana* Shion Yamaguchi[1], Shigetaka Yasuda[1], Hong Ye[1], Midori Tanaka[1], Mutsumi Watanabe[1], Takayuki Tohge[1], Kei Hiruma[1,2], Yusuke Saijo[1] ([1]Grad. Sch. Sci. Tech., NAIST, [2]JST, PRESTO)	3aL09 Translation Complexes Containing a uORF-Encoded Nascent Peptide Sense Cellular Magnesium Concentration to Regulate Translation. Noriya Hayashi[1], Shun Sasaki[1], Yuta Hiragori[2], Feng Zhihang[3], Toru Fujiwara[3], Hiro Takahashi[4], Yui Yamashita[1], Satoshi Naito[1,5], Hitoshi Onouchi[1] ([1]Grad. Sch. Agr., Hokkaido Univ., [2]Sch. Agr., Hokkaido Univ., [3]Grad. Sch. Agr. Sci., Univ. Tokyo, [4]Grad. Sch. Medical Sci. Kanazawa Univ., [5]Grad. Sch. Life Sci., Hokkaido Univ.)	3aM09 Functional characterization of OsBBPIs, a putative ART1-interactive protein in rice Kengo Yokosho, Zhi Chang Chen, Naoki Yamaji, Jian Feng Ma (Institute of Plant Science and Resources, Okayama University)			11:00
3aJ10 The ASYMMETRIC LEAVES2 is involved in leaf development through the repression of AtIPT3 transcription. Shoko Kojima[1], Tamami Nishimoto[1], Kana Koda[1], Nanako Ishibashi[2], Mikiko Kojima[4], Hiro Takahashi[5], Hitoshi Sakakibara[3], Yasunori Machida[2], Chiyoko Machida[1] ([1]Grad. Sch. Biosci. Biotech., Chubu Univ., [2]Grad. Sch. Sci., Nagoya Univ., [3]Grad. Sch. of Bioagr., Nagoya Univ, [4]CSRS, RIKEN, [5]Grad. Sch. Pharm. Pharm. Sci., Kanazawa Univ)	3aK10 Functional analyses for effector candidates of plant growth-promoting endophytic fungi and their suppression by the host tryptophan-derived metabolites in *Arabidopsis thaliana* Shigetaka Yasuda[1], Kei Hiruma[1,2], Kazuki Tsurukawa[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.)	3aL10 Biochemical Evidence for the Involvement of the Ribosomal Exit Tunnel in the Nascent Peptide-Mediated Ribosome Stalling Systems Seidai Takamatsu[1], Yubun Ohashi[2], Noriyuki Onoue[1], Hitoshi Onouchi[2], Yui Yamashita[2], Satoshi Naito[1,2] ([1]Grad. Schl. Life Sci., Hokkaido Univ., [2]Grad. Schl. Agr., Hokkaido Univ.)	3aM10 Environmental stress responses in the mutants of RNA binding protein, APUM5 and deadenylases in *Arabidopsis* 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.)			11:15
3aJ11 Subcellular localization and interaction of pathogenicity factor βC1 of leaf curl viruses with the host receptor, *ASYMMETRIC LEAVES1 (AS1)* Takanori Suzuki[1,2], Norifusa Matsuo[1], Masato Omatsu[1], Mika Tanaka[1], Michiko Sasabe[3], Chiyoko Machida[4], Yasunori Machida[2] ([1]Cent. Res. Inst., Ishihara Sangyo Kaisha, Ltd., [2]Grad. Sch. Sci., Nagoya Univ., [3]Fac. Agric. Life Sci., Hirosaki Univ., [4]Grad. Sch. Biosci. Biotechnol., Chubu Univ.)	3aK11 RSS interacts with NO, ROS, H_2S and is involved in the root nodule symbiosis Mitsutaka Fukudome[1], Hazuki Shimada[2], Nahoko Uchi[1], Ken-ichi Osuki[1], Toshiki Uchiumi[1] ([1]Grad. Sch. Sci., Kagoshima Univ., [2]Fac. Sci., Kagoshima Univ)		3aM11 Evaluation of aluminum (Al^{3+}) tolerance in a worldwide collection of the genus *Vigna* Akiko Baba-Kasai, Kaoru Ebana, Norihiko Tomooka (Genetic Resources Center of NARO)			11:30
3aJ12 Plastid signaling is involved in rice endosperm development. Hirokazu Katoh[1], Mao Fukai[1], Shu Anami[1], Yutaka Sato[2], Sae Shimizu-Sato[2], Hidemi Kitano[1], Yuko Kobayashi[3], Issei Kobayashi[3], Shin Takeda[1], Tsukaho Hattori[1] ([1]Nagoya Univ. BBC., [2]NIG. Plant Genetics, [3]Mie Univ. ASRPC.)	3aK12 Development of thrips repellents and plant secondary metabolites, involved in thrips avoidance. Hiroshi Abe[1], Tamito Sakurai[2], Shigemi Seo[2], Yuji Sawada[3], Masami Yokota Hirai[3], Takeshi Ohya[4], Shohei Matsuura[5], Masaaki Mitomi[6], Kenji Umemura[6], Masami Koshiyama[7], Shinya Tsuda[2], Masatomo Kobayashi[1] ([1]RIKEN BRC, [2]NARO, [3]RIKEN CSRS, [4]Kanagawa Agricultural Technology Center, [5]Hiroshima Prefectural Technology Research Institute, [6]Meiji Seika Pharma Co. Ltd, [7]Zeon Corporation)		3aM12 Variation in the regulation of SUF machinery in response to Fe deficiency among barley cultivars 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.)			11:45

E=Presentation in English

List of Chairpersons of Oral Presentations

Day 1, Wed., March 13, AM

1aC01-12	Biomembrane/Ion and solute transport	Miki Kawachi Naoki Yamaji Yoichi Nakanishi
1aD01-12	Primary metabolism	Takeo Satou Shoji Segami Mineko Konishi
1aE01-11	Environmental responses of photosynthesis	Keisuke Yoshida Kenichi Wakabayashi Sumie Keta
1aF01-12	Environmental responses A	Miyo Morita Masaru Kobayashi Masatsugu Toyota
1aG01-12	Plant hormones/Signaling molecules	Mitsunori Seo Kenichi Kurotani Yukari Nagatoshi
1aH01-12	Epigenetic regulation	Takuya Sakamoto Hidenori Takeuchi Atsushi Hoshino
1aI01-12	Flowering/Clock	Akane Kubota Tomoaki Muranaka Ryosuke Hayama
1aJ01-12	Vegetative growth	Takashi Soyano Tatsuaki Goh Ayami Nakagawa
1aK01-12	Plant-organism interaction A	Kazuya Ichimura Yusuke Saijo Koji Yamaguchi
1aL01-12	Plant-organism interaction B	Takuya Suzaki Kei Hiruma Tatsuhiro Ezawa
1aM01-12	Environmental responses C	Naohiko Ohama Takehito Inaba Hiroshi Kudoh
1aO01-11	Systems biology	Yoshiharu Y. Yamamoto Atsushi Nagano Kyonoshin Maruyama

Day 1, Wed., March 13, PM

1pC01-10	Cell cycle/Cell division	Michiko Sasabe Shin-Ichiro Komaki Naoki Takahashi
1pD01-12	Primary metabolism, Secondary metabolism	Toshiki Ishikawa Ryuichi Nishihama Takahiro Ishikawa
1pE01-09	Photosynthesis, Environmental responses of photosynthesis	Ko Noguchi Mimi Hashimoto
1pG01-12	Plant hormones/Signaling molecules	Kaori Miyawaki-Nagawa Akie Shimotohno Satohiro Okuda
1pH01-12	Reproductive growth	Nobutoshi Yamaguchi Wakana Tanaka Miho Ikeda
1pI01-11	Organelles/Cytoskeleton	Mizuho Ichinose Yusuke Kobayashi Yoshiki Nishimura
1pJ01-12	Vegetative growth	Yukiko Yasui Aya Imamura Yuki Hirakawa
1pK01-12	Plant-organism interaction A	Shigeyuki Betsuyaku Yoji Kawano Akira Mine
1pL01-12	Transcriptional, post-transcriptional/Translational regulations/Protein modification & degradation	Mayuki Tanaka Kengo Kanamaru Junichi Obokata
1pM01-12	Environmental responses B	Kaori Kohzuma Takashi Kuromori Miki Fujita
1pO01-07	Systems biology	Miyako Kusano Takeshi Obayashi

Day 2, Thu., March 14, AM

2aC01-12	Cell wall	Kyoko Miwa Miyuki Nakata Miya Mizutani
2aD01-12	Secondary metabolism	Seiji Takahashi Akiko Maruyama Masami Hirai
2aE01-12	Photosynthesis	Amane Makino Yuki Okegawa Yukari Asakura
2aG01-09	Plant hormones/Signaling molecules	Mikiko Kojima Koji Miyamoto Aino Komatsu
2aH01-12	Reproductive growth	Shuh-Ichi Nishikawa Takashi Okamoto Kazuyuki Kuchitsu
2aI01-12	Organelles/Cytoskeleton	Minako Ueda Saku Kijima Takehide Kato
2aJ01-12	Vegetative growth	Shingo Nagawa Kyoko Ohashi-Ito Katsutoshi Tsuda
2aK01-12	Plant-organism interaction A	Shuta Asai Yoshiteru Noutoshi Kenishi Tsuda
2aM01-12	Environmental responses B	Minoru Ueda Tsuneo Kuwagata Teruaki Taji
2aO01-12	Others (New technology, Bioresources)	Yuriko Osakabe Ayako Nishizawa-Yokoi Masaki Endo

Day 2, Thu., March 14, PM

2pC01-09	Photoreceptors/Photoresponses	Tomomi Suzuki Tomonao Matsushita Shizue Yoshihara
2pE01-09	Photosynthesis	Chihiro Azai Yusuke Kato Yuu Hirose
2pF01-09	Flowering/Clock	Sumire Fujiwara Hiroyuki Tsuji Kumiko Ito
2pH01-07	Membrane trafficking	Ken Matsuoka Kazuo Ebine
2pI01-09	Organelles/Cytoskeleton	Masanori Izumi Takashi L. Shimada Reiko Motohashi
2pJ01-09	Vegetative growth	Misuzu Takahashi Hideki Narukawa Yoshimi Oshima
2pK01-08	Plant-organism interaction A, B	Yasuhiro Kadota Koh Aoki
2pM01-09	Environmental responses C	Takuya Ogata Mari Kamitani Junya Mizoi

Day 3, Fri., March 15, AM

3aC01-12	Photoreceptors/Photoresponses	Tatsuya Sakai Eiji Gotoh Mika Teranishi
3aE01-12	Photosynthesis	Yutaka Shibata Jiro Harada Nobuyuki Takatani
3aI01-12	Organelles/Cytoskeleton	Haruko Ueda Nobuyoshi Mochizuki Kazusato Oikawa
3aJ01-12	Vegetative growth	Shoko Kojima Mamoru Nozaki Shugo Maekawa
3aK01-12	Plant-organism interaction B	Satoko Yoshida Hiromu Kameoka Taro Maeda
3aL01-10	Transcriptional, post-transcriptional/Translational regulations/Protein modification & degradation	Tomohiko Tsuge Yukio Kurihara Yuichiro Watanabe
3aM01-12	Environmental responses B	Seisuke Kimura Kengo Yokosho Sho Nishida

General Presentations

Program of Poster Presentations

- On Day 2, those presenting on Day 1 should remove their posters at 9:00–10:00, and those presenting on Day 3 should mount their posters at 12:00–16:00.

The poster discussion times are as follows.

- For presentations in the first half: 17:00–19:00 on Day 1.
- For presentations in the second half: 14:00–16:00 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 Effects of chlorophyll degradation by Stay-Green on senescence in Arabidopsis
Ying Chen, Ayumi Tanaka, Hisashi Ito (Inst Low Temp Sci, Hokkaido Univ)

PF-002 Ethylene production and leaf abscission through chlorophyll degradation in poplar
Hisashi Ito[1], Keita Arakawa[2], Ayumi Tanaka[1] ([1]Inst Low Temp Sci, Hokkaido Univ, [2]Res Fac Agr, Hokkaido Univ)

PF-003 Reconstitution of the catalytic component (NB-protein) of dark-operative protochlorophyllide oxidoreductase with individual subunit proteins, BchN and BchB
Yoshiki Morimoto, Haruki Yamamoto, Hisanori Yamakawa, Yuichi Fujita (Grad. Sch. Bioagricultural. Sci., Univ. Nagoya)

PF-004 Four distinct trimeric forms of light-harvesting complex II isolated from the green alga Chlamydomonas reinhardtii
Keisuke Kawakami[1], Ryutaro Tokutsu[2], Eunchul Kim[2], Jun Minagawa[2] ([1]Osaka City University, [2]Division of Environmental Photobiology, National Institute for Basic Biology)

PF-005 Imaging of Intracellular Rearrangement of Photosynthetic Proteins upon State Transition by Using High Resolution Cryogenic Microscope
Yuki Fujita, Xianjun Zhang, Yutaka Shibata (Organic Physical Chemistry Lab., Department of Chemistry, Grad. Sch. of Sci., Tohoku Univ.)

PF-006 Long-term light adaptation of the glaucophyte *Cyanophora paradoxa*, probed by time-resolved fluorescence spectroscopy
Yoshifumi Ueno, Seiji Akimoto (Grad. Sch. Sci., Kobe Univ.)

PF-007 Screening of Arabidopsis Mutants with Disturbed Regulation of Proton Concentration Gradient across the Thylakoid Membrane
Nayu Otsuki[1], Mari Takusagawa[1], Fumiyoshi Myouga[2], Toshiharu Shikanai[1] ([1]Grad. Sch. Sci., Kyoto Univ., [2]RIKEN CSRS)

PF-008 Selective photoinhibition of photosystem I induced by the detachment of leaves
Yuki Sato[1], Kintake Sonoike[2] ([1]Integrative Bioscience and Biomedical Engineering, [2]Faculty of Education and Integrated Arts and Sciences, Waseda University, Japan)

PF-009 Infrared microspectroscopic analysis of the water oxidation reaction in a single photosystem II microcrystal
Yuki Kato[1], Satoshi Haniu[1], Yoshiki Nakajima[2], Fusamichi Akita[2,3], Jian-Ren Shen[2], Takumi Noguchi[1] ([1]Grad. Sch. Sci., Nagoya Univ., [2]Res. Inst. Interdiscip. Sci., Okayama Univ., [3]JST-PRESTO)

PF-010 Effects of cryoprotectants on the efficiency of S-state transition in oxygen-evolving photosystem II
Yoshiki Nakajima[1], Fusamichi Akita[1,2], Jian-Ren Shen[1] ([1]Res. Inst. Interdiscip. Sci., Unv. Okayama, [2]JST, PRESTO)

PF-011 Factors to regulate the species-dependent equilibrium of the S_2-state isomers of the water-oxidizing Mn_4CaO_5 cluster in photosystem II
Shota Taguchi[1], Liangliang Shen[2], Guangye Han[2], Jian-Ren Shen[3], Takumi Noguchi[1], Hiroyuki Mino[1] ([1]Grad. Sch. Sci., Nagoya Univ., [2]Key Lab. Photobiol., Inst. Botany, Chinese Acad. Sci., China, [3]Res. Inst. Interdiscip. Sci., Okayama Univ.)

PF-012 Comparison of Photosystem II Complexes in *Anabaena* sp. PCC 7120 Isolated through Cell Disruption with Glass beads or Lysozyme Treatment
Sayaka Nakaji[1], Masahiro Aota[2], Mitsunori Katayama[3], Toshiyuki Shinoda[4], Kaichiro Endo[5], Asako Ishii[2], Tatsuya Tomo[4], Hajime Wada[5], Naoki Mizusawa[2,6] ([1]Graduate School of Science, Hosei University, [2]Faculty of Bioscience and Applied Chemistry, Hosei University, [3]College of Industrial Technology, Nihon University, [4]Graduate School of Science, Tokyo University of Science, [5]Graduate School of Arts and Sciences, The University of Tokyo, [6]Research Center for Micro-Nano Technology, Hosei University)

PF-013 Reassessment of state transitions for activating cyclic electron flow
Kenji Takizawa[1,2] ([1]National Institute for Basic Biology, [2]Astrobiology Center)

PF-014 The role of D1-R140 and D2-T231 interacting with a phosphatidylglycerol molecule (PG714) in the structure and functions of photosystem II
Yuji Fujita[1], Mayu Matsubara[2], Yuto Sugawara[3], Kaichiro Endo[4], Toshiyuki Shinoda[5], Tatsuya Tomo[5], Kenjin Shen[6], Asako Ishi[3], Koichi Kobayashi[4], Hajime Wada[2,4], Naoki Mizusawa[1,3,7] ([1]Graduate School of Science and Engineering, Hosei University, [2]Graduate School of Science, The University of Tokyo, [3]Faculty of Bioscience and Applied Chemistry, Hosei University, [4]Graduate School of Arts and Sciences, The University of Tokyo, [5]Faculty of Science, Tokyo University of Science, [6]Research Institute for Interdisciplinary Science, The University of Okayama, [7]Research Center for Micro-Nano Technology, Hosei University)

PF-015 Quantitative and functional variation of photosystems of Fe-deficient leaves among barley(*Hordeum vulgare*) cultivars
Yuna Wakabayashi, Yuta Majima, Rika Uehara, Akihiro Saito, Takuji Ohyama, Kyoko Higuchi (Agri. Chem., Tokyo Univ. Agri.)

PF-016 Differing isoforms of the cobalamin binding photoreceptor AerR oppositely regulate photosystem expression

Haruki Yamamoto, Mingxu Fang, Carl Bauer (Molecular and Cellular Biochemistry Department, Indiana University)

PF-017 The effect of environmental stress on the amino acid primary structure of the photosynthetic reaction center complex in photosynthetic bacteria

Yurika Morioka, Sakiko Nagashima, Setsuko Hirose, Satoshi Hanada (Department of Biol. Sci. Tokyo Met. Univ.)

■ Environmental Responses of Photosynthesis

PF-018 Functional analysis of heat-sensitive mutant identified by screening using tag-lines of genes encoding chloroplast membrane proteins

Fumiyoshi Myouga, Kazuo Shinozaki (RIKEN CSRS)

PF-019 Quantitative proteome analysis of *Synechocystis* sp. PCC 6803 under different spectral lights

Masakazu Toyoshima, Masumi Sakata, Yoshihiro Toya, Fumio Matsuda, Hiroshi Shimizu (Dept. of Bioinfo. Eng., Grad. Sch. IST, Osaka Univ.)

PF-020 Circadian rhythm of the balance between intracellular reducing power and ROS-level in *Synechococcus elongatus* PCC7942

Kenya Tanaka[1], Masahito Ishikawa[2,3], Souishiro Kato[3,4], Shuji Nakanishi[1,3] ([1]Grad. Sch. Eng. Sci., Osaka Univ., [2]Grad. Sch. Eng., Nagoya Univ., [3]RCSEC, Osaka Univ., [4]AIST)

PF-021 Effects of reduced unsaturation of membrane lipids on growth and productivity of the *Synechocystis* sp. PCC6803 mutant engineered for free fatty acid production

Sumie Keta[1], Honoka Saruhashi[1], Yuuya Senoo[2], Kazutaka Ikeda[3], Tatsuo Omata[4], Makiko Aichi[1] ([1]Biol. Chem., Chubu Univ., [2]Med., Nagoya Univ., [3]IMS, Riken, [4]Grad. Sch. Bioagri. Sci., Nagoya Univ.)

■ Primary metabolism

PF-022 Metabolic Flux Analysis of *Synechocystis* sp. PCC 6803 Grown Under Different Spectral Lights

Chiaki Yamamoto[1], Sayaka Kitamura[2], Masakazu Toyoshima[2], Yoshihiro Toya[2], Hiroshi Shimizu[2] ([1]Sch. Eng., Osaka Univ., [2]Dept. Bioinfo. Eng., Grad. Sch. IST, Osaka Univ.)

PF-023 Functional analysis of the glutamine binding domain repeat protein (CmACR) in the unicellular red alga *Cyanidioschyzon merolae*

Tokiaki Takemura, Sousuke Imamura, Kan Tanaka (CLS, Tokyo Tech)

PF-024 Diverse functions of starch decomposition products in developing fruit of tomato

Chiaki Matsukura[1], Xiaoran Yu[2], Yonggen Yin[3], Hiroshi Ezura[1] ([1]T-PIRC, Univ. Tsukuba, [2]Grad. Sch. Life Env. Sci., Univ. Tsukuba, [3]Nat. Inst. Quantum Radiological Sci. Tech.)

PF-025 Analysis of membrane trafficking regulation in plant C/N nutrient response

Yoko Hasegawa[1], Akari Fujimaki[1], Yongming Luo[1], Koki Mukuta[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 University - France, [5]Live Cell Super-Resolution Imaging Research Team, RIKEN Center for Advanced Photonics)

PF-026 Biochemical analysis of ubiquitin signals on a SNARE protein involved in plant C/N response

Akari Fujimaki[1], Yoko Hasegawa[1], Takeo Sato[1], Syouta Hozuki[1], Tomohiro Uemura[2], Akihiko Nakano[3], Junji Yamaguchi[1] ([1]Fac. Sci. and Grad. Sch. Life Sci., Hokkaido Univ., [2]Graduate School of Humanities and Sciences, Ochanomizu University, [3]Live Cell Super-Resolution Imaging Research Team, RIKEN Center for Advanced Photonics)

PF-027 Induction of chloroplast development in the detached root tissues is disturbed in the *Arabidopsis gles1* mutant that has a defect in chloroplast envelope-localized lipid transporter

Tomoki Obata[1], Ryosuke Tadakuma[1], Koichi Kobayashi[2], Koh Iba[1], Juntaro Negi[1] ([1]Department of Biology, Faculty of Sciences, Kyushu University, [2]Faculty of Arts and Sciences, Osaka Prefecture University)

PF-028 Engineering of Arabidopsis plants to produce high-value oils in leaves

Yuuki Ebiya[1], Hiroyuki Ohta[1,2], Mie Shimojima[1] ([1]School of Life Science and Technology, Tokyo Institute of Technology, [2]OPERA, JST)

PF-029 Do cyanobacteria synthesize triacylglycerols?

Natsumi Mori, Naoki Sato (Univ. of Tokyo, Grad. School Arts Sciences)

PF-030 Functional analysis of a proline-knot-like motif of LDSP in Nannochloropsis

Shohei Yasuda, Takashi Nobusawa, Masako Iwai, Mie Shimojima, Hiroyuki Ohta (Tkyo tech)

PF-031 Novel insights into mechanisms underlying growth defects associated with trinucleotide repeat expansion in Arabidopsis thaliana

Yimeng Li[1], Yuji Sawada[1], Kensuke Kawade[2], Hirokazu Tsukaya[3], Masami Yokota Hirai[1] ([1]RIKEN Center for Sustainable Resource Science (CSRS), [2]Okazaki Institute for Integrative Bioscience (OIIB), [3]Tokyo University)

PF-032 A search for novel transcription factors involved in flavin metabolism of plants

Junya Namba[1], Takanori Maruta[1], Takahiro Ishikawa[1], Kazuya Yoshimura[2], Shigeru Shigeoka[3], Takahisa Ogawa[1] ([1]Grad. Sch. Nat. Sci. Technol., Shimane Univ., [2]Dept. Food Nutr. Sci., Coll. Biosci. Biotech., Chubu Univ., [3]Dept. Adv. Biosci., Fac. Agr., Kindai Univ.)

PF-033 Genetic analysis of callose deposition during phosphate starvation response in *Arabidopsis thaliana*

Koei Yachi[1], Tan Anh Nhi Nguyen[1], Kentaro Okada[1], Kei Hiruma[1,2], Yusuke Saijo[1] ([1]Grad. Sch. Sci. Tech., NAIST, [2]JST, Presto)

■ Secondary metabolism

PF-034 *In vivo* functional analysis of terpene synthase genes from medicinal plant *Scoparia dulcis*.

Kazuya Ishita, Ryo Yamamoto, Yoshimi Yamamura, Fumiya Kurosaki, Jung-Bum Lee (Graduate School Med & Pharm. Sci., Univ. Toyama)

PF-035 Production of betalain-producing gentian plants by constitutive and petal specific promoters

Masahiro Nishihara, Atsumi Higuchi, Aiko Watanabe, Hideyuki Takahashi (Iwate Biotechnology Research Center)

PF-036 Molecular analysis of persulfide metabolism involved in hydrogen sulfide dependent signaling

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

■ Biomembrane/Ion and solute transport

PF-037 The role of sphingolipids in the dynamics of plasma membrane in plants

Minoru Nagano[1], Yohann Boutte[2], Adiilah Mamode-Cassim[2], Laetitia Fouillen[2], Maki Kawai-Yamada[3], Sebastien Mongrand[2] ([1]Ritsumeikan Univ., [2]Bordeaux Univ., [3]Saitama Univ.)

PF-038 Identification and characterization of novel factors involved in the flavin transport in plants

Madoka Kikuchi[1], Takuto Sugimoto[1], Miho Harada[1], Takanori Maruta[1], Takahiro Ishikawa[1], Kazuya Yoshimura[2], Shigeru Shigeoka[3], Takahisa Ogawa[1] ([1]Dept. Life Sci. Biotechnol., Fac. Life Environ. Sci., Shimane Univ., [2]Dept. Food Nutr. Sci., Coll. Biosci. Biotech., Chubu Univ., [3]Dept. Adv. Biosci., Fac. Agr., Kindai Univ.)

PF-039 A Study for Taxane Compound Transporters from Yew

Hiroaki Kuasno[1], Hiroshi Minami[2], Yoshihiro Kato[2], Homare Tabata[2], Kazufumi Yazaki[1] ([1]Laboratory of Gene Expression, Research Institute for Sustainable Humanosphere, Kyoto University, [2]Lifescience Center, Hokkaido Mitsui Chemicals)

PF-040 Screening for Transporters Required for Shikonin Secretion Mechanism

Kanade Tatsumi, Takuji Ichino, Yuka Saida-Munakata, Kazufumi Yazaki (RISH, Kyoto Univ.)

PF-041 Glutathione, applied to leaves, activates zinc transport from roots to shoots in oilseed rape plants

Shin-ichi Nakamura[1], Arunee Wongkaew[2], Yuji Nakai[3], Hiroki Rai[4], Naoko Ohkama-Ohtsu[2] ([1]Tokyo University of Agriculture, [2]Tokyo University of Agriculture and Technology, [3]Hirosaki University, [4]Akita Prefectural University)

PF-042 Apoplastic bypass flow is involved in cadmium uptake in rice

Izumi Mori[1], Carlos Arias-Barreiro[1], Lia Ooi[1], Muhammad Sobahan[2], Yoshimasa Nakamura[2], Yoshihiko Hirai[2], Yoshiyuki Murata[2] ([1]IPSR, Okayama Univ., [2]Grad. Sch. Env. Life. Sci., Okayama Univ.)

PF-043 ATP Binding Cassette Proteins ABCG37 and ABCG33 function as cesium uptake carriers in Arabidopsis thaliana

Mohammad Arif Ashraf[1], Sayaka Kumagai[2], Ryohei Sugita[3], Keitaro Tanoi[3,4], Abidur Rahman[1,2] ([1]United Graduate School of Agricultural Sciences, Iwate University, Morioka, 020-8550, Japan, [2]Faculty of Agriculture, Iwate University, Morioka, 020-8550, Japan, [3]Graduate School of Agriculture and Life Sciences, The University of Tokyo, 1-1-1 Yayoi, Bunkyo-ku, Tokyo, 113-8654, Japan, [4]PRESTO, Japan Science and Technology Agency (JST), 4-1-8 Honcho, Kawaguchi, Saitama 332-0012, Japan)

■ Membrane trafficking

PF-044 Identification of RAB5 effectors containing PH domain 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], 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-045 Analysis of a new PH domain-containing effector of plant RAB5s

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

PF-046 Functional analysis on sequences responsible for sorting of vacuolar lumenal proteins to vacuole in *Arabidopsis thaliana*

Shuhei Kohata[1], Yuga Shinozaki[2], Kazuhiro Kuga[2], Hidehisa Shimizu[2], Mitsuo Jisaka[2], Kazushige Yokota[2], Tsuyoshi Nakagawa[1], Kohji Nishimura[1,2] ([1]Dept. Mol. Func. Gen., Int. Cent. Sci. Res., Shimane Univ., [2]Dept. Life Sci., Fac. Life Environ. Sci, Shimane Univ.)

PF-047 Sucrose-starvation induced degradation of TGN localized proteins

Yamato Oda[1], Satoru Asatsuma[2], Hiroaki Nakasone[1], Abiodun Moses O[2], Kiminori Toyooka[3], Ken Matsuoka[1,2,4] ([1]Graduate School of Bioresource and Bioenvironmental, Kyushu University, [2]Faculty of Agriculture, Kyushu University, [3]RIKEN CSRS, [4]Biotron Application center, Kyushu University)

■ Organelles/Cytoskeleton

PF-048 Characterization of Chloroplast Protein Import in Red Alga, *Cyanidioschyzon merolae*.

Sanghun Baek[1,2], Yukari Asakura[1], Gaku Fujii[3], Sousuke Imamura[3], Kan Tanaka[3], Masato Nakai[1] ([1]Inst. Prot. Res., Osaka Univ., [2]Grad. Sch. Sci., Osaka Univ., [3]Inst. Innov. Res., Tokyo Inst. Tech.)

PF-049 Physiological Consequences Of Autophagy Deficiency In The Moss Physcomitrella patens

Most. Mohoshena Aktar, Kyosuke Mukae, Tomoya Tano, Mai Sato, Junyu Bao, Ryo Funada, Toshihisa Kotake, Daisuke Takezawa, Yuko Inoue-Aono, Yuji Moriyasu (Graduate School of Science and Engineering, Saitama University)

PF-050 Characterization of a Non-Photosynthetic-Type Protein Translocation Machinery at the Inner Envelope Membrane of Plastid (Chloroplast) in *Arabidopsis thaliana*.

Xueyang Zhao[1,2], Takeshi Higa[1], Masato Nakai[1] ([1]Inst. Prot. Res., Osaka Univ., [2]Grad. Sch. Sci., Osaka Univ.)

PF-051 The Localization of Chlorophyllase in Arabidopsis thaliana

Jun-Wei Lin[1,2], Tin-Han Shih[1], Chih-Wen Sun[2], Chi-Ming Yang[1] ([1]Biodiversity Research Center, Academia Sinica, Taipei, Taiwan, [2]Department of Life Sciences, National Taiwan Normal University, Taipei, Taiwan)

PF-052 Effects of Sodium Chloride on Chloroplast division in the Moss Physcomitrella patens

Thi Huong Do[1], Prapapron Pongthai[1], Hiroyoshi Takano[2], Yasushi Yoshioka[3], Ooi-Kock Teh[1], Tomomichi Fujita[1] ([1]Grad. Sch. Life Sci., Univ. Hokkaido, [2]Grad. Sch. Sci, Univ. Kumamoto, [3]Grad. Sch. Sci, Univ. Nagoya)

PF-053 Functional study in GTPase activity of VIPP1 involved in chloroplast membrane integrity

Kenichi Shioya, Norikazu Ohnishi, Wataru Sakamoto (IPSR, Okayama Univ.)

PF-054 Identification and analysis of the suppressor genes of *crl* in *Arabidopsis thaliana*

Ryo Yoshimura[1], Ryohei Seta[1], Takamasa Suzuki[2], Yasushi Yoshioka[1] ([1]Div. Biol. Sci., Grad. Sch. Sci., Nagoya Univ., [2]Col. Biosci. Biotech., Chubu Univ.)

PF-055 Functional analysis of organelle exonuclease DPD1 in rice

Tsuneaki Takami[1], Hiroshi Yamatani[2], Makoto Kusaba[2], Wataru Sakamoto[1] ([1]IPSR., Okayama Univ., [2]Grad. Sch. Sci., Hiroshima Univ.)

PF-056 Complementation Analysis of *MurE* Knockout Lines Showing Defects for Chloroplast Division in Moss and for Chloroplast Development in *Arabidopsis*

Ichiro Kajisa[1], Xiaofei Lin[2], Yilan E[2], Hiromi Kudo[1], Susumu Takio[3,4], Katsuaki Takechi[3], Hiroyoshi Takano[3] ([1]Grad. Sch. Sci. & Tech., Univ. Kumamoto, [2]Col. of Life Sci., Univ. Inner Mongolia, [3]FAST, Univ. Kumamoto, [4]Cent. Water Cycle, Mar. Environ. Disast. Manage.)

PF-057 Analysis of mitochondrial RNA processing factors involved in lateral root development

Akihito Mamiya[1], Kurataka Otsuka[1], Kento Kobayashi[2], Yusuke Yagi[2], Takahiro Nakamura[2], Takashi Hirayama[3], Munetaka Sugiyama[1] ([1]Dept. Biol. Sci., Grad. Sch. Sci., Univ. Tokyo, [2]Dept. Biosci. & Biotech., Fac. Agr. Sci., Kyusyu Univ., [3]Inst. Plant Sci. & Res., Okayama Univ.)

PF-058 Defense gene expression upregulated by mitochondrial perturbation-induced Ca^{2+} signals

Takaki Murata, Koji Shimotani, Miho Kotani, Marina Onoue, Kanako Yamasaki, Satoshi Sano, Takashi Shiina (Grad. Sch. Life and Env. Sci., Kyoto Pref. Univ)

■ Cell wall

PF-059 Effects of Gajyumaru latex on cell growth and cell wall structure and properties in fission yeast S.japonicus

Momoko Terao, Yoh Sakuma, Masahiro Inouhe (Biology and Environmental Science, Graduate School of Science and Technology, Ehime University)

PF-060 Increase in Pectin Methylesterase Activity in Transgenic Poplar Trees with an Introduced Pectin Methylesterase Gene.

Koichi Kakegawa[1], Mitsuru Nishiguchi[2] ([1]Dept. Forest Resources Chemistry, Forestry and Forest Products Res. Inst., [2]Dept. Forest Molecular Genetics and Biotechnology, Forestry and Forest Products Res. Inst.)

PF-061 Analysis of cell wall and genes related to it in Napiergrass

Tomoko Niki[1], Shingo Sakamoto[1], Yasuyo Himuro[2], Yusuke Ueta[2], Madoka Yonekura[2], Satoshi Kondo[2], Kunio Matsui[2], Takehiko Shimada[2], Kaoru Suzuki[1], Nobutaka Mitsuda[1] ([1]Bioprod. Res. Inst., AIST, [2]Agriculture & Biotechnology Business Division, Toyota Motor Corporation)

PF-062 Development of selection system by gene expression in Napier grass

Yasuyo Himuro[1], Tomoko Niki[2], Shingo Sakamoto[2], Nobutaka Mitsuda[2], Yusuke Ueta[1], Madoka Yonekura[1], Satoshi Kondo[1], Kunio Matsui[1], Kaoru Suzuki[2], Takehiko Shimada[1] ([1]Agric. Biotechnol. Bus. Div., Toyota Motor Corp., [2]Bioprod. Res. Inst., AIST)

■ Cell cycle/Cell division

PF-063 Vacuole may be involved in asymmetric cell division of protonemal stem cells, which is directed by a GRAS family transcriptional factor in *Physcomitrella patens*

Renqi Wang[1], Ooi-Kock Teh[1], Alisa Vyacheslavova[1], Mitsuyasu Hasebe[3], Tomomichi Fujita[1,2] ([1]Dept. Biol. Sci, Hokkaido University, [2]Fac. Sci, Hokkaido University, [3]National Institute for Basic Biology)

PF-064 Involvement of RopGTPase signaling in the slime papillae development in *Marchantia polymorpha*

Takuma Hiwatashi, Hidehiro Fukaki, Tetsuro Mimura, Kimitsune Ishizaki (Graduate School of Science, Kobe University)

PF-065 Functional analysis of a novel GRAS-type transcription factor E1M required for proper cell cycle regulation in meristem.

Yuji Nomoto[1], Rieko Noda[1], Toshiya Suzuki[2], Takamasa Suzuki[3], Kenichiro Maeo[1], Masaki Ito[1] ([1]Grad. Sch. Bioagr. Sci., Nagoya Univ., [2]Plant Genet. Lab., Nat. Inst. Genet., [3]Coll. Biosci. Biotech., Chubu Univ.)

■ Vegetative growth

PF-066 Colony formation from mesophyll protoplast of *Perilla frutescens*

Mizuki Nakamura[1], Tomoko Murayama[2] ([1]Natl. Inst. tech., Sasebo Col. Department of Chemical and Biological Engineering, [2]Natl. Inst. tech., Sasebo Col. Department of Chemical and Biological Engineering)

PF-067 Growth of leaf and Usefulness as the experiment material of Ceylon-Benkei

Keiko Goto[1], Akira Nakamura[2] ([1]Pediatrist, [2]Emeritus professor, Univ. of Shizuoka)

PF-068 Genotypic comparative analysis of the early phase of adventitious root formation in *Eucalyptus*

Takato Kameyama[1], Hiroaki Machino[1], Kazuo Watanabe[2,3], Taichi Oguchi[2,3] ([1]College of Biological Sciences, School of Life & Environmental Sciences, University of Tsukuba, [2]Faculty of Life & Environmental Sciences, University of Tsukuba, [3]Tsukuba Plant Innovation Research Center (T-PIRC), University of Tsukuba)

PF-069 Regulation of cytokinin in lateral root growth by root pruning

Jiahang Miao[1], Dongyang Xu[2], Emi Yumoto[3], Takao Yokota[3], Masashi Asahina[3], Masaaki Watahiki[1,4] ([1]Grad. Sch. Life. Sci., Hokkaido Univ., Sapporo, [2]Sch. Biomed. Sci., Inst. Geno., Huaqiao Univ., Amoy, China, [3]Dep. Biosci., Teikyo Univ., Utsunomiya, [4]Div. Biol. Sci., Fac. Sci., Hokkaido Univ., Sapporo)

PF-070 A yeast one-hybrid screening to identify transcription factors that regulate auxin biosynthesis during haustorium initiation in parasitic plants

Takanori Wakatake[1], Satoko Yoshida[2], Ken Shirasu[1,3] ([1]CSRS, RIKEN, [2]Bioscience, NAIST, [3]Grad. Sch. Sci., Univ. Tokyo)

PF-071 ANGUSTIFOLIA Regulates Cell Elongation In Both Gametophyte And Sporophyte Phases In The Moss Physcomitrella patens.

Hiroaki Nagase[1], Yoshikazu Hashida[1], Katsuaki Takechi[2], Tomoyuki Yabe[1], Susumu Takio[2,3], Yoshikatsu Sato[4], Mitsuyasu Hasebe[5], Hirokazu Tsukaya[6], Hiroyoshi Takano[2] ([1]Grad. Sch. Sci. Tech., Univ. Kumamoto, [2]FAST., Univ. Kumamoto, [3]Center Water Cycle, Mar. Environ. Disast. Manage., Univ. Kumamoto, [4]NIBB-ITBM., Univ. Nagoya, [5]NIBB, SOKENDAI, [6]Grad. Sch. Sci., Univ. Tokyo)

PF-072 *PpTAW*s, encoding an ALOG transcription factors, are required for stem cell maintenance in *Physcomitrella patens*

Yuki Hata[1], Yuji Hiwatashi[2], Junko Kyozuka[1], Satoshi Naramoto[1] ([1]Graduate School of Lifescience, Tohoku University, [2]School of Food, Agricultural and Environmental Sciences, Miyagi University)

PF-073 Search for factors which are important for cell-to-cell communication or cell polarity regulation with chemical screening in the moss *Physcomitrella patens*

Chiyo Jinno[1], Naoya Kadofusa[2], Ayato Sato[2], Tomomichi Fujita[3] ([1]Sch. Sci., Univ. Hokkaido, [2]WPI-ITbM, Univ. Nagoya, [3]Grad. Fac. Sci., Univ. Hokkaido)

PF-074 Gene-Expression Profiling of Shoot Regeneration from the Epidermis in Cultured Stem Segments of *Torenia fournieri*.

Hatsune Morinaka[1], Akihito Mamiya[1], Hiroaki Tamaki[1], Takamasa Suzuki[2], Momoko Ikeuchi[3], Akira Iwase[3], Keiko Sugimoto[3], Tetsuya Higashiyama[4], Munetaka Sugiyama[1] ([1]Botanical Gardens, Grad. Sch. Sci., Univ. Tokyo, [2]Dept. Biol. Chem., Coll. Biosci. Biotech., Chubu Univ., [3]CSRS, Riken, [4]ITbM, Nagoya Univ.)

PF-075 The role of plant autophagy in callus formation

Yuki Utsugi[1], Akira Iwase[2], Kohki Yoshimoto[1] ([1]Meiji Univ., Sch. Agric. Dep. Life Sci., [2]RIKEN, CSRS)

PF-076 Novel meristematic organ on the cauline leaf of *Rorippa aquatica*

Shuka Ikematsu, Ami Sasaki, Rumi Amano, Tomoaki Sakamoto, Seisuke Kimura (Kyoto-sangyo Univ.)

PF-077 The relationships between phytohormones and vegetative propagation in *Rorippa aquatica*

Rumi Amano[1], Hokuto Nakayama[2], Risa Momoi[1], Shozuka Gunji[3], Yumiko Takebayashi[4], Tomoaki Sakamoto[1], Hiroyuki Kasahara[4,5], Hitoshi Sakakibara[4,6], Ali Ferjani[3,7], Seisuke Kimura[1] ([1]Facul. Life Sci., Kyoto Sangyo Univ., [2]Dept. of Plant Biology, University of California, Davis, [3]Unit. Grad. Sch. Edu., Univ. Tokyo Gakugei, [4]RIKEN, CSRS, [5]GIR, Tokyo Univ. Agri. Tech., [6]Nagoya Univ., [7]Dept. Biol., Tokyo Gakugei Univ.)

PF-078 ASHH2 Regulates Arabidopsis Callus Formation And Shoot Regeneration Through Photosynthesis/light And Glucose Metabolism Pathways

Ryosuke Makino[1], Kaoru Sugimoto[1], Yuki Katsuyama[1], Hiroya Ishihara[1], Satoshi Kadokura[1], Takamasa Suzuki[2], Takuya Sakamoto[1], Sachihiro Matsunaga[1] ([1]Dept. Applied Bio. Sci., Fac. Sci. Tech., Tokyo Univ. Sci., [2]Chubu Univ., Department of Bio. Sci. Tech., Kasugai)

PF-079 Analysis of novel *eda1* mutant of *Marchantia polymorpha* with ectopic meristem formation

Yuya Mori[1], Kento Otani[1], Shohei Yamaoka[2], Ryuichi Nishihama[2], Takayuki Kohchi[2], Taku Takahashi[1], Hiroyasu Motose[1] ([1]Grad. Sch. Nat. Sci. & Tech., Okayama Univ., [2]Grad. Sch. Biostudies, Kyoto Univ.)

PF-080 Gene expression analyses in the unique meristems of one-leaf plants, *Monophyllaea*

Ayaka Kinoshita[1], Hiroyuki Koga[1], Sujung Kim[2], Nobuyoshi Mochizuki[2], Akira Nagatani[2], Hirokazu Tsukaya[1,3] ([1]Grad. Sch. Sci., Univ. Tokyo, [2]Grad. Sch. Sci., Univ. Kyoto, [3]NINS, ExCELLS)

PF-081 Analysis of REPRESSOR OF SOMATIC EMBRYOGENESIS 1 (RSE1) transcription factor that controls cell totipotency in Arabidopsis

Jun Nakayama[1], Tsubasa Yamagata[2], Hironori Takasaki[2], Miho Ikeda[2], Masaru Ohme-Takagi[2] ([1]Sch. Sci., Univ. Saitama, [2]Grad. Sch. Sci. Eng., Univ. Saitama)

PF-082 Genome wide association mapping for phytic acid content in rice grain

Ishara Perera[1], Ayaka Fukushima[2], Tatsuki Akabane[2], Naoki Hirotsu[1,2] ([1]Grad. Sch. Life Sci. Toyo Univ., [2]Fac. Life Sci. Toyo Univ.)

PF-083 Natural variation of phytic acid contents in rice germplasm and characterization of low and high phytic acid rice

Ayaka Fukushima[1], Ishara Perera[2], Tatsuki Akabane[1], Fumiya Asano[1], Koki Hosoya[1], Naoki Hirotsu[1,2] ([1]Fac. Life Sci. Toyo Univ., [2]Grad. Sch. Life Sci. Toyo Univ.)

PF-084 The Mechanism of action of Arabidopsis thaliana IAP like proteins (AtlLPs) for germination

Masami Nakamura[1], Reona Takano[2], Rio Shimizu[2], Katsumi Higashi[1,2] ([1]Grad. Sci. & Eng. Bio, Teikyo Univ. Sci., [2]Dept. Life&Health Sci., Teikyo Univ. Sci.)

PF-085 Functional analysis of adaptin binding protein on endosperm development in Arabidopsis seeds morphological functions of adaptin binding protein in Arabidopsis

Keito Yamaguchi, Yuki Nakao, Reo Sugiyama, Naoto Kawakami (Department of Life Sciences, Univ. Meiji)

PF-086 Physiological role of a cell-wall protein SRPP in Arabidopsis seed maturation

Natsuki Tanaka-Takada, Hiroshi Uno, Masayoshi Maeshima (Grad. Sch. Bioagr. Sciences, Nagoya University)

PF-087 Natural variation in seed germination response to temperature and phenology in Arabidopsis

Hiroki Maruyama[1], Jun Shigeeda[1], Nanami Morijiri[1], Nozomi Nagatake[1], Misaki Tochinai[1], Ryo Shimizu[1], Masatomo Kobayashi[2], Sei Iuchi[2], Naoto Kawakami[1] ([1]Laboratory of Plant Molecular Physiology, Department of Life Sciences, School of Agriculture, Meiji University, [2]Experimental Plant Division, RIKEN BioResource Research Center)

PF-088 The Mechanism of Submergence-Induced Suppression of Stomatal Development in an Amphibious Aquatic Plant, *Callitriche palustris*.

Yuki Doll[1], Hiroyuki Koga[1], Hirokazu Tsukaya[1,2] ([1]Grad. Sch. Sci., Univ. Tokyo., [2]ExCELLS, NINS.)

PF-089 Senescence of the Arabidopsis leaf disk with the meta-caspase gene knockdown plant

Kensin Sakano, Takuma Suwa, Hiroshi Hayashi (Fac. Biosci. Biotec., Fukui Pref. Univ.)

■ Vegetative growth

PF-090 Phenotypic analysis of the parthenocarpy and bubbling fruit mutant in tomato

Yu Lu, Johan Hunziker, Ryoichi Yano, Hiroshi Ezura, Tohru Ariizumi (Fac. Life and Envir. Sci., Univ. Tsukuba)

PF-091 Gene networks underlying the diversity in persimmon fruit shapes

Haruka Maeda[1], Takashi Akagi[1,2], Noriyuki Onoue[3], Atsushi Kono[3], Ryutaro Tao[1] ([1]Grad. Sch. Agri., Kyoto Univ., [2]JST PRESTO, [3]Inst. of Fruit Tree and Tea Science, NARO)

PF-092 Crosstalk between auxin and cytokinin for the spatio-temporal regulation of floral meristem activities in Arabidopsis

Ze Hong Lee[1], Yoshitaka Tatsumi[1], Nobutoshi Yamaguchi[1,2], Toshiro Ito[1] ([1]NAIST, Biological Sciences, [2]Precursory Research for Embryonic Science and Technology (PRESTO), JST)

PF-093 The longevity of shoot apical meristems in *clavata3* mutants

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

PF-094 Function of H3K4 methylation in Homeotic Development in Plants

Satoyo Oya[1,2], Soichi Inagaki[2], Tetsuji Kakutani[1,2] ([1]Grad. Sch. Sci., UTokyo, [2]National Institute of Genetics)

■ Plant hormones/Signaling molecules

PF-095 Selective role of YUCCA gene family in the root-pruning induced lateral root formation

Yu Chen[1], Masaaki Watahiki[1,2] ([1]Grad. Sch. Life. Sci., Hokkaido Univ., [2]Fac. Sci., Hokkaido Univ.)

PF-096 Growth control of lateral root through auxin biosynthesis and transport

Xiaoli Sun[1], Masaaki Watahiki[1,2] ([1]Grad. Sch. Life. Sci., Hokkaido Univ., [2]Fac. Sci., Hokkaido Univ.)

PF-097 Structure and action of auxin-responsive genetic switches

Keita Tanaka[1], Alejandra Freire-Rios[2], Victoria Mironova[3], Roeland Boer[4], Dolf Weijers[1] ([1]Laboratory of Biochemistry, Wageningen UR, [2]Laboratory of Cell Biology, Wageningen UR, [3]Novosibirsk State University, [4]IRB Barcelona, BIST)

PF-098 A mechanism for communication between epidermal and cortical tissues in *Lotus japonicus* root nodule symbiosis

Takashi Goto[1,2], Meng Liu[1,2], Takashi Soyano[1,2], Masayoshi Kawaguchi[1,2] ([1]National Institute for Basic Biology, [2]The Graduate University for Advanced Studies)

PF-099 Rooting activity of Phenyllactic acid is a consequence of Phenyl acetic acid production

Yuko Maki[1], Hiroshi Soejima[1], Takeo Sato[2], Masaaki Watahiki[2], Junji Yamaguchi[2] ([1]Snow Brand Seed Co., ltd, [2]Fuc. Sci., Hokkaido Univ.)

PF-100 Effects of calcium dynamics on the gene expressions involved in auxin polar transport and recycling of PIN protein

Riko Inoue[1], Naoya Hayashi[1], Mariko Oka[2] ([1]Grad. Sch. Agric., Tottori Univ., [2]Fac. Agric., Tottori Univ.)

PF-101 Auxinic herbicides dicamba, picloram and 2,4-dichlorophenoxyacetic acid control weed by deploymerizing cellular actin

Haruna Sakai[1], Abidur Rahman[2] ([1]Grad. Sch. Agro-Biosci., Univ. Iwate, [2]Dept. Agriculture Agro-Biosci., Univ. Iwate)

PF-102 Characterization of biosynthesis pathway and function of novel cytokinins produced by *Rhodococcus fascians*

Alicia Surjana[1], Mio Takahata[1], Nanae Ueda[2], Mikiko Kojima[2], Hitoshi Sakakibara[1] ([1]Grad. Sch. Bioagri. Sci., Nagoya Univ., [2]RIKEN CSRS)

PF-103 Biosynthesis pathway of ABA mediates the regeneration of root system in *Arabidopsis*

Kou Kyo[1], Masaaki Watahiki[1,2] ([1]Grad. Sch. Life. Sci., Hokkaido Univ., [2]Fac. Sci., Hokkaido Univ.)

PF-104 Downstream pathway of abscisic acid inducible Arabidopsis MAP3Ks, MAP3K17/18.

Daisuke Matsuoka[1], Masayuki Hazama[2], Takashi Nanmori[3], Katsuhiko Sakamoto[1,2] ([1]Biosigal Research Center, Kobe Univ., [2]Grad. Sch. Agric. Sci., Kobe Univ., [3]Faculty of Health and Nutrition, Otemae Univ.)

PF-105 Functional analysis of brassinosteroid in woodland strawberry

Hikari Ishii, Yukihisa Shimada, Ayako Nakamura (Yokohama City University, KIBR)

PF-106 Arabidopsis transcription factors in BRs signaling by Yeast-two hybrid method

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

PF-107 Functional analysis of brassinosteroid signaling factor BSHs

Rina Su[1,2], Ayumi Yamagami[1], Tomoko Miyaqi[1], Masaaki Sakuta[2], Tadao Asami[3], Kazuo Shinozaki[1], Takeshi Nakano[1] ([1]RIKEN CSRS, [2]Ochanomizu Univ, [3]Dept. Appl. Biol. chem. Univ of Tokyo)

PF-108 CEP5 and CEPR1 contribute to zinc homeostasis in *Arabidopsis thaliana*

Hou Xiao[1], Yuji Yamaguchi[1], Mami Kobayashi[1], Izumi Mori[2], Hiroyuki Daimon[3], Yoshikatsu Matsubayashi[4], Kousuke Hanada[5], Yoichiro Fukao[1] ([1]Dept. Bioinfo., Ritsumeikan Univ., [2]IPSR, Okayama Univ., [3]Fac. Agri, Ryukoku Univ., [4]Div. Biol. Sci., Grad. Sch. Sci., Nagoya Univ., [5]Dept. Biosci. Bioinfo., Kyusyu Inst. Tech.)

PF-109 Characterization of defensin-like (DEFL) family proteins on Zinc deficient condition in *Arabidopsis thaliana* root

Tomoya Ohshita[1], Kotomi Yokoyama[1], Mami Kobayashi[1], Izumi Mori[2], Shigeo S. Sugano[3,4], Yoichiro Fukao[1] ([1]Grad. Sch, Life Sci., Ritsumeikan Univ., [2]IPSR, Okayama Univ., [3]R-GIRO, Ritsumeikan Univ., [4]JST, PRESTO.)

PF-110 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., Univ. Kobe, [2]Grad. Sch. Sci., Univ. Osaka, [3]Graduate School of Science and Technology, Nara Institute of Science and Technology)

PF-111 Exhaustive analysis of small proteins and peptides in xylem sap under different nutrient conditions

Satoru Okamoto[1,2], Shungo Kobori[3], Kie Kumaishi[3], Yumiko Makino[4], Takamasa Suzuki[5], Yasunori Ichihashi[2,3] ([1]Niigata Univ., [2]JST PRESTO, [3]RIKEN BRC, [4]NIBB, [5]Chubu Univ.)

PF-112 Screening and analyses of the mode of action of novel putative plant defense activators that activate salicylic acid- or jasmonic acid- pathways

Nobutaka Kitahata[1,2], Yuho Saito[1], Takamitsu Kurusu[3], Masataka Nakano[1], Yasuhiro Ishiga[4], Tadao Asami[5], Kazuyuki Kuchitsu[1,2] ([1]Tokyo Univ. of Sci., [2]IFC, Tokyo Univ. of Sci., [3]Suwa Univ. of Sci, [4]Univ. of Tsukuba, [5]Univ. of Tokyo)

PF-113 Analysis of *urm15* mutant defective in jasmonate-induced trichome formation

Yuki Yoshida[1], Kiyotaka Okada[2], Shinichiro Sawa[1] ([1]Grad. Sch. Sci. Tech., Kumamoto Univ., [2]Dept. Agr., Ryukoku Univ.)

PF-114 Identification of the genes regulated by NtCBP60g and NtSARD1, tobacco CBP60-type transcription factors

Tuyet Nhung Nguyen Thi, Kumiko Takagi, Shinpei Katou (Fac. Agr., Shinshu Univ.)

PF-115 Investigation of the key mechanisms of 4-phenylbutanoic acid for increasing root hairs

Youichi Kondou, Takahiro Sato, Issei Takahashi, Kenta Nakatsuka, Hirokazu Iida (Kanto Gakuin Univ. College Sci. Eng.)

PF-116 Molecular mechanism of plant callus formation accelerated by promoter of plant growth (PPG)

Kotomi Maekawa[1,2], Shota Tanaka[1,2], Shun Takeno[1,2], Ayumi Yamagami[1], Yusuke Kakei[3], Yukihisa Shimada[3], Yoshimitu Kondou[1], Naoshi Douzen[1], Setsuko Shimada[1], Minami Matsui[1], Tetsuo Kushiro[2], Hiroyuki Osada[1], Tadao Asami[4], Kazuo Shinozaki[1], Takeshi Nakano[1] ([1]RIKEN CSRS, [2]Dept. Agri. Chem., Meiji. Univ., [3]Yokohama City Univ., [4]Dept. Appl. Biol. Chem., Univ. of Tokyo)

PF-117 Chemical screening for identifying RGF signaling pathway components

Daiki Tanaka[1], Yoko Hayashi[1], Ayato Sato[2], Yoshikatsu Matsubayashi[1], Hidefumi Shinohara[1] ([1]Grad. Sch. Sci., Nagoya Univ., [2]ITbM, Nagoya Univ.)

PF-118 Analysis of a mutant of Arabidopsis thaliana that shows low-sensitivity to an auxin/brassinosteroid signal transduction inhibitor NJ15

Naiyanate Tanaka-Jaroensanti[1], Sho Miyazaki[1], Kenji Tomita[1], Akito Hosoi[2], Keisuke Tanaka[3], Shinsaku Ito[2], Satoshi Iuchi[4], Takeshi Nakano[5], Masatomo Kobayashi[4], Masatoshi Nakajima[1], Tadao Asami[1] ([1]Dept. Appl. Biol. Chem., Univ. of Tokyo., [2]Dept. Bioscience, Tokyo Univ. Agric., [3]NODAI Genome Research Center, [4]RIKEN BRC, [5]RIKEN CSRS)

■ Photoreceptors/Photoresponses

PF-119 Influence of green-absorbing phytochrome on plant growth

Chise Otsuji, Masafumi Nomura, Hayato Tokumoto, Shizue Yoshihara (College Life, Env., Adv. Sci., Univ. Osaka Prefecture)

PF-120 Light-dependent induction of hypocotyl elongation by the N-terminal 26 peptides of Arabidopsis phyB

Masafumi Nomura, Chise Ootsuji, Hayato Tokumoto, Shizue Yoshihara (College Life, Env., Adv. Sci., Univ. Osaka Prefecture)

PF-121 The effects of lipid transporter flippase mutations on phototropin responses at low temperature.

Tomomi Suzuki[1,2], Masaya Iriguchi[1], Masahiro Nagao[1], Yusuke Aihara[3], Akira Nagatani[1] ([1]Grad. Sch. Sci., Univ. Kyoto, [2]JST PRESTO, [3]Grad. Sch. Sci., Univ. Nagoya)

PF-122 Analysis of cortical microtubule orientation regulated by blue light

Shotaro Hayashi[1], Juri Kikuchi[1], Takahiro Hamada[2], Hayato Tokumoto[1], Shizue Yoshihara[1] ([1]Col. Life Env. Adv. Sci., Osaka pref. univ., [2]Grad. Sch. Arts Sci., Univ. Tokyo)

PF-123 Light-dependent regulation of cortical microtubule dynamics speeds in plants

Juri Kikuchi[1], Shotaro Hayashi[1], Takahiro Hamada[2], Hayato Tokumoto[1], Shizue Yoshihara[1] ([1]Col. Life Env. Adv. Sci., Osaka pref. univ., [2]Grad. Sch. Arts Sci., Univ. Tokyo)

PF-124 Regulation of chloroplast dark positioning in adaxial/abaxial polarity mutants of *Arabidopsis thaliana*

Takahiro Kojima[1], Suguru Kai[1], Yasuhiro Isida[1], Etsuo Yokota[2], Shingo Takagi[1] ([1]Grad. Sch. Sci., Osaka Univ., [2]Grad. Sch. Life Sci., Univ. Hyogo)

PF-125 Analysis of *Arabidopsis* TF-GR line that accumulates anthocyanin by blue and far-red lights.

Takachika Munesada[1,2], Setsuko Shimada[1], Yoko Horii[1], Tomoko Kuriyama[1], Mika Kawashima[1], Taku Takahashi[3], Minami Matsui[1] ([1]RIKEN CSRS, [2]Yokohama City Univ., Graduate school of NanoBioscience, [3]Okayama Univ., Graduate School of Natural Science and Technology)

PF-126 Requirement Of Kinase Activity Of CDKA On The Novel Functions In The Moss, *Physcomitrella patens*

Eggie Febrianto Ginanjar[1], Masaki Ishikawa[2], Masami Sekine[3], Natsumi Inoue[1], Mitsuyasu Hasebe[2], Ooi-Kock Teh[4], Tomomichi Fujita[4] ([1]Grad. Sch. of Life Sci. Hokkaido Univ., [2]Natl. Inst. Basic. Biol., [3]Fac. of Bioresour. Environ. Sci., Ishikawa Pref. Univ., [4]Fac. of Sci. Hokkaido Univ.)

PF-127 Gene expression analysis of microbial rhodopsin without retinal-binding lysine from *Guillardia theta*

Yumeka Yamauchi[1], Masae Konno[1,2], Keiichi Inoue[1,3,4], Hideki Kandori[1,2] ([1]Life Sci. Appl. Chem., Grad. Sch. Eng., NIT, [2]OBTRC, NIT, [3]ISSP, Univ. Tokyo, [4]PRESTO, JST)

PF-128 Blue light dependent carotenoid biosynthesis and its effects on photo-acclimation in Euglena gracilis

Yuri Tanno[1], Shaka Kato[2], Senji Takahashi[1,3], Kintake Sonoike[4], Yutaka Kodama[5], Shinichi Takaichi[6], Tomoko Shinomura[1,3] ([1]Grad. Sch. Sci. Eng., Teikyo Univ., [2]Center Plant Aging Res., Inst. Basic Sci., [3]Dept. Biosci., Teikyo Univ, [4]Fac. Edu. & Int. Arts Sci., Waseda Univ., [5]Center Biosci. Res. & Edu., Utsunomiya Univ., [6]Dept. Mol. Microbiol., Tokyo Univ. Agric.)

■ Flowering/Clock

PF-129 Search for proteins involved in the degradation of KaiC and the effect on rhythm by KaiC turnover.

Keiko Imai[1], Yoko Kitayama[2], Masayuki Fujiwara[3], Kenyo Kaneko[4], Hiroshi Ito[4], Takao Kondo[2] ([1]Laboratory of 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)

PF-130 Functional characterization of two LOV-containing histidine kinases, LHK1 and LHK2, in the green alga Chlamydomonas reinhardtii.

Wataru Tomida[1], Takuya Matsuo[2], Tetsuhiro Otsuka[1], Tomonori Suzuki[3], Setsuyuki Aoki[1] ([1]Graduate School of Informatics, Nagoya University, [2]Center for Gene Research, Nagoya University, [3]School of Informatics and Sciences)

PF-131 Analysis of synchronization patterns and its processes of circadian rhythms in a duckweed plant under partly-illuminated light conditions

Ayana Yoshinaga, Jun Yomo, Shogo Ito, Tokitaka Oyama (Dept. Bot., Grad. Sch. Sci., Kyoto Univ.)

PF-132 Development of genetic tools for overexpressing or disrupting genes in duckweeds, *Lemna minor* and *L. turionifera*

Shogo Ito, Tokitaka Oyama (Dept. Bot., Div. Biol. Sci., Grad. Sch. Sci., Kyoto Univ.)

PF-133 LNK, Transcriptional activator of circadian clock

Aya Matsumura[1], Saori Takao[2], Takamasa Suzuki[3], Toshinori Kinoshita[2], Norihito Nakamichi[2] ([1]Graduate School of Science, Nagoya University, [2]Institute of Transformative Bio-molecules, Nagoya University, [3]College of Biosci, Chubu University)

PF-134 Differential effects of light-to-dark transitions on phase setting in circadian expression among clock-controlled genes in Pharbitis nil

Ryosuke Hayama[1], Tsuyoshi Mizoguchi[1], George Coupland[2] ([1]International Christian University, [2]Max Planck Institute for Plant Breeding Research)

PF-135 Identification and analysis of FT family genes in Sugarcane

Sumire Fujiwara[1], Tomoko Niki[1], Akari Nakasone[2], Yoshimi Nakano[1], Nobutaka Mitsuda[1], Yasuyo Himuro[2], Madoka Yonekura[2], Satoshi Kondo[2], Kunio Matsui[2], Takehiko Shimada[2], Kaoru Suzuki[1] ([1]Bioprod. Res. Inst., AIST, [2]Agric. Biotechnol. Bus. Div., Toyota Motor Corp.)

■ Environmental responses A

PF-136 Analysis of a mutant showing strong positive phototaxis in the green alga *Chlamydomonas reinhardtii*

Yuichiro Hoga[1,4], Keisuke Okajima[2,6], Masako Nakajima[4], Noriko Ueki[3,4], Jiro Nomata[1,4], Katsushi Yamaguchi[5], Shuji Shigenobu[5], Jun Minagawa[2,6], Toru Hisabori[1,4], Ken-ichi Wakabayashi[1,4] ([1]Sch. Life Sci Biotech, Tokyo Tech, [2]NIBB, [3]CUNY, Brooklyn, [4]CLS, Tokyo Tech, [5]NIBB, [6]SOKENDAI)

PF-137 Regulatory mechanisms of the ROS-producing enzymes, Rbohs, by Ca^{2+} binding and phosphorylation and their evolution in plants.

Takafumi Hashimoto[1,2], Takeru Itabashi[1,2], Yoichi Funaki[1], Kenji Hashimoto[3], Kazuyuki Kuchitsu[1,2,3] ([1]Dept. Appl. Biol. Sci., Tokyo Univ. of Sci., [2]Agricultural Interdisciplinary Sci. & Tech. Course, Tokyo Univ. of Sci., [3]Imaging Frontier Center, Tokyo Univ. of Sci.)

PF-138 Comprehensive analysis of ROS-producing enzymes and Ca^{2+}-permeable channels involved in diverse stress-induced signaling in *Marchantia polymorpha*

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

PF-139 Comprehensive reverse genetic analysis of monodehydroascorbate reductases in Arabidopsis

Mio Tanaka, Naoki Matsubara, Takahisa Ogawa, Takahiro Ishikawa, Takanori Maruta (Dept. Life Sci. Biotechnol., Fac. Life Environ. Sci., Shimane Univ.)

PF-140 Dehydroascorbate reduction systems in plants

Hiromi Ueno, Yusuke Terai, Takahisa Ogawa, Takahiro Ishikawa, Takanori Maruta (Dept. Life Sci. Biotechnol., Fac. Life Environ. Sci., Shimane Univ.)

PF-141 Physiological and morphological adjustments of the duckweed fronds shifting the life forms from water-surface float to water-bottom sink.

Hiroyuki Ono[1], Nozomi Arai[1], Yoh Sakuma[2], Masahiro Inouhe[2] ([1]Department of Biology, Faculty of Science, Ehime University, [2]Biology and Environmental Science, Graduate School of Science and Technology, Ehime University)

PF-142 The Analysis of High Gene Expression of Ascorbic Acid Biosynthesis Enzymes in Acerola

Marina Suekawa[1], Akari Inoue[1], Takayuki Kondo[1,2], Yukichi Fujikawa[1], Eriko Uchida[3], Takeshi Koizumi[3], Muneharu Esaka[1] ([1]Grad. Sch. Bio. Sci., Univ. Hiroshima, [2]Grad. Sch. Com. Sci. Sys. Eng., Univ. Kyutech., [3]Nichirei Foods Inc.)

PF-143 The bZIP protein VIP1 binds protein phosphatase 2A B" subunits

Hyuk Sung Yoon[1], Daisuke Tsugama[1,2], Kaien Fujino[1], Tetsuo Takano[2] ([1]Grad. Sch. Agri., Hokkaido Univ., [2]ANESC., Univ. Tokyo)

■ Environmental responses B

PF-144 Diversity of Biofilm formation under various environmental storesses in Synechocystis sp. PCC 6803.

Koichi Takahashi[1], Haruna Ishikawa[2], Ayako Itagaki[2], Junji Uchiyama[1,2,3], Hisataka Ohta[1,2,3] ([1]Grad. Sch. of Sci., Tokyo Univ. of Sci., [2]Grad. Sch. of Math & Sci. Edu., Tokyo Univ. of Sci., [3]Fac. of Sci., Tokyo Univ. of Sci.)

PF-145 Effect of Grafting on Drought Tolerance in *Solanum lycopersicum*

Maria Isabel Fuentes Merlos[1], Makoto Endo[2], Shusei Sato[1], Atsushi Higashitani[1] ([1]Grad. Sch. Life Sci., Tohoku Univ., [2]Takii & Co., LTD.)

PF-146 Characterization of root-specific drought-inducible MYB transcription factors for the enhancement of water use efficiency in Arabidopsis

Zarnab Ahmad[1,2], Khurram Bashir[1], Sultana Rasheed[1], Bushra Rashid[2], Tayyab Husnain[2], Motoaki Seki[1,3,4,5] ([1]Plant Genomic Network Research Team RIKEN CSRS, [2]CEMB, University of the Punjab, Lahore, Pakistan, [3]Kihara Institute for Biological Research, Yokohama City University, [4]CREST, JST, 4-1-8 Honcho, Kawaguchi, Saitama, 332-0012, Japan, [5]Plant Epigenome Regulation Laboratory, CPR, RIKEN)

PF-147 Role of endogenous abscisic acid in osmotic, cold and sugar responses in Marchantia polymorpha

Nobiza Khatun, Kei Saito, Akida Jahan, Daisuke Takezawa (Saitama University)

PF-148 Functional analysis of B3 MAPKKK in ABA and osmotic stress responses of *Arabidopsis thaliana*

Hyeokjin Bak[1], Goro Masuda[1], Shota Kobayashi[1], Shohei Katsuda[1], Masashi Saruhashi[1,2], Daisuke Takezawa[2], Izumi Yotsui[1], Teruaki Taji[1], Yoichi Sakata[1] ([1]Department of Bioscience, Tokyo University of Agriculture, Japan, [2]Graduate School of Science and Engineering Univ. Saitama)

PF-149 Functional analysis of chloroplast-localized NAD kinase in plant abiotic stress responses

Ryosuke Hashimoto[1], Atsuko Miyagi[2], Yuji Sawada[3], Muneo Sato[3], Kohji Yamada[1], Masami Yokota Hirai[3], Maki Kawai-Yamada[3], Keishi Osakabe[1], Yuriko Osakabe[1] ([1]Fac. Biosci. Bioindust., Tokushima Univ., [2]Grad. Sch. Sci. Eng., Saitama Univ., [3]RIKEN CSRS)

PF-150 A novel AP2/ERF transcription factor regulates cuticular wax formation under dehydration response

Kaoru Urano[1], Kyonoshin Maruyama[2], Yoshimi Oshima[3], Toshiki Ishikawa[4], Mayuko Sato[1], Maki Kawai-Yamada[4], Kiminori Toyooka[1], Kazuko Yamaguchi-Shinozaki[5], Kazuo Shinozaki[1] ([1]RIKEN Center for Sustainable Resource Science (CSRS), [2]Japan International Research Center for Agricultural Sciences (JIRCAS), [3]Bioproduction Research Institute, Bioproduction Research Institute, National Institute of Advanced Industrial Science and Technology, [4]Graduate School of Science and Engineering, Saitama University, [5]Graduate School of Agricultural and Life Sciences, The University of Tokyo)

PF-151 Anti-Ageing Activities of a Salt-Inducible Mycosporine-like Amino Acid Isolated from a Halotolerant Cyaobacterium

Tanutcha Patipong[1,2], Supamate Tarasuntisuk[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-152 Chemical screening of compounds enhancing salinity stress tolerance

Kaori Sako[1,5], Chien Van Ha[2], Akihiro Matsui[1], Maho Tanaka[1], Ayato Sato[3], Motoaki Seki[1,4,5] ([1]CSRS, RIKEN, [2]Danforth Center, [3]ITbM, Nagoya Univ., [4]Kihara Inst., Yokohama City Univ., [5]CREST, JST)

PF-153 Initial Responses to Salt Stress in Barley Varieties Showing Different Salt Tolerance

Aya Ohnishi, Maki Katsuhara (Okayama University Institute of Plant Science and Resources)

PF-154 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], Kazuo Shinozaki[1], Takeshi Nakano[1,2] ([1]CSRS, RIKEN, [2]Joint Univ. of National Univ. of Mongolia and RIKEN, [3]Res. Ins. of Ani Husb, [4]Dept. Appl. Biol. Chem., Univ. of Tokyo)

PF-155 Characterization of polyamine biosynthetic enzymes involved in biofilm formation in *Synechocystis* sp. PCC 6803

Kota Kera[1], Tatsuya Nagayama[1], Kei Nanatani[1], Chika Saeki-Yamoto[1], Akira Tominaga[1], Satoshi Souma[1], Nozomi Miura[1], Kota Takeda[1,2], Syunsuke Kayamori[1], Eiji Ando[3], Kyohei Higashi[4], Masashi Kihana[1], Kazuei Igarashi[4], Nobuyuki Uozumi[1] ([1]Grad. Sch. Eng., Tohoku Univ., [2]Grad. Sch. Bio Sci., Tohoku Univ., [3]Clinical and Biotechnology B. U., Shimadzu Corporation, [4]Grad. Sch. Med, Chiba University.)

PF-156 A *Salicornia europaea* gene (*SeNN43*) encoding a short peptide improved plant salt tolerance and induced swelling of root cells.

Hikaru Sakamoto[1], Kenta Kainuma[1], Aoto Kitamura[1], Yoshiki Nakahara[2], Maki Katsuhara[2], Suguru Oguri[1] ([1]Fac. Bioindustry., Tokyo Univ. Agri., [2]IPSR, Okayama Univ.)

PF-157 Expression of soybean plant hemoglobin gene family under environmental stress

Masato Araragi[1], Airi Ikeura[2], Toshiki Uchiumi[1] ([1]Grad. Sch. Sci. Eng., Kagoshima Univ., [2]Fac. Sci., Kagoshima Univ)

PF-158 Natural variation of leaf ionome in Al-accumulater tea plants

Hiroto Yamashita[1,2], Hideyuki Katai[3], Akio Morita[2], Takashi Ikka[2] ([1]Uni. Agr., Gifu Univ., [2]Fac. Agr., Shizuoka Univ., [3]Tea Res. Cent., Shizuoka Pref.)

■ Environmental responses C

PF-159 Tendency of response to low-temperature for evergreen broad-leaves trees in the field

Ayano Sasaki[1], Matsuo Uemura[1,2], Yukio Kawamura[1,2] ([1]Grad. Sch. Sci., Univ. Iwate, [2]Fac. Agri., Univ. Iwate)

PF-160 Molecular analysis of the temperature response in *Saintpaulia* leaves.

Kana Motooka[1], Miwa Ohnishi[2], Kazuko Iida[3], Yoshihiro Suzuki[4], Kimitsune Ishizaki[1], Hidehiro Fukaki[1], Hidetoshi Iida[3], Tetsuro Mimura[1] ([1]Grad. Sch. Sci., Kobe Univ., [2]Eng. Boil. Res. C., Kobe Univ., [3]Dep. Biol. Tokyo Gakugei Univ., [4]Fac. Sci. Kanagawa Univ.)

PF-161 Enhancement of freezing tolerance by the purine metabolite allantoin and its mechanism in Arabidopsis

Yuhi Hashiguchi, Hiroshi Shimada, Atsushi Sakamoto (Grad. Sch. Sci., Hiroshima Univ.)

PF-162 Involvement of Xyloglucan Endotransglucosylase/Hydrolase in Plant Freezing Tolerance

Daisuke Takahashi[1], Arun Sampathkumar[1], Ryusuke Yokoyama[2], Takeshi Kuroha[2], Kazuhiko Nishitani[2], Ellen Zuther[1], Dirk K. Hincha[1] ([1]Max-Planck-Inst. Mol. Plant Physiol., [2]Grad. Sch. Life Sci. Tohoku Univ.)

PF-163 Analysis of low temperature insensitive mutants in Arabidopsis

Arisa Nakamura, Naoko Yamaguti, Narumi Okazaki, Syouhei Fuzimoto, Tsuyoshi Furumoto (Faculty of Agriculture, Ryukoku University)

PF-164 PIF4 is a negative regulator in cold signaling

Renhu Na[1], Hiroki Okuda[1], Rieko Nozawa[1], Tsuyoshi Furumoto[2], Kenji Miura[1] ([1]Grad. Sch. Life and envi. Sci., Univ. Tsukuba, [2]Fac. Agri., Univ. Ryukoku)

PF-165 Heat stress response in growth of domesticated and wild radish species

Yukiko Nakamura[1], Wang Qing-Wei[2], Riichi Oguchi[1], Shin-Ichi Morinaga[3], Kouki Hikosaka[1] ([1]Grad. Sch. Life Sci., Univ. Tohoku, [2]Forest Research and Management Organization, [3]Bio Sci., Univ. Nihon)

PF-166 Analysis of relationship between maintenance of heat stress memory and chromosome higher order structure

Yui Fujiwara[1], Takuya Sakamoto[1], Yuki Sakamoto[2], Nobutoshi Yamaguchi[3], Toshiro Ito[3], Sachihiro Matsunaga[1] ([1]Dept. Applied Bio. Sci., Fac. Sci. Tech., Tokyo Univ. Sci., [2]IFC, RIST, Tokyo univ. sci., [3]Grad. Sch. Bio. Sci., NAIST)

PF-167 *CoHT* is involved in variation of heat tolerance via regulation of pre-mRNA splicing among *A. thaliana* accessions

Kazuho Isono[1], Keisuke Tanaka[2], Takashi Tsuchimatsu[3], Kousuke Hanada[4], 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 Biology, Chiba Univ., [4]Dept. of Bioscience and Bioinformatics, Kyushu Institute of Technology)

PF-168 Functional analysis of rice OsHsfA1 transcription factor in the heat stress response

Moeko Noguchi[1], Naohiko Ohama[1], Daisuke Todaka[1], Satoshi Kidokoro[1], Kazuo Shinozaki[2], Kazuko Yamaguchi-Shinozaki[1] ([1]Grad. Sch. Agr. Life Sci., Univ. Tokyo, [2]Center for Sustainable Resource Science, RIKEN)

PF-169 Functional analysis of a major sigma factor binding protein in a cyanobacterium *Synechococcus elongates* PCC 7942

Hazuki Hasegawa[1], Tatsuhiro Tsurumaki[1], Ikki Kobayashi[2], Sousuke Imamura[1], Kan Tanaka[1] ([1]Tanaka-Imamura lab, Laboratory for Chemistry and Life Science, Tokyo Tech, [2]Graduate School of Engineering, Chiba Univ.)

PF-170 A single seed treatment with hydroxyl radical / reactive oxygen species: a potential solution against emerging threat of multiple abiotic stresses.

Md Mostafa Kamal[1], Carlos Erazo[2], Daisuke Takahashi[3], Karen Tanino[4], Yukio Kawamura[1], Matsuo Uemura[1] ([1]Unit. Grad. Sch. Agr. Sci., Iwate Univ. Japan, [2]Dept. Bio. Sci., Icesi Univ. Colombia, [3]Max Planck Inst. Mol Plant Phys. Germany, [4]Dept. Plant Sci., Univ. Sask. Canada)

PF-171 Biochemical analysis of the Arabidopsis polyphosphatase GppA/Ppx homolog for elucidating physiological function of polyphosphate in plants

Masataka Inazu[1], Doshun Ito[1], Shinji Masuda[2] ([1]Department of Life Science and Technology, Tokyo Institute of Technology, [2]Center for Biological Resources and Informatics, Tokyo Institute of Technology)

PF-172 Polyhydroxybutyrate accumulation in Synechocystis sp. PCC 6803 in starved nutrient-species dependent manners

Kazuho Hirai, Miki Nojo, Yosuke Sato, Mikio Tsuzuki, Norihiro Sato (Tokyo University of Pharmacy and Life Sciences)

PF-173 Is Hormonal Regulation Involved in Sulfur Dioxide-Induced Stomatal Closure?

Lia Ooi, Takakazu Matsuura, Izumi Mori (IPSR, Okayama Univ.)

PF-174 A search for plant hormones involved in a formation of barrier to radial oxygen loss along the adventitious roots in rice (*Oryza sativa*)

Kana Shimizu, Katsuhiro Shiono (Dept. Biosci. & Biotech., Fukui Pref. Univ.)

PF-175 Regulation of OsmiR396 family in developing rice leaves at elevated CO_2

Yonghyun Kim, Mitsue Miyao-Tokutomi (Grad. Sch. Agricul. Sci., Tohoku Univ.)

PF-176 Analysis and experimental verification of a mathematical model for root system architecture in response to nitrogen availability

Hironori Fujita[1,2], Mika Tsugane[1], Masayoshi Kawaguchi[1,2] ([1]Natl. Inst. Basic Biol., [2]SOKENDAI)

■ Plant-organism interaction A

PF-177 Studies on sugar-responsive modulation of pattern-triggered immunity in Arabidopsis plants

Xingwen Li[1], Kotaro Kusaka[2], Shigetaka Yasuda[3], Yusuke Saijo[3], Takeo Sato[1], Junji Yamaguchi[1] ([1]Fac. Sci. and Grad. Sch. Life Sci., Hokkaido Univ., [2]Sch. Sci., Hokkaido Univ., [3]Grad. Sch. Sci. Tech., NAIST)

PF-178 *BSR2* is Involved in Disease Resistance and Seed Size

Satoru Maeda[1], Youichi Kondou[2], Minami Matsui[2], Masaki Mori[1] ([1]NIAS, [2]RIKEN Yokohama)

PF-179 Involvement of *Nicotiana benthamiana* Exportins in Induction of Defense Responses Against *Phytophthora infestans*.

Yuri Mizuno[1], Sayaka Imano[1], Maurizio Camagna[1], Takamasa Suzuki[2], Aiko Tanaka[1], Ikuo Sato[1], Sotaro Chiba[1], Kazuhito Kawakita[1], Daigo Takemoto[1] ([1]Grad. Sch. Bioagr. Sci., Nagoya Univ., [2]Chubu Univ.)

PF-180 Secretory Peptides SAR8.2 are Required for Non-host Resistance of *Nicotiana benthamiana* to Taxonomically Distant *Phytophthora* Species.

Sayaka Imano[1], Yohei Kondou[1], Yusuke Shibata[1], Tatsuhiko Kondo[1], Aiko Tanaka[1], Ikuo Sato[1], Sotaro Chiba[1], Koji Kageyama[2], Kazuhito Kawakita[1], Daigo Takemoto[1] ([1]Grad. Sch. Bioagr. Sci., Nagoya Univ., [2]River Basin Research Center)

PF-181 Disruption of the MAMP-induced MEKK1-MKK1/MKK2-MPK4 Pathway Activates the TNL Immune Receptor SMN1/RPS6

Momoko Takagi[1,2], Kohei Hamano[2], Hiroki Takagi[3,4], Takayuki Morimoto[2], Kazuya Akimitsu[1,2], Ryohei Terauchi[3,5], Ken Shirasu[6], Kazuya Ichimura[1,2] ([1]Unit. Grad. Sch. Agri., Ehime Univ., [2]Facult. and Grad. Sch. Agri., Kagawa Univ., [3]Iwate Biotech. Res. Cent., [4]Dep. Biopro. Sci., Ishikawa Pref. Univ., [5]Sch. Agri. Sci., Kyoto Univ., [6]RIKEN CSRS)

PF-182 DEAD-box RNA helicase SMN2 is a component of RNA exosome and involved in proper expression of *SMN1/RPS6*

Momoko Takagi[1,2], Naoki Iwamoto[1], Yuta Kubo[1], Takayuki Morimoto[1], Hiroki Takagi[3,4], Keisuke Tanaka[5], Teruaki Taji[6], Kazuya Akimitsu[1,2], Ryohei Terauchi[4,7], Ken Shirasu[8], Kazuya Ichimura[1,2] ([1]Grad. Sch. Agri., Kagawa Univ., [2]Unit. Grad. Sch. Agri., Ehime Univ., [3]Facult. Biores. Env. Sci., Ishikawa Pref. Univ., [4]Iwate Biotech. Res. Cent, [5]Nodai Genome Res. Cent. Tokyo Univ. Agri., [6]Facult. Appli. Bio-Sci. Dep. Tokyo Univ. Agri., [7]Grad. Sch. Agri., Kyoto Univ., [8]RIKEN CSRS)

PF-183 Identification of *Arabidopsis* LysM-type receptors involved in immune response induced by polymeric chitin

Keigo Naito[1], Sumire Matukawa[2], Mai Yoshioka[1], Roxana Y. Parada[1], Mayumi Egusa[1], Shinsuke Ifuku[3], Hironori Kaminaka[1] ([1]Fac. Agr., Tottori Univ., [2]Grad Sch. Agr., Tottori Univ., [3]Grad Sch. Eng., Tottori Univ.)

PF-184 Dimerization and activation of Arabidopsis MAPKKKs

Kanako Fujio, Koji Yamaguchi, Misato Kamei, Shoko Yamaguchi, Masahiro Okazaki, Tsutomu Kawasaki (Grad. Sch. Agri., Kinki Univ)

PF-185 Xanthomonas TAL effectors are directly recognized by the NB-LRR immune receptor Xa1.

Maho Izumitani, Shunsuke Ando, Toshikazu Ouchi, Koji Yamaguchi, Satomi Yoshimura, Tsutomu Kawasaki (Dept. Adv. Biosci. Kindai Univ)

PF-186 Molecular mechanism of immune suppression in rice by *Xoo* effctor, XopZ

Gota Yamamoto[1], Mizuki Kimura[1], Satomi Yosimura[1], Koji Yamaguchi[1], Seiji Tsuge[2], Tsutomu Kawasaki[1] ([1]Dept. Adv. Biosci. Kindai Univ, [2]Grad. Sch Agric. Kyoto Pref. Univ)

PF-187 Proteome analysis of leaf epidermis of the Arabidopsis *ein3-1* mutant showing enhanced resistance against *Fusarium graminearum*

Daisuke Tamaoki[1], Daishi Ikeda[2], Ichirou Karahara[1], Takumi Nishiuchi[3] ([1]Grad. Sch. Sci. Eng., Univ. Toyama, [2]Dept. Biol., Fac. Sci., Univ. Toyama, [3]ASRC, Kanazawa Univ.)

PF-188 The role of jasmonates and ethylene in elicitation of secondary metabolism in rice

Kadis Mujiono[1,2], Tomonori Shinya[1], Ivan Galis[1] ([1]IPSR, Okayama Univ., [2]Fac. Agric., Mulawarman Univ., Indonesia)

PF-189 Two rice homologues of tobacco *MYB8* gene do not significantly affect phenolamide levels in herbivory-elicited rice leaves

Hiroki Takahashi[1], Joackin B. Andama[1,2], Yuko Hojo[1], Tomonori Shinya[1], Ivan Galis[1] ([1]IPSR, Okayama Univ., [2]Abi Zonal Agric. Res. Dev. Inst., NARO, Uganda)

PF-190 Development of robust method for measurement of internal leaf volatiles in rice

Tilisa Tohi[1], Kadis Mujiono[1,2], Tomonori Shinya[1], Ivan Galis[1] ([1]IPSR, Okayama Univ., [2]Fac. Agric., Mulawarman Univ., Indonesia)

PF-191 Pilot field experiments for identification of novel herbivory-related QTLs by the use of rice BIL population

Nhan Thanh Ho[1,2], Tomonori Shinya[1], Ivan Galis[1] ([1]IPSR, Okayama Univ., [2]CLRRI, Vietnam)

■ Plant-organism interaction B

PF-192 Symbiotic properties of *Mesorhizobium loti* transconjugant carrying a flavohemoglobin gene on its chromosome
Yusuke Maesako, Mitsutaka Fukudome, Toshiki Uchiumi (Graduate School of Science and Engineering, Kagoshima University, Kagoshima, Japan)

PF-193 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, [2]NARO, NIAS)

PF-194 What kind of responses is caused in leaves through shoot-mediated long-distance control of nodulation?
Nao Okuma[1,2], Takashi Soyano[1,2], Masayoshi Kawaguchi[1,2] ([1]National Institute for Basic Biology Division of Symbiotic Systems, [2]SOKENDAI (The Graduate University for Advanced Studies))

PF-195 Study on Improvement of Cadmium Tolerance of Lotus japonicus by Mycorrhizal Symbiosis
Toshio Sano, Koyuki Hamaoka (Hosei Univ.)

PF-196 Distinct Gene Regulatory Networks For Phosphate Acquisition And Carbon-phosphate Trade-offs In Mycorrhizal Plants
Hayato Maruyama[1], Yusaku Sugimura[1], Ayumi Tezuka[2], Atsushi J. Nagano[2], Tatsuhiro Ezawa[1] ([1]Grad. Sch. Agri., Hokkaido Univ., [2]Fac. Agri., Ryukoku Univ.)

PF-197 Evolutionary analysis of LysM receptor-like kinase in land plants
Ruman Hafijur, Yasuyuki Kawaharada (Iwate University)

PF-198 Interaction of cytoplasmic domains of LysM receptors is an important factor to determine the direction of downstream responses, defense or symbiosis.
Maruya Suzuki[1], Ryota Numazaki[1], Tomomi Nakagawa[2], Naoto Shibuya[1], Hanae Kaku[1] ([1]Dept. Life Sci., Meiji Univ, [2]Symbiotic Systems, NIBB)

PF-199 Effects of nutrient conditions on haustorium formation in parasitic plants
Xiang Zhang, Songkui Cui, Satoko Yoshida (NAIST)

PF-200 Involvement of the intracellular membrane trafficking in the interaction of parasitic plant with host plant
Reika Miyawaki, Koh Aoki (Grad. Sch. Life Environ. Sci., Osaka Pref. Univ.)

■ Epigenetic regulation

PF-201 DNA demethylation specific transposon regulation machanism
Masahiro Fukuda[1], Kosuke Nozawa[2], Atsushi Kato[3], Hidetaka Ito[3] ([1]Sch, Sci, Univ, Hokkaido, [2]Grad, Sch, Life Sci, Univ, Hokkaido, [3]Fac, Sch, Sci, Univ, Hokkaido)

PF-202 Elucidation of chromosome structure and epigenetic mechanism of gene regulation in primitive red alga *Cyanidioschyzon merolae*
Minami Nakayama[1], Takuya Sakamoto[1], Tomoko Matsunaga[1], Miyako Kitagawa[1], Kan Tanaka[2], Tokiaki Takemura[2], Takamasa Suzuki[3], Sachihiro Matsunaga[1] ([1]Dept. Applied Bio. Sci., Fac. Sci. Tech., Tokyo Univ. Sci., [2]Tokyo Tech, Sch of Life Sci & Tech., [3]Chubu Univ., Department of Bio. Chem., Bio. Sci. Tech., Kasugai)

PF-203 MAPK-mediated epigenetic regulation of AGO4 in plant immunity
Shinya Nakagawa[1], Koji Yamaguchi[1], Gota Yamamoto[1], Yuya Tanaka[1], Nobutoshi Yamaguchi[2], Kenichi Tsuda[3], Tsutomu Kawasaki[1] ([1]Grad. Sch. Agri., Univ. Kindai, [2]Grad. Sch. Biol. Sci., NAIST, [3]MPIPZ)

PF-204 Ecotype-specific response to environmental stress
Kosuke Nozawa[1], Atsushi Kato[2], Hidetaka Ito[2] ([1]Grad. Sch. Life Sci., Univ. Hokkaido, [2]Fac. Sci., Univ. Hokkaido)

■ Transcriptional, post-transcriptional/Translational regulations/Protein modification & degradation

PF-205 Functional analysis of TARP1/2 in *Arabidopsis* shoot regeneration
Takahito Takei[1], Misato Ohtani[2,3], Yuichiro Watanabe[1,4], Takahiro Hamada[4,5] ([1]Grad. Sch. Sci., Univ. Tokyo, [2]Grad. Sch. Biol. Sci., NAIST, [3]CSRS, Riken, [4]Grad. Sch. Art and Sci, Univ. Tokyo, [5]JST, PRESTO)

PF-206 Nucleolar stress promotes expression of Arabidopsis ANAC082, a nucleolar stress response mediator, by inducing alternative splicing that removes an inhibitory upstream open reading frame
Shun Sasaki[1], Rin Kudo[1], Daiki Sasahara[1], Hiro Takahashi[2], Shun Watanabe[3], Iwai Ohbayashi[4], Munetaka Sugiyama[5], 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., [4]Haixia Inst. Sci. Tech., Fujian Agriculture and Forestry Univ., [5]Grad. Sch. Sci., Univ. Tokyo)

PF-207 Analysis of the activation mechanism of plant S6 kinase using yeast lacking Ypk3

Misaki Yaguchi[1], Akiko Kozaki[2] ([1]Graduate School of Science, [2]Shizuoka University Faculty of Biology)

PF-208 Transfer RNA wobble uridine modification affects the leaf cell development in plants.

Yumi Nakai[1], Gorou Horiguchi[2], Kosei Iwabuchi[3], Akiko Harada[4], Masato Nakai[5], Ikuko Hara-Nishimura[3], Takato Yano[1] ([1]Dept. of Biochem., Osaka Med. College, [2]Dept. of Life Sci., Rikkyo Univ., [3]Faculty of Sci. and Eng., Konan Univ., [4]Dept. of Biol., Osaka Med. College, [5]Inst. Protein Res., Osaka Univ.)

■ Systems biology

PF-209 Genome analysis for the liverwort Marchantia polymorpha and the diatom Nitzschia sp. NIES4239

Takako Mochizuki[1], Yasuhiro Tanizawa[1], Shohei Yamaoka[2], Ryuichi Nishihama[2], Takehiko Kanazawa[3], Sean A. Montgomery[4], Chang Liu[5], Bence Galik[6], Frederic Berger[4], Takashi Ueda[3], Katsuyuki T. Yamato[7], Takayuki Kohchi[2], Goro Tanifuji[8], Ryoma Kamikawa[9], Yasukazu Nakamura[1] ([1]Genome Informatics Lab., NIG, [2]Grad. Sch. of Biostudies, Kyoto Univ., [3]Div. of Cellular Dynamics, NIBB, [4]Gregor Mendel Institute, [5]ZMBP Tubingen, [6]Vienna Biocenter Bioinformatic Core facility, [7]B.O.S.T., Univ. Kindai, [8]Department of Zoology, National Museum of Nature and Science, [9]Faculty of Integrated Human Studies, Kyoto Univ.)

PF-210 Chronological Analysis of Chromatin Modification Using Barley Grown Under Field Conditions.

Yoko Ikeda[1], Asaka Kanatani[1], Komaki Inoue[2], Daisuke Saisho[1], Jun Ito[3], Hiroyuki Tsuji[3], Keiichi Mochida[1,2,3], Takashi Hirayama[1] ([1]IPSR, Okayama Univ., [2]CSRS, RIKEN, [3]KIBR, Yokohama City Univ.)

■ Others

PF-211 Generation of transgene-free genome-edited tobacco plants using an RNA virus vector

Hirotaka Ariga[1], Hidetaka Kaya[2], Seiichi Toki[2,3,4], Kazuhiro Ishibashi[1] ([1]Plant and Microbe Research Unit, Inst. of Agrobiol. Sci., NARO, [2]Plant Genome Engineering Research Unit, Inst. of Agrobiol. Sci., NARO, [3]Grad. Sch. Nanobio., Yokohama City Univ., [4]Kihara Inst. Biol. Res., Yokohama City Univ.)

PF-212 An efficient DNA- and selectable marker-free genome editing system in rice using zygotes and possible application to other crop species

Erika Toda[1,2], Narumi Koiso[1], Tety Maryenti[1], Arika Takebayashi[2], Masako Ichikawa[3], Takatoshi Kiba[2], Keishi Osakabe[4], Yuriko Osakabe[2,4], Hitoshi Sakakibara[2], Norio Kato[1,2,3], Takashi Okamoto[1,2] ([1]Dept. Biol. Sci., Tokyo Metropolitan Univ., [2]BZP, RIKEN, [3]Plant Innovation Center, Japan Tobacco Inc., [4]Fac. Biosci. Bioindust., Tokushima Univ.)

PF-213 Infrared laser-evoked site-specific DNA recombination in *Marchantia polymorpha*

Masahiro Moriya[1], Ryuichi Nishihama[2], Hiroko Urawa[1] ([1]Gifu Shotoku Gakuen Univ., [2]Grad. Sch. Biostudies, Kyoto Univ.)

PF-214 Development of *in planta*-regeneration system for genome editing in tomato

Nozomu Kira, Risa Ueta, Takahito Watanabe, Eiko Takayanagi, Hideki Sakamoto, Chihiro Abe, Ryosuke Hashimoto, Yuriko Osakabe, Keishi Osakabe (Fac. Biosci. Bioindust., Tokushima Univ.)

PF-215 Development of a genome editing system in spinach via agroinfiltration.

Choyo Tai[1], Shigeo S. Sugano[2,3], Yoichiro Fukao[1] ([1]Grad. Sch. Life Sci., Ritsumeikan Univ., [2]R-GIRO, Ritsumeikan Univ., [3]JST, PRESTO)

PF-216 Development of a precise genome editing with no artificial sequences based on rice gene targeting

Yusuke Matsui[1], Zenpei Shimatani[1,2], Rie Terada[1] ([1]Grad. Sch. Agr., Univ. Meijo, [2]Grad. Sch. Sci., Univ. Kobe)

PF-217 Designing heme protein based oxygen sensing indicators

Jiro Nomata, Toru Hisabori (Tokyo Tech, CLS)

PF-218 AgarTrap-mediated transformation of tobacco callus

Shoko Tsuboyama, Yutaka Kodama (C-bio., Utsunomiya Univ.)

PF-219 Development of a technique to glue organelles

Yuta Fujii[1], Keiji Numata[2], Yutaka Kodama[1,2] ([1]C-Bio, Utsunomiya Univ., [2]CSRS, RIKEN)

PF-220 Development of a Regulatory System of Membrane Potential in Plant Using Microbial Rhodopsin

Masae Konno[1,2], Hideki Kandori[1,2] ([1]Life Sci. Appl. Chem., Grad. Sch. Eng., NIT, [2]OBTRC, NIT)

PF-221 Identification and Expression Analysis of 5'-Upstream Region of *U6* Genes from Caster Bean

Masatake Kanai[1], Kyoko Nagata[1], Kazumi Hikino[1], Mikio Nishimura[2], Kenji Komazawa[3], Shoji Mano[1,4] ([1]Natl. Inst. Basic Biol., Dept. Cell Biol., [2]Konan Univ., Facul. Sci. Engineer., [3]Itoh Oil Chemicals Co., LTD, [4]SOKENDAI, Dept. Basic Biol.)

PF-222 Morphological and Molecular Characterisation of Domatia Development in Myrmecophytes

Emma Sarath[1], Hirokazu Tsukaya[1,2] ([1]Graduate School of Science, The University of Tokyo, [2]ExCELLS, National Institutes of Natural Sciences)

PF-223 Multiple effects of *OsbZIP1* on the growth and yields of rice

Mohammad Saiful Islam, Saki Yoshida, Nobuhiro Tanaka, Yoshihiro Ohmori, Takehiro Kamiya, Toru Fujiwara (Department of Applied Biological Chemistry, Graduate School of Agricultural and Life Sciences, The University of Tokyo)

PF-224 Possibility of chloroplast localization of *Arabidopsis thaliana* tRNA ligase (tRL) in response to strong light stress and subcellular localization of tRL in *Brassica* family

Naoki Okamoto[1], Markus Englert[2], Kazuhito Akama[1] ([1]Grad. Sch. Nat. Sci. and Tech., Univ. Shimane, [2]Dept. Mol. Biophys. and Biochem., Univ. Yale)

PF-225 Evaluation of pre-treatments and durability for metabolomics using GC/MS

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

■ Photosynthesis

PL-001 Interaction Analysis Between the Rieske/cyt*b* Complex and *C*-type Cytochromes in Green Sulfur Bacteria
Hiraku Kishimoto[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.)

PL-002 Metabolic engineering attempts to produce retinal via β-carotene in *Rhodobacter capsulatus*
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-003 Loss of photosynthetic growth ability in the cyanobacterium *Leptolyngbya boryana* during long-term cultivation under heterotrophic conditions in the dark
Shintaro Hida[1], Haruki Yamamoto[1], Kazuma Uesaka[2], Chie Tomatsu[1], Kunio Ihara[2], Yuichi Fujita[1] ([1]Grad. Sch. Bioagricultural. Sci., Nagoya Univ., [2]Center for Gene Research, Nagoya Univ.)

PL-004 Biochemical characterization of the PSI core complexes from a cyanobacterium Anabaena sp. PCC 7120
Tian-Yi Jiang, Ryo Nagao, Jian-Ren Shen (RIIS, Okayama University)

■ Primary metabolism

PL-005 A search for superior alleles leading to better growth of plants in nitrogen deficient environments.
Zhana Chagan, Yasuhito Sakuraba, Shuichi Yanagisawa (Biotech. Res. Center, Univ. Tokyo)

PL-006 Studies on the molecular mechanisms of nitrogen-responsive flowering in Arabidopsis
Takeo Sato[1], Miho Sanagi[1], Shoki Aoyama[1], Shogo Ito[2], Mitsutomo Abe[3], Takato Imaizumi[4], Junji Yamaguchi[1] ([1]Fac. Sci. and Grad. Sch. Life Sci., Hokkaido Univ., [2]Grad. Sch. Sci., Kyoto Univ., [3]Grad. Sch. Sci., The Univ. Tokyo, [4]Dept. Biol., Univ. Washington)

PL-007 Grain amino acid composition in Tos17 insertion lines for asparagine synthetase
Fumi Imagawa, Soichi Kojima (Tohoku University)

PL-008 The role of sphingolipid catabolic pathways in Arabidopsis treated with Fumonisin B1
Daiki Yanagawa, Hiroyuki Imai (Biology Dept., Grad. Sch. Nat. Sci., Konan Univ.)

■ Secondary metabolism

PL-009 Diversity of Chlorophyll Degradation Pathways in Higher Plants
Minh-Khiem Nguyen[1,2], Szu-Hsien Lin[1], Tin-Han Shih[1], Chi-Ming Yang[1] ([1]Biodiversity Research Center, Academia Sinica, [2]Faculty of Applied Sciences, Ton Duc Thang University, Ho Chi Minh City, Vietnam)

■ Biomembrane/Ion and solute transport

PL-010 Characterization of phosphate uptake mechanism in marine diatoms
Kanako Maeda, Nanae Kimura, Yohei Fukuchi, Toshiki Sugiyama, Kensuke Nakajima, Yoshinori Tsuji, Yusuke Matsuda (Kwansei-Gakuin University Department of Bioscience)

PL-011 Electrophysiological Analysis of Rice OsHKT1;1 variants
Shahin Imran[1], Maki Katsuhara[1], Tomoaki Horie[2] ([1]Okayama University, IPSR, [2]Shinshu University, Department of Applied Biology)

PL-012 Identification and functional analysis of transporter genes involved in phosphorus redistribution in rice
Namiki Mitani-Ueno, Naoki Yamaji, Jian Feng Ma (IPSR, Okayama Univ.)

PL-013 ER-localized aquaporin SIP2;1 is involved in avoidance of ER stresses in *Arabidopsis thaliana*
Ryosuke Sato, Masayoshi Maeshima (Laboratory of Cell Dynamics Graduate School of Bioagricultural Sciences Nagoya University)

PL-014 Search for the genes encoding the free fatty acid exporter in *Synechocystis* sp. PCC 6803
Makiko Aichi[1], Tenma Suzuki[1], Kodai Tanaka[1], Tatsuki Mizutani[1], Takanori Hasegawa[1], Shiori Nagano[1], Sumie Keta[1], Tatsuo Omata[2] ([1]Department of Biological Chemistry, Chubu University, [2]Graduate School of Bioagricultural Sciences, Nagoya University)

■ Cell cycle/Cell division

PL-015 Transcriptome analysis reveals dynamic expression changes during tuberous root formation in *Arabidopsis thaliana*

Sakiko Nishioka[1], Takuya Sakamoto[1], Takamasa Suzuki[2], Sachihiro Matsunaga[1] ([1]Dept. Applied Bio. Sci., Fac. Sci. Tech., Tokyo Univ. Sci., [2]Chubu Univ., Department of Bio. Chem., Bio. Sci. Tech., Kasugai)

■ Vegetative growth

PL-016 Mitochondrial pyruvate dehydrogenase contributes to auxin-regulated organ development

Iwai Ohbayashi, Xiaomin Song, Song Sun, Masahiko Furutani (Fujian Agriculture and Forestry University (FAFU))

PL-017 Roles of nucleolar proteins in establishment of leaf polarity and gene body methylation mediated by zinc-finger-like protein AS2 in Arabidopsis thaliana.

Masataka Suzuki[1], Simon Vial-Pradel[1], Hiro Takahashi[2], Munehiro Sugiyama[3], Sumie Keta[1], Shoko Kojima[1], Yasunori Machida[4], Chiyoko Machida[1] ([1]Grad. Sch. Biosci. Biotech., Chubu. Univ, [2]Grad. Medical Science., Kanazawa. Univ, [3]Grad. Sci., Univ. Tokyo, [4]Grad. Sci., Nagoya. Univ)

PL-018 Genetic interaction between AS1, AS2 and MET1, HDA6 in establishment of leaf adaxial-abaxial polarity in Arabidopsis thaliana

Misato Yamakawa[1], Shoko Kamiya[1], Sayuri Ando[1], Yasunori Machida[2], Shoko Kojima[1], Chiyoko Machida[1] ([1]Grad. Sch. Biosci. Biotech, Chubu Univ., [2]Grad. Sch. Sci., Nagoya Univ.)

PL-019 Function of zinc-finger-like protein ASYMMETRIC LEAVES2 (AS2) for formation of AS2 bodies in leaf development of Arabidopsis thaliana

Shoko Kamiya[1], Sayuri Ando[1], Shoko Kojima[1], Yasunori Machida[2], Chiyoko Machida[1] ([1]Grad. Sch. Biotech., Univ. Chubu, [2]Grad. Sch. Sci., Univ. Nagoya)

PL-020 The Role of *Pressed flowerb* in The Morphogenesis of Flattened Leaf Blade

Xiaofeng Yin[1], Hirokazu Tsukaya[1,2] ([1]Grad. Sch. Sci., Univ. Tokyo, [2]NINS, ExCELLS)

PL-021 Regulatory mechanisms restricting *ATML1* activity to the outermost cells

Hiroyuki Iida[1], Ayaka Yoshida[1], Gerd Jürgens[2], Shinobu Takada[1] ([1]Grad. Sch., Osaka Univ, [2]ZMBP, Univ. Tüebingen)

■ Reproductive growth

PL-022 Analysis of ENDOSPERM3, which regulates fertilization-independent endosperm development

Yilin Zhang[1], Hironori Takasaki[2], Miho Ikeda[2], Daisuke Maruyama[3], Nobutaka Mitsuda[4], Tetsu Kinoshita[3], Masaru Ohme-Takagi[2] ([1]DEPT. BIOCHEM. MB., Univ. Saitama, [2]Grad. Sch. Sci. Eng., Univ Saitama, [3]Kihara Institute for Biological Research, Univ. Yokohama City, [4]Bioproduction Research Institute, AIST)

PL-023 Pollen Tube Attraction3 Is there more than one attractant in the upper pistil?

Koyo Iwata, Futo Kubo, Masao Ito (Nagoya-city Koyo High School)

■ Plant hormones/Signaling molecules

PL-024 Functional analysis of rice Gibberellin 3-oxidase 1 in reproductive organ

Kyosuke Kawai[1], Sayaka Takehara[1], Toru Kashio[1], Aya Ito[1], Hiroyasu Furuumi[2], Ken-ichi Nonomura[2], Makoto Matsuoka[1], Miyako Ueguchi-Tanaka[1] ([1]Bioscience and Biotechnology Center, Nagoya University, [2]Experimental Farm, National Institute of Genetics)

PL-025 The role of Gibberellin 3-oxidase 1 in anther development of rice

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

PL-026 Is Ethylene Involved in the Twining of the Morning Glory? - Expression Analysis of ACC Synthase Genes in the Stem -

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

PL-027 Analysis of transcriptional regulation of *ACL5*, which encodes thermospermine synthase in *Arabidopsis thaliana*

Hirotoshi Matsuo, Takashi Okamoto, Hiroyasu Motose, Taku Takahashi (Grad. Sch. Nat. Sci. & Tech., Okayama Univ.)

PL-028 Screening of chemical compounds for activating SnRK2

Shoko Matsuoka[1], Riyo Imamura[2], Yoshiteru Noutoshi[3], Takayoshi Okabe[2], Taishi Umezawa[1] ([1]Grad. Sch. BASE, Tokyo. Univ. Agric. Tech., [2]Drug Discovery Initiative, Tokyo Univ., [3]Dep. Agric., Okayama Univ.)

PL-029 Highly sensitive and high throughput phytohormone quantification platform

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

PL-030 Identification of a two-component system with PAS-histidine kinases in the moss *Physcomitrella patens*

Kota Nakai[5], Kensuke Sato[4], Masashi Ryo[1], Takafumi Yamashino[2], Yuji Nomoto[2], Yuki Goto[1], Mizuho Ichinose[3], Mamoru Sugita[3], Setsuyuki Aoki[4] ([1]Graduate School of Information Science, Nagoya University, [2]Graduate School of Bioagricultural Sciences, Nagoya University, [3]Center for Gene Research, Nagoya University, [4]Graduate School of Informatics, Nagoya University, [5]School of Information and Sciences, Nagoya University)

■ Photoreceptors/Photoresponses

PL-031 The study of phyA-dependent suppression of shade avoidance response to deep shade

Ryota Otsuki, Nobuyoshi Mochizuki, Tomomi Suzuki, Akira Nagatani (Grad. Sch. Sci., Univ. Kyoto)

PL-032 A Possible Involvement of Phytochrome in Blue-Light-Induced Nuclear Photorelocation in *Marchantia polymorpha*

Chihoko Nomoto[1], Yuya Tosaka[1], Kosei Iwabuchi[2], Shingo Takagi[1] ([1]Grad. Sch. Sci., Univ. Osaka, [2]Faculty of Science and Engineering, Univ. Konan)

PL-033 Anatomical analysis of shoot apical meristem tissue at the growth of potato bud under different light and temperature conditions

Yuki Morishige[1], Naoya Mori[2], Hiroyuki Watanabe[1] ([1]Agri., Univ. Tamagawa, [2]Res. Inst., Univ. Tamagawa)

PL-034 Seed germination of transgenic *Arabidopsis* expressing *Adiantum* 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.)

PL-035 Exploring Unidentified Physiological Function of Phytochrome3 in Fern *Adiantum capillus-veneris*

Izumi Kimura, Takeshi Kanegae (Dept. of Biol. Sci., Grad. Sch. of Sci. and Eng., Tokyo Metropolitan Univ.)

■ Flowering/Clock

PL-036 NanoLuc as a highly sensitive reporter in plant cell

Ken-ichiro Taoka[1], Zenpei Shimatani[2], Mana Ogawa[3], Hiromi Saitoh[3], Yoichi Ikeda[3], Hiroko Akashi[1], Koji Yamaguchi[4], Rie Terada[3], Tsutomu Kawasaki[4], Hiroyuki Tsuji[1] ([1]KIBR, Yokohama City Univ., [2]Grad. Sch. Sci., Tech. and Innov., Kobe Univ., [3]Grad. Sch. Agri., Meijo Univ., [4]Grad. Sch. Agri., Kindai Univ.)

PL-037 A dual-color bioluminescence reporter system to simultaneously monitor expression levels of two genes in plant cells

Emiri Watanabe, Shogo Ito, Tokitaka Oyama (Dept. Bot., Grad. Sch. Sci., Kyoto Univ.)

■ Environmental responses A

PL-038 Polar auxin transport is essential to maintain growth and development of etiolated pea seedlings on 1 *g* conditions: Relevance to the International Space Station experiment

Kensuke Miyamoto[1,2], Akinori Inui[2], Eiji Uheda[2], Mariko Oka[3], Motoshi Kamada[4], Chiaki Yamazaki[5], Toru Shimazu[5], Haruo Kasahara[6], Hiromi Sano[6], Tomomi Suzuki[7], Akira Higashibata[7] ([1]Fac. Liberal Arts & Sciences, Osaka Prefecture Univ., [2]Grad. School. Sci., Osaka Prefecture Univ., [3]Fac. Agriculture, Tottori Univ., [4]Advanced Engineering Services Co., Ltd., [5]Japan Space Forum, [6]Japan Manned Space System Corporation, [7]Japan Aerospace Exploration Agency)

PL-039 Screening of a mutant with defect in the light/dark response of the expression of VTC2 gene encoding a rate-limiting enzyme for ascorbate biosynthesis in plants

Kazuya Yoshimura[1], Riki Ishiguro[1], Takahiro Ishikawa[2] ([1]Dept. Food Nutr. Sci., Coll. Biosci. Biotech., Chubu Univ., [2]Dept. Life Sci. Biotechnol., Fac. Life Environ. Sci., Shimane Univ.)

PL-040 Molecular mechanism of oxidative damage to translation factor EF-G in the cyanobacterium *Synechococcus elongatus* PCC 7942

Kazushi Kuwano, Kensuke Takagi, Shin Koreeda, Yoshitaka Nishiyama (graduate school of science and engineering, saitama university)

PL-041 Characterization of mutants with altered root growth response to mechanical stress in *Arabidopsis thaliana*

Takashi Okamoto[1], Shogo Takatani[1], Hidetoshi Iida[2], Hiroyasu Motose[1], Taku Takahashi[1] ([1]Grad. Sch. Sci. Tech, Okayama Univ., [2]Dept. Biol., Tokyo Gakugei Univ.)

■ Environmental responses B

PL-042 Low Magnesium Tolerance 1 physically associates with ER-localized Mg transporters and plays an important role in extending Mg stress adaptation range in *Arabidopsis thaliana*

Zhihang Feng, Takehiro Kamiya, Toru Fujiwara (Department of Applied Biological Chemistry, the University of Tokyo)

PL-043 Genome-wide association study to identify genes regulating growth rate of rice seedlings under low nitrogen conditions

Bian Bian, Kenji Yano, Takehiro Kamiya, Toru Fujiwara (The University of Tokyo, Graduate School of Agricultural and Life Sciences)

PL-044 Golgi-localized OsFPN1 is required for cobalt and nickel homeostasis in rice

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

PL-045 Transcriptional Biomarker to evaluate Al rhizotoxicity in soybean -An Approach for managing Pulse crop production in Acid Soil Region

Raj Kishan Agrahari[1], Yuriko Kobayashi[2], Hiroyuki Koyama[3] ([1]The United Graduate School of Agricultural Science, Gifu university, [2]Faculty of Applied Biological Sciences, [3]Faculty of Applied Biological Sciences)

■ Environmental responses C

PL-046 Light-regulation in Pediastrum duplex: Physiological outcomes and Gene expression analysis

Harshavardhini Sridharan[1], Shota Kato[2,3], Tasuku Simada[2], Tomohiro Suzuki[4], Tomoko Shinomura[2] ([1]Grad. Sch. Sci., Teikyo Univ, [2]BioSci., Sch. Sci. Eng., Teikyo Univ, [3]Center Plant Aging Res., Inst. Basic Sci., [4]C-Bio., Utsunomiya Univ)

PL-047 Role of Sll1558 in environmental stress tolerance in cyanobacterium Synechocystis sp. PCC6803.

Junji Uchiyama[1,2,3], Yuuta Ichikawa[2], Mamoru Sambe[2], Ayumi Matsuhashi[2], Yutaro Ito[4], 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., [4]Dept. of Bio. Sci. and Tech., Grad. Sch. of Ind. Sci. and Tech., Tokyo univ. of Sci.)

PL-048 Connection between low sulfur response and repression of glucosinolate synthesis: Involvement of SLIM1 transcription factor in the induction of SDI1 expression under low sulfur condition.

Ryota Kawaguchi[1], Akiko Maruyama-Nakashita[2] ([1]Sch. Agr., Kyushu Univ., [2]Fac. Agr., Kyushu Univ.)

PL-049 Phosphate starvation affects the subcellular localization of phosphatidic acid phosphohydrolases in Arabidopsis

Sota Makimura[1], Yushi Yoshitake[1], Hiroyuki Ohta[1,2], Mie Shimojima[1] ([1]School of Life Science and Technology, Tokyo Institute of Technology, [2]OPERA, JST)

PL-050 Identification of a Transcription Factor, SPL7, Involved in the Enhanced Expression of *SULTR2;1* in *Arabidopsis* Roots

Tsukasa Ushiwatari[1], Nobutaka Mitsuda[2], Toshiharu Shikanai[3], Akiko Maruyama-Nakashita[1] ([1]Fac. Agr., Kyushu Univ., [2]BPRI, AIST, [3]Grad. Sch. Sci., Kyoto Univ.)

PL-051 Isolation of new chemical compounds as helpers for better phytoremediation and plant nutrition efficiency

Ju Yeon Moon, Takae Miyazaki, Eri Adams, Ryoung Shin (RIKEN CSRS Environmental Response Research Unit, 1-7-22 Suehirocho, Tsurumi-ku, Yokohama, Kanagawa, Japan)

PL-052 Mutation of Specific Paralogs of Arabidopsis Ribosomal Protein Alters Response to Nutrient Stresses

Hirofumi Fukuda[1], Naoyuki Sotta[1], Mayuki Tanaka[1], Seidai Takamatsu[2], Yukako Chiba[2,3], Kyoko Miwa[4], Satoshi Naito[2,5], Toru Fujiwara[1] ([1]Agri., Univ. Tokyo, [2]Grad. Sch. Life Sci., Hokkaido Univ., [3]Grad. Sch. Sci., Hokkaido Univ., [4]Grad. Sch. Envr. Sci, Hokkaido Univ., [5]Grad. Sch. Agri., Univ. Tokyo)

PL-053 Statistical modeling for functional data and its application to crop yield data

Hidetoshi Matsui[1,2], Keiichi Mochida[3,4,5,6] ([1]Shiga Univ., [2]JST PRESTO, [3]RIKEN, [4]Okayama Univ., [5]Yokohama City Univ., [6]JST CREST)

■ Plant-organism interaction A

PL-054 The Possibility Of Plant Immunity Induction By Applying Exogenous Polyols.

Ken Sakuma[1], Toshio Sano[2] ([1]Grad. Sch. Sci and Tech., Hosei univ., [2]Applied Plant Sci., Dept. Lifescience, Hosei univ.)

■ Plant-organism interaction B

PL-055 Genetic analysis of phosphate starvation responses (PSR) in *Arabidopsis thaliana*

Hong Ye[1], Kei Hiruma[1,2], Pathompitaknukul Kuldanai[1], Shion Yamaguchi[1], Yusuke Saijo[1] ([1]Grad. Sch. Biol. Sci., NAIST, [2]JST, Presto)

■ Epigenetic regulation

PL-056 Visualization Of Histone Modification Using Live-imaging Tool In Plant

Megumi Matsuoka[1], Takuya Sakamoto[1], Mio Shibuta[1], Noriyoshi Yagi[1], Hiroshi Kimura[2], Sachihiro Matsunaga[1] ([1]Dept. Applied Bio. Sci., Fac. Sci. Tech., Tokyo Univ. Sci., [2]Tokyo Tech, Institute of Innovative Research)

■ Others

PL-057 Development of powerful CRISPR/Cas9 and TALEN vectors using the translational enhancer dMac3

Hiroaki Shimada[1], Hiroaki Kusano[2], Mariko Ohnuma[1], Takahiro Asahi[1], Daichi Honma[1], Takaaki Horie[1], Hitomi Onodera[1], Kenji Asano[3], Takahiro Noda[3], Hiromi Mutsuro-Aoki[1], Hiroshi Teramura[1] ([1]Dept Biol Sci & Technol, Tokyo University of Science, [2]RISH, Kyoto Univ., [3]Hokkaido Agri Res Center, NARO)

PL-058 Non-destructive imaging of element dynamics in plant using radioisotope

Nobuo Suzui[1], Naoki Kawachi[1], Jun Furukawa[2], Keitaro Tanoi[3,4] ([1]TARRI, QST, [2]CRiED, Univ. Tsukuba, [3]Grad. Sch. Agri. Life Sci., Univ. Tokyo, [4]JST PRESTO)

PL-059 Cas9-RNP-induced genome editing in the industrial green alga *Coccomyxa* sp. strain KJ

Yuya Yoshimitsu[1], Jun Abe[2], Jumpei Hayakawa[2], Yoko Ide[1], Shigeaki Harayama[2] ([1]Advanced Research and Innovation Center, DENSO CORPORATION, [2]Research and Development Initiative, Chuo University)

PL-060 Analysis of sequence changes on genome edited hexaploid *Chrysanthemum morifolium* using high-throughput sequencing

Mitsuko Kishi-Kaboshi[1,2], Hisataka Numa[3], Ryutaro Aida[1], Katsutomo Sasaki[1] ([1]Institute of Vegetable and Floriculture Science, NARO, [2]JSPS research fellowship (RPD), [3]The Advanced Analysis Center, NARO)

PL-061 AI- and automation-assisted high-throughput yeast one-/two-hybrid screening system for transcription factor isolation

Nobutaka Mitsuda[1], Fumie Tobe[1], Miyuki Nakata[1], Masahiro Takahara[2], Yuko Takiguchi[1], Yoko Horii[3], Toru Ishizuka[1], Hiroaki Ichikawa[4], Minami Matsui[3], Masaru Ohme-Takagi[1,5] ([1]Bioproduction RI, AIST, [2]Acacia Horticulture, [3]CSRS, RIKEN, [4]Inst. Agrobiol. Sci., NARO, [5]Grad. School Sci. Eng., Saitama Univ.)

PL-062 Current status of the resources related to *Lotus japonicus*

Shusei Sato[1], Shogo Nitanda[1], Syohei Kusakabe[1], Stig Andersen[2], Vikas Gupta[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. Agr., Univ. of Miyazaki)

PL-063 Collection and Maintenance of Plant Cell Lines at RIKEN BRC in 2019

Toshihiro Kobayashi, Satoshi Iuchi, Masatomo Kobayashi (RIKEN BRC)

PL-064 Collective search function of Arabidopsis thaliana bioresource database at RIKEN BRC

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

PL-065 Research ethics education by active learning in a postgraduate course: current situation and issues in the second year of implementation

Emiko Harada[1], Misako Urabe[1], Takayoshi Kusumoto[1,2], Ko-ichi Takakura[1], Sayoko Hata[1], Takayoshi Nishida[1], Masahiro Maruo[1] ([1]The University of Shiga Prefecture, [2]Kusumoto Patents & Trademarks)