

The 62nd Annual Meeting of the Japanese Society of Plant Physiologists

<https://jspp.org/annualmeeting/62/>



Date: March 14 (Sun) through March 16 (Tue), 2021

Venue & Banquet: Online

You can attend the meeting by logging in the ORSAM portal site (WEB abstract)

(Japanese: <https://jspp.org/annualmeeting/62/>)

(English: https://jspp.org/annualmeeting/62/e_greeting.php)

The ORSAM portal site will be closed on March 31, 2021.

Organizing Committee

Chairperson: Tsuyoshi Nakagawa

Vice-Chairperson: Takahiro Ishikawa

General Affairs: Takushi Hachiya

Accounting: Takahisa Ogawa

Banquet: Takanori Maruta

Program Committee: Kohji Nishimura (Chairperson)

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Takanori Maruta / Ayako Yokoi /

Mixer: Takushi Hachiya

Presentations by High School Students: Kazuhito Akama

Conference Secretaria

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1. General Information

1-1. Important Notice

1) Online meeting

Because of the spread of COVID-19, the 62nd Annual Meeting in Matsue will be held online from March 14th to 16th. Registered participants can attend the meeting, including general presentations, symposia, ceremonies, and banquet via the ORSAM portal site using your ID and password for logging in. Please see the latest information on the meeting website (Japanese: <https://jspp.org/annualmeeting/62/>, English: https://jspp.org/annualmeeting/62/e_greeting.php).

2) Program and Abstract Book

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

3) Registration of attendance

- Registration is already closed. Because of management restrictions of the online annual meeting, you cannot register for participation on the meeting days.
- The password for logging into the ORSAM portal site will be sent to registered participants.

4) Poster presentations [see also section “1-2. 1) General Presentations 3. Poster presentations”]

- Poster viewings and discussions will be carried out using the ORSAM portal site and its Comments section during the annual meeting (from 9:00 on Day 1 to 16:00 on Day 3).
- Poster discussions using Zoom meeting (only for presenters who wish it) are also scheduled for 13:00–14:30 on Day 3 (poster numbers beginning with PF) and 14:30–16:00 on Day 3 (poster numbers beginning with PL). It should be noted that it is NOT necessary for a presenter to create and register a Zoom ID. The organizing committee will arrange the Zoom meeting for poster discussion.

About the Meeting Logo

The logo of the 62nd Annual Meeting of JSPP at Matsue, “The Blooming Peonies in Matsue”, was designed by Yui Oshima-Yamada, combining the symbol of Matsue, “Matsue Castle”, and the flower of Shimane Prefecture, the “Peony”, into a motif. A design of many peonies, from buds to large flowers, in Matsue Castle contains a wish for the further development of research.

1-2. 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 presentation

The type of presentation (poster or oral presentation) is decided by the program committee to meet the requests at the time of application, but if you select “No preference” at the time of application, please make sure to confirm the type of presentation through the program before proceeding with your preparations.

3. Poster presentations

Posters should be in English. If the presentation language is Japanese, please include the Japanese version of the title. A poster file should be prepared in the A format (width : height = 1 : $\sqrt{2}$) or a series of A4 (29.7 cm in width × 21.0 cm in height) sheets (viewers can see a poster by scrolling down the pages) and converted to a PDF whose file size must be smaller than 3 MB (less than 2 MB (strongly recommended) will work better in the system). Please upload the PDF to the registration system between February 24 and March 3. The details of how to upload a poster will be announced later. Note that participants can view but not download the PDF.

<Poster viewing and discussion>

- Poster viewings are basically carried out in the ORSAM portal site from 9:00 on Day 1 to 16:00 on Day 3. Questions and answers will be held in the Comments section of the ORSAM portal site.

<Poster discussion time using Zoom meeting (only for presenters who wish it)>

- Presenters can also have a discussion using Zoom meeting on the afternoon of Day 3. If you wish to have a Zoom meeting, please place a check mark for Zoom meeting when you upload the PDF (poster file). The poster discussion times are as follows:

For presentations (poster numbers beginning with PF): 13:00–14:30 on Day 3.

For presentations (poster numbers beginning with PL): 14:30–16:00 on Day 3.

- At the appointed time, enter your breakout room in the Zoom meeting from “Room P” in the ORSAM portal site, and discuss your poster.

4. Oral presentations

- Slides used in oral presentations should be in English. Prepare a brief summary slide in English as the last slide.
- Each presentation is allotted a 15-min slot, a talk for 12 min and discussion for 2 min 30 s, followed by a 30 s interval before the next speaker. To keep the session on schedule, please strictly follow the time limits.
- Each session will be presented using the Zoom webinar. The presenter will participate in the webinar as a panelist.

Please enter the webinar via the special link for a panelist, which will be notified from the Organizing Committee in advance. When your turn comes, please show your slides by sharing the screen and turn on the microphone and video in the Zoom webinar.

- Your connection to the Zoom webinar will be tested in advance. We will contact you with the details such as the date, time and method.
- Questions and answers will be given via the Q&A function or verbally (by raising hands) in the Zoom webinar. When using the Q&A function, a chairperson will read aloud a question in the Q&A in place of the questioner and then prompt the presenter to answer the question. Please answer it verbally. In the case of verbal questions and answers (by raising hands), the questioner will ask the presenter a question verbally only if a chairperson allows it. Please answer it verbally.
- After a session is finished, the contents of the Q&A will be published in the ORSAM portal site.
- The webinar for one session will be closed 10 minutes after the session is finished. Presenters and participants can discuss topics of interest in the breakroom (SpatialChat) corresponding to each session.
- You can have questions and answers via the Comments section corresponding to each oral presentation.

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.

1-3. Notes for Chairpersons

- Please select a set of oral presentations for which a chairperson will be responsible by consulting with the other chairpersons of the assigned session beforehand.
- The chairperson will participate in the Zoom webinar as a panelist. Please enter the webinar via the special link for a panelist, which will be provided by the Organizing Committee in advance. After entering the webinar, you (as a panelist) will be converted to a cohost by the host (person in charge in the Organizing Committee).
- Questions and answers will be given via the Q&A function or verbally (by raising hands) in the Zoom webinar. Please read aloud a question in Q&A in place of the questioner, and then prompt the presenter to answer the question. In the case of verbal questions and answers (by raising hands), please allow the questioner to ask a question verbally.
- After a session is finished, the contents of the Q&A will be published in the ORSAM portal site.
- The webinar for a session will be closed 10 minutes after the session is finished. Presenters and participants can discuss topics of interest in the breakroom corresponding to each session.

1-4. Notes for Participants (Viewers)

1) Participation in the meeting and discussion with Comments section in the ORSAM portal site

- The registered participants can attend the meeting including general presentations, symposia, ceremonies, and banquet by logging into the ORSAM portal site using your ID and password for logging in.
- The Comments sections corresponding to all the presentations (oral presentations, poster presentations, symposia) are available in the ORSAM portal site. You can discuss contents of presentations during the annual meeting, and receive a notification when an answer to your question is made.

2) Participation in oral presentations

- Oral presentations will be held using the Zoom webinar. You can attend a webinar of interest by selecting a “Zoom link” corresponding to each session/presentation. A microphone and video is not available unless a chairperson allows its use.
- A Zoom webinar will be open 30 minutes prior to the start of each session.
- Questions and answers will be given by Q&A or verbally (by raising hands) in the Zoom webinar. When using the Q&A function, please post your question(s) to the Q&A section in the Zoom webinar (Note that the registration number of oral presentation should be included in the question for correspondence). A chairperson will read aloud a question in Q&A in place of a questioner, and then a presenter will answer the question. Questions and answers verbally (by raising hands) is available for questioners, only if a chairperson allows it. When possible, the questioner can ask the presenter a question verbally after the microphone is turned on.
- After a session is finished, the contents of the Q&A will be published in the ORSAM portal site.
- You can have questions and answers via the Comments section in the ORSAM portal corresponding to each oral presentation.
- The webinar for one session will be closed 10 minutes after the session is finished. Presenters and participants can discuss topics of interest in the rest room (SpatialChat) corresponding to each session.

3) Participation in poster presentations

- Poster viewings are basically carried out in the ORSAM portal site from 9:00 on Day 1 to 16:00 on Day 3. Questions and answers will be held in the Comments section in the ORSAM portal site.
- Poster discussions using Zoom meeting (only for presenters who wish it) are also scheduled at 13:00–14:30 on Day 3 (poster numbers beginning with PF) and at 14:30–16:00 on Day 3 (poster numbers beginning with PL). At the appointed time, enter your breakout room in the Zoom meeting from “Room P” in the ORSAM Portal site, and discuss your poster.

1-5. Patents

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

1-6. Information security

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

1-7. Contact Information

- Contact to the Conference Secretariat

Send any questions to the Annual Meeting Committee by e-mail to jspp2021@nacos.com.

In case of emergency, call the number shown in the meeting website.

1-8. Mixer

Date and time: Day 1, March 14 (Sun) 18:30–20:30

Venue: ORSAM portal site (SpatialChat)

2. Contents of the Annual Meeting

2-1. Banquet

Date and time: Day 2, March 15 (Mon) 18:30–20:30

Venue: ORSAM portal site (SpatialChat)

2-2. JSPP Awards Ceremony and Award Lectures

Date and time: Day 2, March 15 (Mon) 16:30–18:15

Venue: Room W (Zoom webinar)

Please see the program p.13 for details.

2-3. Symposia

Twelve symposia will be held using the Zoom webinar platform. For the contents and purpose of each symposium, please see the outline on the meeting website (https://jspp.org/annualmeeting/62/e_greeting.php) and the program p.14 for details.

Date and time: Day 1, March 14 (Sun) 9:30–12:30

- ◆ S01 Toward understanding emergence of order in Plant-Microbe Holobiont (Room X)
- ◆ S02 The universality and diversity of stem cell regulation revealed from the study of basal plants (Room Y)

Date and time: Day 1, March 14 (Sun) 14:00–17:10

- ◆ S03 Frontiers of Plant Genome Editing to shape the future with new technologies (Room X)
- ◆ S04 Re-optimization of Energy Transduction in Photosynthesis – Structure, Function and System (Room Y)
- ◆ S05 Mineral element transport systems in plants: transporters, regulation and utilization (Room Z)

Date and time: Day 2, March 15 (Mon) 9:00–12:00

- ◆ S06 Frontiers in plant redox biology: Redox regulation, oxidative stress and signaling (Room X)
- ◆ S07 A new perspective for integrated Bio-metal Science (Room Y)
- ◆ S08 Past and future of plant RNA research answering fundamental questions (Room Z)

Date and time: Day 2, March 15 (Mon) 13:00–16:00

- ◆ S09 Molecular elucidation of plant environmental adaptation toward engineering responses of field-grown plants (Room X)
- ◆ S10 Borderless Era of Plant Chemical Research – New Trends in Plant Chemical Biology and Plant Metabolite Chemistry (Room Y)

Date and time: Day 3, March 16 (Tue) 9:00–12:00

- ◆ S11 Elongate, bend, and expand: Deciphering plant growth strategy from its mechanics (Room X)
- ◆ S12 Molecular Mechanisms of Transcriptional Repression in Plants (Room Y)

2-4. The 17th Database Workshop

Date and time: Day 1, March 14 (Sun) 9:30–12:30

Venue: Room Z (Zoom webinar)

Organizers: Kentaro Yano (Meiji Univ.)

Please see the outline on the meeting website (https://jspp.org/annualmeeting/62/e_greeting.php) and the program p.26 for details.

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

A special program, “Research Presentations by High School Students” will be held during the Annual Meeting. It is expected that many high school students will participate in the special program and carry out active discussion. Awards will be given to high school students on a competitive basis. Also, this year, an open lecture will be held to encourage interest in plant science and life science among high school students who will play active roles in the next generation. The abstracts of poster presentations by high school students will be distributed as a separate supplement (PDF).

Date and time: Day 3, March 16 (Tue) 13:00–18:00

Venue: Room Q (Zoom webinar / Zoom meeting)

Sponsor: Shimane Prefectural Board of Education

- 13:00–14:30 The 1st half core time of poster presentations
(poster presentation, question-and-answer session)
- 14:30–16:00 The 2nd half core time of poster presentations
(poster presentation, question-and-answer session)
- 16:00–17:30 Open lecture “Flowers Will Bloom–Plant World Coloring a High School Textbook of the Biology–”
Program
- 16:00–16:10 Opening Remark, Dr. Kazuhito Akama (Shimane Univ.)
- 16:10–16:35 Developmental and Genetical Bases of Pattern Formation in Flower, Dr. Koji Goto
(RIBS Okayama)
- 16:35–17:00 Inside the Flower: Cell World Enabling Double Fertilization, Dr. Tetsuya Higashiyama
(ITbM, Nagoya Univ. / Grad. Sch. Sci. The Univ. of Tokyo)
- 17:00–17:25 Development of Blue Flowers by Genetic Engineering, Dr. Yoshikazu Tanaka
(Suntory Global Innovation Center)
- 17:25–17:30 Closing Remark, Dr. Tsuyoshi Nakagawa (Shimane Univ.)
Chairperson: Dr. Kazuhito Akama (Shimane Univ.)
- 17:30–18:00 Award ceremony

2-6. Luncheon/Evening Seminars

Registration is not required. Please see the outline on the meeting website (https://jspp.org/annualmeeting/62/e_greeting.php) and the program p.27 for details.

◆ Luncheon Seminar on Gender Equality “Why are there so few female researchers in Japan? Considerations based on a large survey for 18,000 researchers.”

Date and time: Day 1, March 14 (Sun) 12:45–13:45

Venue: Room W (Zoom webinar)

Organizer: JSPP Gender Equality Committee

◆ PCP Evening Seminar “Plant & Cell Physiology: publishing in the time of Covid-19”

Date and time: Day 1, March 14 (Sun) 17:15–18:15

Venue: Room W (Zoom webinar)

Organizer: PCP Editors Committee, Sponsor: Oxford University Press

◆ Illumina K.K. Luncheon Seminar

Date and time: Day 2, March 15 (Mon) 12:00–12:50

Venue: Room W (Zoom webinar)

Organizer: Illumina K.K.

◆ OLYMPUS CORPORATION Luncheon Seminar

Date and time: Day 3, March 16 (Tue) 12:00–12:50

Venue: Room W (Zoom webinar)

Organizer: OLYMPUS CORPORATION

2-7. Satellite Meetings

Please see the outline on the meeting website (https://jspp.org/annualmeeting/62/e_greeting.php) and the program p.31 for details.

◆ The 23th Plant Organelle Workshop

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

Venue: Room J (Zoom webinar)

Organizers: Dr. Yoshiki Nishimura (Kyoto University)

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

This workshop is free to all participants, but they are encouraged to register on our website. People who wish to join should register at our website below by Friday, March 12.

Contact addresses: Yoshiki Nishimura, E-mail: nishimura.yoshiki.5n@kyoto-u.ac.jp

Yusuke Kato, E-mail: yusuke.kato@setsunan.ac.jp

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

◆ The 6th Workshop on Photosynthetic Bacteria

Date and time: The day before the Meeting, March 13 (Sat) 14:00–17:40

Venue: Room K (Zoom meeting)

Organizers: Dr. Jiro Harada (Kurume University), Dr. Yusuke Tsukatani (Japan Agency for Marine-Earth Science and Technology), Dr. Chihiro Azai (Ritsumeikan University)

Contents: 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 an online-banquet. To register the workshop and/or banquet, please fill the Entry Form (<https://bit.ly/3mMwoEU>) (deadline, 03/05/2021). We are expecting your participation.

Contact addresses: Jiro Harada, E-mail: jiro_harada@med.kurume-u.ac.jp,

Yusuke Tsukatani, E-mail: tsukatani@jamstec.go.jp

Chihiro Azai, E-mail: cazai@fc.ritsumei.ac.jp

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

Date and time: Day 1, March 14 (Sun) 19:00–20:30

Venue: Room J (Zoom meeting)

Organizers: Dr. Rumi Amano (RIKEN BRC), Dr. Tatsuya Nobori (Salk Institute)

This meeting offers young scientists and students the opportunity to exchange information and discuss topics related to research and career development. We invited two speakers to share their own stories with us. A virtual mixer will be held after the program. More details are available on the meeting website (<http://jsyppmeeting.wixsite.com/wakatenokai>).

Registration due on March 12: <https://forms.gle/fMLMmXPqX87FzRv56>

Contact addresses: Rumi Amano: rumi.amano@riken.jp

Tatsuya Nobori: tnobori@salk.edu

◆ The Workshop on Remodeling Plant Reproduction

Date and time: Day 1, March 14 (Sun) 18:30–20:00

Venue: Room K (Zoom meeting)

Organizers: Dr. Daisuke Maruyama (Yokohama City University), Dr. Yoko Mizuta (Nagoya University), Dr. Shohei Yamaoka (Kyoto University)

Plants use a reproductive system distinct from animals, in which gametes are formed in haploid multicellular gametophyte. The other gametophytic cells are also highly differentiated and cooperate with each other to elaborate fertilization process. These gametophytic cells also harbor plasticity and flexibility in the fate determination and differentiation. In this workshop, our studies regarding the Grant-in-Aid for Transformative Research Area (B) entitled “Remodeling Plant Reproduction System by Cell Fate Manipulations”, focusing on the gametophytic cell differentiation and function, will be shown and the future prospects of plant reproductive research will be discussed. Any feedbacks and advices well beyond the fields of research are welcome.

The Zoom URL will be available in the portal site of the JSPP annual meeting 2021.

Contact addresses: Shohei Yamaoka: syamaoka@lif.kyoto-u.ac.jp

2-8. JSPP Committee Meetings

Date and time: March 13 (Sat) (The day before the meeting)

Venue: Zoom meeting

14:30–17:00 Board of Delegates’ Meeting

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

The invitations will be sent to the members from the Conference Secretaria.

Time table Day 1, Sun., March 14

	9	10	11	12	13	14	15	16	17	18	19	
A		Photosynthesis					Cell wall					
B		Primary metabolism					Transcriptional, post-transcriptional or translational, post-translational regulations					
C		Biomembrane/Ion and solute transport					Photoreceptors/ Photoresponses					
D		Reproductive growth					Reproductive growth					
E		Vegetative growth					Vegetative growth					
F		Plant hormones/Signaling molecules					Plant hormones/Signaling molecules					
G		Environmental responses B					Environmental responses B					
H		Plant-organism interaction A					Plant-organism interaction A					
J									The 38th Meeting of the Japanese Society for Young Plant Physiologists (19:00-20:30)			
K									Workshop for Remodeling Plant Reproduction (18:30-20:00)			
W					Luncheon Seminar on Gender Equality				Evening Seminar PCP			
X		Symposium S01 Toward understanding emergence of order in Plant-Microbe Holobiont					Symposium S03 Frontiers of Plant Genome Editing to shape the future with new technologies					
Y		Symposium S02 The universality and diversity of stem cell regulation revealed from the study of basal plants					Symposium S04 Re-optimization of Energy Transduction in Photosynthesis – Structure, Function and System					
Z		The 17th Database Workshop					Symposium S05 Mineral element transport systems in plants: transporters, regulation and utilization					
P		Poster viewings and discussions										
Q		Research Presentations by High School Students Poster viewings and discussions										
Other										Mixer ORSAM portal site (SpatialChat) (18:30-20:30)		

Time^{table} Day 2, Mon., March 15

	9	10	11	12	13	14	15	16	17	18	19	
A	Secondary (specialized) metabolism				Photosynthesis							
B	Cell cycle/ Cell division		Others		Environmental responses of photosynthesis							
C	Photoreceptors/ Photoresponses				New technology							
D	Systems biology				Organelles/Cytoskeleton							
E	Vegetative growth				Vegetative growth							
F	Plant hormones/ Signaling molecules				Flowering/Clock							
G	Environmental responses B				Environmental responses C							
H	Plant-organism interaction B				Plant-organism interaction B							
J												
K												
W				Luncheon Seminar Illumina K.K.				JSPP Awards: Ceremony and Lectures				
X	Symposium S06 Frontiers in plant redox biology: Redox regulation, oxidative stress and signaling				Symposium S09 Molecular elucidation of plant environmental adaptation toward engineering responses of field-grown plants							
Y	Symposium S07 A new perspective for integrated Bio-metal Science				Symposium S10 Borderless Era of Plant Chemical Research —New Trends in Plant Chemical Biology and Plant Metabolite Chemistry.							
Z	Symposium S08 Past and future of plant RNA research answering fundamental questions											
P	Poster viewings and discussions											
Q	Research Presentations by High School Students Poster viewings and discussions											
Other											Banquet ORSAM portal site (SpatialChat) (18:30-20:30)	

Time table **Day 3, Tue., March 16**

	9	10	11	12	13	14	15	16	17	18	19
A	Primary metabolism										
B	Environmental responses of photosynthesis										
C	Membrane trafficking		Epigenetic regulation								
D	Organelles/Cytoskeleton										
E	Environmental responses A										
F	Flowering/Clock										
G	Environmental responses C										
H											
J											
K											
W				Luncheon Seminar OLYMPUS CORPORATION							
X	Symposium S11 Elongate, bend, and expand: Deciphering plant growth strategy from its mechanics										
Y	Symposium S12 Molecular Mechanisms of Transcriptional Repression in Plants										
Z											
P	Poster viewings and discussions				Poster discussions using Zoom meeting						
					PF	PL					
Q	Research Presentations by High School Students Poster viewings and discussions				Special Program: "Research Presentations by High School Students" Discussion, Award ceremony						
					The 1st half core time of poster presentations	The 2nd half core time of poster presentations	Open lecture	Award ceremony			
Other											

"Flowers Will Bloom—Plant World Coloring a High School Textbook of the Biology—"

Mon., March 15, 16:30–18:15 Room W

JSPP Awards Ceremony and Award Lectures

Awards Ceremony

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

16:30	Reports on Selection Process	Chairpersons of Award Committees
16:45	JSPP Award, JSPP Young Investigator Awards, PCP Best Paper Award and PCP Top Cited Paper Awards	JSPP President
16:55	Honorary Membership Award Tsuneyoshi Kuroiwa (The Japan Academy, Univ. of Tokyo, Japan Women's Univ.)	JSPP President

Award Lectures

Language: Japanese

17:05	A01	JSPP Award “Elucidation of the mechanism of photosynthetic water-splitting reaction” Jian-Ren Shen (RIIS, Okayama Univ.)
17:25	A02	JSPP Young Investigator Award “Quantitative bioimaging of plant cytoskeleton” Takumi Higaki (IROAST, Kumamoto Univ.)
17:40	A03	JSPP Young Investigator Award “The elucidation of gene regulatory networks in flower morphogenesis” Nobutoshi Yamaguchi (Grad. Sch. Sci. & Tech., Nara Inst. Sci. and Tech.)
17:55	A04	PCP Best Paper Award Md Hassanur Rahman, Erika Toda, Masaaki Kobayashi, Toru Kudo, Shizuka Koshimizu, Mirei Takahara, Momoka Iwami, Yoriko Watanabe, Hiroyuki Sekimoto, Kentaro Yano, and Takashi Okamoto “Expression of Genes from Paternal Alleles in Rice Zygotes and Involvement of <i>OsASGR-BBML1</i> in Initiation of Zygotic Development” <i>Plant and Cell Physiology</i> , 60(4): 725–737 (2019) Takashi Okamoto (Dept. Biol. Sci., Tokyo Metropolitan Univ.), et al.

Sun., March 14, 9:30–12:30 Room X

Toward understanding emergence of order in Plant-Microbe HolobiontLanguage: Japanese

Organizers: Kei Hiruma (The University of Tokyo)
 Shunsuke Miyashima (NAIST)
 Akira Mine (Ritsumeikan University)
 Hironori Fujita (National Institute for Basic Biology)

09:30 Opening remarks
 Kei Hiruma

• Chairperson: Kei Hiruma

09:35 **S01-1** Stomatal movements in the assembly of plant-bacteria holobiont
Akira Mine^{1,2}, Kaori Fukumoto³, Ryohei Thomas Nakano³, Yoshinori Kanaoka¹, Atsushi Takeda¹, Kenichi Tsuda^{3,4} (¹Col. Life Sci., Ritsumeikan Univ., ²JST PRESTO, ³MPIPZ, ⁴HZAU)

10:00 **S01-2** Root cap controls the dynamic of soil microbes by integrating its cell morphogenesis and defense system
Shunsuke Miyashima^{1,2}, Keiji Nakajima¹ (¹NAIST, ²JST PRESTO)

10:25 **S01-3** Evolutionary Dynamics of Nitrogen Fixation in the Legume–Rhizobia Symbiosis
Hironori Fujita^{1,2,3} (¹Astrobiology Center, ²National Institute for Basic Biology, ³SOKENDAI)

10:50 Break

• Chairperson: Akira Mine

10:55 **S01-4** RNA-Seq reveals virus diversity and the plant-virus interaction in the fields
Mari Kamitani^{1,2} (¹Faculty of Agriculture, Ryukoku University, ²CER, Kyoto university)

11:25 **S01-5** Genetic and molecular bases of insect gut symbiosis
Yoshitomo Kikuchi (AIST, BPRI)

• Chairperson: Shunsuke Miyashima

11:55 **S01-6** A role of fungal-bacterial synthetic community for plant growth under nutrient limiting conditions
Kei Hiruma^{1,2,3} (¹Grad. Sch. Sci. Tech., NAIST, ²Grad. Sch. Arts and Sci., Univ. Tokyo, ³JST, Presto)

12:20 Closing remarks
 Akira Mine

Sun., March 14, 9:30–12:25 Room Y

The universality and diversity of stem cell regulation revealed from the study of basal plants

Language: Japanese

Organizers: Kimitsune Ishizaki (Kobe University)
Tomomichi Fujita (Hokkaido University)

09:30		Opening remarks
● Chairperson: Kimitsune Ishizaki		
09:35	S02-1	Stem cells in the basal land plants <u>Rumiko Kofuji</u> (Biological Sci. and Tech., Kanazawa Univ.)
10:00	S02-2	Asymmetric cell division in protonemal apical stem cells in the moss, <i>Physcomitrium patens</i> <u>Tomomichi Fujita</u> ¹ , Ooi Kock Teh ² , Alisa Vyacheslavova ³ (¹ Fac. Sci., Hokkaido Univ., ² IAHE, Hokkaido Univ., ³ Grad. Sch. Life Sci., Hokkaido Univ.)
10:25	S02-3	Discovery of the cellular reprogramming triggered by DNA damage <u>Yosuke Tamada</u> ^{1,2,3} , Nan Gu ³ (¹ Sch. Eng., Utsunomiya Univ., ² CORE, Utsunomiya Univ., ³ REAL, Utsunomiya Univ.)
10:50		Break
● Chairperson: Tomomichi Fujita		
11:00	S02-4	Cutting untangled a knot between stem cell formation and auxin in <i>Marchantia polymorpha</i> Sakiko Ishida, Hidemasa Suzuki, Takayuki Kohchi, <u>Ryuichi Nishihama</u> (Grad. Sch. Biostudies, Kyoto Univ.)
11:25	S02-5	Exploring the common mechanisms for stem cell propagation from vegetative reproduction of <i>Marchantia polymorpha</i> <u>Hirota Kato</u> ¹ , Yukiko Yasui ^{1,2} , Kimitsune Ishizaki ¹ (¹ Grad. Sch. Sci., Kobe Univ., ² Grad. Sch. Biostudies, Kyoto Univ.)
11:50	S02-6	Diversity of RAM organization and cell division dynamics in the extant lycophytes <u>Rieko Fujinami</u> ¹ , Toshihiro Yamada ² (¹ Dept. Sci., Fac. Educ., Kyoto Univ. Educ., ² Bot. Gard., Fac. Sci., Osaka City Univ.)
12:15		General Discussion

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

Sun., March 14, 14:00–17:00 Room X

Frontiers of Plant Genome Editing to shape the future with new technologiesLanguage: Japanese**Organizer:** Yuriko Osakabe (Fac. of Biosci. & Bioindust., Tokushima Univ.)

● Chairperson: Yuriko Osakabe

14:00		Opening remarks
14:05	S03-1	Development of genome engineering using a novel genome editing tool, TiD <u>Osakabe Keishi</u> (Grad. School of Tech., Indust. & Social Sci., Tokushima Univ.)
14:35	S03-2	FnCas12a-mediated targeted mutagenesis using crRNA with altered target length in rice. <u>Masaki Endo</u> ¹ , Katsuya Negishi ¹ , Masafumi Mikami ¹ , Seiichi Toki ^{1,2,3} (¹ Inst. Agrobiol. Sci., NARO, ² Grad. Sch. Nanobio., Yokohama City Univ., ³ Kihara Inst. Biol. Res., Yokohama City Univ.)
15:05	S03-3	Targeted sequence disruptions of plant mitochondria genomes. <u>Shin-ichi Arimura</u> (Grad. Sch. of Agri. & Life Sci. Univ of Tokyo)
15:35		Coffee break
15:50	S03-4	Genome editing by direct delivery of CRISPR/Cas9 components into plant zygote <u>Erika Toda</u> (Dept. of Biol. Sci., Tokyo Metropolitan Univ.)
● Chairperson: Erika Toda		
16:10	S03-5	Development of a cultivar-independent gene editing system in plants <u>Haruyasu Hamada</u> (KANEKA Co., Ltd.)
16:30	S03-6	Generation of new technologies of genome editing and plant regeneration <u>Yuriko Osakabe</u> (Fac. Biosci. & Bioind., Tokushima Univ.)
● Chairperson: Yuriko Osakabe		
16:55		Closing remarks

**Cosponsored by Educational Training Committee of the Japanese Society
for Genome Editing and JST-OPERA.
Supported by NEDO.**

Sun., March 14, 14:00–16:45 Room Y

Re-optimization of Energy Transduction in Photosynthesis — Structure, Function and System

Language: Japanese

Organizers: Jun Minagawa (NIBB)
Genji Kurisu (Inst. Prot. Res., Osaka Univ.)

14:00 Opening remarks
Genji Kurisu

• Chairperson: Genji Kurisu

14:05 **S04-1** Functional and structural analyses of photosynthetic pigment-protein complexes ~Insights into evolution of oxyphototrophs~
Ryo Nagao (RIIS, Okayama University)

14:30 **S04-2** Multimeric and monomeric PSII supercomplexes represent structural adaptations to low- and high-light conditions
Eunchul Kim¹, Akimasa Watanabe¹, Christopher Duffy², Alexander Ruban², Jun Minagawa¹
(¹NIBB, ²Queen Mary University of London)

14:55 **S04-3** Systemsbiology of Photosynthetic Organisms
Hiroshi Shimizu (Grad. Sch. Info. Sci. Tech., Osaka Univ.)

15:20 Break

• Chairperson: Jun Minagawa

15:25 **S04-4** Structural basis for the membrane protein complexes responsible for the formation of proton motive force
Genji Kurisu (Inst. Prot. Res., Osaka Univ.)

15:50 **S04-5** Thylakoid membrane remodeling mediated by VIPP1 protein in photosynthetic organisms
Wataru Sakamoto, Norikazu Ohnishi (Inst. Plant Sci. Resources., Okayama Univ.)

16:15 **S04-6** Single molecule observation of photosynthetic proteins in thylakoid membrane by high-speed atomic force microscopy
Daisuke Yamamoto (Fac. Sci., Fukuoka Univ.)

16:40 Closing remarks
Jun Minagawa

**This symposium is Jointly sponsored by the Scientific Research on Innovative Areas:
New Photosynthesis: Re-optimization of the Solar Energy Conversion System.**

Sun., March 14, 14:00–17:10 Room Z



PCP sponsored symposium

Mineral element transport systems in plants: transporters, regulation and utilization

Language: English

Organizers: Jian Feng Ma (Institute of Plant Science and Resources, Okayama University)
Yi-Fang Tsay (Institute of Molecular Biology, Academia Sinica)

14:00		Opening remarks Miki Matoba (Director, Academic Division, Oxford University Press)
● Chairperson: Yi-Fang Tsay		
14:05	S05-1	Molecular Basis Underlying Long-distance Movement of Arabidopsis miR399 in Regulating Phosphate Homeostasis <u>Tzyy-Jen Chiou</u> , Chih-Bin Chiang, Jia-Ling Li, Su-Fen Chiang (Agricultural Biotechnology Research Center, Academia Sinica, Taiwan)
14:35	S05-2	Molecular regulatory mechanisms of phosphate uptake and translocation in rice <u>Chuanzao Mao</u> (Zhejiang University)
15:05	S05-3	Transporters for loading mineral elements to rice grains <u>Jian Feng Ma</u> (Institute of Plant Sciences and Resources, Okayama University)
● Chairperson: Jian Feng Ma		
15:35	S05-4	Boron-dependent translation of a boron transporter and control of boron requirement in <i>Arabidopsis thaliana</i> <u>Kyoko Miwa</u> (Grad. Sch. Environ. Sci., Hokkaido Univ.)
16:05	S05-5	Multilayered regulation of the root iron uptake machinery in Arabidopsis <u>Greg Vert</u> (LRSV - CNRS/Université Toulouse)
16:35	S05-6	Improving nitrogen utilization by manipulating nitrate remobilization in plants <u>Yi-Fang Tsay</u> , Kuo-En Chen (Institute of Molecular Biology, Academia Sinica, Taipei, Taiwan)
17:05		Closing remarks

Specially Promoted Research

Mon., March 15, 9:00–12:00 Room X

Frontiers in plant redox biology: Redox regulation, oxidative stress and signaling

Language: Japanese

Organizers: Takanori Maruta (Fac. Life Environ. Sci., Shimane Univ.)
Keisuke Yoshida (Lab. Chem. Life Sci., Tokyo Tech.)

09:00 Opening remarks
Keisuke Yoshida

• Chairperson: Keisuke Yoshida

09:05 **S06-1** Why and how do plants accumulate ascorbate at very high levels?
Takanori Maruta (Fac. Life Environ. Sci., Shimane Univ.)

09:30 **S06-2** Evolutionary history of redox regulation in photosynthetic electron transport
Ginga Shimakawa (Res. Solar Energ., Univ. Osaka)

09:55 **S06-3** Redox regulation of photosystem I: identification of a new FeS protein involved in P700 oxidation
Mai Duy Luu Trinh, Shinji Masuda (Dep. Life Sci. and Technol., Tokyo Inst. Tech.)

• Chairperson: Takanori Maruta

10:20 **S06-4** Strong-light response of photosynthesis and redox regulation of protein synthesis
Yoshitaka Nishiyama (Grad. Sch. Sci. Eng., Saitama Univ.)

10:45 **S06-5** Thioredoxin-based redox-regulatory network in chloroplasts
Keisuke Yoshida, Yuichi Yokochi, Toru Hisabori (Lab. Chem. Life Sci., Tokyo Tech.)

11:10 **S06-6** The role of receptor-like kinase in ROS signaling *via* NADPH oxidase in *Arabidopsis*
Sachie Kimura (Ritsumeikan Global Innovation Research Organization, Ritsumeikan Univ.)

11:35 Discussion
Takanori Maruta

New photosynthesis: Re-optimization of the solar energy conversion system

Mon., March 15, 9:00–12:05 Room Y

A new perspective for integrated Bio-metal ScienceLanguage: Japanese

Organizers: Junpei Takano (Grad. Sch. Life Environ. Sci., Osaka Pref. Univ.)
Ryo Tabata (Grad. Sch. Bioagri. Sci., Nagoya Univ.)

09:00		Opening remarks Junpei Takano
● Chairperson: Junpei Takano		
09:05	S07-1	Systemic regulation of iron acquisition in plants <u>Ryo Tabata</u> (Grad. Sch. Bioagri. Sci., Nagoya Univ.)
09:30	S07-2	Plant iron deficiency responses and iron sensing by iron- and zinc-binding HRZ ubiquitin ligases <u>Takanori Kobayashi</u> (Ishikawa Pref. Univ.)
09:55	S07-3	Crosstalk of zinc homeostasis and protein quality control in the secretory pathway of mammalian cells <u>Yuta Amagai</u> ¹ , Momo Yamada ¹ , Tomomi Watanabe ¹ , Toshiyuki Kowada ¹ , Satoshi Naramoto ^{2,3} , Satoshi Watanabe ¹ , Junko Kyojuka ² , Roberto Sitia ⁴ , Shin Mizukami ¹ , Kenji Inaba ¹ (¹ IMRAM, Tohoku Univ., ² Grad. Sch. Life Sci., Tohoku Univ., ³ Fuc. of Sci., Hokkaido Univ., ⁴ IRCCS-OSR, Italy)
● Chairperson: Takanori Kobayashi		
10:20	S07-4	Contribution of Sulfur Assimilation and Metabolism to Metal Uptake and Accumulation in Plants <u>Akiko Maruyama</u> (Faculty of Agriculture, Kyushu University)
10:45	S07-5	Predicting the dynamics of bio-metals by transport simulations <u>Naoyuki Sotta</u> ¹ , Junpei Takano ² , Toru Fujiwara ¹ (¹ Grad. Sch. Agr. Life Sci., Univ. Tokyo, ² Grad. Sch. Life Envir. Sci., Osaka Pref. Univ.)
● Chairperson: Ryo Tabata		
11:10	S07-6	BOR1 is a borate tranceptor. <u>Junpei Takano</u> ¹ , Akira Yoshinari ² , Takuya Hosokawa ¹ (¹ Grad. Sch. Life Environ. Sci., Osaka Pref. Univ., ² ITbM, Nagoya Univ.)
11:35	S07-7	Characterization of metal-associated proteins by conditional proteomics approach <u>Tomonori Tamura</u> (Grad. Sch. Eng., Kyoto Univ.)
12:00		Closing remarks Ryo Tabata

Scientific Research on Innovative Areas: Integrated Bio-metal Science

Mon., March 15, 9:00–11:55 Room Z

Past and future of plant RNA research answering fundamental questionsLanguage: Japanese**Organizers:** Masayuki Tsuzuki (Grad. Sch. Arts. Sci., Univ. Tokyo)
Yukio Kurihara (RIKEN CSRS)

09:00		Opening remarks Masayuki Tsuzuki
● Chairperson: Yukio Kurihara		
09:05	S08-1	Broad Noncoding Transcription by RNA Polymerase V Suggesting Genome Surveillance <u>Masayuki Tsuzuki</u> ^{1,2} (¹ Grad. Sch. Arts. Sci., Univ. Tokyo, ² MCDB, Univ. Michigan)
09:30	S08-2	Biochemical characterization of Dicers in plants and other eukaryotes <u>Midori Tabara</u> ¹ , <u>Toshiyuki Fukuhara</u> ^{1,2} (¹ GIR, Tokyo. Univ. Agri. Tech., ² Grad. Sch. Agri., Tokyo. Univ. Agri. Tech.)
09:55	S08-3	Deadenylases in the Arabidopsis CCR4-NOT complex act in shoot regeneration from the callus <u>Toshihiro Arae</u> ¹ , <u>Riko Imahori</u> ² , <u>Yuya Suzuki</u> ² , <u>Misato Ohtani</u> ^{1,4} , <u>Yukako Chiba</u> ^{2,3} (¹ Grad. Sch. Frontier Sci., Univ. Tokyo, ² Grad. Sch. Life Sci., Hokkaido Univ., ³ Fac. Sci., Hokkaido Univ., ⁴ Div. Bio. Sci., NAIST)
● Chairperson: Masayuki Tsuzuki		
10:20	S08-4	Early origin of synchronization between chloroplast translation and cytosolic mRNA abundance in plants <u>Shintaro Iwasaki</u> (RIKEN Cluster for Pioneering Research)
10:45	S08-5	tRNA wobble uridine modification in <i>Arabidopsis thaliana</i> <u>Yumi Nakai</u> (Dept. of Biochemistry, Osaka Medical College)
11:10	S08-6	Translation Arrest and mRNA Degradation: What We Could See/ yet Cannot See from Methionine Biosynthesis <u>Satoshi Naito</u> (Grad. School. Agriculture., Grad School. Life Sci., Hokkaido Univ.)
11:50		Closing remarks Yukio Kurihara

Mon., March 15, 13:00–15:50 Room X

Molecular elucidation of plant environmental adaptation toward engineering responses of field-grown plants

Language: Japanese

Organizers: Akira Mine (Col. Life Sci., Ritsumeikan Univ.)
Kohji Yamada (Grad. Sch. Tech. Ind. Sco. Sci. Tokushima Univ.)
Kaori Yoneyama (Grad. Sch. of Agric., Ehime univ.)

• Chairperson: Akira Mine

13:00		Opening remarks
13:05	S09-1	Supra-organismal regulation of strigolactone synthesis and exudation in response to rhizospheric cues <u>Kaori Yoneyama</u> ^{1,2} (¹ Grad. Sch. Agri., Ehime Univ., ² JST PRESTO)
13:30	S09-2	Root anatomical traits that correlate with environmental adaptation of plants <u>Takaki Yamauchi</u> ^{1,2} (¹ Biosci. Biotech. Ctr., Nagoya Univ., ² JST PRESTO)

• Chairperson: Kaori Yoneyama

13:55	S09-3	Long-distance mobile peptides maintain root sucrose level and root growth <u>Satoru Okamoto</u> ^{1,2} , Azusa Kawasaki ¹ , Yumiko Makino ³ , Takashi Ishida ⁴ , Shinichiro Sawa ⁵ (¹ Grad. Sch. Sci and Tech., Univ. Niigata, ² JST PRESTO, ³ NIBB, ⁴ IROAST, Univ. Kumamoto, ⁵ Grad. Sch. Sci and Tech., Univ. Kumamoto)
14:20		Break
14:30	S09-4	A molecular mechanism of defense-sugar crosstalk <u>Kohji Yamada</u> ^{1,2} (¹ Grad. Sch. Tech. Ind. Sco. Sci. Tokushima Univ., ² JST PRESTO)

• Chairperson: Kohji Yamada

14:55	S09-5	Epigenome regulation of environmental adaptations in plants <u>Soichi Inagaki</u> ^{1,2} (¹ Grad. Sch. Sci., Univ. Tokyo, ² JST PRESTO)
15:20	S09-6	Diverse non-coding RNAs involved in plant reproductive system <u>Reina Komiya</u> ^{1,2} (¹ Science and Technology Group, Okinawa Institute of Science and Technology Graduate University (OIST), ² JST PRESTO)
15:45		Closing remarks

JST PRESTO [Control of Field-Grown Plants Phenomena]

Mon., March 15, 13:00–16:00 Room Y

Borderless Era of Plant Chemical Research —New Trends in Plant Chemical Biology and Plant Metabolite Chemistry.

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

13:00		Opening remarks Takeshi Nakano
● Chairperson: Kazufumi Yazaki		
13:05	S10-1	Identification of structures and functions of widely spreading acylspermidines <u>Tadao Asami</u> (Grad Sch Life Science, UTokyo)
13:25	S10-2	Reconsideration of amino acid metabolism in plant —from the viewpoint of development— <u>Masami Yokota Hirai</u> ^{1,2} , Kensuke Kawade ^{1,3,4} (¹ RIKEN CSRS, ² Grad. Sch. Bioagric. Sci., Nagoya Univ., ³ NIBB, ⁴ SOKENDAI)
13:45	S10-3	Development and utilization of synthetic compounds for elucidation of physiological function of abscisic acid receptors. <u>Masanori Okamoto</u> (Center for Bioscience Research and Education, Utsunomiya University)
14:05	S10-4	Exploiting the metabolic polymorphism of polyphenolics in plant species <u>Takayuki Tohge</u> (Nara Institute of Science and Technology (NAIST))
14:25		Rest
● Chairperson: Hikari Seki		
14:30	S10-5	Chemical biology to reveal molecular mechanism of plant growth <u>Takeshi Nakano</u> (Grad. Sch. Biostudies, Kyoto Univ.)
14:50	S10-6	Functions of plant chemicals in the rhizosphere and possibilities for plant growth regulation <u>Akifumi Sugiyama</u> , Masaru Nakayasu, Kazufumi Yazaki (RISH, Kyoto University)
15:10	S10-7	How did licorice acquire the ability to produce a sweet saponin? <u>Toshiya Muranaka</u> , Hikaru Seki (Dept Biotechnol Grad Sch Eng, Osaka U)
15:30	S10-8	Construction of a data resource for the top-down discovery of unused plant-derived specialized metabolites <u>Nozomu Sakurai</u> (National Institute of Genetics)
15:50		Discussion Masami Hirai

Tue., March 16, 9:00–11:50 Room X

Elongate, bend, and expand: Deciphering plant growth strategy from its mechanics

Language: Japanese

Organizers: Yuki Yoshida (Kumamoto University)
Misato Ohtani (The University of Tokyo)

● Chairperson: Yuki Yoshida

09:00		Opening remarks Yuki Yoshida
09:05	S11-1	Plant plasticity through the narrow gate <u>Yoshikatsu Sato</u> (WPI-ITbM, Nagoya Univ)
09:30	S11-2	The strategy of plant survival revealed by nutritropism in rice roots. <u>Kiyoshi Yamazaki</u> , Toru Fujiwara (Grad. Sch. Agri. Life Sci., Univ. Tokyo)
09:55	S11-3	A mechanical criterion for root-penetration into soil based on root-soil mechanics <u>Haruka Tomobe</u> ¹ , Satoru Tsugawa ² , Yuki Yoshida ³ , Tetsuya Arita ³ , Minoru Kubo ³ , Taku Demura ² , Shinichiro Sawa ³ (¹ National Institute of Technology, Toyota College, ² Nara Institute of Science and Technology (NAIST), ³ Faculty of Advanced Science and Technology, Kumamoto University)
10:20		Break
● Chairperson: Misato Ohtani		
10:30	S11-4	How to make a shelter in the shape of an egg, learn from testate amoeba <u>Mami Nomura</u> ¹ , Yukinori Nishigami ² , Masatoshi Ichikawa ³ , Takuro Nakayama ⁴ , Keisuke Ohta ⁵ , Kei-ichiro Nakamura ⁵ (¹ Fac. Life and Env. Sci., Univ. Tsukuba, ² RIES, Hokkaido Univ., ³ Dept. Phys., Kyoto Univ., ⁴ Grad. Sch. of Life Sci., Tohoku Univ., ⁵ Sch. Med., Kurume Univ.)
10:55	S11-5	Growth stress of large-diameter trees <u>Miyuki Matsuo</u> (Grad. Sch. Bioagr. Sci., Nagoya Univ.)
11:20	S11-6	Plant Physics: its Diversity and Universality <u>Hiroyuki Shima</u> (Fac. Life Env. Sci., Univ. Yamanashi)
11:45		Closing remarks Misato Ohtani

MEXT Grant-in-Aid for Scientific Research on Innovative Areas, "Plant Structure Optimization"

Tue., March 16, 9:00–12:00 Room Y

Molecular Mechanisms of Transcriptional Repression in PlantsLanguage: Japanese**Organizers:** Hironori Takasaki (Saitama Univ.)
Masaru Ohme-Takagi (Saitama Univ.)

09:00		Opening remarks Masaru Ohme-Takagi
● Chairperson: Satoshi Kidokoro		
09:05	S12-1	Combinations of maternal-specific repressive epigenetic marks in the endosperm control seed dormancy <u>Hikaru Sato</u> , Juan Santos-González, Claudia Köhler (The Swedish University of Agricultural Sciences)
09:30	S12-2	Functional analysis of ELONGATION OF SILIQUES WITHOUT POLLINATION 3 in endosperm in Arabidopsis <u>Hironori Takasaki</u> ¹ , Miho Ikeda ¹ , Reika Hasegawa ¹ , Yilin Zhang ¹ , Shingo Sakamoto ² , Daisuke Maruyama ³ , Nobutaka Mitsuda ² , Tetsu Kinoshita ³ , Masaru Ohme-Takagi ¹ (¹ Grad. Sch. Sci. Eng., Saitama Univ., ² Bioproduction Res. Inst. AIST, ³ Kihara Inst. Bio. Res. Yokohama City Univ.)
09:55	S12-3	The factor of transcriptional repression regulating endosperm development in rice <u>Kaoru Tonosaki</u> (Faculty of Agr., Iwate Univ.)
10:20		Break
● Chairperson: Hironori Takasaki		
10:35	S12-4	Semi-automatic transient gene expression system in plant protoplast for plant TFome analysis. <u>Shingo Sakamoto</u> ¹ , Masaru Ohme-Takagi ^{1,2} , Nobutaka Mitsuda ¹ (¹ Bioproduction Res. Inst., AIST, ² Grad. Sch. Sci. Eng., Saitama Univ.)
11:00	S12-5	Transcriptional silencing of the cold-inducible <i>DREB1A/CBF3</i> gene in the Arabidopsis <i>ice1-1</i> mutant <u>Satoshi Kidokoro</u> ¹ , June-Sik Kim ² , Tomona Ishikawa ¹ , Takamasa Suzuki ³ , Kazuo Shinozaki ² , Kazuko Yamaguchi-Shinozaki ^{1,4} (¹ Grad. Sch. Agr. Life Sci., Univ. Tokyo, ² Center for Sustainable Resource Science, RIKEN, ³ College of Bioscience and Biotechnology, Chubu Univ., ⁴ Res. Inst. Agr. Life Sci., Tokyo Univ. Agr.)
11:25	S12-6	Transcriptional repression wakes up green algae <u>Takuya Matsuo</u> (Center for Gene Research, Nagoya University)
11:50		Closing remarks Hironori Takasaki

Day 1, AM

Workshop

Sun., March 14, 9:30–12:30 Room Z

The 17th Database Workshop

Language: Japanese

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

• Chairperson: Kentaro Yano

09:30 **D01-1** Introduction
Kentaro Yano (Bioinformatics, Sch. of Agri., Meiji Univ.)

10:25 Coffee Break

10:30 **D01-2** How to Accelerate Image Annotation Hand Works and Active Learning for Plant Phenotyping Analysis
Eli Kaminuma^{1,2} (¹Tokyo Med Dent Univ, ²RIKEN CSRS Center)

11:15 Coffee Break

• Chairperson: Shizuka Koshimizu

11:20 **D01-3** Human vs. AI?: deep learning frameworks spot specific physiological reactions and genomic patterns in plants
Takashi Akagi^{1,2} (¹Grad. Sch. Environ. Life Sci., Okayama Univ., ²JST-PRESTO)

12:15 Discussion

Co-sponsored by MEXT KAKENHI “Determining principles in the birth of new plant species”

Sun., March 14, 12:45–13:45 Room W

Seminar on Gender Equality

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

Language: Japanese

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

The Japan Inter-Society Liaison Association Committee for Promoting Equal Participation of Men and Women in Science and Engineering consists of societies in the natural sciences, where the percentage of female members is small, and it promotes and collaborates activities related to gender equality. The Large-scale surveys on Gender Equality in STEM are conducted every four years, and many of our society members would be among the 18,000 researchers who responded to the survey. The results are reported as the “Large-Scale Survey of Actual Conditions of Gender Equality in Science and Technological Professions”, but many of you may have not seen it. In this seminar, Dr. Michiko Bando (National Institute of Public Health) and Dr. Reiko Motohashi (Shizuoka University), who were involved in the fourth survey, will give a lecture to introduce the environment surrounding female researchers highlighted by the survey.

Each university is now trying to increase the ratio of female researchers and it requires a transformation of the consciousness of each person and improvement of the environment. For this aim, it is necessary to understand the social background and structure surrounding researchers. Are there really so few women who get academic posts? If so, why is it so? Is it because fewer female students seek jobs in Japanese universities? If so, what are the reasons why they give up seeking these jobs? We hope this seminar will provide a good opportunity to understand the current situation in our society.

Sun., March 14, 17:15–18:15 JST Room W

(Start time in other zones: 19:15 AEDT; 9:15 CET; 8:15 GMT; 4:15 EDT; 1:15 PDT)



PCP Evening Seminar 2021
“Plant & Cell Physiology: publishing in the time of Covid-19”

Language: English

This past year has been a challenging time for many, but has also presented a unique opportunity to consolidate scientific studies and increase publication output. In this session, Plant & Cell Physiology’s new Editor-in-Chief, Prof. Wataru Sakamoto (Okayama University) will present a summary of PCP activities over this past year, as well as an update on PCP’s editorial developments and planned activities for the future. In addition, we will hear from our newly appointed Budding Editors, and also from some of our authors who will discuss their outstanding, recently published work in the journal. We hope you can join us!

Seminar outline:

1. Summary of PCP activities and future plans
2. Editorial developments and Editor discussion
3. Publishing highlights and author presentations
4. Live Q & A session

JSPS symposium delegates will have the opportunity to put questions to the PCP Editorial Team throughout this session using the live chat function (in English or Japanese), and/or participate in the interactive Q&A session at the end of the presentations.

Mon., March 15, 12:00–12:50 Room W

Illumina K.K. Luncheon SeminarLanguage: Japanese

Sponsor: Illumina K.K.

Speaker 1:**Multiple applications with Illumina NGSs in plants and microalgae.****Dr. Keiichi Mochida, RIKEN Center for Sustainable Resource Science**

High-throughput sequencing offers various applications for genome-scale studies in plants and microalgae. Using Illumina sequencing platforms, we have studied genomes and transcriptomes in model plants, crops, and microalgae. In this seminar, I introduce examples from our studies using Illumina sequencers such as NovaSeq6000 and iSeq100. With the NovaSeq6000 system, its sequencing power and scalability have enabled us to analyze genetic diversity of barley accessions from multiple omics aspects such as field transcriptome, exome-sequencing, and chip-sequencing. On the other hand, iSeq100, the smallest and most affordable benchtop sequencer in the illumine series is useful to rapidly analyze PCR amplicons from particular genomic regions or metagenome samples. In this seminar, I introduce our examples with iSeq100 such as amplicon-sequencing of loci targeted by genome editing in *Euglena*.

Speaker 2:**Introduction and latest update of Illumina Next Generation Sequencer****Dr. Takafumi Kobayashi, Sales Specialist team Asia Pacific and Japan, Illumina K.K.**

Illumina's next generation sequencer (NGS) has been used for researchers working on physiological application including genotyping and gene expression for over 10 years. In this session, firstly the principle of Illumina NGS is introduced mainly for entry users. Secondly, recent updates regarding mid-high throughput NGS, NextSeq 1000, NextSeq 2000 and NovaSeq 6000 are presented.

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Day 3, Lunch time

Luncheon Seminar

Tue., March 16, 12:00–12:50 Room W

OLYMPUS CORPORATION Luncheon Seminar

Language: Japanese

Live imaging of intracellular patterning with Olympus confocal technologies

Speaker: Yoshihisa Oda, Ph.D.

Department of Gene Function and Phenomics, National Institute of Genetics

Introduction of FV3000/SpinSR10 confocal microscope

Speaker: Hikaru Mukai

OLYMPUS CORPORATION



FV3000 Confocal Laser Scanning Microscope



SpinSR10 Confocal Super Resolution Microscope

Sponsor: OLYMPUS CORPORATION

OLYMPUS

Sat., March 13, 13:00–18:50 Room J

The 23th Plant Organelle Workshop — Metamorphosing paradigms in organelle biology —

Language: Japanese

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

13:00	Opening remarks
Session 1	
13:05	PSI-PSII megacomplex in green lineage Makio Yokono (Hokkaido University), Atsushi Takabayashi (Hokkaido University), Seiji Akimoto (Kobe University)
13:40	Functional and structural insights into an evolution of photosynthetic light harvesters Ryo Nagao (Okayama University)
14:15	Break
Session 2	
14:25	Formation of chloroplast-associated organelle zones Masanori Izumi (RIKEN)
15:00	Molecular mechanism of mitophagy Tomotake Kanki (Niigata University)
15:35	The impact of mitochondrial DNA dynamics on the overall function of mitochondria. Takaya Ishihara (Osaka University)
16:10	Break
16:20	Dynamics of protein sorting zones on the TGN in plant Tomohiro Uemura (Ochanomizu University)
16:55	Cisternal maturation dynamics of the trans-Golgi network in budding yeast Takuro Tojima (RIKEN)
17:30	Break
Keynote lecture	
17:40	Endomembrane-mediated survival strategies in plants Ikuko Hara-Nishimura (Konan University)
18:40	General discussion
18:50	Mixer (Online)*

This workshop is open to all interested participants. Please register online in advance.

<http://www.rib.okayama-u.ac.jp/OWS/>

*For details about the mixer, please visit our website.

Contact address: Yoshiki Nishimura: yoshiki@pmg.bot.kyoto-u.ac.jp

Yusuke Kato: yusuke.kato@setsunan.ac.jp

Sat., March 13, 14:00–7:40 Room K

6th Workshop on Photosynthetic BacteriaLanguage:Japanese

Organizers: Jiro Harada (Kurume University School of Medicine)
 Yusuke Tsukatani (Japan Agency for Marine-Earth Science and Technology)
 Chihiro Azai (Ritsumeikan University)

14:00	Opening remarks Jiro Harada
14:05	“Telescopic observation of solar-induced chlorophyll fluorescence on extrasolar planets” Kenji Takizawa (Astrobiology Center, NINS)
14:35	“Analysis of the relationship between PSI/PSII excitation ratio and photosynthetic electron transport flux and the function of NDH-1 using FBA simulation in cyanobacteria” Masakazu Toyoshima (Department of Bioinformatic Engineering, Graduate School of Information Science and Technology, Osaka University)
15:05	“Challenges and prospects for expressing synthetic cyanobacterial genome in <i>Bacillus subtilis</i> BEST7613” Satoru Watanabe ¹ , Kei Asai ¹ , Mitsuhiro Itaya ² (¹ Department of Bioscience, Tokyo University of Agriculture; ² Faculty of Engineering, Shinshu University)
15:35	Coffee break
15:50	“Diversity of the light-harvesting complexes in purple phototrophic bacteria” Seiu Otomo ¹ , Yukihiro Kimura ² (¹ Faculty of Science, Ibaraki University, ² Graduate School of Agriculture, Kobe University)
16:20	“Extension of light-harvesting and photocurrent generation activities of purple bacterial light-harvesting/reaction center complexes” Takehisa Dewa (Graduate School of Engineering, Nagoya Institute of Technology)
16:50	“Photochromic signal transduction mechanism of light sensor protein PYP” Suhyang Kim (Graduate School of Science, Kyoto University)
17:20	Discussion
18:00	Get together

Entry Form: <https://bit.ly/3mMwoEU> (Dead Line: 05/03/2021)



Sun., March 14, 18:30–20:00 Room K

Workshop for Remodeling Plant ReproductionLanguage:Japanese

Organizers: Daisuke Maruyama (Yokohama City University)
 Yoko Mizuta (Nagoya University)
 Shohei Yamaoka (Kyoto University)

18:15	Zoom session starts
18:30	Opening remark Daisuke Maruyama (Yokohama City University)
18:35	Can “surviver” synergid cell acquire new cell fate? Daisuke Maruyama (Yokohama City University)
18:55	Live-imaging and germ cell modification in pollen tube development Yoko Mizuta (Nagoya University)
19:15	Understanding male gametogenesis in pollen by the <i>Marchantia polymorpha</i> studies Shohei Yamaoka (Kyoto University)
19:30	Molecular mechanism of the generative cell engulfment by the vegetative cell in Arabidopsis Kazuo Ebine (NIBB)
19:45	General Discussion
20:00	Zoom session ends

In this workshop, the studies regarding the Grant-in-Aid for Transformative Research Area (B) entitled “Remodeling Plant Reproduction System by Cell Fate Manipulations” will be introduced and the future prospects of plant reproductive research will be discussed.

This workshop will be recorded. The recordings will be used only for the Research Area activities and will not be used for any other purpose.

Day 1, Evening

Satellite Meeting

Sun., March 14, 19:00–20:30 Room J

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

Language:Japanese

Organizers: Rumi Amano (RIKEN BRC)
Tatsuya Nobori (Salk Institute)

19:00	Opening remarks by Organizers
19:10	Molecular system for flexible regulation of cell proliferation and differentiation in plants ~Or, how to understand what plants are in my own way~ Dr. Misato Ohtani (The University of Tokyo)
19:40	Genome editing: development of CRISPR-Cas and its supporting technologies in plants Dr. Shigeo Sugano (National Institute of Advanced Industrial Science and Technology)
20:10	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. A virtual mixer will be held after the program. More details are available on the meeting website (<http://jsyppmeeting.wixsite.com/wakatenokai>).

Registration due on March 12: <https://forms.gle/fMLMmXPqX87FzRv56>



Contact addresses: Rumi Amano: rumi.amano@riken.jp
Tatsuya Nobori: tnobori@salk.edu

GENERAL PRESENTATIONS

PROGRAM OF ORAL PRESENTATIONS

- Each presentation is allotted a 15-min slot, a talk for 12 min and discussion for 2 min 30 s, followed by a 30 s interval before the next speaker. To keep the session on schedule, please strictly follow the time limits.
- Your connection to the Zoom webinar will be tested in advance. We will contact you with the details such as the date, time and method.
- The presenter will participate in the webinar as a panelist. When your turn comes, please show your slides by sharing the screen and turn on the microphone and video in the Zoom webinar.
- Please select a set of oral presentations for which a chairperson will be responsible by consulting with the other chairpersons of the assigned session beforehand.
- The chairperson will participate in the Zoom webinar as a panelist. Please enter the webinar via the special link for a panelist, which will be provided by the Organizing Committee in advance.
- Chairpersons are listed at the end of Program of Oral Presentations.

● Day 1, Sun., March 14, AM (9:30–12:30)

Time	Room A	Room B	Room C	Room D
	Photosynthesis	Primary metabolism	Biomembrane/Ion and solute transport	Reproductive growth
09:30	<p>1aA01 Effects of herbicide and formate on the redox potential of the primary quinone Q_A in photosystem II <u>Yuki Kato</u>, Takumi Noguchi (Graduate School of Science, Nagoya University)</p>	<p>1aB01 Activation Mechanism Of The Nitrogen Depletion Responsive Transcription Factor MYB1 In The Unicellular Red Alga <i>Cyanidioschyzon Merolae</i> <u>Baifeng Zhou</u>^{1,2}, Hiroki Shima³, Kazuhiko Igarashi³, Kan Tanaka¹, Sousuke Imamura¹ (¹Lab. Chem. Life Sci., Inst. Innov. Res., Tokyo Tech., ²Sch. Life Sci. Tech., Tokyo Tech., ³Sch. Med., Tohoku Univ.)</p>	<p>1aC01 Analysis of the Tissue-Specific Expression Pattern of the Plant Vacuolar Membrane Transporter ABL2 <u>Toko Mori</u>, Mayuko Naganawa, Yoichi Nakanishi (Grad. Sch. Bioagr., Nagoya Univ)</p>	<p>1aD01 The role of germ cell-specific histone H1 variants during spermiogenesis in <i>Marchantia polymorpha</i> <u>Kanta Kotani</u>¹, Ruri Nishida¹, Asuka Higo², Shohei Yamaoka¹, Keisuke Inoue¹, Takashi Araki¹ (¹Graduate School of Biostudies, Kyoto University, ²Center for Gene Research, Nagoya University)</p>
09:45	<p>1aA02 Formation of High Spin S₂ Intermediate State Related to g~5 EPR Signal in the Oxygen Evolving Complex <u>Hiroyuki Mino</u>¹, Shota Taguchi¹, Liangliang Shen², Guangye Han², Yasufumi Umena^{3,4}, Jian-Ren Shen^{2,3}, Takumi Noguchi¹ (¹Grad. School Sci., Nagoya Univ., ²Key Lab. Photobiol., Inst. Botany, Chinese Acad. Sci., China, ³Res. Inst. Interdiscip. Sci., Okayama Univ., ⁴Jichi Medical Univ.)</p>	<p>1aB02 Low nitrogen conditions affect flowering time by modulating the phosphorylation state of transcription factor in <i>Arabidopsis</i> <u>Miho Sanagi</u>¹, Akio Kubo¹, Yasutake Sato², Filip Rolland³, Junpei Takagi¹, Junji Yamaguchi¹, Takato Imaizumi⁴, Takeo Sato¹ (¹Fac. Sci. and Grad. Sch. Life Sci., Hokkaido Univ., ²Sch. Sci., Hokkaido Univ., ³Biol. Dept., KU Leuven, ⁴Dept. Biol., Univ. Washington)</p>	<p>1aC02  Ca²⁺-sensitive and non-selective Na⁺/K⁺ channel activity of a barley aquaporin HvPIP2;8 <u>Sen Tran</u>^{1,2}, Tomoaki Horie³, Shahin Imran¹, Jiaen Qiu⁴, Samantha McGaughey⁵, Caitlin S. Byrt^{4,5}, Stephen D. Tyerman⁴, Maki Katsuhara¹ (¹Institute of Plant Science and Resources, Okayama University, 2-20-1 Chuo, Kurashiki 710-0046, Japan, ²Faculty of Agronomy, University of Agriculture and Forestry, Hue University, Hue, 530000, Vietnam, ³Division of Applied Biology, Faculty of Textile Science and Technology, Shinshu University, 3-15-1, Tokida, Ueda, Nagano 386-8567, Japan, ⁴Australian Research Council Centre of Excellence in Plant Energy Biology, Waite Research Institute and School of Agriculture, Food and Wine, The University of Adelaide, Glen Osmond, South Australia 5064, Australia, ⁵Research School of Biology, Australian National University, Canberra, ACT 2600, Australia)</p>	<p>1aD02 On the molecular function of Arabidopsis VPS13 during pollen germination <u>Sota Fujii</u>¹, Surachat Tangpranomkorn¹, Motoko Igarashi², Fumiko Ishizuna³, Yoshinobu Kato¹, Takamasa Suzuki⁴, Seiji Takayama¹ (¹University of Tokyo, ²Nara Institute of Science and Technology, ³Tokyo Kasei Gakuin University, ⁴Chubu University)</p>
10:00	<p>1aA03 Comparison of in silico Models of Heriobacterial Type-I and Photosystem I Reaction Centers: Pigment Site Energy Shifts and Energy Transfer Process Akiihiro Kimura¹, Hirotaka Kito², Yasuteru Shigetani³, <u>Shigeru Itoh</u>¹ (¹Physics, Science, Nagoya Univ., ²JST PRESTO. System Info, Kobe Univ., ³Center Computational Sci., Tsukuba Univ)</p>	<p>1aB03 Characterization of a Novel microRNA Function Involved in Nitrogen Assimilation in Rice <u>Mio Takatori</u>¹, Kyonoshin Maruyama², Ning Wang^{3,4}, Miyako Kusano^{3,4,5} (¹Grad. Sch. Life and Environmental Sci., Univ. Tsukuba, ²Biological Resources and Post-Harvest Division, JIRCAS, ³Grad. Sch. Life and Environmental Sci., Univ. Tsukuba, ⁴T-PIRC, Univ. Tsukuba, ⁵Yokohama Inst., RIKEN)</p>	<p>1aC03  Functional characterization of a ZIP family transporter OsZIP2 in rice <u>Sheng Huang</u>, Jian Feng Ma (Institute of Plant Science and Resources, Okayama University)</p>	<p>1aD03 Establishment and maintenance of the axial-basal polarity of the zygote and early embryo in rice <u>Atsuko Kinoshita</u>, Tety Maryenti, Hanifah Aini, Erika Toda, Takashi Okamoto (Dept. of Biol. Sci., Tokyo Metropolitan Univ.)</p>

Room E	Room F	Room G	Room H	Room X	Room Y	Room Z	Time
Vegetative growth	Plant hormones/Signaling molecules	Environmental responses B	Plant-organism interaction A				
<p>1aE01 Functional analysis of CELL DIVISION CYCLE 25 in <i>Marchantia polymorpha</i> Ayumi Oda¹, Shiori S Aki¹, Ryuichi Nishihama², Takayuki Kohchi², Masaaki Umeda¹ (¹Grad. Sch. Sci. Tech., NAIST, ²Grad. Sch. Bio., Kyoto Univ.)</p>	<p>1aF01 Physiological effects and molecular mechanisms triggered by exogenous s-4-hydroxy-5-amino valeric acid (s-HAVA) Kaho Tsuruyama¹, Fumiya Endo², Kaito Hinokawa³, Noritaka Aoki³, Takanori Fujimoto², Shigeyuki Watanabe², Tomohide Uno^{1,3}, Kengo Kanamaru^{1,3} (¹Grad. Sch. Agri., Kobe Univ., ²Research & Development Center, Cosmo Oil Co., Ltd., ³Fac. Agri., Kobe Univ.)</p>	<p>1aG01 E Over-expression of <i>NICOTINAMIDASE 3 (NIC3)</i> gene enhances drought tolerance and plant biomass in <i>Arabidopsis</i> Zarnab Ahmad^{1,2}, Khurram Bashir¹, Akihiro Matsui^{1,3}, Maho Tanaka^{1,3}, Ryosuke Sasaki⁴, Akira Oikawa^{4,5}, Masami Yokota Hirai^{4,6}, Bushra Rashid², Tayyab Husnain², Motoaki Seki^{1,3,7} (¹Plant Genomic Network Research Team, RIKEN Center for Sustainable Resource Science (CSRS), Yokohama, 230-0045, Japan, ²Plant Genomics Laboratory, Centre of Excellence in Molecular Biology, University of the Punjab, Lahore, Pakistan, ³Plant Epigenome Regulation Laboratory, RIKEN Cluster for Pioneering Research, Wako, Saitama, 351-0198, Japan, ⁴Mass Spectrometry and Microscopy Unit, RIKEN Center for Sustainable Resource Science (CSRS), Yokohama, 230-0045, Japan, ⁵Faculty of Agriculture, Yamagata University, Tsuruoka, 997-8555, Japan, ⁶Metabolic Systems Research Team, RIKEN Center for Sustainable Resource Science (CSRS), Yokohama, 230-0045, Japan, ⁷Kihara Institute for Biological Research, Yokohama City University, Yokohama, 244-0813, Japan)</p>	<p>1aH01 E Effector signaling in Hypersensitive Response (HR): The single molecule signaling analysis of active oxygen species (AOS) generation by CDPK regulation in potato Naotaka Furuichi (Department of Biochem. Molecular Biology, U Nevada, Reno.)</p>	Symposium S01	Symposium S02	The 17th Database Workshop (9:30-12:30)	09:30
<p>1aE02 Crucial roles of Rboh-mediated ROS production regulating cell division and differentiation in the apical meristematic zones in <i>Marchantia polymorpha</i> Yuki Hagiwara¹, Kenji Hashimoto¹, Rakuri Aiba¹, Sumika Ide¹, Yuto Yamashita¹, Tomohiro Takagawa¹, Fuminori Takahashi², Kazuyuki Kuchitsu¹ (¹Dept. Appl. Biol. Sci., Tokyo Univ. of Sci., ²RIKEN)</p>	<p>1aF02 Functional differentiation between PIP5K genes in <i>A. thaliana</i> Machiko Watari¹, Blanc-Mathieu Romain², Mariko Kato¹, Tomohiko Tsuge¹, Hiroyuki Ogata¹, Takashi Aoyama¹ (¹Institute for Chemical Research, Kyoto university, ²The French Alternative Energies and Atomic Energy Commission)</p>	<p>1aG02 Stress-mediated secreted protein modulates distant organ communications under dehydration stress Fuminori Takahashi¹, Takehiro Suzuki², Naoshi Dohmae², Kazuo Shinozaki¹ (¹Gene Discovery, RIKEN CSRS, ²Biomolecular Character., RIKEN CSRS)</p>	<p>1aH02 E Plant aquaporin phosphorylation restricts bacterial water acquisition under high humidity Shigetaka Yasuda¹, Taishi Hirase¹, Lionel Verdoucq², Colette Tournaire-Roux², Kohji Yamada^{3,4}, Iris Finkemeier^{3,5}, Hirofumi Nakagami³, Xiu-Fang Xin⁶, Sheng Yang He⁶, Christophe Maurel², Yusuke Saijo^{1,3} (¹NAIST, ²CNRS, ³MPIPZ, ⁴Tokushima Univ., ⁵Univ. Münster, ⁶Michigan State Univ.)</p>	Toward understanding emergence of order in Plant-Microbe Holobiont (9:30-12:30)	The universality and diversity of stem cell regulation revealed from the study of basal plants (9:30-12:25)		09:45
<p>1aE03 E Analysis of co-receptor gene for CLAVATA peptide signaling in <i>Marchantia polymorpha</i> apical meristem Yuki Hirakawa¹, Go Takahashi¹, Natsuki Okuzumi¹, Shigeyuki Betsuyaku², Tomohiro Kiyosue¹ (¹Grad. Sch. Sci., Univ. Gakushuin, ²Fac. Agr., Univ. Ryukoku)</p>	<p>1aF03 Functional analysis of plant progesterone receptor candidate and its downstream gene expression Rira Daiho¹, Ayumi Yamagami¹, Ayaka Uebayashi^{2,3}, Setsuko Shimada², Mayumi Iino², Mayumi Okamoto⁴, Shun Kobayashi⁴, Akinori Matsui⁴, Isao Shimizu⁴, Yusuke Kakei⁵, Yukihiisa Shimada⁵, Masaaki Sakuta³, Tadao Asami⁶, Takao Yokota¹, Takeshi Nakano¹ (¹Grad. Biost., Kyoto Univ., ²CSRS, RIKEN, ³Ochanomizu Univ., ⁴Grad. Sci. Engi., Waseda Univ., ⁵KIBR, Yokohama City Univ., ⁶Dept. Appl. Biol. Chem., Tokyo Univ., ⁷Dept. Biosci., Teikyo Univ.)</p>	<p>1aG03 Functional analysis of Group A bZIP transcription factor <i>PpAB15</i> in <i>Physcomitrium patens</i> Yusuke Yoshimura¹, Izumi Yotsui¹, Ken Fujisaki¹, Teruaki Taji¹, Andrew Cuming², Yoichi Sakata¹ (¹Dept. of Bioscience tokyo Univ. of Agriculture, ²Leeds university)</p>	<p>1aH03 E A pair of effectors involving in suppression of Arabidopsis-specific immunity are conserved in Arabidopsis-infecting <i>Fusarium oxysporum</i> Shuta Asai^{1,2}, Yu Ayukawa¹, Pamela Gan¹, Ayako Tsushima¹, Ken Komatsu³, Petra Houterman⁴, Martijn Rep⁴, Tsutomu Arie³, Ken Shiras¹ (¹RIKEN CSRS, ²JST PRESTO, ³Tokyo University of Agriculture and Technology, ⁴University of Amsterdam)</p>				10:00

E=Presentation in English

● Day 1, Sun., March 14, AM (9:30–12:30)

Time	Room A	Room B	Room C	Room D
	Photosynthesis	Primary metabolism	Biomembrane/Ion and solute transport	Reproductive growth
10:15	<p>1aA04 Numerical Modeling for Electron Transfer Reactions in the Bacterial Type-I Photosynthetic Reaction Centers <u>Mika Takahashi</u>¹, Tetsuko Nakaniwa², Risa Mutoh^{2,3}, Kazuki Terauchi¹, Hideaki Tanaka², Hirozo Oh-oka⁴, Genji Kurisu², Chihiro Aza¹ (¹Col. Life Sci., Ritsumeikan Univ., ²IPR, Osaka Univ., ³Fac. Sci., Fukuoka Univ., ⁴Grad. Sch. Sci., Osaka Univ.)</p>	<p>1aB04 Development of the Growth Rate Evaluation Method for Screening of Rice Varieties in Response to Dynamic Changes of Nitrogen Concentration <u>Chihaya Fukui</u>¹, Takanari Tanabata³, Tomoko Nishizawa², Miyako Kusano^{1,2} (¹Grad. Sch. Life and Environmental Sci., Univ. Tsukuba, ²RIKEN Center for Sustainable Resource Science, ³Kazusa DNA Research Ins.)</p>	<p>1aC04 OsBOR1 is involved in organ- and tissue-dependent distribution of boron in rice Ji Feng Shao^{1,2}, <u>Naoki Yamaji</u>¹, Sheng Huang¹, Jian Feng Ma¹ (¹IPSR, Okayama Univ., ²Zhejiang A&F Univ.)</p>	<p>1aD04 E ROS Dynamics and GSH-mediated Glutathione Peroxidase Functions in Developing Rice Zygote <u>Kasidit Rattanawong</u>¹, Narumi Koiso¹, Erika Toda¹, Mari Tanaka², Hiroyuki Tsuji², Takashi Okamoto¹ (¹Dept. of Biol. Sci., Tokyo Metropolitan Univ., ²Kihara Inst., Yokohama City Univ.)</p>
10:30	<p>1aA05 E Plastid-encoded overexpression of Rubisco Activase improves growth and CO₂ assimilation of tobacco under natural light <u>Shamitha Rao Morey</u>¹, Mieko Higuchi-Takeuchi¹, Masaki Odahara¹, Keiji Numata^{1,2} (¹RIKEN Center for Sustainable Resource Science, ²Graduate School of Engineering, Kyoto University)</p>	<p>1aB05 The growth and yield of double insertion line for <i>NADH-GOGAT1</i> and <i>NADH-GOGAT2</i> in rice Tsuyoshi Matsumura, Ryosuke Tajima, <u>Soichi Kojima</u> (Grad. Sch. Agr., Univ. Tohoku)</p>	<p>1aC05 Investigating the Role of the Phosphorylation in the Polar Localization of the Borate Transporter BOR1 <u>Keita Muro</u>¹, Yudai Shimizu¹, Yuka Ogino², Chiaki Hori³, Taichi Takasuka², Koji Kasai⁴, Toru Fujiwara⁴, Junpei Takano¹ (¹Grad. Sch. Life Environ. Sci., Osaka Pref. Univ., ²Grad. Sch. Agri., Hokkaido Univ., ³Grad. Sch. Engr., Hokkaido Univ., ⁴Grad. Sch. Agri. and Life Sci., Univ. Tokyo)</p>	<p>1aD05 E Developmental profiles of inter-subfamily polyploid zygotes produced by the fusion of wheat and rice gametes <u>Tety Maryenti</u>¹, Takayoshi Ishii², Takashi Okamoto¹ (¹Dept. of Biol. Sci., Tokyo Metropolitan Univ., ²ALRC, Tottori Univ.)</p>
10:45	<p>1aA06 Photoinhibition by overexpressing Rubisco activase is restored by a moss flavodiiron proteins in rice <u>Ryo Maruhashi</u>¹, Mao Suganami¹, Youshi Tazoe², So Konno¹, Shinya Wada³, Hiroshi Yamamoto⁴, Toshiharu Shikanai⁴, Amane Makino¹ (¹Grad. Sch. Agr. Sci., Tohoku Univ., ²Fac. Agro-Food Sci., Niigata Agro-Food Univ., ³Grad. Sch. Agr. Sci., Kobe Univ., ⁴Grad. Sch. Sci., Kyoto Univ.)</p>	<p>1aB06 E The role of Dof1.7 transcription factor in response to nitrogen starvation responses in Arabidopsis <u>Mengna Zhuo</u>, Yasuhito Sakuraba, Shuichi Yanagisawa (Biotech. Research Center, UTokyo)</p>	<p>1aC06 E DISM01 is a novel protein involved in Mo distribution in rice <u>Prashant Kandwal</u>, Yoshihiro Ohmori, Toru Fujiwara, Takehiro Kamiya (Graduate School of Agricultural and Life Sciences The University of Tokyo)</p>	<p>1aD06 Analyses of aberrant embryo development observed in the <i>Arabidopsis</i> mutant defective in the nuclear fusion during reproduction <u>Shuh-ichi Nishikawa</u>¹, Yuri Takagi¹, Yuzuru Sato¹, Daisuke Kurihara^{2,3}, Yoshikatsu Sato², Tetsuya Higashiyama^{2,4,5}, Daisuke Maruyama⁶ (¹Fac. Sci., Niigata Univ., ²WPI-ITbM, Nagoya Univ., ³PRESTO, JST., ⁴Grad. Sch. Sci., Nagoya Univ., ⁵Grad. Sch. Sci., Univ. Tokyo, ⁶Grad. Sch. Sci., Univ. Tokyo)</p>
11:00	<p>1aA07 Differences in Rubisco content between the flag and 11th leaves in transgenic rice overproducing Rubisco grown in an experimental paddy field <u>Marin Tanaka</u>, Keiki Ishiyama, Dong-Kyung Yoon, Takaaki Kagawa, Rina Nagao, Hiroyuki Ishida, Tadahiko Mae, Amane Makino (Tohoku University Graduate School of Agricultural Science)</p>	<p>1aB07 Red light-induced activation of nitrate acquisition in <i>Arabidopsis thaliana</i> <u>Yuma Onoue</u>, Yasuhito Sakuraba, Shuichi Yanagisawa (Biotech. Res. Center, Univ. Tokyo)</p>	<p>1aC07 Regulation of <i>MYB59</i> splicing secures shoot K homeostasis in <i>Arabidopsis thaliana</i> <u>Sho Nishida</u>¹, Takuo Enomoto¹, Nobuhiro Tanaka², Toru Fujiwara³ (¹Fac. of Agr., Saga Univ., ²Ins. of Crop Sci., NARO, ³Grad. Sch. of Agr. and Life Sci., Univ. of Tokyo)</p>	<p>1aD07 E Expression analysis of <i>ELONGATION OF SILIQUE WITHOUT POLLINATION3</i> in developing endosperm <u>Yilin Zhang</u>, Hironori Takasakia, Masaru Ohme-Takagi (Graduate School Science and Engineering Saitama University)</p>
11:15	<p>1aA08 Study on the function of θ-carbonic anhydrases in the marine diatom <i>Phaeodactylum tricornutum</i> <u>Kazuya Nagata</u>¹, Kohei Yoneda¹, Sae Kikutani¹, Yoshinori Tsuji², Yusuke Matsuda¹ (¹Dept. Biosci., Grad. Sch. Sci. Tech., Kwansai Gakuin Univ., ²Grad. Sch. Biostudies., Kyoto Univ.)</p>	<p>1aB08 Involvement of nitrate signaling in maintaining chloroplast function in Arabidopsis <u>Takuto Ariga</u>, Yasuhito Sakuraba, Shuichi Yanagisawa (Biotech. Res. Center, Univ. Tokyo)</p>	<p>1aC08 An unconventional degradation pathway of the high-affinity potassium transporter AtHAK5 upon high K⁺ supply <u>Fumihiko Banno</u>¹, Marcel Pascal Beier^{1,2}, Daichi Nagata³, Junpei Takano¹ (¹Grad. Sch. Life and Env., Osaka Pref. Univ., ²Grad. Sch. Agri. and Life Sci., Univ. Tokyo, ³Grad. Sch. Agr., Hokkaido Univ.)</p>	<p>1aD08 Analysis of rice <i>abnormal cell division 1 (abc1)</i> mutant showing defects in endosperm development <u>Toshiya Suzuki</u>¹, Kotaro Izawa², Yoshinori Takafuji², Tsukahoro Hattori², Misuzu Nosaka-T¹, Nhung Ta¹, Sae Shimizu-Sato¹, Yutaka Sato¹ (¹National Institute of Genetics, ²Graduate School of Bioagricultural Sciences, Nagoya University)</p>

Room E	Room F	Room G	Room H	Room X	Room Y	Room Z	Time
Vegetative growth	Plant hormones/Signaling molecules	Environmental responses B	Plant-organism interaction A				
<p>1aE04 Functional analysis of the LRR receptor-like kinase RPK in <i>Marchantia polymorpha</i> Natsuki Okuzumi, Tomohiro Kiyosue, Yuki Hirakawa (Grad. Sch. Sci., Univ. Gakushuin)</p>	<p>1aF04 Engineering the Production of KODA in Arabidopsis Leaves Takayuki Wakamatsu¹, Yuta Ihara^{1,2}, Mineyuki Yokoyama³, Daisuke Maezawa^{2,4}, Hiroyuki Ohta^{1,2}, Mie Shimojima^{1,2} (¹School of Life Science and Technology, Tokyo Institute of Technology, ²OPERA, JST, ³International Environmental and Agricultural Sciences, Tokyo University of Agriculture and Technology, ⁴Kishi Kasei Co., Ltd.)</p>	<p>1aG04 Interactome analysis of ABI5-mediated transcriptional regulation in <i>Physcomitrium patens</i> Yuri Morikawa¹, Ryotaro Oya¹, Ken Fujisaki¹, Yugo Yamazaki¹, Keiko Kuwata², Teruaki Tajiri¹, Daisuke Takezawa³, Yoichi Sakata¹, Izumi Yotsui¹ (¹Dept. Biosci., Tokyo Univ. Agric., ²TbM, Nagoya Univ., ³Dept. Sci., Saitama Univ.)</p>	<p>1aH04 E Screening for the root-knot nematode effectors that suppress plant immunity Kazuki Sato¹, Yasuhiro Kadota¹, Pamela Gan¹, Taketo Uehara², Takahiro Bino³, Katsushi Yamaguchi³, Yasunori Ichihashi⁴, Hideaki Iwahori⁵, Noriko Maki¹, Shuji Shigenobu³, Takamasa Suzuki⁶, Shahid M. Mukhtar⁷, Ken Shirasu^{1,8} (¹RIKEN Center for Sustainable Resource Science, ²Central Region Agricultural Research Center, NARO, ³NIBB Core Research Facilities, National Institute for Basic Biology, ⁴RIKEN BioResource Research Center, ⁵Department of Agriculture, Ryukoku University, ⁶Department of Biological Chemistry, College of Bioscience and Biotechnology, Chubu University, ⁷Department of Biology, University of Alabama at Birmingham, ⁸Graduate School of Science, University of Tokyo)</p>	Symposium S01 Toward understanding emergence of order in Plant-Microbe Holobiont (9:30–12:30)	Symposium S02 The universality and diversity of stem cell regulation revealed from the study of basal plants (9:30–12:25)	The 17th Database Workshop (9:30–12:30)	10:15
<p>1aE05 The roles of plant specific BZR transcription factors in <i>Marchantia polymorpha</i> Tomoyuki Furuya¹, Shohei Yamaoka², Kimitsune Ishizaki¹, Ryuichi Nishihama², Takashi Araki², Takayuki Kohchi², Hiroo Fukuda³, Yuki Kondo¹ (¹Grad. Sch. Sci., Kobe Univ., ²Grad. Sch. Biostudies, Kyoto Univ., ³Grad. Sch. Sci., Univ. Tokyo)</p>	<p>1aF05 Functional analysis of COI1-JAZ receptor complexes in rice Hideo Inagaki¹, Emi Yumoto², Masashi Asahina^{1,2}, Kenichi Uchida^{1,2}, Kengo Hayashi³, Takuya Kajii³, Nobuki Kato³, Yousuke Takaoka³, Minoru Ueda^{3,4}, Kazunori Okada⁵, Hisakazu Yamane^{1,2}, Koji Miyamoto¹ (¹Grad. Sch. Sci. & Eng., Teikyo Univ., ²Adv. Instrum. Anal. Cent., Teikyo Univ., ³Grad. Sch. Sci., Tohoku Univ., ⁴Grad. Sch. Life Sci., Tohoku Univ., ⁵BRC, The Univ. of Tokyo)</p>	<p>1aG05 Functional analysis of ABI5-related bZIP transcription factors in drought tolerance of <i>Marchantia polymorpha</i> Yuta Kidokoro¹, Daisuke Takezawa², Teruaki Tajiri¹, Yoichi Sakata¹, Izumi Yotsui¹ (¹Dept. of Bioscience Tokyo Univ. of Agriculture, ²Dept. Sci., Saitama Univ.)</p>	<p>1aH05 A secreted <i>Ustilago maydis</i> effector acts as a novel adhesin for hyphal aggregation in plant tumors Fumi Fukada^{1,2}, Nicole Rössel¹, Timo Glatter¹, Karin Münch¹, Petra Happel¹, Regine Kahmann¹ (¹Max Planck Institute for Terrestrial Microbiology, ²IPSR, Univ. Okayama)</p>				10:30
<p>1aE06 Functional characterization of <i>LAX PANICLE2</i> homologous in the liverwort <i>Marchantia polymorpha</i> Naho Maehara¹, Hirotaka Kato¹, Yuki Sakai¹, Yuki Kondo¹, Tetsuro Mimura², Hidehiro Fukaki¹, Kimitsune Ishizaki¹ (¹Grad. Sch. Sci., Kobe Univ., ²Grad. Sch. Agr., The Univ. of Tokyo)</p>	<p>1aF06 GH3.10 functions redundantly with JAR1 in flower development and wound responses of <i>Arabidopsis</i> Jay Camisora Delfin, Takayuki Tohge, Takafumi Shimizu (NAIST)</p>	<p>1aG06 Analysis of transcription factors that down-regulate expression of the <i>PIF4</i> gene in response to abiotic stress in Arabidopsis Hidetoshi Hisamune¹, Satoshi Kidokoro¹, Jin-Seok Moon¹, Miki Osugi¹, Kazuo Shinozaki², Kazuko Yamaguchi-Shinozaki^{1,3} (¹Grad. Sch. Agr. Life Sci., Univ. Tokyo, ²Center for Sustainable Resource Science, RIKEN, ³Res. Inst. Agr. Life Sci., Tokyo Univ. Agr.)</p>	<p>1aH06 E Manipulation of host development and immunity by root-associated microbiota Ryohei Thomas Nakano¹, Jana Hucklenbroich^{1,2}, Tamara Gigolashvili², Paul Schulze-Lefert^{1,3} (¹Max Planck Institute for Plant Breeding Research, ²University of Cologne, ³Cluster of Excellence on Plant Sciences (CEPLAS))</p>				10:45
<p>1aE07 Functional analysis of a R2R3-MYB transcription factor SHOTGLASS in <i>Marchantia polymorpha</i> Yuuki Sakai¹, Hideyuki Takami¹, Shigeyuki Tsukamoto¹, Shohei Yamaoka², Yuki Kondo¹, Hidehiro Fukaki¹, Tetsuro Mimura^{1,3}, Kimitsune Ishizaki¹ (¹Grad. Sch. Sci., Kobe Univ., ²Grad. Sch. Biostudies, Kyoto Univ., ³Grad. Sch. Agri., Univ. Tokyo)</p>	<p>1aF07 JAH3 is a negative regulator of both JA and ethylene-mediated dark-induced senescence KwiMi Chung¹, Barbara Kunkel², Nobutaka Mitsuda¹ (¹Bioproduction Research Institute, AIST, ²Washington University in St. Louis)</p>	<p>1aG07 Functional analysis of Arabidopsis Raf-like kinases under environmental stress conditions Haruka Kameoka¹, Fumiyuki Soma¹, Azusa Fukui¹, Takamasa Suzuki², Kazuko Yamaguchi-Shinozaki^{1,3} (¹Grad. Sch. Agr. Life Sci., Univ. Tokyo, ²Biosci. Biotech., Chubu Univ., ³Res. Inst. Agr. Life Sci., Tokyo Univ. Agr.)</p>	<p>1aH07 E Dissecting the co-transcriptome landscape of plants and microbiota Tatsuya Nobori^{1,2}, Kenichi Tsuda^{1,3} (¹Max Planck Institute for Plant Breeding Research, ²Salk Institute, ³Huazhong Agricultural University)</p>				11:00
<p>1aE08 MpBHLH35 regulates setal formation in the sporophyte of <i>Marchantia polymorpha</i> Kenta Moriya¹, Makoto Shirakawa², Yoriko Matsuda³, Kentaro Tamura⁴, Ryuichi Nishihama², Yoshito Oka¹, Tomonao Matsushita¹, Ikuko Hara-Nishimura⁵, Takayuki Kohchi³, Tomoo Shimada¹ (¹Grad. Sch. Sci., Kyoto Univ., ²Grad. Sch. Sci. Tech., NAIST, ³Grad. Sch. Bio., Kyoto Univ., ⁴Sch. Food & Nutritional Sci., Univ. Shizuoka, ⁵Fac. Sci. Eng., Konan Univ.)</p>	<p>1aF08 Characterization of novel putative plant defense activators that induce accumulation of jasmonic acid in <i>Arabidopsis thaliana</i> Erika Nishida¹, Taiki Funahashi¹, Yuho Saito¹, Masataka Nakano¹, Nobutaka Kitahata¹, Yutaka Nakazawa¹, Kentaro Namiki¹, Maki Nakashima¹, Koji Kuramochi¹, Hiroshi Abe², Fuminori Takahashi², Kenji Hashimoto¹, Kazuyuki Kuchitsu¹ (¹Dept. Appl. Biol. Sci., Tokyo Univ. of Sci., ²RIKEN)</p>	<p>1aG08 Mechanisms of drought stress responses mediated by RAF-SnRK2 kinase cascades in Arabidopsis Fumiyuki Soma¹, Fuminori Takahashi², Suzuki Takamasa³, Kazuo Shinozaki², Kazuko Yamaguchi-Shinozaki^{1,4} (¹Grad. Sch. Agr. Life Sci., Univ. Tokyo, ²Center for Sustainable Resource Science, RIKEN, ³Biosci. Biotech., Chubu Univ., ⁴Res. Inst. Agr. Life Sci., Tokyo Univ. Agr.)</p>	<p>1aH08 E Brown planthopper honeydew-associated microbes elicit defense response in rice Wari David, Hojo Yuko, Shinya Tomnori, Galis Ivan (Inst. Plant Sci. & Res., Okayama Univ.)</p>	11:15			

E=Presentation in English

● Day 1, Sun., March 14, AM (9:30–12:30)

Time	Room A	Room B	Room C	Room D
	Photosynthesis	Primary metabolism	Biomembrane/Ion and solute transport	Reproductive growth
11:30	<p>1aA09 C4Flaveria abundant CP12-3 can regulate GAPDH activity at mesophyll cell chloroplasts <u>Tsuyoshi Furumoto</u>, Dongyu Yan, Kohei Oka, Hayato Horigami (Faculty of Agriculture, Ryukoku University)</p>	<p>1aB09 Analysis of polymorphisms in the promoter of Arabidopsis <i>NITRATE TRANSPORTER1.1</i> (<i>NRT1.1</i>) conferring better nitrogen use under nitrogen-deficient conditions <u>Yasuhito Sakuraba</u>¹, Zhana Chagan¹, Atsushi Mabuchi², Koh Iba², Shuichi Yanagisawa¹ (¹Biotech. Res. Center, Univ. Tokyo, ²Grad. Sch. Sci., Univ. Kyushu)</p>		
11:45	<p>1aA10 Ex-vivo experimental method for visualization of the chloroplast proteins involved in C4 photosynthesis <u>Saki Ueda</u>¹, Ryousuke Sugiura², Sumire Fujisiro², Mao Fujiyoshi², Yuuki Nakamura², Hayato Matsumoto², Tsuyosi Furumoto^{1,2} (¹Grad. Sch. Agr. Univ. Ryukoku, ²Facu. Sch. Agr. Univ. Ryukoku)</p>	<p>1aB10 Characterization of coexpression modules and their hubgenes identified by gene coexpression network analysis of rice plants grown in paddy fields <u>Katsumi Hagino</u>^{1,2}, Yonghyun Kim², Yoshiaki Ueda³, Atsushi J. Nagano⁴, Shuichi Yanagisawa⁵, Mitsue Miyao² (¹Grad. Sch. Arts and Sci., Univ. Tokyo, ²Grad. Sch. Agricul. Sci., Tohoku Univ., ³JIRCAS, ⁴Fac. Agricul., Ryukoku Univ., ⁵Biotech. Res. Center, Univ. Tokyo)</p>		
12:00	<p>1aA11 E Correlation of winter-specific gene expression and sustained thermal dissipation in over-wintering yew leaves <u>Zihao Ye</u>, Mina Sawada, Ryo Moriyama, Toshihiko Hara, Ayumi Tanaka, Atsushi Takabayashi, Ryouichi Tanaka (Inst Low Temp Sci, Hokkaido Uni)</p>			
12:15	<p>1aA12 Exploring for a photorespiratory pathway of conifer leaves by metabolite analysis <u>Shin-Ichi Miyazawa</u>¹, Takafumi Miyama¹, Ko Tahara¹, Yuji Suzuki², Mitsuru Nishiguchi¹ (¹Forestry and Forest Products Research Institute, ²Iwate University)</p>			

Room E	Room F	Room G	Room H	Room X	Room Y	Room Z	Time
Vegetative growth	Plant hormones/Signaling molecules	Environmental responses B	Plant-organism interaction A				
<p>1aE09 Different Expression Patterns of the Key Transcription Factors Underlie the Diverse Patterns of Stomatal Development in the Genus <i>Callitriche</i> Yuki Doll, Hiroyuki Koga, Hirokazu Tsukaya (Grad. Sch. Sci., Univ. Tokyo)</p>	<p>1aF09 Effects of anesthesia on the wound-responsive gene and graft union of <i>Arabidopsis</i> hypocotyls Sakuya Hirayama¹, Ryosuke Sato², Kyomi Shibata³, Ken Yokawa⁴, Shinobu Satoh⁵, Masashi Asahina^{1,2,3} (¹Grad. Sch. Sec. & Eng., Teikyo Univ., ²Dept. Biosci., Teikyo Univ., ³Adv. Instrum. Anal., Teikyo Univ., ⁴Dept. Eng., Kitami Tech Univ., ⁵Life & Environ Sci., Univ. Tsukuba)</p>	<p>1aG09 Arabidopsis B3-MAPKKs are positive regulators of subclass III SnRK2 in osmstress signaling Goro Masuda¹, Shohei Katsuta¹, Hyeokjin Bak¹, Akihisa Shinozawa², Yoshiaki Kamiyama³, Taishi Umezawa³, Daisuke Takezawa⁴, Izumi Yotsui¹, Teruaki Tajiri¹, Yoichi Sakata¹ (¹Dept. of Bioscience., Tokyo Univ. of Agriculture, ²Bio resource genome center., Tokyo Univ. of Agriculture, ³Dept. of BASE., Tokyo Univ. of Agriculture and Engineering, ⁴Dept. of Science and Engineering, Saitama Univ.)</p>	<p>1aH09 Mutants of defensive trichomes isolated from NBRP-tomato bioresource collections Koichi Sugimoto, Naoko Ito, Yoko Fujimori, Hiroshi Ezura (T-PIRC, Univ. Tsukuba)</p>	<p>Symposium S01 Toward understanding emergence of order in Plant-Microbe Holobiont (9:30-12:30)</p>	<p>Symposium S02 The universality and diversity of stem cell regulation revealed from the study of basal plants (9:30-12:25)</p>	<p>The 17th Database Workshop (9:30-12:30)</p>	<p>11:30</p> <p>11:45</p> <p>12:00</p> <p>12:15</p>

=Presentation in English

● Day 1, Sun., March 14, PM (14:00–16:45)

Time	Room A	Room B	Room C	Room D
	Cell wall	Transcriptional, post-transcriptional or translational, post-translational regulations	Photoreceptors/Photoresponses	Reproductive growth
14:00	<p>1pA01 Identification of transcription factor involving in S₂ layer formation of secondary cell wall (SCW) in <i>Populus</i> <u>Naoki Takata</u>¹, Tatsuya Awano², Pui Ying Lam³, Shiro Suzuki^{3,4}, Yuki Tobimatsu³, Nobutaka Mitsuda⁵, Natsumaro Kutsuna⁶, Yusuke Yamagishi⁷, Toru Taniguchi⁸ (¹Forest Bio Res. Cent., For. Forest Prod. Res. Inst., ²Grad. Sch. of Agri., Kyoto Univ., ³RISH, Kyoto Univ., ⁴Fac. Appl. Biol. Sci. Gifu Univ., ⁵Bioprod. Res. Inst., AIST, ⁶LPixel Inc., ⁷Grad. Sch. of Agri., Hokkaido Univ., ⁸Tohoku Reg. Breeding Office, Forest Tree Breeding Cent., For. Forest Prod. Res. Inst.)</p>	<p>1pB01 Local activation of an endogenous pararetrovirus and its effect to RNA interference in star-type petunia <u>Kazunori Kuriyama</u>¹, Midori Tabara¹, Hideki Takahashi², Hiromitsu Moriyama¹, Toshiyuki Fukuhara¹ (¹Agriculture, Univ. Tokyo of Agri. and Tech., ²Agriculture, Univ. Tohoku)</p>	<p>1pC01 Photochemical Properties of LOV Domains of Phototropin from <i>Marchantia polymorpha</i> <u>Yamato Takahashi</u>¹, Shota Kato¹, Koji Okajima², Yutaka Kodama¹ (¹Utsunomiya Univ., ²Keio University)</p>	<p>1pD01 Crucial roles of autophagy and Rboh-mediated ROS production in tapetal programmed cell death and pollen maturation in rice Kazunori Ogawa¹, Jumpei Sawada¹, Togo Fukunaga¹, Shigeru Hanamata^{1,2}, Kenji Hashimoto¹, Seijiro Ono³, Ken-Ichi Nonomura⁴, Seisuke Kimura⁴, Takamitsu Kurusu^{1,5}, <u>Kazuyuki Kuchitsu</u>¹ (¹Dept. Appl. Biol. Sci., Tokyo Univ. of Science, ²Niigata Univ., ³Natl. Inst. Genetics, ⁴Kyoto Sangyo Univ., ⁵Suwa Univ. of Science)</p>
14:15	<p>1pA02 ③ BAHD acyltransferases responsible for lignin <i>p</i>-coumaroylation in rice cell walls <u>Pui Ying Lam</u>¹, Yuki Tobimatsu¹, Shiro Suzuki^{1,2}, Takuto Tanaka¹, Yuri Takeda¹, Yuriko Osakabe³, Keishi Osakabe³, Laura E. Bartley⁴, Toshiaki Mizewawa^{1,5} (¹RISH, Kyoto Univ., ²Fac. Appl. Biol. Sci., Gifu U., ³Fac. Biosci. Bioeng., Tokushima Univ., ⁴Inst. Biol. Chem., Washington State Univ., ⁵RUDGS, Kyoto Univ.)</p>	<p>1pB02 Molecular dissection of Dicer-Like1 protein in Arabidopsis microRNA biogenesis <u>Rikako Hirata</u>¹, Kei-ichiro Mishiba¹, Nozomu Koizumi¹, Hamdan Samir M.2, Yuji Iwata¹ (¹Grad. Sch. Biol. Environ., Osaka. Pref. Univ., ²KAUST Div. of Biol. Envir. Sci. Eng., King Abdullah Univ. of Sci. Tech.)</p>	<p>1pC02 Dimerization of LOV1 Domain of Phototropin from <i>Marchantia polymorpha</i> <u>Minoru Noguchi</u>, Yutaka Kodama (Ctr. Biosci. Res. Educ., Utsunomiya Univ)</p>	<p>1pD02 The floral homeotic protein AGAMOUS controls petal growth and senescence via Jasmonic acid in <i>Arabidopsis</i> <u>Akira Uemura</u>, Nobutoshi Yamaguchi, Toshiro Ito (Grad. Sch. Science and Technology., Nara Institute of Science and Technology)</p>
14:30	<p>1pA03 Second pathway for generation of UDP-L-arabinose in Arabidopsis Akira Umezawa¹, Konatsu Nakazawa², Shinya Fushinobu³, Naho Nishigaki¹, Yoichi Tsumuraya¹, Daisuke Takahashi¹, <u>Toshihisa Kotake</u>¹ (¹Grad. Sch. Sci. & Eng., Saitama Univ., ²Fac. Sci., Saitama Univ., ³Grad. Sch. Agri. & Life Sci., Univ. Tokyo)</p>	<p>1pB03 ③ Importance of Nonsense-mediated mRNA Decay in Auxin Signaling during <i>in vitro</i> Organogenesis and Development in Plants <u>Nyet-Cheng Chiam</u>¹, Tomoyo Fujimura², Ryosuke Sano¹, Taku Demura^{1,2}, Misato Ohtani^{1,2,3} (¹Division of Biological Science, Graduate School of Science and Technology, Nara Institute of Science and Technology, Ikoma, 630-0192 Japan, ²RIKEN Center for Sustainable Resource Science, Yokohama, 230-0045 Japan, ³Department of Integrated Biosciences, Graduate School of Frontier Sciences, The University of Tokyo, Kashiwa, 77-8562, Japan)</p>	<p>1pC03 The Role of Dephosphorylation of NPH3 in The Hypocotyl Phototropism of Arabidopsis <u>Taro Kimura</u>¹, Ken Haga², Yuko Nomura³, Takumi Higaki⁴, Hirofumi Nakagami⁵, Tatsuya Sakai¹ (¹Grad. Sch. Sci. Tech., Niigata Univ., ²Fac. Fundam. Eng., Nippon Inst. Tech., ³RIKEN CSRS, ⁴IROAST, Kumamoto Univ., ⁵Max Planck Inst. Plant Breeding Res.)</p>	<p>1pD03 ③ Morphological and Physiological Framework Underlying Plant Longevity in <i>Arabidopsis thaliana</i> <u>Yukun Wang</u>¹, Kie Kumaishi², Takamasa Suzuki³, Yasunori Ichihashi^{2,4}, Nobutoshi Yamaguchi^{1,4}, Makoto Shirakawa¹, Toshiro Ito¹ (¹Division of Biological Science, Graduate School of Science and Technology, Nara Institute of Science and Technology, ²RIKEN BioResource Research Center, ³Department of Biological Chemistry, College of Bioscience and Biotechnology, Chubu University, ⁴Precursory Research for Embryonic Science and Technology, Japan Science and Technology Agency)</p>
14:45	<p>1pA04 ③ Arabinogalactan Proteins Modulate Auxin Signaling in <i>Physcomitrium patens</i> To Control Gametophore Formation <u>Ooi Kock Teh</u>¹, Junling Ren³, Tomomichi Fujita² (¹IAHE, Hokkaido Univ., ²Fac. Sci., Hokkaido Univ., ³Grad. Sch. Life. Sci., Hokkaido Univ.)</p>	<p>1pB04 Involvement of pre-mRNA splicing regulation in the plastid signal-mediated lateral root development <u>Natsu Takayanagi</u>¹, Hirokazu Takahashi², Misato Ohtani^{1,2,3} (¹Grad. Sch. Front. Sci., Univ. Tokyo, ²Div. Biol. Sci., NAIST, ³RIKEN, CSRS)</p>	<p>1pC04 Blue light-induced leaf movement in <i>Lotus japonicus</i> <u>Rie Mishima</u>¹, Yusuke Kubo¹, Tatsuya Sakai², Toshinori Kinoshita³, Takuya Suzuki⁴, Shin-ichiro Inoue¹ (¹Grad. Sch. Sci., Nagoya Univ., ²Grad. Sch. Sci., Niigata Univ., ³ITbM., Nagoya Univ., ⁴Grad. Sch. Life and Environ. Sci., Univ. Tsukuba)</p>	<p>1pD04 CRABS CLAW controls nectary development thorough the <i>MACCHI-BOU 4</i> gene in <i>Arabidopsis</i> <u>Hideaki Jimura</u>¹, Nobutoshi Yamaguchi^{1,2}, Toshiro Ito¹ (¹Bio. Sci., NAIST, ²JST Sakigake)</p>
15:00	<p>1pA05 Exploring the significance of lignin by using an artificial system to reconstitute cell wall in planta Miyuki Nakata¹, Kentaro Ezura¹, Shingo Sakamoto¹, Yasuko Kaneko², Kouki Yoshida³, <u>Nobutaka Mitsuda</u>¹ (¹BPRI AIST, ²Grad. Sch. Sci. Eng., Saitama Univ., ³Taisei Co. Ltd.)</p>	<p>1pB05 <i>Arabidopsis</i> DROL1 gene is specifically required for splicing AT–AC-type introns <u>Takamasa Suzuki</u>, Gaiki Ono, Tomoko Niwa, Fumiya Yamasaki (Col. Biosci. Biotech., Chubu Univ.)</p>	<p>1pC05 BLUS1 signal and a decrease in intercellular CO₂ concentration are necessary for stomatal opening in response to blue light <u>Sakurako Hosotani</u>¹, Shota Yamauchi¹, Haruki Kobayashi¹, Saashia Fuji¹, Shigekazu Koya², Ken-ichiro Shimazaki², Atsushi Takemiya¹ (¹Grad. Sch. Sci. Tech. Innov., Yamaguchi Univ., ²Grad. Sch. Sci., Kyushu Univ.)</p>	<p>1pD05 QTL dissection of the flower morphology in the genus <i>Streptocarpus</i> <u>Kanae Nishii</u>^{1,2}, Yun-Yu Chen^{2,3}, Catherine Kidner^{2,3}, Christine Anne Hackett⁴, Michael Moeller² (¹Kanagawa Univ., ²Royal Botanic Garden Edinburgh, ³Univ. Edinburgh, ⁴BioSS)</p>

Room E	Room F	Room G	Room H	Room X	Room Y	Room Z	Time
Vegetative growth	Plant hormones/Signaling molecules	Environmental responses B	Plant-organism interaction A				
<p>1pE01 E A novel stress-activated regulator of shoot regeneration in Arabidopsis <u>Duncan Coleman</u>¹, Ayako Kawamura¹, Momoko Ikeuchi², David Favero¹, Akira Iwase¹, Alice Lambolozzi^{1,3}, Takamasa Suzuki^{3,4}, Keiko Sugimoto^{1,3} (RIKEN CSRS, Yokohama, ²Sch. Sci., Niigata Univ., ³Grad. Sch. Sci., Univ. Tokyo., ⁴Col. Biosci. Biotech., Chubu Univ.)</p>	<p>1pF01 A Study In The Relationship Between BR Supply In The Root Tip And Light Signaling From The Shoot Tissue <u>Jun Sakaguchi</u>, Yuichiro Watanabe (Grad. Sch. of Arts and Sci., The Univ. of Tokyo)</p>	<p>1pG01 Improvement of growth and yield in stress tolerant plants by gene stacking <u>Toshiki Kato</u>¹, Satoshi Kidokoro¹, Madoka Kudo¹, Kazuo Shinozaki², Kazuko Yamaguchi-Shinozaki^{1,3} (¹Grad. Sch. Agr. Life Sci., Univ. Tokyo, ²Center for Sustainable Resource Science, RIKEN, ³Res. Inst. Agr. Life Sci., Tokyo Univ. Agr)</p>	<p>1pH01 E Identification of secondary metabolite synthesis key genes that are involved in virulence of phytopathogenic fungi using a multiplex gene disruption system <u>Naoyoshi Kumakura</u>¹, Katsuma Yonehara^{1,2}, Pamela Gan¹, Nobuaki Ishihama¹, Ken Shirasu^{1,2} (¹CSRS, Riken, ²Grad. Sch. Sci., Univ. Tokyo)</p>	Symposium S03 Frontiers of Plant Genome Editing to shape the future with new technologies (14:00-17:00)	Symposium S04 Re-optimization of Energy Transduction in Photosynthesis – Structure, Function and System (14:00-16:45)	Symposium S05 Mineral element transport systems in plants: transporters, regulation and utilization (14:00-17:10)	14:00
<p>1pE02 E Light as an environmental signal in the control of plant regeneration <u>Yu Chen</u>^{1,2}, David Favero², Ayako Kawamura², Keiko Sugimoto^{1,2} (¹Grad. Sch. Sci., Univ. Tokyo, ²CSRS, RIKEN)</p>	<p>1pF02 Analysis for subcellular protein dynamics of BIL7 that promotes plant growth in brassinosteroid signaling <u>Yusuke Nakamura</u>¹, Tomoko Miyaji², Ayumi Yamagami¹, Minami Matsui², Shozo Fujioka², Tadao Asami³, Takeshi Nakano¹ (¹Grad. Sch. Biostudies., Kyoto Univ., ²RIKEN, CSRS, ³Grad. Sch. Agri. Life Sci., Univ. of Tokyo)</p>	<p>1pG02 MKP1 Plays a Positive Role in Osmotic Stress Tolerance in <i>Arabidopsis thaliana</i> <u>Masahiro Yamaguchi</u>¹, Kohei Uchida¹, Hirota Ariga¹, Keisuke Tanaka², Izumi Yotsui¹, Yoichi Sakata¹, Teruaki Tajiri¹ (¹Tokyo Univ. of Agriculture Dept. of Bioscience, ²NODAI Genome Research Center)</p>	<p>1pH02 Dissection of LysM protein-mediated immune signaling pathway in the moss <i>Physcomitrium patens</i> using a forward genetic approach <u>Yuki Ambe</u>¹, Hidenori Matsui², Teruaki Tajiri¹, Yoichi Sakata¹, Izumi Yotsui¹ (¹Dept. of Bioscience Tokyo Univ. of Agriculture, ²Grad. Sch. Environ. and Life Sci., Okayama Univ.)</p>				14:15
<p>1pE03 Transcriptome Dynamics of Epidermal Reprogramming during Direct Shoot Regeneration in <i>Torenia fournieri</i> <u>Hatsune Morinaka</u>¹, Akihito Mamiya¹, Hiroaki Tamaki¹, Takamasa Suzuki², Momoko Ikeuchi^{3,4}, Akira Iwase⁴, Keiko Sugimoto⁴, Tetsuya Higashiyama^{5,6}, Munetaka Sugiyama¹ (¹Botanical Gardens, Grad. Sch. Sci., Univ. Tokyo, ²Dept. Biol. Chem., Coll. Biosci. Biotech., Chubu Univ., ³Faculty of Sci., Niigata Univ., ⁴CSRS, RIKEN, ⁵ITbM, Nagoya Univ., ⁶Dept. Biol. Sci., Grad. Sch. Sci., Univ. Tokyo)</p>	<p>1pF03 Functional analysis of brassinosteroid signaling factor BSHs for plant growth <u>Rina Su</u>¹, Ayumi Yamagami¹, Tomoko Miyaji², Masaaki Sakuta³, Tadao Asami⁴, Kazuo Shinozaki², Takeshi Nakano¹ (¹Grad. Bios., Univ. Kyoto, ²CSRS, Riken, ³Grad. Life Sci., Univ. Ochanomizu, ⁴Dept. Appl. Biol. Chem., Univ. Tokyo)</p>	<p>1pG03 Dissecting genetic variation in osmotolerance among <i>Arabidopsis thaliana</i> accessions <u>Kosuke Banba</u>, Izumi Yotsui, Yoichi Sakata, Teruaki Tajiri (Dept. of Bioscience Tokyo Univ. of Agriculture)</p>	<p>1pH03 Systemic Induction of Disease Resistance and Growth Inhibition by Chitin in Arabidopsis <u>Hisako Yamagata</u>¹, Keigo Naito², Momoko Takagi¹, Mai Yoshioka¹, Mayumi Egusa¹, Keisuke Kariya², Atsushi Ishihara¹, Shinsuke Ifuku³, Akira Mine^{4,5}, Hironori Kaminaka¹ (¹Fac. Agr., Tottori Univ., ²Grad. Sch. Agr., Tottori Univ., ³Grad. Sch. Eng., Tottori Univ., ⁴Fac. Life Sci., Ritsumeikan Univ., ⁵JST PRESTO)</p>				14:30
<p>1pE04 E Leaf Protoplast Reprogramming in Arabidopsis <u>Yuki Sakamoto</u>^{1,2}, Takamasa Suzuki³, Shoji Segami^{4,5}, Masayoshi Maeshima³, Keiko Sugimoto^{1,2} (¹Grad. Sch. Sci., Univ. Tokyo, ²CSRS, RIKEN, ³Col. Biosci. Biotech., Chubu Univ., ⁴NIBB, ⁵SKENDAI)</p>	<p>1pF04 Functional analysis of novel bHLH transcription factors BHHs in BR signaling pathway <u>Zhana Chagan</u>¹, Yuichiro Tanaka^{1,2}, Reika Hasegawa³, Ayumi Yamagami¹, Miho Ikeda³, Nobutaka Mitsuda⁴, Tetsuo Kushiro², Masaru Takagi^{3,4}, Tadao Asami⁵, Takeshi Nakano¹ (¹Grad. Sch. Bios., Kyoto Univ., ²Grad. Sch. Agri., Meiji Univ., ³Grad. Sch. Sci. Eng., Saitama Univ., ⁴AIIST, ⁵Grad. Sch. Agri. Life Sci., Univ. Tokyo)</p>	<p>1pG04 Phenotypic analysis of quinoa inbred lines by automated phenotyping system RIPPS <u>Miki Fujita</u>¹, Saya Kikuchi¹, Masami Toyoshima², Nobuyuki Mizuno^{3,4}, Yasuo Yasui³, Yasunari Fujita^{2,5}, Kazuo Shinozaki¹ (¹RIKEN CSRS, ²JIRCAS, ³Grad. Sch. Agri. Sci., Kyoto Univ., ⁴Institute of Crop Science, NARO, ⁵Univ Tsukuba)</p>	<p>1pH04 Elucidation of the Mechanism Underlying the Expression of Disease Resistance Systemically Induced by Chitin in Rice <u>Momoko Takagi</u>¹, Kei Hotamori¹, Keigo Naito², Mayumi Egusa¹, Yoko Nishizawa³, Shinsuke Ifuku⁴, Akira Mine^{5,6}, Hironori Kaminaka¹ (¹Fac. Agr., Tottori Univ., ²Grad. Sch. Agr., Tottori Univ., ³Inst. Agr. Sci., NARO, ⁴Grad. Sch. Eng., Tottori Univ., ⁵Fac. Life Sci., Ritsumeikan Univ., ⁶JST PRESTO)</p>				14:45
<p>1pE05 E Identification of proliferative cells among protoplast prepared from rice scutellum callus <u>Hanifah Aini</u>, Orika Nakahira, Takashi Okamoto (Dept. of Biol. Sci., Tokyo Metropolitan Univ.)</p>	<p>1pF05 Identification of novel compounds that inhibit SnRK2 kinase activity by high-throughput screening <u>Shoko Matsuoka</u>¹, Karin Sato¹, Riyo Imamura², Yoshiteru Noutoshi³, Takayoshi Okabe², Hirotsugu Kojima², Taishi Umezawa¹ (¹Grad. Sch. BASE, Tokyo Univ. Agric. Tech., ²Drug Discovery Initiative, Tokyo Univ., ³Grad. Sch. Env. Life Sci., Okayama Univ.)</p>	<p>1pG05 E Enhancement of heat and drought tolerance by tomato <i>phytochrome A</i> mutation <u>Islam Abdellatif</u>¹, Shaoze Yuan¹, Na Renhu¹, Kenji Miura^{1,2} (¹Graduate school of Life and Environmental Sciences, University of Tsukuba, Tsukuba, Japan, ²Tsukuba Plant-Innovation Research Center (T-PIRC), University of Tsukuba, Tsukuba, Japan)</p>	<p>1pH05 Callose-dependent phosphate mobilization in phosphate starvation response of <i>Arabidopsis thaliana</i> <u>Kentaro Okada</u>¹, Koei Yachi¹, Tan Anh Nhi Nguyen¹, Tae-Hong Lee¹, Saya Kikuchi², Kazuo Shinozaki², Satomi Kanno³, Miki Fujita², Kei Hiruma^{1,4}, Yusuke Saijo¹ (¹Grad. Sch. Sci. Tech., NAIST, ²RIKEN CSRS, ³IAR, Nagoya Univ., ⁴Grad. Sch. Arts. Sci., Tokyo Univ.)</p>				15:00

E=Presentation in English

● Day 1, Sun., March 14, PM (14:00–16:45)


Time	Room A	Room B	Room C	Room D
	Cell wall	Transcriptional, post-transcriptional or translational, post-translational regulations	Photoreceptors/Photoresponses	Reproductive growth
15:15	<p>1pA06 The β-1,4-Glucanase Gene in the Adhesion of "Grafting" and "Parasitism" <u>Ken-ichi Kurotani</u>¹, Ryo Tabata², Yaichi Kawakatsu¹, Takanori Wakatake^{3,4}, Ken Shirasu^{3,4}, Michitaka Notaguchi^{1,2,5} (¹Bioscience and Biotechnology Center, Nagoya Univ., ²Graduate School of Bioagricultural Sciences, Nagoya University, ³Graduate School of Science, The University of Tokyo, ⁴Center for Sustainable Resource Science, RIKEN, ⁵Institute of Transformative Bio-Molecules, Nagoya University)</p>	<p>1pB06 COP9 signalosome and its interacting partner AtSAP130 both contribute to pollen development in <i>Arabidopsis thaliana</i> Shiori S Aki¹, Kei Yura^{2,3}, Takashi Aoyama¹, Tomohiko Tsuge¹ (¹ICR, Kyoto Univ., ²Fac. Sci. Eng., Waseda Univ., ³Grad. Sch. Hum. Sci., Ochanomizu)</p>	<p>1pC06 Blue light-induced phosphorylation of BEC1 mediates starch degradation and stomatal opening <u>Shota Yamauchi</u>¹, Naoyuki Sugiyama², Ken-ichiro Shimazaki³, Atsushi Takemiya¹ (¹Grad. Sch. Sci. Tech. Innov., Yamaguchi Univ., ²Grad. Sch. Pharm., Kyoto Univ., ³Grad. Sch. Sci., Kyushu Univ.)</p>	<p>1pD06 Functional analysis of a NIMA-related kinase in a liverwort <i>Marchantia polymorpha</i> <u>Aoi Sumiura</u>¹, Asaka Kanda², Taku Takahashi^{1,2}, Hiroyasu Motose^{1,2} (¹Dep. Biol., Fac. Sci., Okayama Univ., ²Dep. Biol. Sci., Grad. Sch. Nat. Sci. & Tech., Okayama Univ.)</p>
15:30	<p>1pA07 Analysis of physiological roles of cell wall-related genes affecting xylem transport <u>Satoshi Endo</u>, Hiroo Fukuda (Grad. Sch. Sci., Univ. Tokyo)</p>	<p>1pB07 The relationship between polyadenylation and C-to-U editing of mitochondrial mRNA in Arabidopsis <u>Akihito Mamiya</u>¹, Kurataka Otsuka¹, Kayoko Yamamoto¹, Takehito Kobayashi², Yusuke Yagi², Takahiro Nakamura², Takashi Hirayama³, Munetaka Sugiyama¹ (¹Botanical Gardens, Graduate School of Science, The University of Tokyo., ²Department of Bioscience and Biotechnology, Faculty of Agriculture, Kyushu University., ³Institute of Plant Science and Resources, Okayama University.)</p>	<p>1pC07 amiRNA-based screen for novel factors that function in the phototropin-mediated blue light signaling <u>Arisa Mifujii</u>, Haruki Kobayashi, Rio Tomomoto, Atsushi Takemiya (Grad. Sch. Sci. Tech. Innov., Yamaguchi Univ.)</p>	<p>1pD07 B Genetic dissection of MpFGMYB functions in the sexual differentiation of <i>Marchantia polymorpha</i> <u>Yihui Cui</u>¹, Tatsuaki Goh¹, Tetsuya Hisanaga^{1,2}, Tomoaki Kajiwara³, Yoshihiro Yoshitake³, Takayuki Kohchi³, Keiji Nakajima¹ (¹Grad. Sch. Sci. Tech, NAIST, ²GMI, ³Grad. Sch. Biostudies, Kyoto Univ.)</p>
15:45	<p>1pA08 Changes in cotyledon shape and pavement cell morphology in <i>RIC1</i>-overexpressors <u>Kotomi Kikukawa</u>¹, Takumi Higaki² (¹Faculty of Science, Kumamoto Univ., ²IROAST, Kumamoto Univ.)</p>	<p>1pB08 Plant ribosome-specific stalling unveiled by unfolded protein response <u>Tomoya Imamichi</u>¹, Nao Kusumoto¹, Shugo Sugawara², Seidai Takamatsu¹, Yugo Honda³, Shiori Muraoka³, Hitoshi Onouchi², Satoshi Naito^{1,2}, Yui Yamashita¹ (¹Graduate School of Life Science, Hokkaido University, Japan, ²Graduate School of Agriculture, Hokkaido University, Japan, ³School of Agriculture, Hokkaido University, Japan)</p>	<p>1pC08 Characterization and molecular improvement of compounds that affect light-induced stomatal opening <u>Yusuke Aihara</u>¹, Shigeo Toh², Yosuke Toda^{3,4}, Shinpei Inoue¹, Ayato Sato³, Kei Murakami^{4,5}, Kenichiro Itami^{1,3}, Toshinori Kinoshita^{1,3} (¹Grad. Sch. Sci., Nagoya Univ., ²Grad. Sch. Agr., Meijo Univ., ³WPI-ITbM, Nagoya Univ., ⁴PRESTO, JST, ⁵Grad. Sch. Sci. Tech., Kwansai Gakuin Univ.)</p>	<p>1pD08 Gibberellin-mediated feedback regulation of sexual organ formation in the liverwort <i>Marchantia polymorpha</i> <u>Shogo Kawamura</u>, Rui Sun, Ran Wang, Yoshihiro Yoshitake, Ryunosuke Kusunoki, Ryuichi Nishihama, Shohei Yamaoka, Takayuki Kohchi (Grad. Sch. Biostudies., Kyoto Univ.)</p>
16:00	<p>1pA09 ROS and Ca²⁺-mediated regulation of polar tip growth of rhizoids and the mechanical properties of the cell wall in <i>Marchantia polymorpha</i> <u>Kenji Hashimoto</u>¹, Naoaki Abe¹, Mariko Higashijima¹, Takeru Itabashi¹, Toshinori Morisaku², Hiroharu Yui², Kazuyuki Kuchitsu¹ (¹Dept. of Appl. Biol. Sci., Tokyo University of Science, ²Dept. of Chem., Tokyo University of Science)</p>	<p>1pB09 Sucrose-induced ribosome stalling and mRNA degradation in Arabidopsis <u>Shugo Sugawara</u>¹, Tomoya Imamichi², Yugo Honda³, Hitoshi Onouchi¹, Satoshi Naito^{1,2}, Yui Yamashita¹ (¹Grad. Sch. Agri., Hokkaido Univ., ²Grad. Sch. Life Sci., Hokkaido Univ., ³Sch. Agri., Hokkaido Univ.)</p>	<p>1pC09 Functional characterization of novel compounds that affect signaling pathway in stomatal opening <u>Gwangchol Sin</u>¹, Yusuke Aihara¹, Shigeo Toh², Shinpei Inoue¹, Ayato Sato², Toshinori Kinoshita^{1,3} (¹Grad. Sch. Sci., Nagoya Univ., ²Dept. Agr. Resour. Sch., Meijo Univ., ³WPI-ITbM, Nagoya Univ.)</p>	
16:15	<p>1pA10 B Cellular and subcellular localization of haustorium inducing signals in the haustorium of the parasitic plant <i>Striga hermonthica</i> <u>Sonokui Cui</u>¹, Yuri Takeda², Toshiaki Umezawa^{2,3}, Yuki Tobimatsu², Satoko Yoshida¹ (¹Plant Symb., Div. Bio. Sic., NAIST, ²Res. Ins. Sust. Hum., Kyo. Univ., ³Res. Uni. Dev. Glob. Sus., Kyo. Univ.)</p>	<p>1pB10 Genome-wide identification of evolutionarily conserved non-AUG uORFs involved in translational control in plants <u>Yuta Hiragori</u>¹, Hiro Takahashi², Noriya Hayashi¹, Shun Sasaki¹, Yui Yamashita¹, Satoshi Naito^{1,3}, Hitoshi Onouchi¹ (¹Grad. Sch. of Agr., Hokkaido Univ., ²Grad. Sch. of Med. Sci., Kanazawa Univ., ³Grad. Sch. of Life Sci., Hokkaido Univ.)</p>		

Room E	Room F	Room G	Room H	Room X	Room Y	Room Z	Time
Vegetative growth	Plant hormones/Signaling molecules	Environmental responses B	Plant-organism interaction A				
<p>1pE06 Molecular mechanism of plant callus formation accelerated by FPX and promoter of plant growth (PPG) Kotomi Maekawa¹, Shota Tanaka^{2,3}, Shun Takeno^{2,3}, Ayumi Yamagami^{1,2}, Yusuke Kakei⁴, Yukihisa Shimada⁴, Yoshimitsu Kondou², Naoshi Douzen², Setsuko Shimada², Minami Matsui², Tetsuo Kushi³, Naoyuki Osada², Tadao Asami⁵, Kazuo Shinozaki², Takeshi Nakano^{1,2} (¹Grad. Sch. Biostudies., Kyoto Univ., ²RIKEN CSRS, ³Dept. Agri., Meiji Univ., ⁴Yokohama City Univ., ⁵Grad. Sch. Agri. Life Sci., University of Tokyo)</p>	<p>1pF06 E Involvement of secondary metabolic pathway for root-cut response in <i>Arabidopsis thaliana</i> Kang Xu¹, Feiyang Lin², Emi Yumoto³, Masashi Asahina³, Masaaki Watahiki^{1,2} (¹Grad. Sch. Life., Univ. Hokkaido, ²Div. Sci., Fac. Sci., Univ. Hokkaido, ³Dept. Biosci., Univ. Teikyo)</p>	<p>1pG06 E <i>Brachypodium</i> BdABC25 is a homolog of <i>Arabidopsis</i> AtABC25 involved in the transport of abscisic acid Takashi Kuromori, Eriko Sugimoto, Kazuo Shinozaki (RIKEN CSRS)</p>	<p>1pH06 E Tryptophan-derived metabolites suppress fungal pathogenesis during beneficial fungal interactions in <i>Arabidopsis thaliana</i> Hong Ye¹, Shigetaka Yasuda¹, Kazuki Tsurukawa¹, Semba Kazuhiko², Mutsumi Watanabe¹, Keisuke Tanaka³, Teruaki Taji⁴, Takayuki Tohge¹, Yoshiaki Nakao², Kei Hiruma^{1,5}, Yusuke Saijo¹ (¹Grad. Sch. Sci. Tech., NAIST, ²Grad. Sch. Eng., Kyoto Univ., ³NODAI Genome Research Center, Tokyo Univ. Agric., ⁴Dept. Biosci., Tokyo Univ. Agric., ⁵Grad. Sch. Arts and Sci., Univ. Tokyo)</p>	Symposium S03 Frontiers of Plant Genome Editing to shape the future with new technologies (14:00–17:00)	Symposium S04 Re-optimization of Energy Transduction in Photosynthesis – Structure, Function and System (14:00–16:45)	Symposium S05 Mineral element transport systems in plants: transporters, regulation and utilization (14:00–17:10)	15:15
<p>1pE07 Biochemical Analysis of Stemness-Related Proteins in Arabidopsis Ryuji Tsugeki¹, Hitoshi Mori² (¹Grad. Sch. Sci., Kyoto Univ., ²Grad. Sch. Agric. Sci., Nagoya Univ.)</p>	<p>1pF07 Identification of a novel gene involved in cytokinin riboside metabolism in rice Mikiko Kojima^{1,2}, Nobue Makita¹, Tsuyu Ando^{3,4}, Ayahiko Syoumura^{3,4}, Toshio Yamamoto^{3,5}, Hitoshi Sakakibara^{1,2} (¹CSRS, RIKEN, ²Grad. Sch. Bio. Sci., Nagoya Univ., ³STAFF Institute, ⁴NARO, ⁵Inst. Plant. Sci. Resources., Okayama Univ.)</p>	<p>1pG07 The effect of MYB transcription factors regulating cuticle accumulation on water use efficiency Yoshimi Oshima^{1,2}, Kaoru Urano³, Miki Fujita³, Frederic Domergue⁴, Kazuo Shinozaki³, Nobutaka Mitsuda¹ (¹Bioprod. Res. Inst., Natl. Adv. Ind. Sci. & Tech. (AIST), ²PREST, JST, ³CSRS, RIKEN, ⁴Bordeaux Univ.)</p>	<p>1pH07 A chemical defense strategy of Brassicaceae plants reduces the feeding motivation of blowflies through their olfactory and gustatory systems Junpei Takagi¹, Somare Mizuho², Tatsuya Uebi³, Tadashi Kunieda⁴, Toru Maeda⁵, Shunya Habe⁶, Kenji Yamada⁵, Mamiko Ozaki⁷, Ikuko Hara-Nishimura² (¹Fac. Sci. and Grad. Sch. Life Sci., Hokkaido Univ., ²Fac. Sci. and Eng., Konan Univ., ³Nara Women's Univ., Inst. Yamato Area and Kii Pen., ⁴Grad. Sch. Biol. Sci., NAIST, ⁵Malopolska Centre of Biotechnol., Jagiellonian Univ., ⁶Dept. Bioreour. Fld. Sci., Kyoto Inst. of Technol., ⁷RISH, Kyoto Univ.)</p>				15:30
<p>1pE08 Cell polarity establishment and maintenance by PIN cluster formation in Arabidopsis Shimane Naramoto¹, Masahiko Furutani², Hiroo Fukuda³, Junko Kyoizuka⁴, Tomomichi Fujita¹ (¹Dept. Biol. Sci., Univ. Hokkaido, ²Col. Life Sci., Fujian Agriculture and Forestry Univ., ³Dept. Biol. Sci., Grad. Sch. Sci., Univ. Tokyo, ⁴Grad. Sch. Life Sci., Tohoku Univ.)</p>	<p>1pF08 Contribution of indole-3-butyric acid uptake mediated by Arabidopsis NPF7.3/NRT1.5 to the creation of uneven auxin distribution in Arabidopsis roots Shunsuke Watanabe¹, Naoki Takahashi², Yuri Kanno¹, Hiromi Suzuki¹, Yuki Aoi³, Noriko Takeda-Kamiya¹, Kiminori Toyooka¹, Hiroyuki Kasahara^{1,4}, Ken-ichiro Hayashi⁵, Masaaki Umeda², Mitsunori Seo¹ (¹RIKEN CSRS, ²Grad. Sch. Sci. Tech., NAIST, ³Grad. Sch. Agric., Tokyo Univ. Agric. Tech., ⁴GIR, Tokyo Univ. Agric. Tech., ⁵Dep. Biochem., Okayama Univ. Sci.)</p>	<p>1pG08 Analyses of transcriptional regulation of cuticular wax accumulation in response to dehydration Kaoru Urano¹, Kyonoshin Maruyama², Yoshimi Oshima^{3,4}, Shingo Sakamoto³, Toshiki Ishikawa⁵, Maki Kawai-Yamada⁵, Mayuko Sato¹, Kiminori Toyooka¹, Kazuko Yamaguchi-Shinozaki^{6,7}, Kazuo Shinozaki¹ (¹CSRS, RIKEN, ²Bio. Res. Div., JIRCAS, ³Bio. Res. Inst., AIST, ⁴PREST, JST, ⁵Grad. Sch. Sci. Eng., Saitama Univ., ⁶Grad. Sch. Agri. Life Sci., Univ. Tokyo, ⁷Res. Inst. Agri. Life Sci., Tokyo Univ. of Agri.)</p>	<p>1pH08 Wide-field imaging of calcium signals triggered by green leaf volatile in Arabidopsis Takuva Uemura, Yuri Aratani, Masatsugu Toyota (Grad. Sch. Sci., Univ. Saitama)</p>				15:45
<p>1pE09 E Role of a conserved tyrosine residue of the MAB4 family proteins in Arabidopsis halotropism Xiaomin Song^{1,2}, Yi Yang^{1,2}, Song Sun², Masahiko Furutani^{1,2} (¹Coll. Life Sci., FAFU, ²HIST, FAFU)</p>	<p>1pF09 Identification of genes involved in auxin and temperature interaction in roots using GWAS Takehiko Ogura, Wolfgang Busch (Salk Institute)</p>	<p>1pG09 Correlation of expression of OsPIP2;4, rice aquaporin, with root water permeability (<i>Lp</i>) Aya Ohnishi, Maki Katsuhara (IPSR • Univ. Okayama)</p>	<p>1pH09 E Spatiotemporal dynamics of the salicylic acid and jasmonic acid responsive genes in immune and wound responses Shigeyuki Betsuyaku¹, Eriko Betsuyaku¹, Shunsuke Masuo², Natsumi Mori-Moriyama³, Atsushi J. Nagano¹ (¹Fac. Agr., Ryukoku Univ., ²Fac. Life & Env. Sci., Univ. Tsukuba, ³Research Inst. Food & Agr., Ryukoku Univ.)</p>				16:00
<p>1pE10 E Functional analysis of the conserved domains of a NPH3-like protein, MAB4 Yi Yang^{1,2}, Xiaomin Song^{1,2}, Song Sun², Mengyuan Lu^{1,2}, Tianyi Tan^{1,2}, Masahiko Furutani^{1,2} (¹Coll. Life Sci., FAFU, ²HIST, FAFU)</p>	<p>1pF10 A chemical screening of auxin by using Auxin Inducible Degron cell lines Yoshino Fukuhara¹, Yuki Nakashima², Naoya Kadofusa³, Ayato Sato³, Naoyuki Uchida², Keisuke Obara¹, Takumi Kamura¹, Kohei Nishimura¹ (¹Grad. Sch. Sci., Nagoya Univ., ²Center for Gene Research, Nagoya Univ., ³WPI-ITbM, Nagoya Univ.)</p>		<p>1pH10 RNA-seq analysis of <i>sar8.2m</i> knockout <i>Nicotiana benthamiana</i> inoculated with <i>Phytophthora infestans</i> Sayaka Imano¹, Yohei Kondou¹, Yusuke Shibata¹, Takamasa Suzuki², Aiko Tanaka¹, Ikuro Sato¹, Sotaro Chiba¹, Koji Kageyama³, Kazuhito Kawakita¹, Daigo Takemoto¹ (¹Grad. Sch. Bioagri. Sci., Nagoya Univ., ²College Biosci. Biotech., Chubu Univ., ³River Basin Res. Ctr., Gifu Univ.)</p>	16:15			

E=Presentation in English


● Day 1, Sun., March 14, PM (14:00–16:45)

Time	Room A	Room B	Room C	Room D
	Cell wall	Transcriptional, post-transcriptional or translational, post-translational regulations	Photoreceptors/Photoresponses	Reproductive growth
16:30		<p>1pB11 Analysis of effect of mutations occurred in ALSRKb on the SI activity and protein biosynthesis <u>Masaya Yamamoto</u>¹, Shotaro Ohtake¹, Akihisa Sinosawa⁴, Matsuyuki Shiota², Yuki Mitsui³, Hiroyasu Kitashiba¹ (1¹Grad. Sch. of Agri., Tohoku Univ., 2²Grad. Sch. of Med., Tohoku Univ., 3³Grad. Sch. of Agri., Tokyo Univ. of Agri., 4⁴NODAI Genome Research Center, Tokyo Univ. of Agri.)</p>		

Room E	Room F	Room G	Room H	Room X	Room Y	Room Z	Time
Vegetative growth	Plant hormones/Signaling molecules	Environmental responses B	Plant-organism interaction A				
<p>IpE11 </p> <p>Reconsideration of the function of a Ser/Thr kinase PINOID in polar auxin transport Qiuli Wang^{1,2}, Masahiko Furutani^{1,2} (¹Coll. Life Sci., FAFU, ²HIST, FAFU)</p>							16:30

=Presentation in English

● Day 2, Mon., March 15, AM (9:00–12:00)

Time	Room A	Room B	Room C	Room D
	Secondary (specialized) metabolism	Cell cycle/Cell division	Photoreceptors/Photoresponses	Systems biology
09:00	<p>2aA01 Novel transcription factors linked to change of (iso)flavonoid metabolism Kai Uchida, Jun Inaba, Muneo Sato, Masami Yokota Hirai (RIKEN CSRS)</p>	<p>2aB01 Dissection of plant mitosis by tracking single cell metabolite changes of BY-2 cell Okubo-Kurihara Emiko¹, Ahmed Ali^{2,3}, Mika Hiramoto^{1,6}, Yukio Kurihara¹, Abouleila Yasmine^{2,3}, Takayuki Kawai², Yoko Makita¹, Mika Kawashima¹, Hiroaki Shimada⁶, Takumi Higaki⁴, Seiichiro Hasezawa⁵, Minami Matsui¹ (¹RIKEN, CSRS, ²RIKEN, BDR, ³Leiden University, LACDR, ⁴Kumamoto University, IROAST, ⁵Hosei University, ⁶Tokyo University of Science)</p>	<p>2aC01 Identification of key amino acid sequences required for chloroplast translocation of CPD photolyase Momo Otake, Chiharu Komatsu, Mamoru Hara, Mika Teranishi, Kaoru Yoshiyama (Okamoto), Jun Hidema (Grad. Life. Sci., Tohoku Univ.)</p>	<p>2aD01 Allohexaploid wheat 10+ genomes project and de novo genome assembly of the Japanese wheat cultivar Norin 61: functional variation in flowering time and <i>Fusarium</i> resistance genes Kentaro K. Shimizu^{1,2}, Dario Copetti^{2,3}, Moeko Okada², Thomas Wicker⁴, Toshiaki Tameshige^{1,5}, Masaomi Hatakeyama^{2,6}, Rie Shimizu-Inatsugi², Tim Paape², Gwyneth Halstead-Nussloch², Catharine Aquino⁶, Kazusa Nishimura⁷, Fuminori Kobayashi⁸, Kazuki Murata⁹, Kuo Tony^{10,11}, Emily Delorean¹², Jesse Poland¹², Georg Haberer¹³, Manuel Spannagl¹³, Klaus F. X. Mayer^{13,14}, Juan Gutierrez-Gonzalez¹⁵, Gary J. Muehlbauer¹⁵, Cecile Monat¹⁶, Axel Himmelbach¹⁶, Sudharsan Padmarasu¹⁶, Martin Mascher¹⁶, Sean Walkowiak^{17,18}, Tetsuya Nakazaki¹⁷, Tomohiro Ban¹, Kanako Kawaura¹, Hiroyuki Tsuji¹, Curtis Pozniak¹⁷, Nils Stein^{16,19}, Jun Sese^{9,20}, Shuhei Nasuda⁹, Hirokazu Handa^{8,21} (¹Kihara Institute for Biological Research, Yokohama City University, ²University of Zurich, Department of Evolutionary Biology and Environmental Studies, ³Molecular Plant Breeding, ETH Zurich, ⁴University of Zurich, Department of Plant and Microbial Biology, ⁵Niigata University, Faculty of Science, ⁶Functional Genomics Center Zurich, ⁷Graduate School of Agriculture, Kyoto University, Kizugawa, ⁸Institute of Crop Science, NARO, ⁹Graduate School of Agriculture, Kyoto University, Kyoto, ¹⁰National Institute of Advanced Industrial Science and Technology, ¹¹University of Guelph, Centre for Biodiversity Genomics, Guelph, ¹²Kansas State University, Department of Plant Pathology, ¹³Helmholtz Zentrum München, ¹⁴School of Life Sciences, Technical University Munich, ¹⁵University of Minnesota, Department of Agronomy and Plant Genetics, ¹⁶Leibniz Institute of Plant Genetics and Crop Plant Research, ¹⁷University of Saskatchewan, Crop Development Centre, Saskatoon, ¹⁸Canadian Grain Commission, Grain Research Laboratory, ¹⁹Department of Crop Science, Center of integrated Breeding Research, ²⁰Humanome Lab., ²¹Graduate School of Life and Environmental Sciences, Kyoto Prefectural University)</p>
09:15	<p>2aA02 Elucidation Of Precise Interaction Mode Of The Natural Rubber Biosynthetic Machinery Proteins In <i>Hevea brasiliensis</i> Nadia Nur Shazana Binti Abu Talib Khan¹, Makoto Yamaguchi¹, Koji Kojima¹, Miki Hiromori¹, Toshiyuki Waki¹, Satoshi Yamashita², Yuzuru Tozawa³, Haruhiko Yamaguchi⁴, Yukino Miyagi⁴, Toru Nakayama¹, Seiji Takahashi¹ (¹Grad. Sch. Eng., Univ. Tohoku, ²Grad. Sch. Natural Sci., Tech., Univ. Kanazawa, ³Grad. Sch. Sci. Eng., Univ. Saitama, ⁴Sumitomo Rubber Ind., Ltd.)</p>	<p>2aB02 Rice RNA binding protein MEL2 regulates mitosis-meiosis transition as a constituent of cytoplasmic RNA granules Manaki Mimura¹, Seijiro Ono¹, Ken-Ichi Nonomura^{1,2} (¹National Institute of Genetics, Plant Cytogenetics Lab, ²Grad. Univ. Adv. Sids. (SOKENDAI))</p>	<p>2aC02 The functions of two UVB photoreceptors UVR8 and their role in the mechanism of UVB resistance in rice Hanako Miura, Mika Teranishi, Jun Hidema (Grad. Life. Sci., Tohoku Univ.)</p>	<p>2aD02 Genome analysis of two rice core collections, the WRC and JRC for association studies Nobuhiro Tanaka¹, Matthew Shenton¹, Yoshihiro Kawahara¹, Masao Ishimoto¹, Kaworu Ebana² (¹Ins. of Crop Sci., NARO, ²Genetic Resources Center, NARO)</p>
09:30	<p>2aA03 A dirigent protein AtDPI1 and a laccase AtLAC5 responsible for biosynthesis of neolignans in Arabidopsis seed coats Keiko Yonekura-Sakakibara¹, Masaomi Yamamura², Fumio Matsuda³, Eiichiro Ono⁴, Ryo Nakabayashi¹, Satoko Sugawara¹, Tetsuya Mori¹, Yuki Tobimatsu², Toshiaki Umezawa^{2,5}, Kazuki Saito^{1,6} (¹RIKEN CSRS, ²RISH, Kyoto Univ., ³Grad. Sch. Info. Sci. Tech., Osaka Univ., ⁴Suntory Global Innovation Center Ltd., ⁵RUDGS, Kyoto Univ., ⁶Plant Molecular Science Center, Chiba Univ.)</p>	<p>2aB03 Domain swap or convergent evolution - the riddle of the elusive plant Survivin Shinichiro Komaki¹, Maren Hesse², Takashi Hashimoto¹, Arp Schnittger² (¹Grad. Sch. Biol. Sci., NAIST, ²Univ. Hamburg)</p>	<p>2aC03  AT-hook transcription factors promote photomorphogenesis by antagonizing the PHYTOCHROME INTERACTING FACTORS David Favero¹, Ayako Kawamura¹, Arika Takebayashi¹, Akira Iwase¹, Keiko Sugimoto^{1,2} (¹RIKEN Cent. Sust. Res. Sci., ²Dep. Biol. Sci., Univ. Tokyo)</p>	<p>2aD03 Comparative genome/transcriptome analysis under low temperature conditions at the germination stage of rice Kyonoshin Maruyama¹, Hiroaki Sakai², Mio Shibuta K.³, Sachihiko Matsunaga³ (¹JIRCAS, ²NARO, ³Dept. Integr. Biosci., Grad. Sch. Frontier Sci., Univ. Tokyo)</p>

Room E	Room F	Room G	Room H	Room X	Room Y	Room Z	Time
Vegetative growth	Plant hormones/Signaling molecules	Environmental responses B	Plant-organism interaction B				
<p>2aE01 Functional analysis of a rice transcription factor OsPIL7 involved in leaf rolling Daisuke Todaka¹, Takayuki Hashimoto¹, Kazuo Shinozaki², Kazuko Yamaguchi-Shinozaki^{1,3} (1Grad. Sch. Agr. Life Sci., Univ. Tokyo, 2Center for Sustainable Resource Science, RIKEN, 3Res. Inst. Agr. Life Sci., Tokyo Univ. Agr.)</p>	<p>2aF01 Identification of a gibberellin agonist by a cell-free based drug screening system Akira Nozawa¹, Ryosuke Hori¹, Chihiro Muramatsu¹, Keiichiro Nemoto², Tatsuya Sawasaki¹ (1PROS, Ehime Univ., 2Iwate Biotechnology Research Center)</p>	<p>2aG01 Dissecting The Salt-tolerance Mechanism of a Salt-shock Tolerant <i>Arabidopsis thaliana</i> Kaori Uchiyama, Yu Ito, Izumi Yotsui, Yoichi Sakata, Teruaki Taji (Dept. of Bioscience, Tokyo Univ. of Agriculture)</p>	<p>2aH01 E Feeding Behavior of Golden Apple Snail on Rice and Subsequent Rice Defense Response Mafrikhul Muttaqin^{1,2}, Songkui Cui¹, Satoko Yoshida¹ (1Plant Symbiosis Laboratory, Graduate School of Science and Technology, Nara Institute of Science and Technology, Ikoma, Nara 630-0192, Japan, 2Department of Biology, Faculty of Mathematics and Natural Sciences, Bogor Agricultural University (IPB University), Bogor, 16680, Indonesia)</p>	Symposium S06	Symposium S07	Symposium S08	09:00
				Frontiers in plant redox biology: Redox regulation, oxidative stress and signaling (9:00–12:00)	A new perspective for Integrated Bio-metal Science (9:00–12:05)	Past and future of plant RNA research answering fundamental questions (9:00–11:55)	09:15
<p>2aE02 Roles of nucleolar proteins and epigenetic regulator AS2 in leaf development of <i>Arabidopsis thaliana</i> Chiyoko Machida¹, Hiro Takahashi², Tetsunori Hibino¹, Sayuri Ando¹, Hidekazu Iwakawa¹, Mika Nomoto³, Masaomi Tada³, Munetaka Sugiyama⁴, Shoko Kojima⁴, Yasunori Machida³ (1Grad. Sch. of Biosci. & Biotech., Chubu Univ., 2Grad. Sch. of Medical Sci., Kanazawa Univ., 3Dev. of Biol. Sci., Grad. Sch. of Sci., Nagoya Univ., 4Grad. Sch. of Sci., Univ. of Tokyo)</p>	<p>2aF02 The regulation of phase transition in rice internode Keisuke Nagai¹, Yoshinao Mori¹, Shin Ishikawa¹, Rico Gamuyao¹, Yoko Niimi¹, Tokunori Hobo¹, Moyuri Fukuda¹, Hitoshi Sakakibara^{1,5}, Tomonori Furuta², Hiroshi Hisano², Hirokazu Sato², Takashi Akagi², Aya Yoshida³, Hiroyuki Tsuji³, Yutaka Sato⁴, Mikiko Kojima⁵, Yumiko Takebayashi⁵, Atsushi Fukushima⁵, Yasuyo Himuro⁵, Masatomo Kobayashi⁵, Jianzhong Wu⁶, Wataru Ackley⁶ (1Biosci. Biotech. Cent., Nagoya Univ., 2Okayama Univ., 3Yokohama City Univ., 4NIG, 5Riken, 6NARO)</p>	<p>2aG02 Genetical Analyses of <i>Acquired Osmotolerance Defective2 (aod2)</i> Mutant Norika Fukuda¹, Takashi Koyama¹, Hirotaka Ariga², Keisuke Tanaka³, Izumi Yotsui¹, Yoichi Sakata¹, Teruaki Taji¹ (1Dept. of Bioscience, Tokyo Univ. of Agriculture, 2NARO Advanced Analysis Center, 3NODAI Genome Research Center)</p>	<p>2aH02 Comparative transcriptome analyses between chloroplast-like organelle of the thecate amoeba <i>Paulinella micropora</i> and some cyanobacterial species presumed as its symbiotic origin Mitsuhiro Matsuo¹, Hiroko Uchida², Makoto Tachikawa³, Akio Murakami², Junichi Obokata¹ (1Fac. Agri., Setsunan Univ., 2KURCIS., Kobe Univ., 3Grad. Sch. Life Env. Sci., Kyoto Prefect. Univ.)</p>				09:30
<p>2aE03 Expression pattern of SCARECROW during leaf development in <i>C₄ Flaveria bidentis</i> Yuri Munekage¹, Mei Osawa¹, Yukimi Taniguchi¹, Tammy Sage² (1Sch. Sci. Tech., Kwansai Gakuin Univ., 2Dep. Eco. Evo. Bio., Univ. Toronto)</p>	<p>2aF03 Studies on the gibberellin deactivation pathway catalyzed by EUI and EUI2 in rice Toshiaki Ishida¹, Shoko Fudano², Yingying Zhang³, Hongbo Zhu⁴, Shubiao Zhang⁴, Zuhua He³, Yoshiya Seto⁵, Kiyoshi Mashiguchi¹, Shinjiro Yamaguchi¹ (1ICR, Kyoto Univ., 2Grad. Sch. Life Sci., Tohoku Univ., 3Chinese Academy of Sciences, 4Fujian Agric. & Forestry Univ., 5Dep. Agric. Chem., Meiji Univ.)</p>	<p>2aG03 Mutation in <i>CATION CALCIUM EXCHANGER4</i> Impairs the Osmotolerance by Detrimental Autoimmunity via NPR1 Kazuki Kanamori¹, Takashi Koyama¹, Hirotaka Ariga², Keisuke Tanaka³, Izumi Yotsui¹, Yoichi Sakata¹, Teruaki Taji¹ (1Tokyo Univ. of Agriculture Dept. of Bioscience, 2NARO Advanced Analysis Center, 3NODAI Genome Research Center)</p>	<p>2aH03 Effect of plant hormones on the differentiation of searching hyphae of a stem parasitic plant, <i>Cuscuta campestris</i>, into vascular elements Yusuke Takagaki, Koh Aoki (Grad. Sch. Life and Env. Sci., Osaka Pref. Univ.)</p>				

E=Presentation in English

● Day 2, Mon., March 15, AM (9:00–12:00)

Time	Room A	Room B	Room C	Room D
	Secondary (specialized) metabolism	Cell cycle/Cell division	Photoreceptors/Photoresponses	Systems biology
09:45	<p>2aA04 Analysis of the Indoxyl-Biosynthetic Ability of a Flavin-Containing monooxygenase from <i>Polygonum tinctorium</i>, One of the Indigo-Producing Plants <u>Shintaro Inoue</u>, Rihito Morita, Yoshiko Minami (Dept. of Biochem., Faculty of Sci., Okayama Univ. of Sci.)</p>	<p>2aB04 DNA Damage Response in <i>M. polymorpha</i> <u>Kaoru Yoshimura (Okamoto)</u>¹, Tomoaki Sakamoto², Seisuke Kimura², Jun Hidema¹ (¹Tohoku Univ, Life Sciences, ²Kyoto Sangyo Univ. Life Sciences)</p>	<p>2aC04 Analysis of E3 ubiquitin ligase Cul4 complex involved in light signal transduction in a primitive red alga <i>Cyanidioschyzon merolae</i> <u>Yuki Kobayashi</u>¹, Miyako Kitagawa^{1,2}, Toko Yoshikawa^{1,2}, Hikaru Ohara³, Mitsumasa Hanaoka³, Sousuke Imamura⁴, Kan Tanaka¹ (¹Laboratory for Chemistry and Life Science, Institute of Innovative Science, Tokyo Institute of Technology, ²School of Life Science and Technology, Tokyo Institute of Technology, ³Graduate School of Horticulture, Chiba University)</p>	<p>2aD04 Prediction of leaf photosynthetic rate in field-grown rice by comprehensive measurement and predicted transcriptome profile <u>Satoshi Ohkubo</u>¹, Sotaro Honda², Makoto Kashima³, Nan Su San¹, Anothai Nakkasame¹, Hiroki Saito⁴, Taiichiro Ookawa¹, Atsushi J. Nagano⁵, Shunsuke Adachi⁶ (¹Grad. Sch. Agr., Tokyo Univ. Agr. Tech., ²Grad. Sch. Agr. Life Sci., Univ. Tokyo, ³Col. Sci. Eng., Aoyama Gakuin Univ., ⁴JIRCAS, ⁵Fac. Agr., Ryukoku Univ., ⁶Col. Agr., Ibaraki Univ.)</p>
10:00	<p>2aA05 Identification of glycosyltransferase enzymes involved in biosynthesis of phenylethanoid glycoside by using sesame cell culture <u>Yoshiro Fuji</u>^{1,4}, Hiroshi Matsufuji², Tomoyoshi Akashi³, Masami Yokota Hirai⁴ (¹College of Bioresource Sciences, Nihon University, ²Department of Food Bioscience and Biotechnology, College of Bioresource Sciences, Nihon University, ³Department of Applied Biological Science, College of Bioresource Sciences, Nihon University, ⁴RIKEN Center for Sustainable Resource Science)</p>	<p>2aB05 Stem cell replenishment in <i>Arabidopsis</i> roots under DNA stress <u>Kazuki Saita</u>, Naoki Takahashi, Masaaki Umeda (Grad. Sch. Sci. Tech., NAIST)</p>	<p>2aC05 Structural basis of the red-absorbing state of cyanobacteriochrome ReaE that regulates complementary chromatic acclimation in cyanobacteria Takayuki Nagae¹, Masashi Unno², Taiki Koizumi³, Yohei Miyanoiri⁴, Tomotsumi Fujisawa⁵, Kento Masui⁶, Takanari Kamo⁶, Kei Wada⁵, Toshihiko Eki⁶, Yutaka Ito³, Masaki Mishima³, <u>Yuu Hirose</u>⁶ (¹Nagoya Univ., ²Saga Univ., ³Tokyo City Univ., ⁴Osaka Univ., ⁵Miyazaki Univ., ⁶Toyohashi Univ. of Tech.)</p>	<p>2aD05 From Seed to Data: Clearance of Bottlenecks for Ultra-high-throughput Transcriptomics of <i>Arabidopsis</i> Seedlings <u>Nagano Atsushi</u>^{1,2}, Yasuyuki Nomura³, Natsumi Mori-Moriyama³, Yuko Kurita³, Makoto Kashima^{3,4}, Shigeyuki Betsuyaku¹ (¹Fac. Agr., Ryukoku Univ., ²IAB, Keio Univ., ³Res. Inst. Food Agr., Ryukoku Univ., ⁴Coll. Sci. Eng., Aoyama Gakuin Univ.)</p>
10:15	<p>2aA06 ③ Cross-species fruitomics to elucidate biosynthetic structure and metabolic regulation of fruit polyphenolics in the Solanaceous species <u>Carla Lenore Ferrolino Calumpang</u>, Tomoki Saigo, Mutsumi Watanabe, Takayuki Tohge (Plant Secondary Metabolism, Nara Institute of Science and Technology)</p>	<p>2aB06 ③ SOG1 homologues regulate DNA-damage responses in <i>Physcomitrella patens</i> <u>Ayako Sakamoto</u>¹, Tomoaki Sakamoto³, Yuichiro Yokota¹, Mika Teranishi², Seisuke Kimura³ (¹Department of Radiation-Applied Biology, QST, ²Faculty of Life Sciences, Kyoto Sangyo University, ³Graduate School of Life Sciences, Tohoku University)</p>	<p>2aC06 Pressurised liquid extraction of the isotopically labeled phycoerythrin and its <i>in vitro</i> reconstitution with a cyanobacteriochrome-class photosensor <u>Takanari Kamo</u>, Toshihiko Eki, Yuu Hirose (Toyoohashi Univ. of Tech.)</p>	<p>2aD06 Exploration of Gene Expression Latent Space in Higher Plants by using Generative Models <u>Yuichi Aoki</u>^{1,2}, Takeshi Obayashi² (¹ToMMo, Tohoku Univ., ²Grad. Sch. Info. Sci., Tohoku Univ.)</p>
10:30	<p>2aA07 ③ Identification of key amino acid residues for catalytic activity and substrate specificity of CYP716A subfamily in site-specific oxidation of triterpenoid <u>Jutapat Romsuk</u>¹, Shuhei Yasumoto¹, Hikaru Seki¹, Ery Odette Fukushima^{1,2}, Toshiya Muranaka¹ (¹Department of Biotechnology, Graduate School of Engineering, Osaka University, ²Universidad Regional Amazónica IKIAM, Ecuador)</p>	<p>Others</p> <p>2aB07 Detection of DNA damage from radiation by <i>Arabidopsis</i> callus harboring an alternative β-glucuronidase reporter gene in field of Fukushima <u>Shinya Takahashi</u>¹, Masanori Tamaoki² (¹Univ. Tsukuba, ²Natl. Inst. Env. Stud.)</p>		<p>2aD07 ③ ATTED-II v10.2: a Plant Coexpression Database Providing Logit Score of Ensemble Mutual Rank as Coexpression Index to Enhance Usability for Genome-Wide Analyses <u>Takeshi Obayashi</u>¹, Yuichi Aoki² (¹Grad. Sch. Info. Sci., Tohoku Univ., ²ToMMo, Tohoku Univ.)</p>

Room E	Room F	Room G	Room H	Room X	Room Y	Room Z	Time
Vegetative growth	Plant hormones/Signaling molecules	Environmental responses B	Plant-organism interaction B				
<p>2aE04 CYP78A isoforms and AMP1 regulate the plastochron and leaf senescence in non-cell autonomous/organ-specific manners in Arabidopsis <u>Takashi Nobusawa</u>, Makoto Kusaba (Hiroshima Univ.)</p>	<p>2aF04 Evolution and function analysis of rice GA 3-oxidase 1 <u>Kyosuke Kawai</u>¹, Toru Kashio¹, Minami Morii¹, Sayaka Takehara¹, Akihiko Sugihara¹, Hisako Yoshimura¹, Aya Ito¹, Masako Hattori¹, Yosuke Toda^{2,3}, Mikiko Kojima⁴, Yumiko Takebayashi⁴, Hiroyasu Furumi⁵, Ken-Ichi Nonomura⁶, Takashi Akagi⁷, Hitoshi Sakakibara^{4,8}, Hidemi Kitano¹, Makoto Matsuoka¹, Miyako Ueguchi-Tanaka¹ (¹Biosci. and Biotech. Cen., Nagoya Univ., ²Japan Sci. and Technol. Agency (JST), ³Ins. of Transformative Bio-Molecules (WPI-ITbM), Nagoya Univ., ⁴RIKEN Ctr. for Sustainable Resource Sci., ⁵Experimental Farm, Nat. Ins. of Genetics, ⁶Plant Cytogenetics Lab., Natl. Inst. of Genetics, ⁷Grad. Sch. of Env. and Life Sci. Okayama Univ., ⁸Grad. Sch. of Bioagricultural Sci., Nagoya Univ.)</p>	<p>2aG04 Transcriptome analysis of the hierarchical response of histone deacetylase proteins that respond in an antagonistic manner to salinity stress <u>Minoru Ueda</u>^{1,2}, Akihiro Matsui^{1,2}, Shunsuke Watanabe³, Makoto Kobayashi⁴, Kazuki Saito⁴, Maho Tanaka^{1,2}, Junko Ishida^{1,2}, Miyako Kusano^{4,5}, Mitsunori Seo³, Motoaki Seki^{1,2,6} (¹Plant Genomic Network Research Team, RIKEN CSRS, ²Plant Epigenome Regulation Lab., RIKEN CPR, ³Dormancy and Adaptation Research Unit, RIKEN CSRS, ⁴Metabolomics Research Group, RIKEN CSRS, ⁵Grad. Sch. Life Environ. Sci., Univ. Tsukuba, ⁶Kihara Inst., Yokohama City Univ.)</p>	<p>2aH04 E Effect of Salinity Stress on Parasitic Interaction Between Root Hemiparasite <i>Phtheriospermum japonicum</i> and Host <i>Medicago sativa</i> <u>Clarissa F. Frederica</u>¹, Louis J. Irving² (¹Grad. Sch. Life Environ. Sci., Univ. of Tsukuba, ²Fac. Life Environ. Sci., Univ. of Tsukuba)</p>	Symposium S06	Symposium S07	Symposium S08	09:45
<p>2aE05 ROP interactive partners (RIPs) regulate microtubule dynamics and orientation of cell division in the leaves <u>Qimuge Hasi</u>, Tatsuo Kakimoto (Osaka university)</p>	<p>2aF05 Homeostatic inactivation of gibberellin and auxin is regulated by the same allosteric mechanism <u>Sayaka Takehara</u>¹, Shun Sakuraba², Bunzo Mikami³, Hisako Yoshimura¹, Makoto Matsuoka¹, Miyako Ueguchi-Tanaka¹ (¹Nagoya Univ., ²QST, ³Kyoto Univ.)</p>	<p>2aG05 Study on physiological role of ATHK1 in <i>Arabidopsis thaliana</i> <u>Takeshi Uchiyama</u>¹, Kosuke Takebayashi¹, Shin Hamamoto¹, Megumi Kato¹, Hayato Ikeda², Hidetoshi Kikunaga², Toshimi Suda², Sho Toyama¹, Misako Miwa¹, Shigeo Matsuyama¹, Takashi Kuromori³, Atsushi Ishiawa⁴, Tomoaki Horie⁵, Mutsumi Yamagami⁶, Yasuhiro Ishimaru¹, Nobuyuki Uozumi¹ (¹Grad. Eng., Tohoku Univ., ²Research Center of Electron Photon Science., Tohoku Univ., ³Center for Sustainable Resource Science., Riken, ⁴Fukui Prefectural Univ., ⁵Shinshu Univ., ⁶Institute for Environment Sciences)</p>	<p>2aH05 E Cellular connection and molecular traffic between a stem parasitic plant <i>Cuscuta campestris</i> and host plant <u>Koh Aoki</u>, Kohki Shimizu, Rika Takada, Subhankar Bera (Grad. Sch. Life Environ., Osaka Pref. Univ.)</p>	Frontiers in plant redox biology: Redox regulation, oxidative stress and signaling (9:00–12:00)	A new perspective for integrated Bio-metal Science (9:00–12:05)	Past and future of plant RNA research answering fundamental questions (9:00–11:55)	10:00
<p>2aE06 A role for ER stress-responsive genes in epidermis differentiation <u>Ayami Nakagawa</u>¹, Naoyuki Uchida², Keiko U. Torii^{1,3,4} (¹Institute of Transformative Bio-Molecules, Nagoya University, ²Center for Gene Research, Nagoya University, ³College of Natural Sciences, University of Texas at Austin, ⁴Howard Hughes Medical Institute)</p>	<p>2aF06 The Function of OsSWEET3a as a Gibberellin and Glucose Transporter <u>Akihiko Sugihara</u>¹, Minami Morii¹, Sayaka Takehara², Yuri Kanno³, Kyosuke Kawai¹, Tokunori Hobo², Masako Hattori², Hisako Yoshimura², Mitsunori Seo³, Miyako Ueguchi-Tanaka² (¹Nagoya Univ., Grad. Sch. Bioagric. Sci., ²Nagoya Univ., Bioscience and Biotechnology Center, ³RIKEN, CSRS)</p>	<p>2aG06 The Genotype-Dependent Phenotypic Landscape of Quinoa in Salt Tolerance <u>Yasufumi Kobayashi</u>¹, Nobuyuki Mizuno², Masami Toyoshima¹, Miki Fujita³, Yasuo Yasui⁴, Yasunari Fujita^{1,5} (¹Biol. Resources Post-harvest Div., JIRCAS, ²Institute of Crop Science, NARO, ³RIKEN CSRS, ⁴Grad. Sch. Agri., Kyoto Univ., ⁵Grad. Sch. Life Environ. Sci., Univ. Tsukuba.)</p>	<p>2aH06 Characterization of haustorium-inducing factors for parasitic plants produced by plants incubated with DMBQ <u>Natsumi Aoki</u>, Syogo Wada, Cui Songkui, Satoko Yoshida (NAIST)</p>				10:15
<p>2aE07 Destabilization of RPL12B by ubiquitin ligase SZK2-mediated ubiquitination is required for ribosome stress response <u>Shugo Maekawa</u>^{1,2}, Kanta Igarashi¹, Kanae Fukada¹, Masahiro Takahara¹, Keisuke Nishimura¹, Hirokazu Tsukaya³, Gorou Horiguchi^{1,2} (¹Dept. Life Sci., Col. Sci., Rikkyo Univ., ²Res. Ctr. Life Sci., Col. Sci., Rikkyo Univ., ³Grad. Sch. Sci., Univ. Tokyo)</p>	<p>2aF07 E <i>Arabidopsis CLE2</i> regulates light-dependent carbohydrate metabolism in shoots <u>Dichao Ma</u>¹, Satoshi Endo¹, Shigeyuki Betsuyaku², Akie Shimotohno¹, Hiroo Fukuda¹ (¹Grad. Sch. Sci., Univ. Tokyo, ²Dept. Plant Life Sci., Fac. Agri., Ryukoku Univ.)</p>	<p>2aG07 Responses of plant cell wall polysaccharides in protecting rice plants from aluminum <u>Teruki Nagayama</u>¹, Hiromu Saitoh², Atsuko Nakamura², Naoki Yamaji³, Shinobu Satoh², Jun Furukawa², Hiroaki Iwai² (¹Grad. Sch. Life and Env., Univ. Tsukuba, ²Fac. Life and Env., Univ. Tsukuba, ³Res. Inst. Biores., Okayama Univ.)</p>	<p>2aH07 E Characterization of a root parasitic plant <i>Phtheriospermum japonicum</i> mutant that induces haustoria in the absence of host signal <u>Lei Xiang</u>, Songkui Cui, Satoko Yoshida (Plant Sym., Div. Bio. Sci., NAIST)</p>				10:30

E=Presentation in English

● Day 2, Mon., March 15, AM (9:00–12:00)

Time	Room A	Room B	Room C	Room D
	Secondary (specialized) metabolism	Others	Photoreceptors/Photoresponses	Systems biology
10:45	<p>2aA08 E</p> <p>Comparative analysis of plant NADPH-cytochrome P450 reductase classes of legumes towards triterpenoids biosynthesis <u>Pramesti Istiandari</u>¹, Shuhei Yasumoto¹, Ery Odette Fukushima², Seki Hikaru¹, Toshiya Muranaka¹ (¹Department of Biotechnology, Graduate School of Engineering, Osaka University, ²Universidad Regional Amazónica IKIAM, Ecuador)</p>	<p>2aB08</p> <p>Establishing genetic variation databases for the Japanese morning glory using large-scale resequencing <u>Atsushi Hoshino</u>^{1,2}, Kenta Shirasawa³, Atsushi Toyoda⁴, Eiji Nitasaka⁵ (¹Natl. Inst. Basic Biol., ²Sch. Life Sci., SOKENDAI, ³Kazusa DNA Res. Inst., ⁴Natl. Inst. Genet., ⁵Grad. Sch. Sci., Kyushu Univ.)</p>		<p>2aD08</p> <p>A genome-wide chronological study of histone modifications and gene expression in barley grown under field conditions <u>Yoko Ikeda</u>¹, Satoshi Okada¹, Asaka Kanatani², Komaki Inoue², Daisuke Saisho¹, Jun Ito³, Hiroyuki Tsuji³, Keiichi Mochida^{1,2,3}, Takashi Hirayama¹ (¹IPSR, Okayama Univ., ²CSRS, RIKEN, ³KIBR, Yokohama City Univ.)</p>
11:00	<p>2aA09</p> <p>Analysis of Secondary Sulfur Metabolism in Callus Tissues of <i>Allium</i> Plants Ayuna Kisanuki¹, Takashi Asano², Isao Fujii², Kazuki Saito^{1,3}, <u>Naoko Yoshimoto</u>¹ (¹Grad. Sch. Pharm. Sci., Chiba Univ., ²Sch. Pharm., Iwate Med. Univ., ³RIKEN CSRS)</p>	<p>2aB09</p> <p>Public attitudes toward genome-edited food in Japan: interests in benefit, risk, and trust <u>Nozomu Koizumi</u>¹, Yube Yamaguchi¹, Ryuma Shineha² (¹Osaka Prefecture University, ²Osaka University)</p>		<p>2aD09</p> <p>Evaluation of composition of volatile organic compounds in soil cultivating different crops in field conditions <u>Mizuki Sano</u>¹, Yusuke Aono¹, Takumi Sato², Naoto Nihei³, Yasunori Ichihashi², Miyako Kusano^{4,5} (¹Deg. Prog. Life and Earth Sci., Univ. Tsukuba, ²BRC, Riken, ³Fac. Food and Agri. Sci., Univ. Fukushima, ⁴Dept. Life and Env., Univ. Tsukuba, ⁵CSRS, Riken)</p>
11:15	<p>2aA10</p> <p>Multi-metabolomics using liquid chromatography-tandem mass spectrometry and imaging mass spectrometry for spatially characterizing specialized metabolites released from roots <u>Ryo Nakabayashi</u>¹, Noriko Takeda-Kamiya¹, Tetsuya Mori¹, Takashi Nirasawa², Kiminori Toyooka¹, Kazuki Saito¹ (¹RIKEN CSRS, ²Brucker Japan K. K.)</p>	<p>2aB10</p> <p>Characterization and modulation of JAZ2 and Nup98 condensates to construct designed artificial membrane-less organelles in plant cell <u>Yoshito Koja</u>, Yu Joshima, Takuya Arakawa, Yusuke Yoritaka, Goharuka Go, Nagisa Hakamata, Hinako Kaseda, Tsukaho Hattori, Shin Takeda (Grad. Sch. Bioagricul. Sci., Univ. Nagoya.)</p>		<p>2aD10</p> <p>Integrated metabolome analysis for elucidation of the regulation mechanism of carotenoid-derived volatiles <u>Yusuke Aono</u>¹, Yonathan Asikin², Ning Wang³, Denise Tieman⁴, Harry Klee⁴, Miyako Kusano^{3,5} (¹Deg. Prog. Life and Earth Sci., Univ. Tsukuba, ²Fuel. Agri. Bio, Univ. the Ryukyus, ³Dept. of Life and Env. Sci., Univ. Tsukuba, ⁴Plant Innov. Center, Univ. Florida, ⁵CSRS, RIKEN)</p>
11:30	<p>2aA11</p> <p>Analysis of changes in alkaloid metabolism during germination in <i>Catharanthus roseus</i> <u>Mai Uzaki</u>^{1,2}, Kotaro Yamamoto^{3,4}, Akio Murakami⁵, Miwa Ohnishi⁶, Chizuko Shichijo⁵, Kimitsune Ishizaki⁵, Hidehiro Fukaki⁵, Tetsuro Mimura⁵, Masami Yokota Hirai^{1,2} (¹Grad. Sch. Bioagri. Sci., Nagoya Univ., ²RIKEN CSRS, ³Grad. Sch. Pharm. Sci., Chiba Univ., ⁴Dept. Nat. Prod. Bio., MPI, ⁵Grad. Sch. Sci., Kobe Univ., ⁶Eng. Biol. Res. C., Kobe Univ.)</p>			<p>2aD11</p> <p>Investigating the regulatory mechanisms of the Calvin cycle using a kinetic model <u>Ryotaro Tajima</u>¹, Mayu Ikehara², Yoshihiro Toya¹, Hiroshi Shimizu¹ (¹Grad. Sch. IST., Univ. Osaka, ²Sch. Eng., Univ. Osaka)</p>
11:45	<p>2aA12 E</p> <p>Cross-species comparison of floral specialized metabolites deciphering evolutionary aspects in Brassicaceae species <u>Yuting Liu</u>¹, Sayuri Yasukawa¹, Yuriko Kawamura¹, Chaiwat Aneklaphakij^{1,2}, Mutsumi Watanabe¹, Takayuki Tohge¹ (¹Grad. Sch. Sci., Tech., NAIST, ²Dept. Phar., Mahidol Univ.)</p>			<p>2aD12</p> <p>Diversity of chemical structures and biosynthetic genes of polyphenols in nut bearing species <u>Tomoki Saigo</u>¹, Chaiwat Aneklaphakij^{1,2}, Mutsumi Watanabe¹, Thomas Naake^{3,4}, Alisdair R. Fernie³, Somnuk Bunsupa², Veena Satitpatipan², Takayuki Tohge¹ (¹Grad. Sch. Sci. Tech., NAIST, ²Dept. Pharma, Mahidol Univ., ³MPI-MP, ⁴EMBL heidelberg)</p>

Room E	Room F	Room G	Room H	Room X	Room Y	Room Z	Time
Vegetative growth	Plant hormones/Signaling molecules	Environmental responses B	Plant-organism interaction B				
<p>2aE08 Multilayered regulation of auxin signaling by CUC transcription factors in the apical region of the embryo <u>Mizuki Yamada</u>¹, Ayame Imoto², Shunsuke Tanaka³, Tatsuya Miyazaki³, Mitsuhiro Aida^{1,3} (¹IROAST, Kumamoto Univ., ²Grad. Sch. Bio. Sci., NAIIST, ³Fac. Sci., Kumamoto Univ.)</p> <p>2aE09 Functional analysis of <i>MAPKKKs</i> in Arabidopsis seed dormancy and germination <u>Masahiko Otani</u>¹, Ryo Tojo¹, Lipeng Zheng¹, Kazuhiko Sugimoto², Kohci Yokota³, Kazuya Ichimura³, Naoto Kawakami¹ (¹Grad. Sch. Agri., Univ. Meiji, ²Inst. Crop Science, NARO, ³Grad. Sch. Agri., Univ. Kagawa)</p> <p>2aE10 <i>BABY BOOM</i> Genes are Required to Organize Normal Dorsoventral Axis during Rice Embryogenesis <u>Takumi Tezuka</u>¹, Sae Shimizu-Sato², Kim Nhung Ta², Misuzu Nosaka-T^{1,2}, Toshiya Suzuki^{1,2}, Yutaka Sato^{1,2} (¹Sch. life sci., SOKENDAI, ²Plant genetics., Natl. Inst. Genet)</p> <p>2aE11 E Spatiotemporal gibberellin biosynthesis underlying the optimal rhizome development in <i>Oryza longistaminata</i> <u>Kanako Bessho-Uehara</u>¹, Tomoki Omori², Keisuke Nagai², Mikiko Kojima³, Ayumi Agata², Hitoshi Sakakibara³, Motoyuki Ashikari², Tokunori Hobo³ (¹Grad Sch Life Sci, Tohoku Univ., ²Bio Sci. Bio Tech. center, Nagoya Univ., ³Grad Sch Agri, Nagoya Univ.)</p> <p>2aE12 Propagule formation process of <i>Pinellia ternata</i> and accumulation of functional polysaccharide Araban in propagule Atsuhiko Kuriki¹, Hibiki Shimokawa¹, Toshihiko Eguchi², Hiroyuki Tanaka^{3,4}, <u>Ken Matsuoka</u>^{1,2,5} (¹Grad. Sch. Biores. Bioenviron. Sci., Kyushu Univ., ²Biotron Appl. Ctr., Kyushu Univ., ³Fac. Pharmaceu. Sci., Kyushu Univ., ⁴Fac. Pharmaceu. Sci., Sanyo-Onoda City Univ., ⁵Fac. Agr., Kyushu Univ.)</p>	<p>2aF08 The role of CLE peptide in response to environmental stimuli <u>Akie Shimotohno</u>, Hiroo Fukuda (The University of Tokyo)</p> <p>2aF09 Functional analysis of putative peptide-coding genes in <i>Marchantia polymorpha</i> <u>Haruaki Kobayashi</u>¹, Shigeo S. Sugano², Kentaro Tamura³, Yoshito Oka¹, Tomonao Matsushita¹, Tomoo Shimada¹ (¹Grad. Sch. Sci., Kyoto Univ., ²Bioproduction, AIST, ³Sch. Food & Nutritional Sci., Univ. Shizuoka)</p>	<p>2aG08 Molecular genetic analysis of Arabidopsis <i>cadmium sensitive</i> mutant <u>Koki Misawa</u>, Erika Urayama, Izumi Yotsui, Teruaki Taji, Yoichi Sakata (Dept. of Bioscience Tokyo Univ. of Agriculture)</p>	<p>2aH08 E Effect of Host <i>Medicago sativa</i> Light Availability on Hemiparasite <i>Phtheriospermum japonicum</i> Growth <u>Maya Lynn Lackie</u>¹, Louis J. Irving² (¹Grad. Sch. Life Environ. Sci., Univ. of Tsukuba, ²Fac. Life Environ. Sci., Univ. of Tsukuba)</p>	Symposium S06 Frontiers in plant redox biology: Redox regulation, oxidative stress and signaling (9:00–12:00)	Symposium S07 A new perspective for Integrated Bio-metal Science (9:00–12:05)	Symposium S08 Past and future of plant RNA research answering fundamental questions (9:00–11:55)	10:45 11:00 11:15 11:30 11:45

E=Presentation in English




● Day 2, Mon., March 15, PM (13:00–16:00)

Time	Room A	Room B	Room C	Room D
	Photosynthesis	Environmental responses of photosynthesis	New technology	Organelles/Cytoskeleton
13:00	<p>2pA01 Genome analysis of a novel <i>Acaryochloris</i> species without phycobiliproteins <u>Haruki Yamamoto</u>¹, Kazuma Uesaka², Yuki Tsuzuki¹, Hisanori Yamakawa¹, Shigeru Itoh³, Yuichi Fujita¹ (¹Graduate school of Agricultural Sciences, Nagoya University, ²Center for Gene Research, Nagoya University, ³Graduate School of Science, Nagoya University)</p>	<p>2pB01 Does mesophyll conductance limit photosynthesis during induction? <u>Kazuma Sakoda</u>^{1,2}, Wataru Yamori¹, Michael Groszmann³, John Evans³ (¹Graduate School of Agricultural and Life Sciences, The University of Tokyo, ²Research Fellow of Japan Society for the Promotion of Science, ³The Australian National University)</p>	<p>2pC01 Engineered SaCas9-NNG provides expanded target scope and compact genome editing tool in plants <u>Katsuya Negishi</u>¹, Hiroshi Nishimasa^{2,3}, Osamu Nureki², Seiichi Toki^{1,4,5} (¹Inst. Agrobiol. Sci., NARO, ²Grad. Sch. Sci., Univ. Tokyo, ³RCAST, Univ. Tokyo, ⁴Grad. Sch. Nanobio., Yokohama City Univ., ⁵Kihara Inst. Biol. Res., Yokohama City Univ.)</p>	<p>2pD01 Chloroplast DNA ligase controls the shape of chloroplast nucleoids through the modulation of DNA supercoils <u>Yoshiki Nishimura</u>¹, Takashi Hamaji¹, Yusuke Kobayashi², Mari Takusagawa¹, Toshiharu Shikanai¹ (¹Department of Botany, Graduate School of Science, Kyoto University, ²Graduate School of Science and Engineering, Ibaraki University)</p>
13:15	<p>2pA02 Genomic Analysis of the Diatom <i>Chaetoceros gracilis</i> and Phylogenetic Analysis of Light-Harvesting Complex Proteins / Fucoxanthin Chlorophyll <i>a/c</i>-Binding Proteins <u>Minoru Kumazawa</u>¹, Hiroyo Nishide², Ryo Nagao³, Natsuko Inoue-Kashino⁴, Ikuro Uchiyama², Yasuhiro Kashino⁴, Jian-Ren Shen³, Takeshi Nakano¹, Kentaro Ifuku¹ (¹Grad. Sch. Biostudies., Kyoto Univ., ²NIBB, ³RIIS, Okayama Univ., ⁴Grad. Sch. Sci., Univ. Hyogo)</p>	<p>2pB02 Changes in sensitivity of PSI photoinhibition in <i>Arabidopsis thaliana</i> by low-temperature treatment <u>Makoto Egashira</u>, Yusuke Mizokami, <u>Ko Noguchi</u> (Sch. Life Sci., Tokyo Univ. Pharm. Life Sci.)</p>	<p>2pC02 Genome editing in plants using a novel genome editing tool, TiD <u>Naoki Wada</u>¹, Tomoko Miyaji¹, Emi Murakami¹, Kazuya Marui¹, Risa Ueta¹, Ryosuke Hashimoto¹, Chihiro Abe-Hara¹, Bihe Kong², Kentaro Yano², Yuriko Osakabe¹, Keishi Osakabe¹ (¹Grad. Sch. Tech. Ind. Soc. Sci. Tokushima Univ., ²Sch. Agri. Meiji Univ.)</p>	<p>2pD02 A light-dependent nucleoid behavior in chloroplasts of <i>Marchantia polymorpha</i> <u>Seika Ishihara</u>¹, Kohta Sakashita¹, Yusuke Ishida¹, Yoshitaka Kimori², Yoshiki Nishimura², Yusuke Kobayashi⁴, Ikuko Hara-Nishimura¹, Kosei Iwabuchi¹ (¹Grad. Sch of Nat. Sci., Konan Univ., ²Fac. Environ. Info. Sci., Fukui Univ. Tech., ³Grad. Sch. Sci., Kyoto, ⁴Grad. Sch. Sci., Ibaraki)</p>
13:30	<p>2pA03 Discovery of new siphonaxanthin biosynthetic precursor and its biological function <u>Soichiro Seki</u>¹, Yumiko Yamano², Ritsuko Fujii^{1,3} (¹Grad. Sch. Sci., Osaka City Univ., Osaka, Japan, ²Dept. Org. Chem. for Life Sci., Kobe Pharmaceutical Univ., Kobe, Japan, ³Research Center for Artificial Photosynthesis, Osaka City Univ., Osaka, Japan)</p>	<p>2pB03 Relationship between oxidative damage to the chloroplast translation factor EF-Tu and photoinhibition of photosystem II in <i>Arabidopsis thaliana</i> <u>Machi Torii</u>, Azusa Shinjo, Yoshitaka Nishiyama (Grad. Sch. Sci. Eng., Saitama Univ.)</p>	<p>2pC03 Assessment of the activity of the Prime Editing method in <i>Arabidopsis</i> <u>Shigeo S. Sugano</u>, Akiyoshi Nakamura, Kentaro Ezura, Shingo Sakamoto, Nobutaka Mitsuda (Bioproduction Institute, AIST)</p>	<p>2pD03 A novel plastid protein LIPID RICH 1 is a negative regulator of lipid biosynthesis in <i>Arabidopsis thaliana</i> <u>Mebae Yamaguchi</u>¹, Shuji Shigenobu², Katsushi Yamaguchi², Hiro Takahashi³, Shuichi Fukuyoshi³, Yasuhiro Higashi⁴, Kazuki Saito^{4,5}, Keiko Kuwata⁶, Ikuko Hara-Nishimura⁷, Takashi Shimada^{1,5} (¹Graduate School of Horticulture, Chiba Univ., ²NIBB, ³Kanazawa Univ., ⁴RIKEN, ⁵Plant Molecular Science Center, Chiba Univ., ⁶Nagoya Univ., ⁷Konan Univ.)</p>
13:45	<p>2pA04 Observation for the organogelation of chlorosomal pigment mixtures extracted from the mutant of the green sulfur bacterium <i>Chlorobaculum limnaeum</i> <u>Jiro Harada</u>¹, Yusuke Kinoshita², Takeshi Hashishin³, Tadashi Mizoguchi², Ken Yamamoto¹, Hitoshi Tamiaki² (¹Dept. Med. Biochem., Kurume Univ. Sch. Med., ²Grad. Sch. Life Sci., Ritsumeikan Univ., ³Facul. Adv. Sci. Tech., Kumamoto Univ.)</p>	<p>2pB04 Biochemical analysis of outer Light harvesting complex I deletion Reveals Flexible rearrangement ability of antenna in the green algae <i>Chlamydomonas reinhardtii</i> <u>Shin-Ichiro Ozawa</u>¹, Philipp Gäbelein², Felix Buchert², Laura Mosebach², Susan Hawat², Martin Scholz², Wataru Sakamoto¹, Michael Hippler^{1,2} (¹IPSR, Okayama Univ., ²IPBB, Univ. Muenster)</p>	<p>2pC04 Targeted modification of <i>Arabidopsis thaliana</i> plastid genome <u>Issei Nakazato</u>, Yoshiko Tamura, Nobuhiro Tsutsumi, Shin-ichi Arimura (Grad. Sch. Agr. Life Sci., Univ. Tokyo)</p>	<p>2pD04 Construction and characterization of the complete knock-out mutant of all ppGpp synthases in <i>Arabidopsis</i> <u>Masataka Inazu</u>, Sae Suzuki, Sumire Ono, Shinji Masuda (Graduate School of Life Science and Technology, Tokyo Institute of Technology)</p>

Room E	Room F	Room G	Room H	Room X	Room Y	Room Z	Time
Vegetative growth	Flowering/Clock	Environmental responses C	Plant-organism interaction B				
<p>2pE01 Brassinosteroid regulates periclinal cell division in root vascular cells <u>Kyoko Ohashi-Ito</u>, Kuninori Iwamoto, Hiroo Fukuda (Grad. Sch. Sci., The Univ. Tokyo)</p> <p>2pE02 Analysis of ANAC and DOF transcription factors involved in ectopic vascular cell differentiation in <i>Arabidopsis</i>. <u>Ryosuke Sato</u>¹, Keita Matsuoka¹, Yukina Endo¹, Keita Kaminaga¹, Kyomi Shibata¹, Yuki Kondo², Shinobu Satoh³, Masashi Asahina^{1,4} (1Dept. Biosci., Teikyo Univ., 2Grad. Sch. Sci., Kobe Univ., 3Life & Environ. Sci., Univ. Tsukuba, 4Adv. Instrum. Anal. Cent., Teikyo Univ.)</p> <p>2pE03 Cell fate regulation of vascular stem cell via cytokinin signaling <u>Shunji Shimadzu</u>^{1,2}, Tomoyuki Furuya², Kyoko Ohashi-Ito¹, Kimitsune Ishizaki², Hidehiro Fukaki², Hiroo Fukuda¹, Yuki Kondo² (1Grad. Sch. Sci., The Univ. of Tokyo, 2Grad. Sch. Sci., Kobe Univ.)</p> <p>2pE04 Regulatory Mechanism on Induction of Secondary Growth via Cytokinin Signaling <u>Miyu Imamura</u>¹, Nobutaka Mitsuda², Shingo Sakamoto², Yuki Kondo³, Kazuma Uesaka⁴, Masaru Ohme-Takagi^{2,5}, Takafumi Yamashino¹ (1Grad. Sch. Bioagr. Sci., Nagoya Univ., 2Bioprod. Res. Inst., Nat. Inst. of Adv. Ind. Sci. Tech., 3Grad. Sch. Sci., Kobe Univ., 4Ctr. Gene Res. Nagoya Univ., 5Grad. Sch. Sci. Eng., Saitama Univ.)</p>	<p>2pF01 Imaging of auxin and cytokinin signaling in the shoot apical meristem of rice <u>Moeko Sato</u>¹, Yuki Sakamoto², Sachihiro Matsunaga³, Hiroyuki Tsuji¹ (1KIBR., Yokohama City Univ., 2Dept. Biol. Sci., Grad. Sch. Sci., Osaka Univ., 3Grad. Sch. Front. Sci., Univ. Tokyo)</p> <p>2pF02 Analysis of cellular dynamics in the shoot apical meristem of barley under field and laboratory conditions by 3D imaging at single-cell resolution <u>Shunichi Arai</u>¹, Jun Ito¹, Shuhei Kuge¹, Nao Sato¹, Yuko Nomura¹, Midori Sugimura¹, Daisuke Saisho², Hiroyuki Tsuji¹ (1KIBR, Yokohama City Univ., 2IPSR, Okayama U.)</p> <p>2pF03 Warmer temperature promotes flowering through morning <i>FT</i> induction in <i>A. thaliana</i> <u>Yusuke Ozaki</u>¹, Akane Kubota¹, Takato Imaizumi², Motomu Endo¹ (1Div of Bioscience, NAIST, 2Dept of Biology, Univ of Washington)</p> <p>2pF04 Functional analysis of <i>cis</i>-elements in the <i>FT</i> promoter region using the novel SpCas9-NGv1 <u>Akito Yoshida</u>¹, Katsuya Negishi², Mayuka Yamamoto¹, Mitsutomo Abe³, Seiichi Toki², Kapppei Kobayashi¹, Hidetaka Kaya¹ (1Dept. Food Prod. Sci., Fac. Agr., Ehime Univ., 2Plant Genome Engineering Research Unit, NARO, 3Grad. Sch. Arts Sci., Univ. Tokyo)</p>	<p>2pG01 Effect of epigenetic modifications on low-temperature injury in rice <u>Ryuhei Hatakeyama</u>¹, Tomoaki Muranaka^{2,3}, Haruki Nishio², Mie N. Honjo², Yuuki Ishimori⁴, Takashi Endo⁴, Mika Teranishi¹, Hiroshi Kudoh², Atsushi Higashitani¹ (1Grad. Life Sci., Tohoku Univ., 2Center for Ecological Research, Kyoto Univ., 3Fac. of Agri., Kagoshima Univ., 4Miyagi Pref. Furukawa Agri. Exp. Stn.)</p> <p>2pG02 Analysis of regulatory mechanism of cold-inducible gene expression in response to circadian clock <u>Izumi Konoura</u>¹, Satoshi Kidokoro¹, Kentaro Hayashi¹, Takamasa Suzuki², Kazuo Shinozaki³, Kazuko Yamaguchi-Shinozaki^{1,4} (1Grad. Sch. Agr. Life Sci., Univ. Tokyo, 2Biosci. Biotech., Chubu Univ., 3Center for Sustainable Resource Science, RIKEN, 4Res. Inst. Agr. Life Sci., Tokyo Univ. Agr)</p> <p>2pG03 Non-invasive 3D imaging of fine freezing behaviors in complex plant organs using high resolution MRI <u>Masaya Ishikawa</u>¹, Timothy Stait-Gardner², Hikaru Kubo¹, Norihisa Matsushita¹, Kenji Fukuda¹, William S. Price² (1Grad. Sch. Agr. Life Sci., Univ. Tokyo, 2Western Sydney Univ.)</p> <p>2pG04 Two <i>cis</i>-acting elements required for the guard cell-specific expression of <i>SCAP1</i> essential for functionalization of stomata <u>Kosuke Moriwaki</u>¹, Shuichi Yanagisawa², Koh Iba¹, Juntaro Negi¹ (1Dept. Biol., Fac. Sci., Kyushu Univ., 2Biotechnology Research Center, The University of Tokyo)</p>	<p>2pH01 Machine learning based prediction of rice fertilization states and key microbial species in root microbiomes <u>Shunsuke Imai</u>, Utami Yuniar Devi, Yusa Aritoshi, Sumire Kiritani, Masako Fuji, Yukiko Shimizu, Naoki Ono, Shigehiko Kanaya, Yusuke Saijo (Grad. Sch. Sci. and Tech., NAIST)</p> <p>2pH02 E Multi-omics reveal mechanisms of rice to microbial Volatile Compounds (VCs) exposure in a changing climate <u>Marouane Baslam</u>¹, Murat Aycan⁴, Edurne Baroja-Fernández², Francisco José Muñoz², Ángela María Sánchez-López², Nuria De Diego³, Karel Doležal³, Mohammad-Reza Hajirezaei⁴, Kimiko Itoh¹, Javier Pozueta-Romero², Toshiaki Mitsui¹ (1Laboratory of Biochemistry, Faculty of Agriculture, Niigata University, Niigata, Japan., 2Instituto de Agrobiotecnología (Consejo Superior de Investigaciones Científicas/ Gobierno de Navarra). Iruñako etorbidea 123, 31192 Mutiloabeti, Nafarroa, Spain., 3Department of Chemical Biology and Genetics, Centre of the Region Haná for Biotechnological and Agricultural Research, Faculty of Science, Palacký University, Olomouc, CZ-78371, Czech Republic., 4Leibniz Institute of Plant Genetics and Crop Plant Research (IPK), OT Gatersleben, Corrensstr. 3, D-06466 Stadt Seeland, Germany.)</p> <p>2pH03 Comparative analysis of plants forming arbuscular mycorrhiza with different morphological types <u>Takaya Tominaga</u>¹, Yuuka Sumigawa², Yukine Hirose², Katsushi Yamaguchi³, Shuji Shigenobu³, Akira Mine^{4,5}, Hironori Kaminaka² (1United Grad. Sch. Agr., Tottori Univ., 2Fac. Agr., Tottori Univ., 3NIBB, 4Fac. Life Sci., Ritsumeikan Univ., 5JST PRESTO)</p> <p>2pH04 A strigolactone and methyl jasmonate promote the propagation of an arbuscular mycorrhizal fungus <i>R. clarus</i> HR1 under asymbiotic conditions Sachiko Tanaka¹, <u>Kayo Hashimoto</u>¹, Yuuki Kobayashi¹, Koji Yano¹, Taro Maeda^{1,2}, Hiromu Kameoka^{1,3}, Tatsuhiro Ezawa⁴, Katsuharu Saito⁵, Kohki Akiyama⁶, Masayoshi Kawaguchi^{1,7} (1National Institute for Basic Biology, 2Faculty of Agriculture, Ryukoku Univ., 3Grad. Sch., Life Sci., Tohoku Univ., 4Grad. Sch. of Agriculture, Hokkaido Univ., 5Faculty of Agriculture, Shinshu Univ., 6Grad. Sch. of Life & Environ. Sci., Osaka Pref. Univ., 7SOKENDAI)</p>	Symposium S09 Molecular elucidation of plant environmental adaptation toward engineering responses of field-grown plants (13:00–15:50)	Symposium S10 Borderless Era of Plant Chemical Research—New Trends in Plant Chemical Biology and Plant Metabolite Chemistry. (13:00–16:00)		13:00
							13:15
							13:30
							13:45

E=Presentation in English

● Day 2, Mon., March 15, PM (13:00–16:00)

Time	Room A	Room B	Room C	Room D
	Photosynthesis	Environmental responses of photosynthesis	New technology	Organelles/Cytoskeleton
14:00	<p>2pA05 Cyanobacterial histidine kinase NblS is the PSII-interacting sensor that disappeared during evolution <u>Tatsuhiko Tsurumaki</u>¹, Kan Tanaka² (1Dept. of Life Science and Technology, Tokyo Tech, 2Institute of Innovative Research, Tokyo Tech)</p>	<p>2pB05 Functional analysis of a galactolipase, Galp1, involved in the high-light acclimation in <i>Synechococcus elongatus</i> PCC 7942 <u>Nobuyuki Takatani</u>¹, Kazutaka Ikeda², Tatsuo Omata¹ (1Grad. Sch. Bioagr. Sci. Nagoya Univ., 2Clinical Omics Unit, Kazusa DNA Res.)</p>	<p>2pC05  Gene Delivery to Plant Mitochondria Using Carbon Nanotube-Polymer Hybrids Modified with Functional Peptides <u>Geoffrey Liou</u>¹, Simon Sau-Yin Law¹, Yukiko Nagai², Naoki Tanaka², Kousuke Tsuchiya¹, Masaki Odahara¹, Tsuyohiko Fujigaya^{2,3,4,5}, Keiji Numata¹ (1Center for Sustainable Resource Sci., RIKEN, 2Dept. Appl. Chem., Grad. Sch. Eng., Kyushu Univ., 3Int. Inst. Carbon Neutral Energy Res., Kyushu Univ., 4JST-PRESTO, 5Center for Mol. Sys., Kyushu Univ.)</p>	<p>2pD05 Characterization of enzyme activity, multimerization, and gene expression of two ALADs in <i>Arabidopsis</i> Yuri Kanbayashi, Masashi Amano, Tomohide Uno, <u>Kengo Kanamaru</u> (Grad. Sch. Agri., Kobe Univ.)</p>
14:15	<p>2pA06 Effects of Mutations in the Loop4 Region of PsbP on the Oxygen-Evolving Activity of Photosystem II <u>Ko Imaizumi</u>¹, Taishi Nishimura², Ryo Nagao^{3,4}, Yuki Kato⁴, Takeshi Nakano^{1,2}, Takumi Noguchi⁴, Kentaro Ifuku^{1,2} (1Fac. Agri., Kyoto Univ., 2Grad. Sch. Biostudies, Kyoto Univ., 3RIIS, Okayama Univ., 4Grad. Sch. Sci., Nagoya Univ.)</p>	<p>2pB06 Lipid remodeling in <i>Synechocystis</i> sp. PCC 6803 during acclimation to photo-oxidative stress conditions <u>Haruhiko Jimbo</u>¹, Kensuke Takagi¹, Takashi Hirashima¹, Taichi Izuhara², Kaichiro Endo³, Yuki Nakamura⁴, Hajime Wada¹ (1Grad. Sch. Arts Sci., Univ. Tokyo, Japan, 2Grad. Sch. Sci. Eng., Saitama Univ., Japan, 3Malopolska Cent. Biotech., Jagiellonian Univ., Poland, 4Inst. Plant Microbial. Bio., Acad. Sinica, Taiwan)</p>	<p>2pC06 Genome editing by polyion complex vesicle-mediated Cas9 ribonucleoprotein complex delivery in <i>Arabidopsis thaliana</i> <u>Masaki Odahara</u>¹, Kenta Watanabe¹, Kousuke Tsuchiya², Ayaka Tateishi¹, Yutaka Kodama^{1,3}, Keiji Numata^{1,2} (1Biomacro. Res. Team, CSRS, RIKEN, 2Biomat. Chem., Matl. Chem., Kyoto Univ., 3Center for Biosci. Res. & Edu., Utsunomiya Univ.)</p>	<p>2pD06 Analysis of cooperative regulations for plant greening by novel BR signaling factor BPG4 and homologous factors BGH2, BGH3 <u>Ryo Tachibana</u>¹, Momo Marugami², Susumu Abe², Ayumi Yamagami¹, Minami Matsui³, Tetsuo Kushiro², Tadao Asami⁴, Kentarou Ifuku¹, Takeshi Nakano¹ (1Grad. Sch. Biostudies., Kyoto Univ., 2Dept. Agri., Meiji Univ., 3RIKEN CSRS, 4Grad. Sch. Agri. Life Sci., Univ. Tokyo)</p>
14:30	<p>2pA07 Intrinsic Fluctuations in Transpiration Observed in Rice Plants Induce Photorespiration to Oxidize P700 in Photosystem I <u>Riu Furutani</u>^{1,5}, Amano Makino^{2,5}, Yuji Suzuki^{3,5}, Ginga Shimakawa^{4,5}, Shinya Wada¹, Chikahiro Miyake^{1,5} (1Grad. Sch. Agri., Univ. Kobe, 2Grad. Sch. Agri., Univ. Tohoku, 3Fac. Agri., Univ. Iwate, 4Res. Solar Energ. Chem., Univ. Osaka, 5JST CREST)</p>	<p>2pB07 Transcriptional regulation under diverse light intensity changes by an evolutionarily conserved cyanobacterial two-component system <u>Akira Yasuda</u>¹, Daichi Inami¹, Sousuke Imamura², Kan Tanaka², Mitsumasa Hanaoka^{1,3} (1Grad. Sch. Horticult., Chiba Univ., 2Lab. Chem. Life Sci., Tokyo Inst. Tech., 3Plant Mol. Sch. Cent., Chiba Univ.)</p>	<p>2pC07 Improvement of plasma treatment method for CRISPR/Cas9-mediated genome editing in plants <u>Yuki Yanagawa</u>¹, Yuma Suenaga², Shohei Moriya², Yusuke Iijima², Masaki Endo¹, Etsuko Kato³, Seiichi Toki¹, Akitoshi Okino², Ichiro Mitsuura¹ (1NIAS, NARO, 2FIRST, Tokyo Tech, 3NAAC, NARO)</p>	<p>2pD07 CO₂-dependent relocation of carbonic anhydrase in the algal chloroplast <u>Takashi Yamano</u>, Chihana Toyokawa, Daisuke Shimamura, Hideya Fukuzawa (Grad. Sch. Biostudies, Kyoto University)</p>
14:45	<p>2pA08 The ptp1 mutation contributes to PSI photoinhibition in the <i>Arabidopsis pgr5</i> mutant <u>Shinya Wada</u>¹, Katsumi Amako², Chikahiro Miyake¹ (1Grad. Sch. Agri. Sci., Kobe-Univ., 2Dep. Health and Nutrition, Jin-ai Univ.)</p>		<p>2pC08 Potato Virus X Vector-Mediated DNA-Free Genome Editing in Plants <u>Hirota Arita</u>^{1,2}, Seiichi Toki^{3,4,5}, Kazuhiro Ishibashi¹ (1Plant and Microbial Research Unit, Institute of Agrobiological Sciences, NARO, 2Genetic Resources Center, NARO, 3Plant Genome Engineering Research Unit, Institute of Agrobiological Sciences, NARO, 4Graduate School of Nanobioscience, Yokohama City Univ., 5Kihara Institute for Biological Research, Yokohama City Univ.)</p>	<p>2pD08 Serine hydroxymethyltransferase (SHMT) participates in the synthesis of cysteine rich storage protein in rice seed Hiroaki Matsusaka¹, <u>Masako Fukuda</u>¹, Ai Nagamine², Toshihiro Kumamaru¹ (1Fac. Agr., Kyushu Univ., 2Fac. Life and Env. Sci., Univ. of Tsukuba)</p>
15:00	<p>2pA09 The functional analysis of cysteine residues of PGRL1 in the green alga <i>Chlamydomonas reinhardtii</i> <u>Hiroko Takahashi</u>¹, Kenta Takayama¹, Atsuko Isu², Ken-ichi Wakabayashi², Hisabori Toru², Yoshitaka Nishiyama¹ (1Graduate School of Science and Engineering, Saitama University, 2Laboratory for Chemistry and Life Science, Institute of Innovative Research, Tokyo Institute of Technology)</p>		<p>2pC09  Efficient base editing in tomato using a highly expressed transient system <u>Shaoye Yuan</u>^{1,4}, Shunsuke Kawasaki^{1,4}, Islam Abdellatif^{3,4}, Keiji Nishida², Akihiko Kondo^{2,3}, Tohru Arizumi^{1,4}, Hiroshi Ezura^{1,4}, Kenji Miura^{1,4} (1Tsukuba-Plant Innovation Research Center, University of Tsukuba, Tsukuba 305-8572, Japan, 2Graduate School of Science, Technology and Innovation, Kobe University, Kobe 657-8501, Japan, 3Department of Chemical Science and Engineering, Graduate School of Engineering, Kobe University, Kobe 657-8501, Japan, 4Graduate School of Life and Environmental Sciences, University of Tsukuba, Tsukuba 305-8572, Japan)</p>	<p>2pD09  Biochemical characterization of <i>Arabidopsis</i> ABC transporter that can bind to hemin Li Zijing¹, Takayuki Shimizu¹, Kohji Nishimura², <u>Tatsuru Masuda</u>¹ (1Grad. Sch. Arts Scie, Univ. Tokyo, 2Fac. Life Environ. Sci., Shimane Univ.)</p>

Room E	Room F	Room G	Room H	Room X	Room Y	Room Z	Time
Vegetative growth	Flowering/Clock	Environmental responses C	Plant-organism interaction B				
<p>2pE05 Lateral Organ Boundary Domain Family Transcription Factor LBD12 is involved in Radial Pattern Formation of Root Apical Meristem in <i>Arabidopsis thaliana</i> <u>Koichi Gombu</u>¹, Miyu Imamura¹, Shunsuke Miyashima², Keiji Nakajima², Takafumi Yamashino¹ (¹Grad. Sch. Bioagr. Sci., Nagoya Univ., ²Grad. Sch. Sci. Tech., NAIST)</p>	<p>2pF05 Identification of a devernization inducer by chemical screening approaches in <i>Arabidopsis thaliana</i> <u>Makoto Shirakawa</u>¹, Yukaho Morisaki¹, Ryoya Yamaguchi¹, Eng-Seng Gan², Ayato Sato³, Toshiro Ito¹ (¹Division of Biological Science, Graduate School of Science and Technology, Nara Institute of Science and Technology, ²Temasek Life Sciences Laboratory, National University of Singapore, ³Institute of Transformative Bio-Molecules (WPI-ITbM), Nagoya University)</p>	<p>2pG05 E Photoperiod and elevated [CO₂] influence morphological and physiological responses to drought in trembling aspen: implications for climate change-induced migration <u>Sahari Inoue</u>¹, Qing-Lai Dang², Rongzhou Man³, Binyan Tedla¹ (¹Northern Alberta Institute of Technology, Center for Boreal Research, ²Lakehead University, ³Ontario Ministry of Natural Resources and Forestry)</p>	<p>2pH05 Regulation of cell cycle reactivation during nodule development <u>Teruki Sugiyama</u>, Makoto Hayashi (Riken, CSRS)</p>	Symposium S09 Molecular elucidation of plant environmental adaptation toward engineering responses of field-grown plants (13:00–15:50)	Symposium S10 Borderless Era of Plant Chemical Research—New Trends in Plant Chemical Biology and Plant Metabolite Chemistry. (13:00–16:00)		14:00
<p>2pE06 Analysis of <i>fewer roots suppressor 1 (fsp1)</i> in which the mutation suppresses the <i>fewer roots (fwr)</i> phenotype for lateral root formation <u>Chieko Goto</u>¹, Akira Ikegami¹, Tatsuki Goh^{1,2}, Hiroyuki Kasahara^{3,4}, Yuki Kondo¹, Kimitsune Ishizaki¹, Tetsuro Mimura¹, Hidehiro Fukaki¹ (¹Grad. Sch. of Sci., Kobe Univ., ²Grad. Sch. of Sci. and Tech., NAIST, ³GIR, Tokyo Univ. of Agri. and Tech., ⁴RIKEN, CSRS)</p>	<p>2pF06 Analysis of salicylic acid- and benzoid acid-induced flowering pathway in duckweed plants, <i>Wolffia hyalina</i> <u>Minako Isoda</u>, Nanami Kitayama, Shogo Ito, Tokitaka Oyama (Grad. Sch. Sci., Kyoto Univ.)</p>	<p>2pG06 Functions And Long-distance Transport Of MiRNAs To Root Upon Dormancy Induction By Short-day In Poplar <u>Shinya Hirooka</u>, Kimiyo Sage-Ono, Moritaroh Matsuzawa, Jun Furukawa, Michiyuki Ono (University of Tsukuba, Faculty of Life and Environmental Science.)</p>	<p>2pH06 Sterol acyltransferase is involved in the regulation of root nodule symbiosis <u>Akihiro Yamazaki</u>¹, Yoza Okazaki², Yasuhiro Higashi¹, Kazuki Saito^{1,3}, Akira Akamatsu⁴, Naoya Takeda⁴, Akira Miyahara⁵, Miwa Nagae⁵, Yosuke Umehara⁵, Makoto Hayashi¹ (¹RIKEN CSRS, ²Mie University Graduate School and Faculty of Bioreources, ³Chiba University Graduate School and Faculty of Pharmaceutical Sciences, ⁴Kwansei Gakuin University Graduate School of Science and Technology, ⁵NIAS Division of Plant Sciences)</p>				14:15
<p>2pE07 CLE-RLK signaling pathway modulates lateral root formation in <i>Arabidopsis thaliana</i> <u>Satoru Nakagami</u>¹, Takashi Ishida^{1,2}, Shinichiro Sawa¹ (¹Grad. Sch. Sci. Tech., Kumamoto Univ., ²IROAST, Kumamoto Univ.)</p>	<p>2pF07 Natural variation of the circadian period contributes to the critical day-length diversity <u>Tomoaki Muranaka</u>^{1,2}, Hiroshi Kudoh³, Tokitaka Oyama⁴ (¹Fac. Agri., Kagoshima Univ., ²JSPS PD, ³CER, Kyoto Univ., ⁴Grad. Sch. Sci., Kyoto Univ.)</p>	<p>2pG07 Role of indole-3-butyric acid (IBA) transport in DNA damage response <u>Naoki Takahashi</u>, Saki Yoshikuni, Masaaki Umeda (Grad. Sch. Sci. Tech., NAIST)</p>	<p>2pH07 NoPLO, a mathematical model of nodulation pattern based on photosynthate distribution <u>Kensuke Kawade</u>^{1,2}, Masayoshi Kawaguchi^{1,2} (¹NIBB, ²SOKENDAI)</p>				14:30
<p>2pE08 E Excess nutrition suppresses Arabidopsis root hair growth <u>Michitaro Shibata</u>, Ayako Kawamura, Keiko Sugimoto (RIKEN CSRS)</p>	<p>2pF08 Quantitative measurement of plant proteins using MRM assays by mass spectrometry <u>Hitoshi Mori</u>, Yutaro Komura, Haruyuki Mukai (Bioagricultural Sciences, Nagoya University)</p>	<p>2pG08 Importance of autophagy in phosphate recycle system <u>Yushi Yoshitake</u>, Kohki Yoshimoto (Life sci. Agri. Meiji Univ.)</p>	<p>2pH08 Role of cystathionine γ-lyase of <i>Mesorhizobium loti</i> in the root nodule symbiosis with <i>Lotus japonicus</i> <u>Mitsutaka Fukudome</u>¹, Haruka Ishizaki², Yuta Shimokawa³, Toshiki Uchiiumi³, Masayoshi Kawaguchi^{1,4} (¹National Institute for Basic Biology, ²Fac. Sci., Kagoshima Univ., ³Grad. Sch. Sci. Eng., Kagoshima Univ., ⁴SOKENDAI)</p>				14:45
<p>2pE09 Characterization of an <i>Arabidopsis</i> short ORF, <i>sof3</i>, involved in nitrogen-dependent lateral root development <u>Kazuhiro Ito</u>¹, Ayu Yamamoto¹, Atsushi Mabuchi¹, Kousuke Hanada², Koh Iba¹, Kensuke Kusumi¹ (¹Dept. Biol. Fac. Sci. Kyushu Univ., ²Dept. Bioscience and Bioinformatics Kyusyu Institute of Technology)</p>		<p>2pG09 Analysis of Phosphorus Deficiency Response and Glucuronosyl-diacylglycerol Synthase in <i>Klebsromidium nitens</i> <u>Shinsuke Sekine</u>, Koichi Hori, Noriaki Tonosu, Yuta Ihara, Shinsuke Shimizu, Mie Shimojima, Hiroyuki Ohta (School of Life Science and Technology, Tokyo Institute of Technology)</p>		15:00			

E=Presentation in English

● Day 2, Mon., March 15, PM (13:00–16:00)

Time	Room A	Room B	Room C	Room D
	Photosynthesis	Environmental responses of photosynthesis	New technology	Organelles/Cytoskeleton
15:15	<p>2pA10 The <i>m</i>-type thioredoxins regulate the PGR5/PGR1-dependent photosystem I cyclic electron transport via the interaction with PGR1 <u>Yuki Okegawa</u>, Ken Motohashi (Fac. of Life Sci., Univ. of Kyoto Sangyo)</p>		<p>2pC10 RAP tag and PMab-2 antibody: A tagging system for detecting and purifying proteins in plant cells <u>Kenji Miura</u>¹, Shohei Nosaki¹, Mika K. Kaneko², Yukinari Kato² (¹Grad. Sch. Life Environ. Sci., Univ. Tsukuba, ²Tohoku Univ.)</p>	<p>2pD10 E Interaction of porphyrins with the loop region of <i>Arabidopsis</i> ABC transporter <u>Zijing Li</u>, Takayuki Shimizu, Tatsuru Masuda (Grad. Sch. Arts Sci., Univ. Tokyo)</p>
15:30	<p>2pA11 A quantitative demonstration of the NADP⁺/NADPH redox homeostasis in cyanobacterial cells <u>Kenya Tanaka</u>¹, Ginga Shimakawa², Hiro Tabata¹, Shoko Kusama¹, Shuji Nakanishi^{1,2} (¹Grad. Sch. Eng. Sci., Osaka Univ., ²RCSEC, Osaka Univ.)</p>		<p>2pC11 Live imaging system to track dynamics of histone modifications and RNA polymerase II modification in plants <u>Mio Shibuta K.</u>¹, Mayu Yoshikawa², Tamako Yamaoka², Takuya Sakamoto², Hiroshi Kimura³, Sachihito Matsunaga¹ (¹Grad. Sch. Frontier Sci., Univ. Tokyo, ²Fac. Sci. and Tech., Tokyo Univ. Sci., ³Grad. Sch Life Sci. Tech., Tokyo Inst. Tech.)</p>	<p>2pD11 Analysis on starvation-induced microautophagy in plants <u>Shino Goto-Yamada</u>, Katarzyna Sieńko, Elżbieta Borlik, Kenji Yamada (Malopolska Ctr. Biotechnol., Jagiellonian Univ., Poland)</p>
15:45	<p>2pA12 Characterization of putative thylakoidal anion channels in the marine diatom, <i>Phaeodactylum tricoratum</i>. <u>Shun Ito</u>¹, Kansei Yamagishi¹, Ai Miyatake¹, Kohei Yoneda¹, Yoshinori Tsuji², Yusuke Matsuda¹ (¹Dept. Biosci., Grad. Sch. Sci. Tech., Kwansai Gakuin Univ., ²Grad. Sch. Biostudies., Kyoto Univ)</p>		<p>2pC12 DeLTa-Seq: direct-lysate targeted RNA-Seq from crude tissue lysate <u>Makoto Kashima</u>^{1,2}, Mari Kamitani^{1,3}, Yasuyuki Nomura¹, Hiromi Hirata², Atsushi J. Nagano⁴ (¹Res. Inst. Food and Agri., Ryukoku Univ., ²College of Sci. and Eng., Aoyama Gakuin Univ., ³Cent. for Eco. Res., Kyoto Univ., ⁴Fac. of Agri., Ryukoku Univ.)</p>	<p>2pD12 E Genome Duplication in Brassicaceae Generated <i>NAI2</i> and <i>TSA1</i> Homologues that Establish the Variety of ER Body Formation <u>Kenji Yamada</u>, Jakub Bizan, Shayan Sarkar, Natalia Stefanik (Malopolska Centre of Biotechnology, Jagiellonian University)</p>

Room E	Room F	Room G	Room H	Room X	Room Y	Room Z	Time
Vegetative growth	Flowering/Clock	Environmental responses C	Plant-organism interaction B				
<p>2pE10 Isolation of Thermospermine-Insensitive Mutants of <i>Arabidopsis thaliana</i> Taku Takahashi, Takahiro Tanaka, Takashi Okamoto, Hiroyasu Motose (Grad Sch Natl Sci & Tech, Okayama Univ.)</p>				Symposium S09 Molecular elucidation of plant environmental adaptation toward engineering responses of field-grown plants (13:00-15:50)	Symposium S10 Borderless Era of Plant Chemical Research—New Trends in Plant Chemical Biology and Plant Metabolite Chemistry. (13:00-16:00)		<p>15:15</p> <p>15:30</p> <p>15:45</p>

=Presentation in English

● Day 3, Tue., March 16, AM (9:00–12:00)

Time	Room A	Room B	Room C	Room D
	Primary metabolism	Environmental responses of photosynthesis	Membrane trafficking	Organelles/Cytoskeleton
09:00	3aA01 E The Entry Step of the Plant Shikimate Pathway Is Subjected to Highly-Complex Metabolite-Mediated Regulation <u>Ryo Yokoyama</u> , Marcos de Oliveira, Bailey Kleven, Hiroshi Maeda (Department of Botany, University of Wisconsin-Madison)	3aB01 Cellular differentiation in filamentous cyanobacteria analyzed by Raman scattering spectral microscopy with a line-scanning parallel acquisition <u>Kouto Tamamizu</u> , Shigeichi Kumazaki (Grad. Sch. Sci., Kyoto Univ)	3aC01 ER bodies in the lateral root cap are involved in the massive transport of the enzymes to vacuoles <u>Kiminori Toyooka</u> ¹ , Kei Hashimoto ¹ , Yumi Goto ¹ , Mayumi Wakazaki ¹ , Takashi Okamoto ² , Mayuko Sato ¹ (¹ RIKEN CSRS, ² Biol. Sci., Tokyo Metro. Univ.)	3aD01 Studies on Organelle Reorganization during Spermiogenesis in <i>Marchantia polymorpha</i> <u>Takuya Norizuki</u> ^{1,2} , Naoki Minamino ² , Takashi Ueda ^{2,3} (¹ Grad. Sch. Sci., Univ. Tokyo, ² Div. Cellular Dynamics, NIBB, ³ SOKENDAI)
09:15	3aA02 Metabolomic study of oxalate accumulation focused on rice isocitrate lyase <u>Atsuko Miyagi</u> , Hiroki Nogami, Toshiaki Ishikawa, Masatoshi Yamaguchi, Maki Kawai-Yamada (Grad. Sch. Sci. Eng., Saitama Univ.)	3aB02 Molecular Basis of Persulfide Response Involved in Sulfide-mediated Regulation of Physiological Activities <u>Takayuki Shimizu</u> ¹ , Shinji Masuda ² , Tatsuru Masuda ¹ (¹ Grad. Sch. Arts and Sci., Univ. Tokyo, ² Dept. Life Sci. and Technol., Tokyo Inst. Technol.)	3aC02 Analysis of growth arrest phenotype during seedling development in the vacuolar sorting mutant <i>kam2</i> <u>Chika Hosokawa</u> ¹ , Kentaro Tamura ² , Yoshito Oka ¹ , Tomonao Matsushita ¹ , Tomoo Shimada ¹ (¹ Grad. Sch. Sci., Univ. Kyoto, ² Sch. Food & Nutritional Sci., Univ. Shizuoka)	3aD02 Studies on molecular mechanisms of oil body formation in <i>Marchantia polymorpha</i> <u>Sho Hachinoda</u> ^{1,2} , Takehiko Kanazawa ^{1,2} , Takashi Ueda ^{1,2} (¹ Division of Cellular Dynamics, National Institute for Basic Biology, ² The Department of Basic Biology, SOKENDAI (The Graduate University for Advanced Studies))
09:30	3aA03 E A deubiquitinating enzyme interacts with the membrane-localized ubiquitin ligase ATL31 to modulate plant responses to C/N-nutrient availability in Arabidopsis <u>Yongming Luo</u> , Shigetaka Yasuda, Yu Lu, Yoko Hasegawa, Junpei Takagi, Junji Yamaguchi, Takeo Sato (Faculty of Science and Graduate School of Life Science, Hokkaido University)	3aB03 Thioredoxin-dependent redox regulation of phosphoribulokinase in cyanobacteria <u>Kazuha Fukui</u> ^{1,2} , Shoko Mihara ² , Ken-ichi Wakabayashi ^{1,2} , Toru Hisabori ^{1,2} (¹ Life Sci. Tech., Tokyo Tech., ² LCS, Tokyo Tech.)	3aC03 Study on Plant-unique RAB5 Effectors in Arabidopsis <u>Emi Ito</u> ¹ , Seung-won Choi ² , Kazuki Takeuchi ² , Kazuo Ebine ^{3,4} , Akihiko Nakano ⁵ , Takashi Ueda ^{3,4} , Tomohiro Uemura ¹ (Faculty of Science, Ochanomizu Univ., Tokyo, Japan, ² Dept. Natural Sciences, ICU, Tokyo, Japan, ³ Div. Cellular Dynamics, NIBB, Aichi, Japan, ⁴ Sch. Life Sci., SOKENDAI, Kanagawa, Japan, ⁵ Live Cell Super-Resolution Imaging Research Team, RIKEN Center for Advanced Photonics, Saitama, Japan)	3aD03 Evolution of GUN1 Function in Plastid-to-Nucleus Signaling <u>Nobuyoshi Mochizuki</u> ¹ , Hidetoshi Sakayama ² , Tomoaki Nishiyama ³ , Akira Nagatani ¹ (¹ Grad. Sch. Sci., Kyoto University, ² Grad. Sch. Sci., Kobe Univ., ³ Adv. Sci. Res. Cen., Kanazawa Univ.)
09:45	3aA04 A Relationship Between Plasma Membrane H ⁺ -ATPase Activity and Carbon Metabolites in Arabidopsis Leaves <u>Satoru Kinoshita</u> ¹ , Toshinori Kinoshita ^{1,2} (¹ Grad. Sch. of Science, Nagoya University, ² WPI-ITbM, Nagoya University)	3aB04 Physiological role of thioredoxin-dependent regulation of phosphoribulokinase in <i>Arabidopsis thaliana</i> <u>Shoko Mihara</u> ¹ , Kazuha Fukui ² , Keisuke Yoshida ^{1,2} , Toru Hisabori ^{1,2} (¹ LCS, Tokyo Tech., ² Life Sci. Tech., Tokyo Tech.)	3aC04 Functional Analysis of Plasma Membrane-type SNARE Proteins in Arabidopsis Seed Coat Epidermal Cells <u>Tadashi Kunieda</u> ^{1,2,3} , Masa H Sato ⁴ , George W. Haughn ³ , Ikuko Hara-Nishimura ² (¹ Div. of Biol. Sci., NAIST, ² Fac. of Sci. and Eng., Konan Univ., ³ Dept. of Bot., UBC, ⁴ Grad. Sch. of Life and Environ. Sci., Kyoto Pref. Univ.)	3aD04 Functional comparison of APEM6-like proteins in peroxisome biogenesis <u>Akane Kamigaki</u> ¹ , Mikio Nishimura ² , Shoji Mano ^{1,3} (¹ Dept. Cell Biol., NIBB, ² Fac. Sci. Engin., Konan Univ., ³ Dept. Basic Biol., SOKENDAI)
10:00	3aA05 The ER pathway for membrane lipid synthesis plays a major role in shoot-removal-induced root chloroplast development in <i>Arabidopsis</i> <u>Tomoki Obata</u> ¹ , Koichi Kobayashi ² , Ryosuke Tadakuma ¹ , Taiki Akasaka ³ , Koh Iba ¹ , Juntaro Negi ¹ (¹ Dept. Biol., Fac. Sci., Kyushu Univ., ² Fac. Lib. Arts & Sci., Osaka Prefec. Univ., ³ Fac. Agr., Kyushu Univ.)	3aB05 Interaction between an Anti-sigma Factor-like Protein PmgA and Anti-sigma Factor Antagonists in the Cyanobacterium <i>Synechocystis</i> sp. PCC 6803 <u>Arisa Terada</u> , Yuji Takahashi, Kakeru Suzuki, Yuzuru Tozawa, Yukako Hihara (Grad. Sch. Sci. Eng., Saitama Univ.)	3aC05 Developmental dynamics of the oil body in <i>Marchantia polymorpha</i> <u>Takehiko Kanazawa</u> ^{1,2} , Takashi Ueda ^{1,2} (¹ Div. Cellular Dynamics, NIBB, ² Life Sci., SOKENDAI)	3aD05 In Planta Analysis of Plant Bilirubin Using a Ligand-induced Fluorescent Protein UnaG <u>Kazuya Ishikawa</u> ¹ , Xiaonan Xie ¹ , Atsushi Miyawaki ² , Keiji Numata ^{3,4} , Yutaka Kodama ¹ (Ctr. Biosci. Res. Educ., Utsunomiya Univ., ² BSI, RIKEN, ³ CSRS, RIKEN, ⁴ Grad. Sch. Eng., Kyoto Univ.)
10:15	3aA06 Heterologous complementation analysis reveals a distinct function of two glycosphingolipid subclasses in Arabidopsis <u>Yamato Kudo</u> , Atsuko Miyagi, Masatoshi Yamaguchi, Maki Kawai-Yamada, <u>Toshiki Ishikawa</u> (Grad. Sch. Sci. Eng., Saitama Univ.)	3aB06 Analysis of cyAbrB1 Transcription Factors in the Cyanobacterium <i>Synechocystis</i> sp. PCC 6803 using CRISPRi Technology <u>Atsuko Hishida</u> ¹ , Akitaka Higo ² , Minenosuke Matsutani ³ , Kaori Nimura-Matsune ⁴ , Satoru Watanabe ⁴ , Shigeki Ehira ² , Yukako Hihara ¹ (¹ Grad. Sch. Sci. Eng., Saitama Univ., ² Dept. Biol. Sci., Tokyo Metropolitan Univ., ³ NGRC, Tokyo Univ. Agric., ⁴ Dept. Biosci., Tokyo Univ. Agric.)	3aC06 Elucidation of the molecular mechanisms controlling oil body development in <i>Marchantia polymorpha</i> <u>Takuma Hiwataashi</u> ¹ , Takehiko Kanazawa ^{1,2} , Masaaki Watahiki ³ , Takashi Ueda ^{1,2} (¹ Division of Cellular Dynamics, NIBB, ² Department of Basic Biology, SOKENDAI, ³ Faculty of Science, Hokkaido University)	3aD06 Quantitative Analysis of Photo-dependently Changing in Plant Organelle Contact Sites <u>Keiko Midorikawa</u> ¹ , Ayaka Tateishi ¹ , Yutaka Kodama ² , Keiji Numata ^{1,3} (¹ RIKEN CSRS, ² Bio. Edu., Univ. Utsunomiya, ³ Grad. Eng., Univ. Kyoto)
10:30	3aA07 Regulation mechanisms for <i>cis</i> -prenyltransferases contributing to dolichol biosynthesis in <i>Arabidopsis thaliana</i> <u>Tomohiro Takahashi</u> , Humihiro Yanbe, Yuki Sakai, Chiho Minakawa, Toshiyuki Waki, Toru Nakayama, Seiji Takahashi (Grad. Sch. Eng., Tohoku Univ.)	3aB07 Regulatory Mechanism of DNA Binding Activity of the Transcription Factor RpaB in the Cyanobacterium <i>Synechocystis</i> sp. PCC 6803 <u>Naoki Kato</u> , Taro Kadowaki, Yukako Hihara (Grad. Sch. Sci. Eng., Saitama Univ.)	3aC07 Clathrin-mediated endocytosis is not required for the polar localization of mineral transporters in rice <u>Noriyuki Konishi</u> , Jian Feng Ma (Okayama Univ. IPSR)	3aD07 Chloroplast Glue with Fluorescent Proteins <u>Shota Kato</u> ¹ , Kazuya Ishikawa ¹ , Yuta Fujii ¹ , Keiji Numata ^{2,3} , Yutaka Kodama ^{1,3} (Ctr. Biosci. Res. Educ., Utsunomiya Univ., ² Dept. Mater. Chem., Kyoto Univ., ³ CSRS, RIKEN)

Room E	Room F	Room G	Room X	Room Y	Room Z	Time
Environmental responses A	Flowering/Clock	Environmental responses C				
<p>3aE01 Live-cell imaging of LZ1 in gravity-sensing cells <u>Shogo Mori</u>^{1,2}, Moritaka Nakamura², Ryuichiro Oshida¹, Hiromasa Shikata², Takeshi Nishimura², Masahiko Furutani³, Takumi Higaki⁴, Miyo Terao Morita² (¹Grad. Sch. Bioagri. Sci., Nagoya Univ., ²NIBB, ³Col. Life Sci., Fujian Agriculture and Forestry Univ., ⁴IROAST, Kumamoto Univ.)</p>	<p>3aF01 Molecular mechanism for far-red light- and photoperiod-dependent growth phase transition in <i>Marchantia polymorpha</i> <u>Yuki Kanesaka</u>, Keisuke Inoue, Shohei Yamaoka, Takashi Araki (Grad. Sch. Biostudies, Kyoto Univ.)</p>	<p>3aG01 E Oligouridylylate binding protein 1b (UBP1b) involved in heat stress adaptation through mRNA protection <u>Kentaro Nakaminami</u>¹, Cam Chau Thi Nguyen^{1,2}, Akihiro Matsui^{1,3}, Maureen Hummel⁴, Maho Tanaka^{1,3}, Junko Ishida^{1,3}, Satoshi Takahashi^{1,3}, Julia Bailey-Serres⁴, Motoaki Seki^{1,2,3} (¹CSRS, RIKEN, ²Kihara Inst. Biol. Res., Yokohama City Univ., ³CPR, RIKEN, ⁴Riverside, Univ. California)</p>	Symposium S11 Elongate, bend, and expand: Deciphering plant growth strategy from its mechanics (9:00–11:50)	Symposium S12 Molecular Mechanisms of Transcriptional Repression in Plants (9:00–12:00)		09:00
<p>3aE02 Analysis for molecular functions of BIL8 that regulates plant gravitropism in brassinosteroid signaling <u>Shin Suzuki</u>¹, Ayumi Yamagami¹, Genki Nakata², Minami Matsui³, Tetsuo Kushiro², Tadao Asami⁴, Takeshi Nakano¹ (¹Grad. Sch. Biostudies, Kyoto Univ., ²Dept. Agri., Meiji Univ., ³RIKEN CSRS, ⁴Grad. Sch. Agri. Life Sci., University of Tokyo)</p>	<p>3aF02 Genes implicated in temperature compensation of the Arabidopsis circadian clock <u>Akari Maeda</u>¹, Hiromi Matsuo², Toshinori Kinoshita^{1,2}, Norihito Nakamichi^{1,2} (¹Grad. Sch. Sci., Nagoya Univ., ²ITbM., Nagoya Univ.)</p>	<p>3aG02 A circadian rhythm regulator RpaA modulates the growth temperature preference by suppressing the photosynthetic electron transport in <i>Synechococcus elongatus</i> PCC 7942 <u>Hazuki Hasegawa</u>^{1,3}, Tatsuhiro Tsurumaki^{1,3}, Sousuke Imamura¹, Kintake Sonoike², Kan Tanaka¹ (¹CLS, Tokyo Tech, ²Fac. Edu. Integ. Arts Sci., Waseda Univ., ³Life Sci. Tech., Tokyo Tech)</p>				09:15
<p>3aE03 Environmental factors that stimulate the extracellular secretion of superoxide in the noxious red-tide-forming raphidophyte <i>Chattonella antiqua</i> <u>Koki Yuasa</u>¹, Takayoshi Ichikawa¹, Yu Tamura¹, Tomoyuki Shikata², Yoshitaka Nishiyama¹ (¹Grad. Sch. Sci. Eng., Univ. Saitama, ²Fisher. Technol. Inst., Japan Fisher. Res. Edu. Agency)</p>	<p>3aF03 Mode-of-Actions of plant clock modulators <u>Norihito Nakamichi</u>^{1,2}, Hiromi Matsuo¹, Azusa Ono², Akari Maeda², Ayato Sato¹, Kenichiro Itami^{1,2}, Toshinori Kinoshita^{1,2}, Junichiro Yamaguchi³ (¹ITbM, Nagoya Univ., ²Grad. Sch. Sci., Nagoya Univ., ³Dep. Appl. Chem.)</p>	<p>3aG03 Dissecting The Mechanism Underlying Natural Variation In Short-term Heat Tolerance Among <i>Arabidopsis thaliana</i> Accessions <u>Mao Ueki</u>¹, Fumiyo Myouga², Izumi Yotsui¹, Yoichi Sakata¹, Teruaki Taji¹ (¹Tokyo Univ. of Agriculture Dept. of Bioscience, ²Riken CSRS)</p>				09:30
<p>3aE04 Biochemical analysis of the extracellular secretion of superoxide in the noxious red-tide-forming raphidophyte <i>Chattonella</i> spp. <u>Takayoshi Ichikawa</u>¹, Koki Yuasa¹, Tomoyuki Shikata², Yoshitaka Nishiyama¹ (¹Grad. Sch. Sci. Eng., Saitama Univ., ²Fisher. Technol. Inst., Japan Fisher. Res. Edu. Agency)</p>	<p>3aF04 Circadian clock controls development of root hair in <i>Arabidopsis</i> <u>Taiga Uchikawa</u>¹, Yu Leng¹, Yohei Kondou², Akane Kubota¹, Motomu Endo¹ (¹Bioscience, NAIST, ²ExCELLS, National Institutes of Natural Sciences.)</p>	<p>3aG04 A large-scale evaluation for long-term heat tolerance on soil of <i>Arabidopsis thaliana</i> accessions <u>Kiyohito Sato</u>, Naoya Endo, Takuma Kajino, Izumi Yotsui, Yoichi Sakata, Teruaki Taji (Dept. of Bioscience Tokyo Univ. of Agriculture)</p>				09:45
<p>3aE05 Excess sterols disturb physiological functions in seeds, leaves and roots in <i>Arabidopsis thaliana</i> <u>Takashi Shimada</u>^{1,2}, Shuji Shigenobu³, Katsushi Yamaguchi³, Hiro Takahashi⁴, Shuichi Fukuyoshi⁴, Takashi Ueda³, Ikuko Hara-Nishimura⁵ (¹Graduate School of Horticulture, Chiba Univ., ²Plant Molecular Science Center, Chiba Univ., ³NIBB, ⁴Kanazawa Univ., ⁵Konan Univ.)</p>	<p>3aF05 Effects of cell-cell communication on the stability of cellular circadian rhythms in isolated cells of <i>Arabidopsis</i> <u>Shunji Nakamura</u>, Tokitaka Oyama (Grad. Sci., Univ. Kyoto)</p>	<p>3aG05 Identification of <i>Long-term Heat Tolerance 1</i> locus responsible for L-heat tolerance of <i>Arabidopsis thaliana</i> accessions <u>Kazuho Isono</u>¹, Keisuke Tanaka², Kousuke Hanada³, Izumi Yotsui¹, Yoichi Sakata¹, Teruaki Taji¹ (¹Dept. of Bioscience, Tokyo Univ. of Agriculture, ²NODAI Genome Research Center, ³Dept. Of Bioscience and Bioinformatics, Kyushu Institute of Technology)</p>				10:00
<p>3aE06 Occurrence of Reactive Carbonyl Species in the Cell Proliferation Sites in Lateral Root Formation <u>Jun'ichi Mano</u>¹, Mari Ikemoto², Katsunori Tanaka^{3,4}, Ambara Pradipta³ (¹Sci. Res. Center, Yamaguchi Univ., ²Fac. Agr., Yamaguchi Univ., ³RIKEN Cluster for Pioneering Research, ⁴Schl. Material Chem. Technol., Tokyo Inst. Tech.)</p>	<p>3aF06 Analysis on the behavior of uncoupled circadian rhythms detected by a dual-color bioluminescence monitoring system in duckweed plant <u>Emiri Watanabe</u>, Shogo Ito, Tokitaka Oyama (Grad. Sch. Sci., Kyoto Univ.)</p>	<p>3aG06 Isolation and genetic analyses of <i>sensitive to long-term heat5 (sloh5)</i> mutant <u>Ryo Tsukimoto</u>, Kazuho Isono, Akihisa Shinozawa, Izumi Yotsui, Yoichi Sakata, Teruaki Taji (Tokyo University Of Agriculture Bioscience)</p>				10:15
<p>3aE07 Regulation of H₂O₂-induced cell death under high light stress <u>Kana Kikuraku</u>¹, Gen Mitomi¹, Takakazu Matsuura², Izumi Mori², Takahisa Ogawa¹, Takahiro Ishikawa¹, Takanori Maruta¹ (¹Grad. Sch. Nat. Sci. Technol., Shimane Univ., ²Inst. of Plant Sci. and Resour., Okayama Univ.)</p>	<p>3aF07 Structural and functional analysis on receiver like domain of PRR7 that are implicated in central oscillator function of the circadian clock in <i>Arabidopsis thaliana</i> <u>Masahide Kobayashi</u>, Yusuke Takata, Chiaki Teramae, Takafumi Yamashino (Grad. Sch. Bioagr. Sci., Nagoya Univ.)</p>	<p>3aG07 Analyses of a long coiled-coil protein, concerned in <i>PIF4</i> mRNA induction under warm temperature <u>Arisa Nakamura</u>¹, Takumi Tamura², Naoki Sakamoto², Mako Uemura², Nanako Miyazaki², Saki Ueda¹, Tsuyoshi Furumoto^{1,2} (¹Grad. Sch. Agr., Univ. Ryukoku, ²Facu. Sch. Agr., Univ. Ryukoku)</p>				10:30

E=Presentation in English

● Day 3, Tue., March 16, AM (9:00–12:00)

Time	Room A	Room B	Room C	Room D
	Primary metabolism	Environmental responses of photosynthesis	Epigenetic regulation	Organelles/Cytoskeleton
10:45	<p>3aA08 A START domain-containing protein is involved in the incorporation of ER-derived fatty acids into chloroplast glycolipids in <i>Marchantia polymorpha</i> <u>Takashi Hirashima</u>¹, Haruhiko Jimbo¹, Koichi Kobayashi², Hajime Wada¹ (¹Grad. Sch. Arts Sci., Univ. Tokyo, ²Faculty Arts Sci., Osaka Pref. Univ.)</p>		<p>3aC08 Auxin-mediated regulation of heterochromatin formation <u>Shiori S. Aki</u>, Masaaki Umeda (Grad. Sch. Sci. Tech., NAIST)</p>	<p>3aD08 Relationship between cell shapes and microtubule organizations in cotyledon pavement cells <u>Daichi Yoshida</u>¹, Liu Bo², Takumi Higaki³ (¹Faculty of Sci, Univ. Kumamoto, ²UC, Davis, ³IROAST, Univ. Kumamoto)</p>
11:00	<p>3aA09 Delay in NADP⁺ decrease has a significant impact on the metabolic responses in dark <u>Shin-nosuke Hashida</u>¹, Atsuko Miyagi², Maki Kawai-Yamada² (¹Env. Sci. Res. Lab., CRIEPI, ²Grad. Sch. Sci. Eng., Saitama Univ.)</p>		<p>3aC09 E Unraveling the Role of Chromatin Regulation in Response to Nitrate Variation for Cytokinin Biosynthesis <u>Olivia Tjahjono</u> (Laboratory for Plant Signaling, School of Agricultural Sciences, Nagoya University)</p>	<p>3aD09 Myosin XIs are involved in cortical microtubule orientation and cell elongation in root epidermal cells <u>Motoki Tominaga</u>^{1,4}, Hirotomo Takatsuka², Shun Kawabata¹, Masaaki Umeda³ (¹Grad. Sch. Adv. Sci. and Eng., Univ. Waseda, ²Grad. Sch. Biol. Sci. Tech., Kanazawa Univ., ³Grad. Sch. Sci. Tech., NAIST, ⁴Fac. Educ. Integrated Arts. Sci., Bio., Univ. Waseda)</p>
11:15			<p>3aC10 Recorder and Decoder; Two Modes of H3K4 methylation Revealed by Machine Learning <u>Satoyo Oya</u>¹, Soichi Inagaki¹, Tetsuji Kakutani^{1,2} (¹Dept. of Biol. Sci., Grad. Sch. of Sci., Univ. Tokyo, ²Natl. Inst. of Genetics)</p>	<p>3aD10 Inducible overexpression of NIMA-related kinases suppresses thallus growth in a liverwort <i>Marchantia polymorpha</i> <u>Hikari Mase</u>¹, Yoshihiro Yoshitake², Takayuki Kohchi², Taku Takahashi¹, Hiroyasu Motose¹ (¹Dep. Biol., Fac. Sci., Okayama Univ., ²Grad. Sch. Biostudies, Kyoto Univ.)</p>
11:30			<p>3aC11 AS2 bodies colocalize with chromocenters that include ribosomal DNA around nucleolus <u>Hidekazu Iwakawa</u>¹, Takuya Sakamoto², Yuuki Sakamoto³, Mika Nomoto⁴, Sachihito Matsunaga⁵, Yasuomi Tada⁴, Sayuri Ando¹, Shoko Kojima¹, Yasunori Machida⁴, Chiyoko Machida¹ (¹Chubu Univ., ²Grad. Sch. Sci. and Technol., Tokyo Univ. of Sci., ³Grad. Sch. Sci., Osaka Univ., ⁴Grad. Sch. Sci., Nagoya Univ., ⁵Grad. Sch. Frontier Sci., Univ. of Tokyo)</p>	<p>3aD11 An armadillo-repeat kinesin regulates rhizoid growth through microtubule organization and organelle transport <u>Asaka Kanda</u>, Taku Takahashi, Hiroyasu Motose (Grad. Sch. Nat. Suc. & Tech., Okayama Univ.)</p>
11:45				<p>3aD12 Helical-growth wonderland and the end of the straight growth <u>Hiroyasu Motose</u> (Grad. Sch. Nat. Sci. & Tech., Okayama Univ.)</p>

Room E	Room F	Room G	Room X	Room Y	Room Z	Time
Environmental responses A	Flowering/Clock	Environmental responses C				
<p>3aE08 Dynamic polarity changes of <i>Arabidopsis</i> AGC protein kinases at the plasma membrane re-orientate root hair cell growth <u>Hiromasa Shikata</u>^{1,2,3,4}, Martina Kolb¹, Ulrich Hammes¹, Naoki Yanagisawa², Yoshikatsu Sato², Tetsuya Higashiyama^{2,5}, Claus Schwechheimer¹ (1Chair of Plant Systems Biology, TU Munich, 2ITbM, Nagoya Univ., 3PRESTO, JST, 4Div. of Plant Environmental Responses, NIBB, 5Fac. Sci., Univ. Tokyo)</p> <p>3aE09 Functional analysis of AS2/LOB domain transcription factors responsible for the movement of <i>Mimosa pudica</i> <u>Masamichi Ueda</u>^{1,2}, Hiroaki Mano^{1,2,3}, Chao-Li Huang⁴, Tomoaki Nishiyama⁵, Shuji Shigenobu^{2,6}, Mitsuyasu Hasebe^{1,2} (1Div. Evol. Biol., NIBB, 2Sch. Life Sci., SOKENDAI, 3PRESTO, JST, 4Inst. Trop. Plant Sci. Microbiol., NCKU, 5Adv. Sci. Res. Cen., Kanazawa Univ., 6Funct. Genomics Fac., NIBB)</p> <p>3aE10 E Sucrose alters <i>Arabidopsis thaliana</i> root diameter and mechanics <u>Marcel Pascal Beier</u>¹, Shumpei Hayashi², Hirotaka Hida², Kyoko Miwa³, Toru Fujiwara¹ (1Grad. Sch. Agr. Life Sci., Univ. Tokyo, 2Dpt. Mech Eng., Kobe Univ., 3Grad. Sch. Environ. Sci., Hokkaido Univ.)</p> <p>3aE11 E Boron induced stiffness changes in <i>Arabidopsis</i> roots <u>Yunshu Wang</u>¹, Marcel Pascal Beier¹, Shumpei Hayashi², Kyoko Miwa³, Hirotaka Hida², Toru Fujiwara¹ (1Dep. Appl. Bio. Chem., Grad. Sch. Agri. Life Sci., Univ. of Tokyo, 2Dep. Mech. Eng., Kobe univ., 3Grad. Sch. Environ. Sci., Hokkaido Univ.)</p>	<p>3aF08 Binding Mode of KaiA to the C-Terminal Region of the Cyanobacterial Clock Protein KaiC <u>Genta Mizuno</u>, Yasuhiro Onoue, Kazuki Terauchi (Col. Life Sci., Ritsumeikan Univ.)</p>	<p>3aG08 Expression of the anther-specific transcription factor OsMYB80 is impaired under high-temperature-induced male sterility conditions in rice <u>Makiko Kawagishi-Kobayashi</u>¹, Ryuji Kuroda², Atsushi Higashitani³, Yuzuru Tozawa² (1NIAS, NARO, 2Grad. Sch. Sci. Eng., Saitama Univ., 3Grad. Sch. Life Sci., Tohoku Univ.)</p> <p>3aG09 Artificial mimicry of plant seasonal responses in a smart growth chamber mini <u>Yuko Kurita</u>¹, Hironori Takimoto², Mari Kamitani¹, Yoichi Hashida³, Makoto Kashima¹, Ayumi Tezuka¹, Takanari Tanabata⁴, Atsushi J. Nagano^{1,5} (1Faculty of Agriculture, Ryukoku University, 2Faculty of Computer Science and Systems Engineering, Okayama Prefectural University, 3Faculty of Agriculture, Takasaki University of Health and Welfare, 4Kazusa DNA Research Institute, 5IAB, Keio Univ.)</p>	<p>Symposium S11 Elongate, bend, and expand: Deciphering plant growth strategy from its mechanics (9:00-11:50)</p>	<p>Symposium S12 Molecular Mechanisms of Transcriptional Repression in Plants (9:00-12:00)</p>		<p>10:45</p> <p>11:00</p> <p>11:15</p> <p>11:30</p> <p>11:45</p>

E=Presentation in English

List of Chairpersons of Oral Presentations

Day 1, Sun., March 14, AM

1aA01-12	Photosynthesis	Yuki Kato Yusuke Matsuda Chihiro Azai
1aB01-10	Primary metabolism	Sousuke Imamura Yasuhito Sakuraba Soichi Kojima
1aC01-08	Biomembrane/Ion and solute transport	Takehiro Kamiya Yoichi Nakanishi
1aD01-08	Reproductive growth	Shuh-ichi Nishikawa Sota Fujii
1aE01-09	Vegetative growth	Yuuki Sakai Tomoo Shimada Yuki Hirakawa
1aF01-09	Plant hormones/Signaling molecules	Takafumi Shimizu Mie Shimojima Nobutaka Mitsuda
1aG01-09	Environmental responses B	Kentaro Nakaminami Takashi Kuromori Izumi Yotsui
1aH01-09	Plant-organism interaction A	Fumi Fukada Shuta Asai Tatsuya Nobori

Day 1, Sun., March 14, PM

1pA01-10	Cell wall	Satoshi Endo Daisuke Takahashi Kenichi Kurotani
1pB01-11	Transcriptional, post-transcriptional or translational, post-translational regulations	Misato Ohtani Tomohiko Tsuge Yui Yamashita

1pC01-09	Photoreceptors/Photoresponses	Atsushi Takemiya Yutaka Kodama
1pD01-08	Reproductive growth	Kanae Nishii Kazuyuki Kuchitsu
1pE01-11	Vegetative growth	Akira Iwase Tomomichi Fujita Masahiko Furutani
1pF01-10	Plant hormones/Signaling molecules	Taishi Umezawa Kohei Nishimura Mitsunori Seo
1pG01-09	Environmental responses B	Yoshimi Oshima Teruaki Taji Satoshi Kidokoro
1pH01-10	Plant-organism interaction A	Shigeyuki Betsuyaku Junpei Takagi Naoyoshi Kumakura

Day 2, Mon., March 15, AM

2aA01-12	Secondary (specialized) metabolism	Masami Hirai Hikaru Seki Naoko Yoshimoto
2aB01-10	Cell cycle/Cell division / Others	Minami Matsui Masaaki Umeda Shin Takeda
2aC01-06	Photoreceptors/Photoresponses	Kan Tanaka Jun Hidema
2aD01-12	Systems biology	Takeshi Obayashi Atsushi Nagano Kyonoshin Maruyama
2aE01-12	Vegetative growth	Takashi Nobusawa Naoyuki Uchida Shugo Maekawa

2aF01-09 Plant hormones/Signaling molecules
Miyako Ueguchi(Tanaka)
Shinjiro Yamaguchi
Akie Shimotohno

2aG01-08 Environmental responses B
Hiroaki Iwai
Minoru Ueda

2aH01-08 Plant-organism interaction B
Satoko Yoshida
Koh Aoki

Day 2, Mon., March 15, PM

2pA01-12 Photosynthesis
Haruki Yamamoto
Shinya Wada
Yuki Okegawa

2pB01-07 Environmental responses of photosynthesis
Ko Noguchi
Shin-ichiro Ozawa

2pC01-12 New technology
Yuriko Osakabe
Kenji Miura
Shigeo Sugano

2pD01-12 Organelles/Cytoskeleton
Yoshiki Nishimura
Tatsuru Masuda
Kengo Kanamaru

2pE01-10 Vegetative growth
Kyoko Ito (Ohashi)
Hidehiro Fukaki
Taku Takahashi

2pF01-08 Flowering/Clock
Makoto Shirakawa
Tomoaki Muranaka

2pG01-09 Environmental responses C
Michiyuki Ono
Makiko Kawagishi
Kohki Yoshimoto

2pH01-08 Plant-organism interaction B
Hironori Kaminaka
Masayoshi Kawaguchi

Day 3, Tue., March 16, AM

3aA01-09 Primary metabolism
Atsuko Miyagi
Juntaro Negi
Toshiki Ishikawa

3aB01-07 Environmental responses of photosynthesis
Toru Hisabori
Yukako Hihara

3aC01-11 Membrane trafficking/Epigenetic regulation
Takehiko Kanazawa
Tadashi Kunieda
Soichiro Satoh

3aD01-12 Organelles/Cytoskeleton
Takashi Ueda
Keiji Numata
Hiroyasu Motose

3aE01-11 Environmental responses A
Yoshitaka Nishiyama
Jun'ichi Mano
Hiromasa Shikata

3aF01-08 Flowering/Clock
Norihiro Nakamichi
Akane Kubota

3aG01-09 Environmental responses C
Yushi Yoshitake
Motoaki Seki
Tsuyoshi Furumoto

GENERAL PRESENTATIONS

PROGRAM OF POSTER PRESENTATIONS

- Poster viewings are basically carried out in the ORSAM portal site from 9:00 on Day 1 to 16:00 on Day 3. Questions and answers will be held in the Comments section in the ORSAM portal site.
- Poster discussions using Zoom meeting (only for presenters who wish it) are also scheduled at 13:00–14:30 on Day 3 (poster numbers beginning with PF) and at 14:30–16:00 on Day 3 (poster numbers beginning with PL).

■ Photosynthesis

- PF-001 [Cancelled]
- PF-002 Regulation of light-harvesting functions during non-photochemical quenching induction in green microalgae grown under different light intensity
Yoshifumi Ueno¹, Shimpei Aikawa², Seiji Akimoto¹ (¹Grad. Sch. Sci., Kobe Univ., ²JIRCAS)
- PF-003 Effects of red-shifted light-harvesting complexes accumulated by eukaryotic algae under far-red light conditions on the primary process of photosynthesis
Hiroto Matsuzaka¹, Yoshifumi Ueno¹, Fei Wang², Hideaki Miyashita², Jian-Ren Shen³, Ryo Nagao³, Makio Yokono⁴, Seiji Akimoto¹ (¹Grad. Sch. Sci., Kobe Univ., ²Grad. Sch. Hum. Environ. Stud., Kyoto Univ., ³RIIS, Okayama Univ., ⁴Inst. Low Temp. Sci., Hokkaido Univ.)
- PF-004 Light-independent chlorophyll *d* biosynthesis in marine cyanobacteria *Acaryochloris*
Yuki Tsuzuki¹, Hisanori Yamakawa¹, Shigeru Itoh², Yuichi Fujita¹, Haruki Yamamoto¹ (¹Grad. Sch. Bioagr. Sci., Nagoya Univ., ²Grad. Sch. Sci., Nagoya Univ.)
- PF-005 In-vitro reconstitution of light-harvesting complexes of a siphonous green alga, *Codium fragile*
Chiari Akiyama¹, Naoko Norioka², Naohiro Oka³, Yuki Isaji¹, Tetsuko Nakaniwa², Rei Tohda⁴, Hideaki Tanaka^{2,4}, Genji Kurisu^{2,4}, Ritsuko Fujii^{1,5} (¹Division of Molecular Materials Science, Graduate School of Science, Osaka City University, Osaka, Japan, ²Institute for Protein Research, Osaka University, Suita, Japan, ³Graduate School of Technology, Industrial and Social Science, Tokushima University, Tokushima, Japan, ⁴Department of Macromolecular Science, Graduate School of Science, Osaka University, Osaka, Japan, ⁵Research Center for Artificial Photosynthesis, Osaka City University, Osaka, Japan)
- PF-006 Regulation in the expression of *Arabidopsis* β-carotene hydroxylase genes *Chy1* and *Chy2* by blue light
Asako Okano¹, Ryohei Yamada², Satomi Takeda² (¹College of Life, Env., Advanced Sci., Osaka Prefecture Univ., ²Grad. Sch. Sci., Osaka Prefecture Univ.)
- PF-007 Adaptation of 8-vinyl reductase to the iron environment and its role in *Acaryochloris*
Haruka Suehiro, Ryouichi Tanaka, Hisashi Ito (Inst. Low Temp. Sci., Hokkaido Univ.)
- PF-008 The function of barley-unique HvLhcb1.12 in rice under Fe deficiency stress
Yuna Wakabayashi¹, Akihiro Saito², Takuji Ohyama², Kyoko Higuchi² (¹Grad. Sch. Agri. Chem., Tokyo Univ. of Agri., ²Dept. Agri. Chem., Tokyo Univ. of Agri.)
- PF-009 Relationship between the redox condition of plastoquinone pool and non-photochemical quenching in the cyanobacterium *Synechocystis* sp. PCC6803
Ryohei Tachikake, Kintake Sonoike (Fac. Edu. Integ. Arts Sci., Waseda Univ.)
- PF-010 Deprivation of outer membrane enhances extracellular electron transfer activity of cyanobacterium *Synechocystis* sp. PCC 6803
Shoko Kusama^{1,2}, Seiji Kojima², Ken Kimura¹, Kenya Tanaka¹, Ginga Shimakawa³, Yasuaki Okumura², Shuji Nakanishi^{1,3} (¹Grad. Sch. Eng. Sci., Univ. Osaka, ²Panasonic Corp., ³RCSEC, Univ. Osaka)
- PF-011 The relationship between molecular hydrogen and photosystem reactions using *Synechocystis* sp. PCC6803
Yuta Asano¹, Hisataka Ohta², Tatsuya Tomo² (¹Grad. Sch. Sci., Tokyo University of Science, ²Grad. Sch. Sci., Tokyo University of Science)

■ Environmental responses of photosynthesis

- PF-012 Responses of energy-transfer processes in *Euglena gracilis* to fluctuating lights
Miyuki Tanabe¹, Yoshifumi Ueno¹, Makio Yokono², Ka-Ho Kato³, Jian-Ren Shen^{3,4}, Ryo Nagao⁴, Seiji Akimoto¹ (¹Grad. Sch. Sci., Kobe Univ., ²Inst. Low Temp. Sci., Hokkaido Univ., ³Grad. Sch. Sci. Tech., Okayama Univ., ⁴RIIS, Okayama Univ.)
- PF-013 Analysis of regulatory signals for redox balance-sensing phycobilisome degradation using $\Delta ndhD1/D2$ strain of *Synechocystis* sp. PCC 6803
Masakazu Toyoshima¹, Masumi Sakata¹, Chiaki Yamamoto¹, Yoshifumi Ueno², Yoshihiro Toya¹, Seiji Akimoto², Hiroshi Shimizu¹ (¹IST, Osaka univ., ²Grad. Sch. Sci., Kobe univ.)

- PF-014 Ability of P700 Oxidation in Photosystem I Causes Varietal Difference of Chilling Tolerance in Cucumber
Ko Takeuchi¹, Yufen Che², Minoru Kumazawa², Takeshi Nakano^{1,2}, Chikahiro Miyake³, Kentaro Ifuku^{1,2} (¹Fac. Agri., Kyoto Univ., ²Grad. Sch. Biostudies., Kyoto Univ., ³Grad. Sch. Agri., Kobe Univ.)
- PF-015 Response of *Acaryochloris* to different light qualities studied by time-resolved fluorescence spectroscopy
Zhe Wang¹, Yoshifumi Ueno¹, Makio Yokono², Reona Toyofuku³, Tatsuya Tomo³, Seiji Akimoto¹ (¹Grad. Sch., Kobe Univ., ²Inst. Low Temp. Sci., Hokkaido Univ., ³Fac. Sci., Tokyo Univ. Sci)
- PF-016 Modifications of light-harvesting and energy-transfer processes of diatoms in response to fluctuating red light
Miyuki Tanabe¹, Yoshifumi Ueno¹, Makio Yokono², Jian-Ren Shen³, Ryo Nagao³, Seiji Akimoto¹ (¹Grad. Sch. Sci., Kobe Univ., ²Inst. Low Temp. Sci., Hokkaido Univ., ³RIIS, Okayama Univ.)
- PF-017 Genetic analysis of the chloroplast-localized protein DLDG1 involved in pH control in chloroplasts
Kasane Suzuki, Shinji Masuda (Department of Life Sciences and Technology, Tokyo Institute of Technology)
- PF-018 Responses of excitation energy-transfer processes in *Euglena gracilis* to light qualities
Yuki Sorihashi¹, Yoshifumi Ueno², Makio Yokono³, Ka-Ho Kato⁴, Jian-Ren Shen^{4,5}, Ryo Nagao⁵, Seiji Akimoto^{1,2} (¹Fac. Sci., Kobe Univ., ²Grad. Sch. Sci., Kobe Univ., ³Inst. Low Temp. Sci., Hokkaido Univ., ⁴Grad. Sch. Sci. Tech., Okayama Univ., ⁵RIIS, Okayama Univ.)
- PF-019 Photosynthesis influences *VTC2* expression providing a possible mechanism for light control of ascorbate accumulation in Arabidopsis leaves
Takahiro Ishikawa¹, Takanori Maruta¹, Takahisa Ogawa¹, Shigeru Shigeoka², Mike Page³, Smirmoff Nicholas³ (¹Grad. Sch. Nat. Sci. Technol., Shimane Univ., ²Exp. Farm, Kindai Univ., ³Univ., Exeter, Biosci.)

■ Primary metabolism

- PF-020 Identification and characterization of transcription factors located at the center of the nitrogen-deficiency response network in rice
Namie Ohtsuki¹, Yoshiaki Ueda², Yasuhito Sakuraba¹, Shuichi Yanagisawa¹ (¹Biotech. Res. Center, Univ. Tokyo, ²JIRCAS)
- PF-021 Histone chaperon NAP1 proteins are involved in nitrogen responsive gene expression regulation in *Arabidopsis thaliana*
Linnan Jie, Miho Sanagi, Yoshie Morita, Junpei Takagi, Junji Yamaguchi, Takeo Sato (Fac. Sci. and Grad. Sch. Life Sci., Hokkaido Univ.)
- PF-022 Regulatory mechanisms of nitrogen responsive flowering through SnRK1-dependent phosphorylation signaling in *Arabidopsis*
Akio Kubo¹, Miho Sanagi¹, Yasutake Sato², Filip Rolland³, Junpei Takagi¹, Junji Yamaguchi¹, Takato Imaizumi⁴, Takeo Sato¹ (¹Fac. Sci. and Grad. Sch. Life Sci., Hokkaido Univ., ²Sch. Sci., Hokkaido Univ., ³Biology Department, KU Leuven, ⁴Dept. Biol. Univ. Washington)
- PF-023 Elucidation of Different Traits of Five Genes Responsible for the First Reactions of Glutathione Degradation Pathways in Arabidopsis
Takehiro Ito¹, Minori Umahashi², Shunsuke Miyaji², Akiko Maruyama-Nakashita³, Masami Yokota Hirai⁴, Naoko Ohkama-Ohtsu^{1,5} (¹Tokyo University of Agriculture and Technology, Faculty of Agriculture, ²Tokyo University of Agriculture and Technology, Graduate school of Agriculture, ³Kyushu University, Faculty of Agriculture, ⁴RIKEN Center for Sustainable Resource Science (CSRS), ⁵Tokyo University of Agriculture and Technology, Institute of Global Innovation Research)

■ Secondary (specialized) metabolism

- PF-024 Biochemical characterization of glycosyltransferases involved in the formation of glycosylated scent compounds in petunia flowers
Takao Koeduka¹, Yukiko Ueyama¹, Sakihito Kitajima², Toshiyuki Ohnishi³, Kenji Matsui¹ (¹Grad. Sch. Sc. Tech. Innov., Yamaguchi Univ., ²Kyoto Inst. Tech., ³Grad. Sch. Agr., Shizuoka Univ.)
- PF-025 Comparison of different methods and datasets for genome-wide association study -a case study in sorghum
Xu Chen¹, Kiyoshi Yamazaki¹, Bian Bian¹, Hideki Takanashi¹, Masaru Fujimoto¹, Nobuhiro Tsutsumi¹, Junichi Yoneda², Taichi Koshiba², Hiromi Kajiya-Kanegae¹, Motoyuki Ishimori¹, Tsuyoshi Tokunaga², Hiroyoshi Iwata¹, Masaomi Yamamura³, Yuki Tobimatsu³, Toshiaki Umezawa³, Toru Fujiwara¹ (¹Graduate School of Agricultural and Life Sciences, The University of Tokyo, ²EARTHNOTE Co., Ltd., ³Research Institute for Sustainable Humanosphere, Kyoto University)
- PF-026 Elucidation of regulation and accumulation machinery in proanthocyanidin biosynthesis
Aoi Shimeno, Mutsumi Watanabe, Takayuki Tohge (Graduate School of Science and Technology, Nara Institute of Science and Technology (NAIST))

- PF-027 Comprehensive analyses of hydrolyzable tannins in aluminum-resistant tree *Eucalyptus camaldulensis*
Ko Tahara¹, Shoichi Suzuki², Mitsuru Nishiguchi¹, Koh Hashida¹, Hideyuki Ito² (¹Forestry and Forest Products Research Institute, ²Graduate School of Health and Welfare Science, Okayama Prefectural University)
- PF-028 Glucosinolate Catabolism dependent on Two β -Glucosidases, BGLU28 and BGLU30, is critical for Plant Growth under Sulfur Deficiency
Liu Zhang¹, Ryota Kawaguchi¹, Tomomi Morikawa-Ichinose¹, Alaa Allahham¹, Sun-Ju Kim², Akiko Maruyama-Nakashita¹ (¹Grad. Sch. Bioresour. & Bioenviron., Univ. Kyushu, ²Grad. Sch. Bio-Enviro Chem., Univ. Chungnam National)

■ Biomembrane/Ion and solute transport

- PF-029 Mutations in a Golgi-localized proton pyrophosphatase *AVP2;1* alleviates low-boron stress in *Arabidopsis thaliana*
Amarachukwu Faith Onuh, Kyoko Miwa (Grad. Sch. Environ. Sci., Hokkaido Univ)
- PF-030 Functional analysis of tonoplast intrinsic protein AtTIP2;2 in *Arabidopsis thaliana*
 Yukako Yamanari¹, Yoshiki Nakahara², Hina Fujimoto¹, Yuka Motohiro¹, Tsuneo Kuwagata³, Yuko Hanba⁴, Maki Katsuhara²,
Kumi Sato-Nara¹ (¹Nara Women's Univ., ²IPSR, Okayama Univ., ³Nat. Inst. Agro-Environ. Sci., NARO, ⁴Dep. Appl. Biol., Kyoto Inst. Tech.)
- PF-031 Analysis of the C-terminal region controlled the water transport activities of *Arabidopsis* tonoplast intrinsic proteins, AtTIP3s
Shigeeko Utsugi, Maki Katsuhara (IPSR, Univ. Okayama)
- PF-032 The relationship between Fe influx into new leaf and downregulation of SUF machinery in Fe-deficient barley
 Kyoko Higuchi¹, Minori Sasaki¹, Maya Katori¹, Keisuke Kurita², Takuro Sakai², Nobuo Suzuki³, Naoki Kawachi³, Akihiro Saito¹,
 Takuji Ohyama¹ (¹Tokyo University of Agriculture, Faculty of Applied Bioscience, Department of Agricultural Chemistry, ²Materials Sciences Research Center, Japan Atomic Energy Agency, ³National Institutes for Quantum and Radiological Science and Technology, Takasaki Advanced Radiation Research Institute)
- PF-033 Identification of RND-type free fatty acid exporters using of *Synechocystis* sp. PCC6803
Harumi Jinno¹, Tenma Suzuki², Kodai Tanaka², Tatsuki Mizutani², Takanori Hasegawa², Tatsuo Omata³, Makiko Aichi² (¹Grad. Sch. of Biosci. and Biotech., Chubu Univ., ²Col. of Biosci. and Biotech., Chubu Univ., ³Grad. Sch. of Bioagric. Sci., Nagoya Univ.)
- PF-034 A novel factor involved in regulation of free fatty acid (FFA) efflux activity of the RND-type transporter RND1 in *Synechococcus elongatus* PCC 7942
Jun Furuhashi, Nobuyuki Takatani, Tatsuo Omata, Seiryuu Motoyama (Grad. Sch. Bioagr. Sci., Nagoya Univ)

■ Membrane trafficking

- PF-035 Analysis of the subcellular localization of novel proteins with Syntaxin6 N-terminal region
Leyna Nagao¹, Yutaro Shimizu^{2,3}, Takahiro Fujikura³, Emi Ito¹, Kei Yura^{1,4}, Akihiko Nakano², Tomohiro Uemura¹ (¹Graduate School of Humanities and Sciences, Ochanomizu Univ., ²Live Cell Super-Resolution Imaging Research Team, RIKEN Center for Advanced Photonics., ³Graduate School of Science, Univ. Tokyo, ⁴School of Advanced Science and Engineering, Waseda Univ.)
- PF-036 Analysis of Rab6/RABH1 protein in *Arabidopsis thaliana*
Chihiro Ohori¹, Emi Ito¹, Akihiko Nakano², Takashi Ueda^{3,4}, Tomohiro Uemura¹ (¹Sci. Bio., Univ. Ocha, ²RIKEN Center for Advanced Photonics, ³Div. Cellular Dynamics, NIBB, ⁴Sch. Life Sci., SOKENDAI)
- PF-037 The role of the plant secretion system in the pathogen responses
Sae Endo¹, Emi Ito¹, Akihiko Nakano², Tomohiro Uemura¹ (¹Sci. Bio., Univ. Ocha, ²RIKEN Center for Advanced Photonics)
- PF-038 Analysis of *Arabidopsis thaliana* VAMP714 intracellular localization
Tomoko Eguchi¹, Sae Endo², Emi Ito², Akihiko Nakano³, Tomohiro Uemura^{1,2} (¹Graduate School of Humanities and Science, Ochanomizu Univ., ²Faculty of Science, Ochanomizu Univ., ³Live Cell Super-Resolution Imaging Research Team, RIKEN Center for Advanced Photonics.)
- PF-039 Salt stress response mediated by TGN-vacuolar transport pathway
Yuzuki Inoue¹, Yutaro Shimizu^{2,3}, Emi Ito¹, Akihiko Nakano², Tomohiro Uemura¹ (¹Graduate School of Humanities and Sciences, Ochanomizu Univ., ²Live Cell Super-Resolution Imaging Research Team, RIKEN Center for Advanced Photonics., ³Grad. Sch. Sci., Univ. Tokyo)

- PF-040 Involvement of ubiquitin signals in salt stress response regulations mediated by membrane trafficking regulator SYP61 in *Arabidopsis*
Mayu Arai¹, Yoko Hasegawa¹, Yongming Luo¹, Koki Mukuta¹, Tomohiro Uemura², Junpei Takagi¹, Junji Yamaguchi¹, Takeo Sato¹ (¹Fac. Sci. and Grad. Sch. Life Sci., Hokkaido Univ., ²Graduate School of Humanities and Sciences, Ochanomizu Univ.)
- PF-041 Analysis of plant C/N-nutrient responses mediated by regulation of ubiquitin signaling and membrane trafficking
Yoko Hasegawa¹, Yongming Luo¹, Koki Mukuta¹, Mayu Arai¹, Tomohiro Uemura², Yohann Boutté³, Akihiko Nakano⁴, Junji Yamaguchi¹, Takeo Sato¹ (¹Fac. Sci. and Grad. Sch. Life Sci., Hokkaido Univ., ²Graduate School of Humanities and Sciences, Ochanomizu Univ., ³Laboratory of Membrane Biogenesis - CNRS/Bordeaux Univ. - France, ⁴Live Cell Super-Resolution Imaging Research Team, RIKEN Center for Advanced Photonics)

■ Organelles/Cytoskeleton

- PF-042 Distinctive properties in the ATP- and the GTP-hydrolysis activity of *Arabidopsis* VIPP1 protein involved in chloroplast membrane protection
Norikazu Ohnishi¹, Manabu Sugimoto¹, Lingang Zhang², Wataru Sakamoto¹ (¹Institute for Plant Science and Resources, Okayama University, ²School of Life Science, Inner Mongolia University)
- PF-043 *dpd1* mutation suppresses early senescence phenotype in *atg* mutant
Tsuneaki Takami, Wataru Sakamoto (Inst. Plant Sci. Res., Okayama Univ.)
- PF-044 [Cancelled]
- PF-045 Plant mitophagy contributes to the maintenance of mitochondrial population and quality in *Arabidopsis* leaves
Sakuya Nakamura¹, Shinya Hagihara¹, Kohei Otomo^{2,3,4}, Hiroyuki Ishida⁵, Jun Hidema⁶, Tomomi Nemoto^{2,3,4}, Masanori Izumi¹ (¹CSRS, Riken, ²EXCELLS, NINS, ³Div. Biophoto., NIPS, ⁴Sch. Life Sci., Sokendai, ⁵Grad. Sch. Agri Sci., Tohoku Univ., ⁶Grad. Sch. Life Sci., Tohoku Univ.)
- PF-046 Identification and analysis of the gene responsible for the suppression of *crl* in *Arabidopsis thaliana*
Ryo Yoshimura¹, Syun Minamikawa¹, Ryohei Seta¹, Sae Miyazaki¹, Takamasa Suzuki², Moussa Benhamed³, Yasushi Yoshioka¹ (¹Div. Bio. Sci., Grad. Sch. Sci., Nagoya Univ., ²Col. Biosci. Biothech., Chubu Univ., ³Inst. Plant Sci. Paris-Saclay, Univ. Paris-Sud)
- PF-047 The search for new pest and pathogen resistance factors related to chloroplast proteins
Yohei Matsunaga, Hiromi Kozen, Atsushi Kasai, Hisae Hirata, Reiko Motohashi (Grad. Sch. Inte. Sci. and Tech., Shizuoka Univ.)

■ Cell wall

- PF-048 Construction of *in vitro* grafting system of *Nicotiana benthamiana*
Yaichi Kawakatsu^{1,2}, Katsuhiko Shiratake², Michitaka Notaguchi¹ (¹Biosci. & Biotech. Center, Nagoya Univ., ²Grad. Sch. Bioagri. Sci., Nagoya Univ.)
- PF-049 A novel Golgi protein, HOP, is required for integrated cell plate formation through callose accumulation
Takema Sasaki^{1,2}, Yoshihisa Oda^{1,2} (¹Department of Gene Function and Phenomics, NIG, ²Department of Genetics, SOKENDAI)
- PF-050 FIBex: A New Online Transcriptome Platform to Analyze Development of Plant Cellulosic Fibers
Hitomi Onodera¹, Natalia Mokshina², Oleg Gorshkov², Hironori Takasaki³, Tatyana Gorshkova², Nobutaka Mitsuda¹ (¹BPRI AIST, ²KIBB FRC Kazan Scientific Center of RAS, ³Grad. Sch. Sci. and Eng., Saitama Univ.)

■ Cell cycle/Cell division

- PF-051 Quantitative analysis of the effect of polyploidization on root growth and chromosome polytenization in euployploids of *Arabidopsis thaliana*
Suzuka Kikuchi¹, Munetaka Sugiyama², Akitoshi Iwamoto^{1,3} (¹Dept. Biol. Sci., Grad. Sch. Sci., Kanagawa Univ., ²Bot. Gard., Grad. Sch. Sci., Univ. Tokyo, ³Dept. Biol. Sci., Fac. Sci., Kanagawa Univ.)
- PF-052 Establishment of quantitative PCR-based *Arabidopsis* DNA-damage assay
Shimpei Uraguchi, Natsuho Tamaru, Maho Suzuki, Yuka Ohshiro, Ryosuke Nakamura, Yasukazu Takanezawa, Masako Kiyono (Kitasato Univ.)
- PF-053 Regulatory mechanism of cell cycle arrest in response to DNA damage
Minori Hosoya, Naoki Takahashi, Masaaki Umeda (Grad. Sch. Sci. Tech., NAIST)

■ Vegetative growth

- PF-054 MpPGDH-mediated serine synthesis is essential for plant growth in the dark and for sexual reproduction in *Marchantia polymorpha*
Mengyao Wang^{1,2}, Hiromitsu Tabeta^{1,3,5}, Kinuka Ohtaka^{1,2,6}, Ayuko Kuwahara¹, Kiminori Toyooka¹, Mayuko Sato¹, Mayumi Wakazaki¹, Hiromichi Akashi¹, Yoriko Matsuda⁴, Takayuki Kohchi⁴, Ryuichi Nishihama⁴, Ali Ferjani⁵, Masami Yokota Hirai^{1,2}
(¹RIKEN Center for Sustainable Resource Science, ²Graduate School of Bioagricultural Sciences, Nagoya University, ³Department of Life Sciences, Graduate School of Arts and Sciences, The University of Tokyo, ⁴Graduate School of Biostudies, Kyoto University, ⁵Department of Biology, Tokyo Gakugei University, ⁶Department of Chemical and Biological Sciences, Faculty of Science, Japan Women's University)
- PF-055 NIN-like protein homologs regulate gametophyte-dependent sporophyte development in *Physcomitrium patens*
Emiko Yoro, Keiko Sakakibara (Dep. of Life Sci., Rikkyo Univ.)
- PF-056 Analysis of genes affected by MpCLE2 peptide signaling in *Marchantia polymorpha*
Go Takahashi (Grad. Sch. Sci., Univ. Gakushuin)
- PF-057 *ATML1* is activated in the outermost cells independently of cell lineage
Shinobu Takada¹, Ayaka Yoshida¹, Nozomi Takada¹, Miharuru Ito¹, Gerd Jürgens³, Hiroyuki Iida² (¹Dept. Biol. Sci., Grad. Sch. Sci., Osaka Univ., ²Institute of Biotechnology, HiLIFE, University of Helsinki, ³ZMBP, University of Tübingen)
- PF-058 Functional analysis of epigenetic regulators involved in the acquisition of plant regenerative capacity
Rina Miura¹, Takuya Sakamoto¹, Mio Shibuta K.², Satoyo Oya³, Soichi Inagaki³, Yutaka Suzuki⁴, Suzuki Kakutani^{3,5}, Sachihito Matsunaga² (¹Dept. of Appl. Biol. Sci., Grad. Sch. of Sci. and Tech., Tokyo Univ. of Sci., ²Dept. of Integr. Biosci., Grad. Sch. of Front. Sci., Tokyo Univ., ³Dept. of Biol. Sci., Grad. Sch. of Sci., Tokyo Univ., ⁴Dept. of Comput. Biol. & Med. Sci., Grad. Sch. of Front. Sci., Tokyo Univ., ⁵Natl. Inst. of Genetics)
- PF-059 γ -ray irradiation prior to callus induction enhances shoot regeneration in *Arabidopsis*
Tomoka Tokairin¹, Yuki Sakamoto², Takamasa Suzuki³, Takuya Sakamoto¹, Sachihito Matsunaga⁴ (¹Dept. Appl. Biol. Sci., Grad. Sch. Sci. Tech., Tokyo Univ. Sci., ²Dept. Biol. Sci., Grad. Sch. Sci., Osaka Univ., ³Dept. Biol. Grad. Sch. Biosci. Biotechnol., Chubu Univ., ⁴Dept. Integr. Biosci., Grad. Sch. Front. Sci., Univ. Tokyo)
- PF-060 Ectopic auxin accumulation and subsequent activation of cell cycling trigger spontaneous callus formation on *hope-1* mutant hypocotyls
Mizuki Shiratori^{1,2}, Kazuki Takahashi², Hiromitsu Tabeta^{1,2,3}, Hiroyuki Koga⁴, Shizuka Gunji², Gorou Horiguchi^{5,6}, Masami Yokota Hirai³, Hirokazu Tsukaya⁴, Ali Ferjani² (¹Grad. Sch. Art Sci., ²Dept. Biol., Tokyo Gakugei Univ., ³RIKEN CSRS, ⁴Grad. Sch. Sci., Univ. Tokyo, ⁵Dept. Life Sci., Rikkyo Univ., ⁶Res. Ctr. Life Sci., Rikkyo Univ.)
- PF-061 Establishment Of The Live Imaging Approach To Analyze Tip Growth of Conchocelis In The Red Alga *Neopyropia yezoensis*
Yuji Hiwatashi^{1,2}, Mizuho Shimada², Nagisa Takada¹ (¹Sch. Food Ind. Sci., Miyagi Univ., ²Gad. Food Agri. Environ. Sci., Miyagi Univ.)
- PF-062 The orientation of cortical microtubules in cells of a vine in morning glory —Involvement of cortical microtubules in vine twining—
Kasumi Saito¹, Tomoe Yofune², Tsuyoshi Kaneta² (¹Fac. Sci., Ehime Univ., ²Grad. Sch. Sci. & Eng., Ehime Univ.)
- PF-063 Time-series analysis of the developmental process of *Eucalyptus globulus* young tree in the field of Nara
Miyuki Nakata¹, Masahiro Takahara², Taku Demura¹ (¹NAIST, ²Acacia Hort.)

■ Reproductive growth

- PF-064 A Novel Transcriptional Network that Underpins Stem Structural and Mechanical Integrity by Regulating Radial Cell Growth
Mariko Asaoka^{1,2}, Shingo Sakamoto³, Hiroyuki Koga⁴, Shizuka Gunji¹, Nobutaka Mitsuda³, Hirokazu Tsukaya⁴, Shinichiro Sawa⁵, Olivier Hamant², Ali Ferjani¹ (¹Dept. Biol., Tokyo Gakugei Univ., ²RDP, ENS de Lyon, ³Bioprod. Res. Inst., AIST, ⁴Grad. Sch. Sci., Univ. Tokyo, ⁵Grad. Sch. Sci. Tech., Kumamoto Univ.)
- PF-065 A novel experimental system to study effects of mechanical forces on the floral development in *Arabidopsis thaliana*
Akitoshi Iwamoto¹, Yoshioka Yuna², Oriko Okabe², Yohei Tanoue², Karube Ryuta¹, Mizuki Negishi¹, Sumire Yamamoto¹
(¹Kanagawa Univ. Fac. Sci. Dept. Bilol., ²Tokyo Gakugei Univ. Div. Sci. Dept Biol.)
- PF-066 Analysis of GH17 members regulating generative cell engulfment by the vegetative cell in *Arabidopsis*
Kazuo Ebine^{1,2}, Shohei Yamaoka³, Takashi Ueda^{1,2} (¹Div. Cellular Dynamics, NIBB, ²Sch. Life Sci., SOKENDAI, ³Grad. Sch. Biostudies, Kyoto Univ.)

PF-067 Streptophytes reproducing with motile sperm possess adenylyl cyclase/cAMP phosphodiesterase gene, *CAPE*
Chiaki Yamamoto, Fumio Takahashi, Yousuke Ooe, Haruto Shirahata, Aika Shibata, Masahiro Kasahara (Grad. Sch. Life Sci., Univ. Ritsumeikan)

■ Plant hormones/Signaling molecules

- PF-068 *DIENLACTONE HYDROLASE LIKE PROTEIN1* negatively regulates KAI2-ligand pathway in *Marchantia polymorpha*
Hiromu Kameoka¹, Shota Shimazaki¹, Yohei Mizuno¹, Kyoichi Kodama¹, Aino Komatsu¹, Akiyoshi Yoda², Kiyoshi Mashiguchi³, Bunta Watanabe³, Masanori Okamoto², Takahito Nomura², Shinjiro Yamaguchi³, Junko Kyozyuka¹ (¹Grad. Sch., Life Sci., Tohoku Univ., ²Ctr. for Biosci. Res. & Educ., Utsunomiya Univ., ³Inst. Chem. Res. Kyoto Univ.)
- PF-069 The effect of root-specific reduction of cytokinin signals on shoot transcriptome in *Arabidopsis thaliana*
Kota Monden¹, Takamasa Suzuki², Tsuyoshi Nakagawa¹, Takushi Hachiya¹ (¹Center for Integrated Research in Science, Univ. Shimane, ²Department of Biological Chemistry, Univ. Chubu)
- PF-070 Tissue-specific expression analysis of plant intracellular Ras-group LRR Proteins (*PIRLS*) in *Arabidopsis thaliana*
Md. Firose Hossain, Mst Momtaz Sultana, Ai Tanaka, Takushi Hachiya, Tsuyoshi Nakagawa (Dep. Mol. Func. Gen. Int. Cent. Sci. Res., Shimane Univ.)
- PF-071 An Ancestral Strigolactone Conserved in Land Plants
Akiyoshi Yoda^{1,2}, Xiaonan Xie², Shota Shimazaki³, Kyoichi Kodama³, Kaori Yoneyama⁴, Kohki Akiyama⁵, Masaki Shimamura⁶, Junko Kyozyuka³, Takahito Nomura² (¹United Grad. Sch. of Agri. Sci., Tokyo Univ. of Agri. and Tech., ²Ctr. for Biosci. Res. & Educ., Utsunomiya Univ., ³Grad. Sch. of Life Sci., Tohoku Univ., ⁴Grad. Sch. of Agri., Ehime Univ., ⁵Grad. Sch. of Life & Environ. Sci., Osaka Pref. Univ., ⁶Grad. Sch. of Integrated Sci. for Life, Hiroshima Univ.)
- PF-072 Bioactive GAs synthesized by OsGA3ox1 in rice anther promote pollen starch synthesis
Minami Morii, Akihiko Sugihara, Kyosuke Kawai, Toru Kashio, Aya Ito, Hisako Yoshimura, Masako Hattori, Sayaka Takehara, Makoto Matsuoka, Miyako Ueguchi-Tanaka (Biosci. and Biotech. Cen., Nagoya Univ.)
- PF-073 Identification of ABA-dependent phosphorylated bHLH transcription factors in guard cells of *Vicia faba* by mass spectrometry
Yuki Hayashi¹, Yohei Takahashi², Keiko Kuwata³, Takamasa Suzuki⁴, Toshinori Kinoshita^{1,3} (¹Grad. Sch. Sci., Nagoya Univ., ²Div. Biol. Sci., UCSD, ³WPI-ITbM, Nagoya Univ., ⁴Dept. Bio. Chem., Chubu Univ.)
- PF-074 Functional Analysis of A Novel Brassinosteroid Signaling Factor BMY2
Kenya Haratani¹, Kenjiro Fujita^{1,3}, Reika Hasegawa⁴, Ayumi Yamagami^{1,2}, Miho Ikeda⁴, Nobutaka Mitsuda⁵, Kazuo Shinozaki², Masaru Takagi^{4,5}, Tadao Asami⁶, Takeshi Nakano^{1,2} (¹Grad. Sch. Biostudies., Kyoto Univ., ²CSRS, RIKEN., ³Grad. Agric., Meiji Univ., ⁴Grad. Sch. Sci. Eng., Saitama Univ., ⁵AIST., ⁶Grad. Sch. Agri. Life Sci., University of Tokyo)
- PF-075 Elucidation of the physiological function of fairy chemicals in *Arabidopsis thaliana*
Yuki Taniguchi¹, Sooyeon Park¹, Kotaro Iwamoto¹, Toshiyuki Kan², Hirohide Takemura⁴, Jae-Hoon Choi⁴, Xiaonan Xie³, Hirokazu Kawagishi⁴, Reiko Motohashi¹ (¹Grad. Sch. Inte. Sci. and Tech., Shizuoka Univ., ²Pharma., Univ. Shizuoka, ³Center. Bio. Res. and Edu., Utsunomiya Univ., ⁴Grad. Sch. Sci. and Tech., Shizuoka Univ)
- PF-076 Characterization of a Transcription Factor Related to Auxin Induced Gene Expression in *Klebsormidium nitens*
Noriaki Tounosu, Kanami Sesoko, Koichi Hori, Mie Shimojima, Hiroyuki Ohta (School of Life Science and Technology, Tokyo Institute of Technology)
- PF-077 Molecular analysis of *RLD* gene family, novel regulator of auxin transport, in *Arabidopsis*
Takeshi Nishimura¹, Masahiko Furutani², Masatoshi Taniguchi³, Miyo Terao Morita¹ (¹NIBB, ²Fujian Agriculture and Forestry Univ., ³Nagoya Univ.)
- PF-078 Elucidation of the starch decomposition mechanism during rice pollen maturation
Akira Hayama¹, Kyosuke Kawai¹, Akihiko Sugihara¹, Minami Morii¹, Sayaka Takehara¹, Yoko Mizuta², Miyako Ueguchi-Tanaka¹ (¹Biosci. and Biotech. Cen., Nagoya Univ., ²Ins. of Transformative Bio-Molecules (WPI-ITbM), Nagoya Univ.)

■ Photoreceptors/Photoresponses

- PF-079 *ZEITLUPE* enhances expression of *PIF4* and *YUC8* in the upper aerial parts of *Arabidopsis* seedlings to positively regulate hypocotyl elongation
Aya Saitoh¹, Tomoyuki Takase¹, Hiroshi Abe², Masaaki Watahiki³, Yuki Hirakawa¹, Tomohiro Kiyosue¹ (¹Graduate Course in Life Science, Graduate School of Science, Gakushuin University, ²Experimental Plant Division, Department of Biological Systems, RIKEN, BioResource Center, ³Faculty of Science, Division of Biological Sciences Hokkaido University)
- PF-080 Functional mapping of the kinase domain of BLUS1 in blue light-dependent stomatal opening
Saashia Fujii¹, Kyoka Tahara¹, Shota Yamauchi¹, Sakurako Hosotani¹, Koji Okajima², Ken-ichiro Shimazaki³, Atsushi Takemiya¹ (¹Grad. Sch. Sci. Tech. Innov., Yamaguchi Univ., ²Fac. Sci. Tech., Keio Univ., ³Grad. Sch. Sci., Kyushu Univ.)
- PF-081 Analysis of novel interacting partners of phot2 involved in chloroplast photorelocation movement
Takeshi Higa¹, Eiji Gotoh², Masamitsu Wada³, Yoshihisa Oda^{1,4}, Masato Nakai⁵ (¹Dept. Gene Func. Phen., NIG, ²Fac. of Agr., Kyushu Univ., ³Grad. Sch. Sci., Tokyo Metro. Univ., ⁴Dept. Genet., SOKENDAI, ⁵Inst. for Prot. Res., Osaka Univ.)
- PF-082 Phenotypic analyses of *Chlamydomonas reinhardtii* mutants that always show positive phototaxis
Jun Morishita^{1,2}, Ryutarou Tokutsu^{3,4}, Jun Minagawa^{3,4}, Toru Hisabori^{1,2}, Ken-ichi Wakabayashi^{1,2} (¹LST., Tokyo Tech, ²CLS., TokyoTech, ³Division of Environmental Photobiology., NIBB, ⁴Department of Basic Biology., SOKENDAI)
- PF-083 Improvement of the phycocyanobilin synthesis in *Escherichia coli* using a modular cloning approach
Kento Masui, Toshihiko Eki, Yuu Hirose (ToyoHashi Univ. of Tech.)

■ Flowering/Clock

- PF-084 Investigation of Molecular Mechanism of The FT Transport
Yusuke Murata, Mitsutomo Abe (Grad. Sch. Arts and Sci., Univ. Tokyo)
- PF-085 Relationship between meristem size and floral transition in *Arabidopsis*
Shinji Watanabe, Takashi Okamoto, Atsuko Kinoshita (Dept. of Biol. Sci., Tokyo Metropolitan Univ.)
- PF-086 [Cancelled]
- PF-087 Regulation of seasonal sensing mechanism via circadian clocks
Atsuhiko Hirohata¹, Yuta Yamatsuta¹, Kaori Ogawa², Akane Kubota¹, Takamasa Suzuki³, Motomu Endo¹ (¹Grad. Sci. and Tech., NAIST, ²Grad. Biostudies, Kyoto Univ., ³Col. Biosci. and Biotech., Chubu Univ.)
- PF-088 Analysis of LUX function in root development in *A. thaliana*
Yu Leng¹, Koutarou Torii², Taiga Uchikawa¹, Akane Kubota¹, Nozomu Takahashi¹, Tatsuaki Goh¹, Motomu Endo¹ (¹Grad. Sci. and Tech., NAIST, ²Wako Inst., Riken)
- PF-089 Functional Study of LOV-Histidine Kinases (LHKs) in the green alga *Chlamydomonas reinhardtii*
Yuri Yamamoto¹, Takuya Matsuo², Tomoki Watanabe¹, Yuki Nakano¹, Ryuta Katayama³, Ko Tomida¹, Tetsuhiro Otsuka¹, Setsuyuki Aoki¹ (¹Graduate School of Informatics, Nagoya University, ²Center for Gene Research, Nagoya University, ³School of Informatics, Nagoya University)
- PF-090 Homologs of *Pseudo-Response Regulator (PRR)* genes in the green alga *Chlamydomonas reinhardtii*
Yuki Nakano¹, Takuya Matsuo², Tomoki Watanabe¹, Yuri Yamamoto¹, Ryuta Katayama³, Setsuyuki Aoki¹ (¹Graduate School of Informatics, Nagoya University, ²Center for Gene Research, Nagoya University, ³School of Informatics, Nagoya University)

■ Environmental responses A

- PF-091 Regulation of ascorbate metabolism under nitrogen deficiency
Takumi Iwagami, Takahisa Ogawa, Takahiro Ishikawa, Takanori Maruta (Grad. Sch. Nat. Sci. Technol., Shimane Univ.)
- PF-092 Molecular mechanism underlying glutathione-dependent ascorbate recycling system
Akane Hamada¹, Yusuke Terai¹, Takahisa Ogawa¹, Atsuko Miyagi², Maki Kawai-Yamada², Takahiro Ishikawa¹, Takanori Maruta¹ (¹Fac. Life Environ. Sci., Shimane Univ., ²Grad. Sch. Sci. Eng., Saitama Univ.)
- PF-093 Regulatory mechanisms of the ROS-producing enzymes, Rboh, by Ca²⁺ binding and phosphorylation and their molecular and functional diversification in *Marchantia polymorpha*
Takafumi Hashimoto¹, Kenji Hashimoto¹, Takuya Miyakawa², Masaru Tanokura², Kazuyuki Kuchitsu¹ (¹Dept. Appl. Biol. Sci., Tokyo Univ. of Sci., ²Dept. Appl. Biol. Chem., Univ. of Tokyo)

- PF-094 Spatiotemporal imaging analysis of stress-responsive rapid long-distance signaling in *Marchantia polymorpha*.
Kenshiro Watanabe, Kota Hsegawa, Hiroki Shindo, Kenji Hashimoto, Kazuyuki Kuchitsu (Dept. Appl. Biol. Sci., Tokyo Univ. of Sci.)
- PF-095 Functional analysis of chloroplast-localized NAD kinase in Arabidopsis
Chaomurilege Bai¹, Shin-nosuke Hashida², Atsuko Miyagi¹, Toshiki Ishikawa¹, Masatoshi Yamaguchi¹, Maki Kawai-Yamada¹ (¹Grad. Sch. Science and Engineering, Saitama university, ²Environmental Science Research Laboratory, Central Research, Institute of Electric Power Industry)
- PF-096 Mammalian-type Thioredoxin Reductase Contributes to Resistance Against High-light Stress in *Chlamydomonas reinhardtii*
Yuma Asahina^{1,2}, Kazuma Sakamoto^{1,2}, Toru Hisabori^{1,2}, Ken-ichi Wakabayashi^{1,2} (¹Tokyo Institute of Technology, School of Life Science and Technology, ²Tokyo Institute of Technology, Laboratory for Chemistry and Life Science, Institute of Innovative Research)

■ Environmental responses B

- PF-097 Functional Analyses of an Arabidopsis bZIP Transcription Factor Involved in Drought Tolerance
Yoshimi Nakano, Keiko Kigoshi, Sumire Fujiwara (Bioprod. Res. Inst., AIST)
- PF-098 An AREB-like bZIP transcription factor in *Klebsormidium nitens* is a global transcriptional regulator of water stress
Koichi Hori, Noriaki Tounosu, Kanami Sesoko, Mie Shimojima, Hiroyuki Ohta (School of Life Science and Technology, Tokyo Institute of Technology)
- PF-099 Analysis of ABA-hypersensitive mutants in *Physcomitrium patens*
Ryotaro Oya¹, Yuri Morikawa¹, Teruaki Taji¹, Daisuke Takezawa², Yoichi Sakata¹, Izumi Yotsui¹ (¹Dept. Biosci., Tokyo Agric. Univ., ²Dept. Sci., Saitama Univ.)
- PF-100 Responses of fructose-1,6-bisphosphate aldolases to salt stress in a halotolerant cyanobacterium
Siripat Ngoenent¹, Masaki Honda², Tanutch Patipong^{1,3}, Takashi Hibino^{2,3}, Rungaroon Waditee-Sirisattha¹, Hakuto Kageyama^{2,3} (¹Fac. Sci., Chulalongkorn Univ., ²Fac. Sci. Tech., Meijo Univ., ³Grad. Hum. Environ. Sci., Meijo Univ.)
- PF-101 HTD0011 enhances salinity stress tolerance via vacuolar H⁺-ATPase in *Arabidopsis thaliana*
Kaori Sako^{1,2}, Hiroyuki Hirano², Sheena C Li², Yoko Yashiroda², Charles Boone², Hiroyuki Osada², Motoaki Seki² (¹Dep. Adv. Biosci., ²CSRS, RIKEN)
- PF-102 Effect of NaCl on cellulase activity in *Amaranthaceae* plants; Salicornia, beet and spinach, which have different salt tolerance
Keiichi Ishikura¹, Mariko Oka² (¹Grad. Sch. Agric., Tottori Univ., ²Fac. Agric., Tottori Univ.)
- PF-103 Analysis of the mechanisms for changing leaf morphology under mild salt stress condition
Mika Fujii¹, Taishi Tamaki², Mai Satoh¹, Hironori Takasaki¹, Masaru Ohme-Takagi^{1,3}, Mikihisa Umehara², Nobutaka Mitsuda³, Miho Ikeda¹ (¹Grad. Sch. Sci. Eng., Univ Saitama, ²Grad. Sch. Life Sci., Toyo Univ., ³Bioprod. Res. Inst., AIST)

■ Environmental responses C

- PF-104 Analysis of Protein Kinases Involved in the Post-translational Regulation of the Stress-Responsive Transcription Factor DREB2A
Junya Mizoi¹, Ryosuke Takahashi¹, So Sugimoto¹, Touko Nakazawa¹, Haruho Funamori¹, Fuminori Takahashi², Norihito Nakamichi^{3,4}, Toshinori Kinoshita^{3,4}, Kazuo Shinozaki², Kazuko Yamaguchi-Shinozaki^{1,5} (¹Grad. Sch. Agr. Life Sci., Univ. Tokyo, ²Center for Sustainable Resource Science, RIKEN, ³ITbM, Nagoya Univ., ⁴Grad. Sch. Sci. Nagoya Univ., ⁵Res. Inst. Agr. Life Sci., Tokyo Univ. Agr.)
- PF-105 High Temperature Response In Arabidopsis Is Regulated By Isovariant Specific Actin
Sumaya Parveen¹, Abidur Rahman^{1,2,3} (¹United Graduate School of Agricultural Sciences, Iwate University, ²Agri-Innovation Center, Faculty of Agriculture, Iwate University, Japan, ³Dept. of Plant Bio Sciences, Faculty of Agriculture, Iwate University, Japan)
- PF-106 Statistical Regression Model for Prediction of Cold Damage on *Eucalyptus* Leaves on Field from Meteorological Observed Data
Tomoaki Chubachi¹, Kazuki Morita¹, Nanami Hayashi¹, Atsuko Shishido¹, Akira Kikuchi^{1,2}, Kazuo N. Watanabe^{1,2}, Taichi Oguchi^{1,2} (¹Life & Env. Sci., Univ. Tsukuba, ²T-PIRC, Univ. Tsukuba)
- PF-107 Pleiotropic changes of Arabinogalactan proteins during cold acclimation treatment
Daisuke Takahashi¹, Yuta Numao², Yukino Shibasaki², Toshihisa Kotake¹ (¹Grad. Sch. Sci. Eng., Saitama Univ., ²Dept. Biochem. Mol. Biol., Fac. Sci., Saitama Univ.)

- PF-108 Carbon- and energy-supply for TG accumulation in arsenate-stressed *Chlorella kessleri* cells
Yukari Iijima, Yutaro Ohisi, Shoko Fujiwara, Norihiro Sato (Grad. Sch. Sci., Univ. Toyaku)
- PF-109 Analysis of ClpXP protease involved in the generation of giant cells under acidic stress in cyanobacterium *Synechocystis* sp. PCC6803
Hidetaka Kohga¹, Yoshikazu Saito¹, Yuka Kakegawa¹, Junji Uchiyama^{1,2}, Hisataka Ohta^{1,2} (¹Grad. Sch. of Sci., Tokyo Univ. of Sci., ²Fac. of Sci., Tokyo Univ. of Sci.)
- PF-110 Characterization of *slr2006-2009* Region Involved in Proton Regulation of *Synechocystis* sp. PCC6803
Yukino Sakai¹, Yoshikazu Saito¹, Masanori Sato¹, Junji Uchiyama^{1,2}, Hisataka Ohta^{1,2} (¹Dept. of Math. and Sci. Edu., Grad. Sch. of Sci., Tokyo Univ. of Sci., ²Dept. of Bio., Fac. of Sci., Tokyo Univ. of Sci.)
- PF-111 The expression of MsbA, which transports lipid A in *E. coli*, overcome the acid sensitivity due to *slr2019* mutant in *Synechocystis* sp. PCC6803
Sato Kashiwagi¹, Ayumi Matsushashi², Kengo Matsushima³, Junji Uchiyama^{1,2,4}, Hisataka Ohta^{1,2,4} (¹Tokyo Univ. of Sci., Grad. Sch. of Sci., Dep. of Math. and Sci. Edu., ²Tokyo Univ. of Sci., Grad. Sch. of Math. And Sci. Edu., Dep. of Math. And Sci. Edu., ³Tokyo Univ. of Sci., Fac of Sci., Dep. of Chem., ⁴Tokyo Univ of Sci., Fac. of Sci., Dep. of Lib. Arts)
- PF-112 Analysis of lipid remodeling regulators under phosphorus starvation in *Chlamydomonas reinhardtii*
Nozomi Miura, Koichi Hori, Mie Shimojima, Hiroyuki Ohta (School of Life Science and Technology, Tokyo Institute of Technology)

■ Plant-organism interaction B

- PF-113 Application of single cell RNAseq to dissect the onset of root nodule development in *Lotus japonicus*
Kai Battenberg^{1,2}, S. Thomas Kelly², A. Nicola Hetherington², Aki Minoda², Makoto Hayashi¹ (¹RIKEN Center for Sustainable Resource Science, ²RIKEN Center for Integrative Medical Sciences)
- PF-114 Relationship between the plant cell wall and the symbiotic microbes in the infection process, focusing on *COBRA* genes in *Lotus japonicus*
Daniela Romero Montero, Mayu Kawasaki, Akira Akamatsu, Naoya Takeda (Kwansei Gakuin University)
- PF-115 Maturation of the gall-inducing peptide CAP by the processing enzyme CP
Megumi Matsuzawa¹, Tomoko Hirano², Masa H Sato² (¹Life and Environmental Sci., Kyoto Pre. Univ., ²Grad. Sch. Life and Environmental Sci., Kyoto Pre. Univ.)
- PF-116 Soil nutrient- and developmental stage-dependent regulation of root microbiome in rice
Yusa Aritoshi¹, Shunsuke Imai¹, Sumire Kirita¹, Yukiko Shimizu¹, Yuniar Devi Utami¹, Takumi Murakami², Masako Fuji¹, Yusuke Saijo¹ (¹Grad. Sch. Sci. and Tech., NAIST, ²NIG)
- PF-117 Multi-omics analysis in the field reveals a close association between microbiome and mineral in the soybean rhizosphere
Shinichi Yamazaki¹, Yuichi Aoki¹, Hossein Mardani-Korran², Rumi Kaida², Yoshiharu Fujii², Masaru Kobayashi³, Akifumi Sugiyama⁴ (¹ToMMo, Univ. Tohoku, ²Tokyo Univ. Agri. Tech., ³Grad. Sch. Agri., Univ. Kyoto, ⁴RISH, Univ. Kyoto)

■ Photosynthesis

- PL-001 Search and Comparison of C-terminal Processing Protease for the D1 Protein from a Wide Range of Algae Genome Sequences
Noritoshi Inagaki¹, Akio Murakami² (¹Advanced Analysis Center, NARO, ²RCIS, Kobe Univ.)
- PL-002 Mechanism of novel amino acid conversion of a Mn-cluster ligand in photosystem II
Yuichiro Shimada¹, Takehiro Suzuki², Tomomi Kitajima-Ihara¹, Ryo Nagao^{1,3}, Naoshi Dohmae², Takumi Noguchi¹ (¹Grad. Sch. Sci., Nagoya Univ., ²CSRS, RIKEN, ³RIIS, Okayama Univ.)
- PL-003 Purification of the Rieske/cytb complex under anaerobic conditions and interaction analysis with c-type cytochromes in green sulfur bacteria
Hiraku Kishimoto¹, Takahiro Nagaoka¹, Chihiro Azai², Risa Mutoh³, Hideaki Tanaka⁴, Yohei Miyanoiri⁴, Genji Kurisu⁴, Hirozo Ohoka¹ (¹Grad. Sch. Sci., Osaka Univ., ²Col. Life. Sci., Ritsumeikan Univ., ³Fac. Sci., Fukuoka Univ., ⁴Inst. Protein Res., Osaka Univ.)
- PL-004 Effects of site-directed mutations at D1-R140 or D2-T231 interacting with one phosphatidylglycerol molecule (PG714) on light intensity-dependence of photosynthesis
Yuto Sugawara¹, Toshiyuki Shinoda², Kaichiro Endo³, Tatsuya Tomo⁴, Kenjin Shin⁵, Haruhiko Jimbo³, Hajime Wada³, Naoki Mizusawa^{1,2,6} (¹Grad. Sch. Sci. Eng., Hosei Univ., ²Fac. Biosci. Appl. Chem., Hosei Univ., ³Grad. Sch. Arts Sci., Univ. Tokyo, ⁴Fac. Sci., Tokyo Univ. Sci., ⁵RIIS, Okayama Univ., ⁶Res. Micro-Nano Tech., Hosei Univ.)
- PL-005 Effects of site-directed mutations at D1-R140 or D2-T231 interacting with one phosphatidylglycerol molecule (PG714) on electron transport reactions in PSII
Toshiyuki Shinoda¹, Yuto Sugawara², Kaichiro Endo³, Tatsuya Tomo⁴, Jian-Ren Shen⁵, Haruhiko Jimbo³, Hajime Wada³, Naoki Mizusawa^{1,2,6} (¹Fac. Biosci. Appl. Chem., Hosei Univ., ²Grad. Sch. Sci. Eng., Hosei Univ., ³Grad. Sch. Arts Sci., Univ. Tokyo, ⁴Fac. Sci., Tokyo Univ. Sci., ⁵RIIS, Okayama Univ., ⁶Res. Micro-Nano Tech., Hosei Univ.)
- PL-006 Effects of overproduction of chloroplast glyceraldehyde-3-phosphate dehydrogenase on photosynthesis and plant growth in rice
Yuji Suzuki¹, Keiki Ishiyama², Misaki Sugawara¹, Yuka Suzuki¹, Eri Kondo², Yuki Takegahara-Tamakawa¹, Dong-Kyung Yoon², Mao Suganami², Shinya Wada³, Chikahiro Miyake³, Amane Makino² (¹Fac. Agr., Iwate Univ., ²Grad. Sch. Agr. Sci., Tohoku Univ., ³Grad. Sch. Agr. Sci., Kobe Univ.)
- PL-007 Increased Cuticle Permeability Caused by a New Allele of *ACETYL-COA CARBOXYLASE1* Enhances CO₂ Uptake in *Arabidopsis*
Keina Monda¹, Atsushi Mabuchi¹, Sho Takahashi¹, Juntaro Negi¹, Ryoma Tohmori¹, Ichiro Terashima², Wataru Yamori³, Koh Iba¹ (¹Dept. Biol., Fac. Sci., Univ. Kyushu, ²Dept. Biol., Sch. Sci., Univ. Tokyo, ³Grad. Sch. Agri. and Life Sci., Univ. Tokyo)
- PL-008 The physiological function of the chloroplast-localized dynamin-like protein FZL in *Arabidopsis thaliana*.
Yu Ogawa¹, Mari Takusagawa¹, Megumi Iwano², Lianwei Peng³, Fumiyoushi Myouga⁴, Toshiharu Shikanai¹ (¹Grad. Sch. Sci., Univ. Kyoto, ²Grad. Sch. Bio., Univ. Kyoto, ³Grad. Sch. Life Sci., Univ. Shanghai Normal, ⁴Wako Inst., Riken)
- PL-009 Analyses of the role of PIP aquaporins in the regulation of leaf CO₂/H₂O flux
Yusuke Mizokami, Hidemitsu Yoshino, Ko Noguchi (Tokyo Univ. Pharm. Life Sci.)
- PL-010 NAD(P)H dehydrogenase deletion enhances accumulation of polyhydroxybutyrate in *Synechocystis* sp. PCC 6803
Masakazu Yajima, Masakazu Toyoshima, Yoshihiro Toya, Hiroshi Shimizu (Grad. Sch. IST., Univ Osaka)
- PL-011 Phylogenetic analysis of mitochondrial pyruvate carrier genes in Poaceae species
Shin Kore-eda¹, Shogo Yamamoto², Moe Imazeki², Susumu Mitsuyama³ (¹Grad. Sch. Sci. and Eng., Saitama Univ., ²Dept. Biochem. Mol. Biol., Saitama Univ., ³Grad. Sch. Agric. Life Sci., Univ. Tokyo)

■ Environmental responses of photosynthesis

- PL-012 Detection of nutrition deficiency using Delayed luminescence in *Arabidopsis*
So Yahagi¹, Chikako Fukasawa¹, Masakazu Katsumata², Reiko Motohashi¹ (¹Agri., Shizuoka Univ., ²Hamamatsu Photonics Co., Ltd.)
- PL-013 Mechanism of the Quick Response-type Redox Regulation in Chloroplast
Yuka Fukushi^{1,2}, Yuichi Yokochi^{1,2}, Keisuke Yoshida^{1,2}, Ken-ichi Wakabayashi^{1,2}, Toru Hisabori^{1,2} (¹Laboratory for Chemistry and Life Science, Institute of Innovative Research, Tokyo Institute of Technology, ²School of Life Science and Technology, Tokyo Institute of Technology)

- PL-014 Analysis of a photosynthetic megacomplex found in Fe-deficiency stressed barley leaves
Akihiro Saito, Shuhei Sumiki, Shoichiro Akita, Takuji Ohyama, Kyoko Higuchi (Dept. Agri. Chem., Tokyo Univ. of Agri.)
- PL-015 Elucidation of light-dependent regulation mechanism of ascorbate biosynthesis mediated by VTC3
Yasuhiro Tanaka¹, Takanori Maruta¹, Takahisa Ogawa¹, Masaru Mori^{2,3}, Takahiro Ishikawa¹ (¹Grad. Sch. Nat. Sci. Technol., Shimane Univ., ²Instit. Adv. Biosci., Keio Univ., ³SFC Grad. Sch. Media Govern., Keio Univ.)
- PL-016 Evaluation of CBSX proteins as regulators of thioredoxin system
Ryota Murai, Yuki Okegawa, Nozomi Sato, Ken Motohashi (Faculty of Life Sciences, Kyoto Sangyo University)
- PL-017 Transcriptome analysis for understanding of HCO₃⁻ use mechanism under submerged condition in amphibious plant *Hygrophila difformis*
Genki Horiguchi, Naoki Hirotsu (Grad. Sch. Life Sci., Toyo Univ.)
- PL-018 Effects of green light supplementation to a mixture of red and blue light on growth and photosynthesis in leaf lettuce
Keiko Ohashi, Yuya Isaki (Tamagawa Univ.)
- PL-019 Manganese toxicity affects carbon assimilation by disturbing stomatal function and development in rice leaves
Daisuke Takagi, Tomokazu Ushijima, Michio Kawasaki (Faculty of Agriculture, Setsunan University)

■ Primary metabolism

- PL-020 Subcellular localization and characterization of enzymes involved in TAG biosynthesis in *Coccomyxa* sp. strain Obi
Haruka Nagata¹, Yurika Fuseya², Mizuki Maie², Tomohiro Uemura^{1,2}, Yuki Kasai³, Shigeaki Harayama³, Misako Kato^{1,2} (¹Grad. Life Sci., Ochanomizu Univ., ²Dept. Biol., Fac. Sci., Ochanomizu Univ., ³Res. Dev. Init., Chuo Univ.)
- PL-021 Metabolism of α-Glucan in the *Synechococcus* Transformants Expressing Genes for Amylopectin Biosynthesis of Rice
Eiji Suzuki, Hitoshi Yoshimura, Naoyuki Osada, Ryuichiro Suzuki (Fac Bioresour Sci, Akita Pref Univ)
- PL-022 Plastid-specific acidic lipids are required for the development of non-photosynthetic organs in Arabidopsis
Akiko Yoshihara¹, Hajime Wada², Koichi Kobayashi³ (¹Sch. Sci., Osaka Pref. Univ, ²Grad. Sch. Arts Sci., Univ. Tokyo, ³Fac. Lib. Arts Sci., Osaka Pref. Univ)
- PL-023 Involvement of Pathogenic Responses that Occurs under Low-Ca Condition without Pathogen in Low-Ca Tolerance in *Arabidopsis thaliana*
Shuichi Hashimoto, Yusuke Shikanai, Takehiro Kamiya, Toru Fujiwara (Grad. Sch. Agri. Life Sci., UTokyo)

■ Secondary (specialized) metabolism

- PL-024 Metabolomics and mass spectrometry imaging of metabolites on *Nopalea cochenillifera* having high environmental adaptability
Ryosuke Sato^{1,2}, Muneo Sato³, Yuji Sawada³, Masami Yokota Hirai³, Hirofumi Enomoto^{1,4}, Masashi Asahina^{1,4}, Takanori Horibe², Takashi Tsuge², Masayoshi Maeshima² (¹Teikyo Univ., Dept. Biosci., ²Chubu Univ., Dept. Biosci. Biotech, ³RIKEN CSRS, ⁴Teikyo Univ., Adv. Instr. Anal. Center)
- PL-025 Gene expression analysis of ABC transporter *ABCD1* in tobacco and petunia
Yasuyuki Yamada¹, Shiori Nishitani², Yoko Nakahara¹, Takao Koeduka², Nobukazu Shitan¹ (¹Kobe Pharm. Univ., ²Grad. Sch. Sci. Tech. Innov., Yamaguchi Univ.)
- PL-026 A metabolomic approach for the functional analysis of taxane compound transporters from yew
Hiroaki Kusano¹, Hiroshi Minami², Yoshihiro Kato², Kaori Kanazawa¹, Akifumi Sugiyama¹, Homare Tabata², Kazufumi Yazaki¹ (¹RISH, Kyoto Univ., ²Hokkaido Mitusi Chemicals Inc.)
- PL-027 Functional analysis of a novel transporter potentially involved in glucosinolate uptake into vacuole in Arabidopsis
Kaichiro Endo¹, Akiko Nakazaki², Tomoo Shimada², Ikuko Nishimura³, Kenji Yamada¹ (¹Malopolska Centre of Biotechnology, Jagiellonian Univ., ²Graduate School of Science, Kyoto Univ., ³Faculty of Science and Engineering, Konan Univ.)

■ Organelles/Cytoskeleton

- PL-028 Anchoring of nucleoids to the thylakoid membrane is essential for distribution of plastid DNA during chloroplast development
Sho Fujii, Toshiharu Shikanai, Yoshiki Nishimura (Grad. Sch. Sci., Kyoto Univ.)
- PL-029 Finely-balanced expression of *STR4a* is essential for the proper function in chloroplasts
Kota Ishibashi, Naoto Doi, Mari Takusagawa, Toshiharu Shikanai (Grad. Sch. Sci., Kyoto Univ.)
- PL-030 Bases around target cytidine affect deaminase activity of DYW domain
Ayako Maeda, Sachi Takenaka, Mizuki Takenaka (Grad. Sch. Sci., Kyoto Univ.)

- PL-031 Analysis of *Arabidopsis* vegetative actin isoforms' mutants
Saku Kijima¹, Nobutaka Mitsuda², Yoshihisa Oda^{1,3} (¹Dept. Gene Funct. Phenomics, NIG, ²Bioproduction Res. Inst., AIST, ³Dep. Genetics, SOKENDAI)
- PL-032 Examination of the biological significance of the complicated cell shape in leaf epidermal cells using *bpp* mutants
Shoichiro Mitsui, Takehide Kato, Takashi Hashimoto (Div. of Biol. Sci., Grad. Sch. of Sci. and Tech., NAIST)
- PL-033 Screening of mutants which show reduced tubulin phosphorylation upon hyperosmotic stress
Chie Maeda, Toshiki Minamiyama, Kohei Fukuda, Shinichiro Komaki, Takehide Kato, Takashi Hashimoto (Div. of Biol. Sci., Grad. Sch. of Sci. and Tech., NAIST)

■ Vegetative growth

- PL-034 Spatio-temporal analyses revealed that the effects of excess pyrophosphate on leaf development are cell-autonomous
Shizuka Gunji¹, Kensuke Kawade^{2,3}, Hiromitsu Tabeta^{1,4,5}, Gorou Horiguchi^{6,7}, Mariko Asaoka^{1,8}, Akira Oikawa^{5,9}, Masami Yokota Hirai⁵, Hirokazu Tsukaya¹⁰, Ali Ferjani¹ (¹Dept. Biol., Tokyo Gakugei Univ., ²NIBB, ³SOKENDAI, ⁴Grad. Sch. Art Sci., Univ. Tokyo, ⁵RIKEN CSRS, ⁶Dept. Life Sci., Rikkyo Univ., ⁷Res. Ctr. Life Sci., Rikkyo Univ., ⁸ENS de Lyon, ⁹Fac. Agr., Yamagata Univ., ¹⁰Grad. Sch. Sci., Univ. Tokyo)
- PL-035 RNA-seq Analysis of GFP-positive Hydathode Microsamples in *Arabidopsis*
Hiroki Yagi¹, Atsushi J. Nagano², Jaewook Kim¹, Kentaro Tamura³, Nobuyoshi Mochizuki¹, Akira Nagatani¹, Tomonao Matsushita¹, Tomoo Shimada¹ (¹Grad. Sch. Sci., Kyoto Univ., ²Fac. Agr., Ryukoku Univ., ³Dep. Env. Life Sci., Univ. Shizuoka)
- PL-036 Impact of ribosomal protein-expression levels on plant growth revealed by inducible expression method
Kei Kondo¹, Seidai Takamatsu², Hitoshi Onouchi¹, Satoshi Naito^{1,2}, Yui Yamashita¹ (¹Grad. Schl. Agr., Hokkaido Univ., ²Grad. Schl. Life Sci., Hokkaido Univ.)
- PL-037 RNA-seq transcriptome analysis identifies key regulatory genes in growth cessation and dormancy induced by short-day photoperiod in *Lemna turionifera*
Shogo Ito, Tokitaka Oyama (Dept. Bot., Div. Biol. Sci., Grad. Sch. Sci., Kyoto Univ.)
- PL-038 *Sdr4-like (SFL)* genes of *Arabidopsis* promote seed germination and early seedling growth by suppressing embryogenesis and dormancy regulator genes
Lipeng Zheng¹, Masahiko Otani¹, Kazuhiko Sugimoto², Naoto Kawakami¹ (¹Grad. Sch. Agri., Univ. Meiji, ²NICS)
- PL-039 An emerging role of INDOLE-3-BUTYRIC ACID RESPONSE 10 in seed storage oil mobilization and etiolated seedling growth
Hiromitsu Tabeta^{1,2,3}, Masami Yokota Hirai², Ali Ferjani¹ (¹Grad. Sch. Arts & Sci., Univ. Tokyo., ²RIKEN CSRS, ³Dept. Biol., Tokyo Gakugei Univ.)
- PL-040 A putative *AGAMOUS* ortholog is a candidate for the gene determining pericarp phenotype in Tartary buckwheat
Yuka Fukuie¹, Hana Shimoyama², Toshikazu Morishita³, Daisuke Tsugama⁴, Kaiken Fujino¹ (¹Grad. Sch. Agri., Hokkaido Univ., ²ASAFAS., Univ. Kyoto, ³Inst. Crop. Sci., NARO, ⁴ANESC., Univ. Tokyo)
- PL-041 Effect of germination temperature on phytic acid and zinc bioavailability in brown rice
Ayaka Fukushima¹, Gun Uchino², Tatsuki Akabane¹, Ayaka Aiseki², Ishara Perera³, Naoki Hirotsu^{1,2} (¹Grad. Sch. Life Sci., Toyo Univ., ²Fac. Life Sci., Toyo Univ., ³Grain Legumes and Oil Crops Research and Development Centre)
- PL-042 Construction and analysis of a mathematical model of root twisting
Takaaki Yonekura, Tatsuaki Goh, Keiji Nakajima (Grad. Sch. Sci. Tech., NAIST)
- PL-043 Functional analyses of CLAVATA 1/BARELY ANY MERISTEM class receptor kinases in the regulation of root meristem development
Takashi Ishida¹, Shinichiro Sawa² (¹Kumamoto University, IROAST, ²Kumamoto University, FAST)
- PL-044 Isolation and analysis of lateral root pre-patterning mutants using the luminescence reporter gene
Ayaka Ozasa¹, Chieko Goto¹, Tatsuaki Goh², Yuki Kondo¹, Kimitsune Ishizaki¹, Tetsuro Mimura¹, Hidehiro Fukaki¹ (¹Grad. Sch. of Sci., Kobe Univ., ²Grad. Sch. of Sci. and Tech., NAIST)

■ Plant hormones/Signaling molecules

- PL-045 The role of gibberellin 3-oxidase 1 and 2 in rice flower organ
Hiroto Suzuki, Sayaka Takehara, Kyosuke Kawai, Akihiko Sugihara, Minami Morii, Masako Hattori, Hisako Yoshimura, Miyako Ueguchi-Tanaka (Biosci. and Biotech. Cen., Nagoya Univ.)

- PL-046 Life-course phytohormone profiling of field barley for seasons reveals unique fluctuations along with environmental responses and developmental progress under the field conditions
Takashi Hirayama¹, Daisuke Saisho¹, Takakazu Matsuura¹, Jun Ito², Satoshi Okada¹, Asaka Kanatani³, Hiroyuki Tsuji², Keiichi Mochida^{1,2,3} (¹IPSR Okayama Univ., ²KIBR YCU, ³CSRS RIKEN)
- PL-047 Functional analysis of SnRK2 substrate 1 as a regulator of flowering time
Sotaro Katagiri, Yoshiaki Kamiyama, Risa Suzuki, Taishi Umezawa (BASE, Tokyo Univ, Agric, Thech)
- PL-048 Expression Analysis of The Promoter for Plant Growth Compound PPG Responsive Genes
Keiya Kaga^{1,7}, Shun Takeno^{2,3}, Shota Tanaka^{2,3}, Ayumi Yamagami¹, Setsuko Shimada², Minami Matsui², Yusuke Kakei⁴, Yukihisa Shimada⁴, Shoji Segami⁵, Yasumitsu Kondo², Naoshi Dohmae², Tetsuo Kushiro³, Masayoshi Maeshima⁵, Tadao Asami⁶, Hiroyuki Osada², Kazuo Shinozaki², Masaru Ohme-Takagi⁷, Takeshi Nakano¹ (¹Grad. Sch. Biostudies., Kyoto Univ., ²RIKEN • CSRS, ³Grad. Agri. Chem., Meiji Univ., ⁴Yokohama City Univ., ⁵Grad. Sch. Biol. Agri., Nagoya Univ., ⁶Grad. Sch. Agri. Life Sci., Univ. of Tokyo, ⁷Grad. Sch. Sci. Eng., Saitama Univ.)
- PL-049 *BRASSINOSTEROID RELATED HOMEODOMAIN 1 (BHB1)* regulates Brassinosteroid biosynthesis under environmental stress condition
Reika Hasegawa¹, Hironori Takasaki¹, Miho Ikeda¹, Ayumi Yamagami², Nobutaka Mitsuda³, Takeshi Nakano², Masaru Ohme-Takagi¹ (¹Grad. Sch. Sci. Eng., Saitama Univ., ²Grad. Sch. Bio., Kyoto Univ., ³Bioproduction Res. Inst. AIST)
- PL-050 Crystallization of Recombinant TGW6, which Limits Grain Size in Rice
Tatsuki Akabane¹, Wataru Tsuchiya², Nobuhiro Suzuki², Etsuko Katoh², Naoki Hirotsu¹ (¹Graduate School of Life Sciences, Toyo Univ., ²Advanced Analysis Center, NARO)
- PL-051 Physiological importance of Ca²⁺-dependent ppGpp synthesis in Arabidopsis chloroplasts
Sae Suzuki (Masuda Lab., TokyoTech)
- PL-052 Nutrient-mediated organ-organ coupling contributes to the stabilization of circadian clock
Kyohei Uemoto^{1,2}, Yumi Kunimoto², Fumito Mori³, Hiroshi Ito³, Akane Kubota², Haruki Egashira², Toshinori Kinoshita⁴, Takashi Araki¹, Motomu Endo² (¹Grad. Sch. Biostudies., Univ. Kyoto, ²Grad. Sch. Science and Technology., Nara Institute of Science and Technology, ³Grad. Sch. Design., Univ. Kyushu, ⁴Grad. Sch. Sci., Univ. Nagoya)
- PL-053 Molecular Mechanisms for the ROS-Ca²⁺ Signaling Network in *Marchantia polymorpha*
Shoko Tsuboyama, Junnosuke Yamagishi, Yuki Kamiya, Yuka Yoshizawa, Kenji Hashimoto, Kazuyuki Kuchitsu (Dept. Appl. Biol. Sci., Tokyo Univ. of Sci.)
- PL-054 Large-scale analysis of ABA dependent TSS changes
Yusuke Ohori¹, Akihiro Ezoe², Kousuke Hanada², Yutaka Suzuki³, Tomonao Matsuhita⁴, Taishi Umezawa¹ (¹BASE, Tokyo Univ. Agric. Tech., ²Dep. Bioscience Bioinformatics, KIT, ³Grad. Sch. FS., Univ. Tokyo, ⁴Grad. sch. Agric., Kyushu Univ.)

■ Environmental responses A

- PL-055 Chloroplastic glutamine synthetase is required for photorespiratory H₂O₂-induced cell death
Kana Ishibashi¹, Takanori Maruta¹, Amna Mhamdi², Frank Van Breusegem² (¹Fac. Life Environ. Sci., Shimane Univ., ²Plant Systems Biol., VIB-Ghent Univ.)
- PL-056 Enhancement Of Ozone Tolerance By Overexpression Of A Gene Encoding A Phycocyanin In Arabidopsis
 Shoko Saji¹, Hikaru Saji¹, Kimiyo Sage-Ono², Michiyuki Ono², Nobuyoshi Nakajima¹, Tomomi Inoue¹, Mitsuko Aono¹ (¹Natl. Inst. Environ. Studies, ²GRC, T-PIRC, Univ. Tsukuba)
- PL-057 Effects of increased activity of GFAT, the rate-limiting enzyme in hexosamine pathway, on the phenotype of *Arabidopsis thaliana*
Yousuke Matoba¹, Kaede Adachi², Yasushi Sato¹ (¹Grad Sch Sci & Eng, Ehime univ, ²Sci, Ehime univ)
- PL-058 A Candidate of the “Factor X” for the Japan’s Low Death Rate under Covid-19 Pandemic: An Idea Obtained from Our Studies with Engineered Formaldehyde (FA)-Assimilating Plants
Katsura Izui^{1,2} (¹Grad. Sch. Biostudies., Kyoto Univ., ²Grad. Sch. Biol.-Oriented Sci and Tech, Kindai Univ.)
- PL-059 Effects of 10 G hypergravity environment on growth and content of secondary metabolites in medicinal plants, *Cassia nomame* Honda
 Koshiro Tanihata¹, Daisuke Tamaoki², Hiroyuki Kamachi², Yasumasa Takao³, Futoshi Taura⁴, Takumi Nishiuchi⁵, Ichirou Karahara² (¹Grad. Sch. Sci. Eng., Univ. Toyama, ²Fac. Sci., Acad. Assemb., Univ. Toyama, ³Experimental Station for Medicinal Plant Research, Univ. Toyama, ⁴Fac. Pharm. Pharmaceut. Sci., Univ. Toyama, ⁵ASRC, Kanazawa Univ.)

- PL-060 Altered localization of ZmPIN1a proteins in plasma membranes responsible for enhanced-polar auxin transport in etiolated maize seedlings under microgravity conditions: Relevance to the International Space Station experiment “Auxin Transport”
Mariko Oka¹, Motoshi Kamada², Riko Inoue¹, Kensuke Miyamoto³, Eiji Uheda⁴, Chiaki Yamazaki⁵, Toru Shimazu⁶, Hiromi Sano⁷, Haruo Kasahara⁷, Tomomi Suzuki⁸, Akira Higashibata⁸, Junichi Ueda⁴ (¹Fac. Agric., Tottori Univ., ²A. E. S. Co., Ltd., ³Fac. Liberal Arts and Sci., Osaka Pref. Univ., ⁴Grad. Sch. Sci., Osaka Pref. Univ., ⁵JEM Mission Operations & Integration center, JAXA, ⁶Japan Space Forum, ⁷JAMSS, ⁸Kibo Utilization Center, JAXA)

■ Environmental responses B

- PL-061 The ROP-dependent receptor-like cytoplasmic kinase is involved in correct localization of lignin deposition at the Casparian strip domain
Qi Wu, Toru Fujiwara, Takehiro Kamiya (The University of Tokyo)
- PL-062 Pattern-triggered immunity signaling leads to salt stress tolerance in *Arabidopsis thaliana*
Shota Kido¹, Yuri Tajima¹, Eliza Poiian Loo¹, Kohji Yamada^{2,3}, Taishi Hirase¹, Hirotaka Ariga⁴, Tadashi Fujiwara¹, Keisuke Tanaka⁴, Teruaki Taji⁴, Imre E. Somssich³, Jane E. Parker³, Yusuke Saijo^{1,3} (¹NAIST, ²Tokushima Univ., ³MPIPZ, ⁴Tokyo Univ. of Agriculture)
- PL-063 Effects of Salicylic Acid and Heavy Metal Ions on Growth of Rice Seedlings under Sterile Conditions
Yutaroh Daidoh, Masahiro Inoue, Yoh Sakuma (Biology, Grad. Sch. Sci. & Eng., Ehime Univ.)
- PL-064 Absorptions of Lithium and Sodium Ions and the Metal Tolerance Mechanisms in Protonema Cells of *Trematodon longicollis*
Ryosuke Nakanishi, Yoh Sakuma, Masahiro Inoue (Biology, Grad. Sch. Sci. & Eng., Ehime Univ.)
- PL-065 Establishment of a genetically encoded magnesium sensor in *Arabidopsis thaliana*
Danhan Peng, Zhihang Feng, Takehiro Kamiya, Toru Fujiwara (Graduate School of Agricultural and Life Sciences, The University of Tokyo)
- PL-066 A novel *MATE* family gene involved in cadmium mobilization in rice
Hua Xiao¹, Nobuhiro Takana^{1,2}, Zhihang Feng¹, Kiyoshi Yamazaki¹, Takehiro Kamiya¹, Toru Fujiwara¹ (¹The University of Tokyo, ²National agricultural and food research organization)
- PL-067 Heavy metal tolerance and accumulation properties in proanthocyanidin deficient mutants of the fern *Athyrium yokoscense* gametophytes
Hiroyuki Kamachi¹, Kazunori Morishita², Manami Hatta³, Ayaka Okamoto², Kazuma Fujii², Naoki Imai², Akihiro Sakatoku¹, Tamihisa Ohta¹, Mana Aoki³, Sakurako Hiyama³ (¹Fac. Sci., Univ. Toyama, ²Grad. Sch. Sci., Univ. Toyama, ³Fac. Sci., Univ. Toyama)

■ Environmental responses C

- PL-068 Regulatory metabolic carbon flow and photosynthesis in *Chlorella* for combinatory-stress induced triacylglycerol accumulation
Mimari Kondo, Yukari Iijima, Rie Otaki, Shoko Fujiwara, Norihiro Sato (Sci., Univ. Toyaku)
- PL-069 The roles of PG in *Synechocystis* cells acclimating to phosphorus-starved conditions
Tatsunori Hiyoshi, Norihiro Sato (Sch. Life Sci., Tokyo Univ. Pharm. Life Sci.)
- PL-070 The relationship between cell growth and Phycobilisome degradation under nitrogen starvation in *Synechocystis* sp. PCC 6803
Akiko Yoshihara¹, Koichi Kobayashi² (¹Sch. Sci., Osaka Pre. Univ., ²Fac. Lib. Art. Sci., Osaka Pre. Univ.)
- PL-071 Analysis of the Two-component System DivJK and PleC in *Synechocystis* sp. PCC6803
Yoshikazu Saito¹, Hisataka Kohga¹, Yukino Sakai¹, Masanori Sato¹, Junji Uchiyama^{1,2}, Hisataka Ohta^{1,2} (¹Dept. of Math. & Sci. Edu., Grad. Sch. of Sci., Tokyo Univ. of Sci., ²Dept. of Bio., Fac of Sci., Tokyo Univ. of Sci.)
- PL-072 Heterocyst Differentiation and Gene Expression of *Anabaena* sp. PCC7120 under Acidic Stress Condition
Masanori Sato¹, Yoshikazu Saito¹, Yukino Sakai¹, Junji Uchiyama^{1,2}, Hisataka Ohta^{1,2} (¹Dept. Sci. Edu., Grad. Sch. of Sci., Tokyo Univ. of Sci., ²Dept. of Bio., Fac. of Sci., Tokyo Univ. of Sci.)
- PL-073 Deep Learning-based Field Transcriptome Model of Rice and Transfer Learning to Other Species
Taro Maeda¹, Satoshi Ohkubo², Makoto Kahima³, Daisuke Kyogoku⁴, Yoichi Hashida⁵, Suguru Tanaka¹, Naoya Mori⁶, Hiroyuki Watanabe⁶, Sunsuke Adachi⁷, Atsushi J. Nagano^{1,8} (¹Fac. Agr., Ryukoku Univ., ²Grad. Agr., TUAT, ³Coll. Sci&Eng., AGU, ⁴Grp. Ecol., Hitohaku, ⁵Fac. Agr., Takasaki Univ. of H&W, ⁶Fac. Agr., Tamagawa Univ., ⁷Fac. Agr., Ibaraki Univ., ⁸IAB, Keio Univ.)
- PL-074 Effects of increasing CO₂ levels and temperature on rice yield and Nutrient Use Efficiency
Nene Furukawa¹, Marouane Baslam², Murat Aycan², Toshihiro Nagamori¹, Priesack Eckart³, Gakière Bertrand⁴, José Luis Araus⁵, Iker Aranjuelo⁶, Toshiaki Mitsui^{1,2} (¹Dept. of Life and Food Sciences, Grad. Sch. Sci. Tech, Univ. Niigata, ²Laboratory of

Biochemistry, Faculty of Agriculture, Niigata University, ³Helmholtz Center-Munich, Munich, Germany, ⁴Institute of Plant Sciences Paris-Saclay (IPSS), CNRS Université Paris-Saclay, Orsay, France, ⁵University of Barcelona, Barcelona, Spain, ⁶Instituto de Agrobiotecnología (CSIC/UPNA/Gobierno de Navarra). Mutilva, Navarra, Spain)

PL-075 Metacaspase suppress the dark-induced senescence of *Arabidopsis thaliana* leaves

Hiroshi Hayashi¹, Rika Shimamoto, Miku Chiba (Fac. Biosci. Biotec., Fukui Pref. Univ.)

PL-076 Functional Study of PAS-histidine kinases in the moss *Physcomitrella patens*

Ryo Suzuki¹, Takafumi Yamashino², Syu Anami¹, Masashi Ryo¹, Kota Nakai¹, Bowen Wu¹, Haruki Kikuchi¹, Mamoru Sugita¹, Setsuyuki Aoki¹ (¹Grad. Sch. Info., Univ. Nagoya, ²Grad. Sch. Bio., Univ. Nagoya)

■ Plant-organism interaction A

PL-077 Role of the subtilases in the haustorial formation in the parasitic plant *Phtheirospermum japonicum*

Satoshi Ogawa¹, Takanori Wakatake^{1,2}, Thomas Spallek^{1,3}, Juliane K. Ishida^{1,2}, Ryosuke Sano⁴, Tetsuya Kurata⁴, Taku Demura⁴, Satoko Yoshida^{1,4,5}, Yasunori Ichihashi^{1,5,6}, Andreas Schaller³, Ken Shirasu^{1,2} (¹CSRS, RIKEN, ²Grad. Sch. of Sci., Univ. of Tokyo, ³Dept. of Plant Physiol. and Biochem., Univ. of Hohenheim, ⁴Grad. Sch. of Sci. Tech., NAIST, ⁵JST, PRESTO, ⁶BRC, RIKEN)

PL-078 Toward identification of virulence factors required for the necrotrophic phase of a phytopathogenic fungus, *Colletotrichum orbiculare*

Katsuma Yonehara, Naoyoshi Kumakura, Gan Pamela, Ken Shirasu (Yokohama inst., Riken (Grad. Sci., Univ. Tokyo))

PL-079 Secretome Study at Plant-Pathogen Interface

Yasir Sidiq¹, Takumi Nishiuchi^{1,2} (¹Graduate School of Natural Science and Technology, Kanazawa University, ²Institute for Gene Research, Advanced Science Research Center, Kanazawa University)

PL-080 Rice growth promotion by damage-associated OsPep peptides is dependent on root microbiota

Masako Fujii¹, Yuniar Devi Utami^{1,2}, Shigetaka Yasuda¹, Rena Tani¹, Yuichi Hongoh², Yutaka Sato³, Yusuke Saijo¹ (¹Grad. Sch. Sci. Tech., NAIST, ²Grad. Sch. Biosci. Biotech., Tokyo Inst. Tech., ³NIG)

PL-081 Comparison of local and systemic defense responses against herbivory in rice leaf

Taiga Kuwabara, Yuko Hojo, Tomonori Shinya, Ivan Galis (Inst. Plant Sci. & Res., Okayama Univ.)

PL-082 The role of salicylic acid in defense response of tomato to *Clavibacter michiganensis* subsp. *michiganensis*.

Naoki Yokotani¹, Yoshinori Hasegawa¹, Masaru Sato¹, Hideki Hirakawa¹, Yusuke Kouzai², Yoko Nishizawa³, Eiji Yamamoto¹, Yoshiki Naito¹, Sachiko Isobe¹ (¹Kazusa DNA Res., ²RIKEN, ³NARO)

PL-083 Development of *Arabidopsis* cell culture for comparable physiological and genetic studies

Shingo Maruyama¹, Yuto Takahashi¹, Akihiro Ogawa¹, Naoto Shibuya¹, Hanae Kaku¹, Yoshitake Desaki^{1,2} (¹Dept. Life Sciences, Sch. Agriculture, Meiji University, ²Dept. Biological Science and Technology, Fac. Industrial Science and Technology, Tokyo University of Science)

■ Plant-organism interaction B

PL-084 Control of root nodule symbiosis by nitrate and the implication of carbon utilization in the process

Masahiro Watanabe¹, Hanna Nishida², Momoyo Ito², Takuya Suzuki^{1,2} (¹Grad. Sch. Bio., Univ. Tsukuba, ²T-PIRC, Univ. Tsukuba)

PL-085 Microbiome regulation by phosphorus starvation response regulators in *Arabidopsis thaliana*

Ryo Chigusa¹, Kentaro Okada¹, Ayato Hirano¹, Yuniar Devi Utami¹, Kazuo Shinozaki², Saya Kikuchi², Miki Fujita², Kei Hiruma^{1,3}, Yusuke Saijo¹ (¹Grad. Sch. Sci. Tech., NAIST, ²CSRS., Riken, ³Grad. Sch. Arts. Sci., Tokyo Univ)

PL-086 Creation of *ENOD40* knockout plants in *Lotus japonicus*

Teruaki Iwamoto¹, Takuya Suzuki^{2,3} (¹Col. Biol. Sci., Univ. Tsukuba, ²Grad. Sch. Bio., Univ. Tsukuba, ³T-PIRC, Univ. Tsukuba)

PL-087 Classification of Lysin motif receptor like kinases (LysM-RLKs) in seed plants

Hafijur Ruman¹, Masanori Saito², Yasuyuki Kawaharada^{1,2} (¹United Graduate School of Agricultural Sciences, Iwate University, Japan., ²Department of Plant Bio-Sciences, Faculty of Agriculture, Iwate University, Japan.)

PL-088 Host specificity in the nodule symbiosis between *Lotus* spp. and *Rhizobium* sp.

Yuhei Chiba¹, Sachiko Masuda², Arisa Shibata², Ken Shirasu², Yasuyuki Kawaharada³ (¹Graduate School of Arts and Sciences, Iwate University, ²Center for Sustainable Resource Science, RIKEN, ³Department of Plant-Biosciences, Faculty of Agriculture, Iwate University)

- PL-089 Gene expression analysis during haustorium formation in the parasitic plant *Striga hermonthica*
Syogo Wada¹, Shungo Kobori², Kie Kumaishi², Songkui Cui¹, Yasunori Ichihashi², Satoko Yoshida¹ (¹Grad. Sch. Sci., NAIST,
²BRC., Riken)

■ Epigenetic regulation

- PL-090 Functional Analysis of RNA Polymerase IV, V in *Marchantia polymorpha*
Hikari Ikeda, Masayuki Tsuzuki, Yuichiro Watanabe (Grad. Sch. Arts Sci., Univ. Tokyo)
- PL-091 Functional analyses of histone modification enzymes, SDG7 and SDG8 during Arabidopsis root growth
Yicong Wang (Plant Stem Cell Regulation and Floral Patterning Laboratory Graduate School of Biological Sciences Nara Institute
of Science and Technology)
- PL-092 Functional analysis of rice CHROMOMETHYLASEs involved in non-CG methylation
Hanna Nishida¹, Asuka Higo², Hiroyuki Tsuji², Taiji Kawakatsu¹ (¹NIAS, ²KIBR)
- PL-093 DNA double-strand break repair in the nucleosome-free region impacts proximal promoter chromatin
Kohei Kawaguchi¹, Mei Kazama¹, Takayuki Hata^{1,2}, Naoto Takada¹, Chihiro Hayakawa¹, Kazuki Mukae¹, Mitsuhiro Matsuo²,
Junichi Obokata², Soichirou Satoh¹ (¹Grad. Sch. Life Env. Sci., Kyoto Pref. Univ., ²Fac. Agri., Setsunan Univ)
- PL-094 *Arabidopsis* nuclear pore complex regulates centromere arrangement
Nanami Ito¹, Takuya Sakamoto¹, Yuki Sakamoto², Sachihiko Matsunaga³ (¹Dept. Appl. Biol. Sci., Grad. Sch. Sci. Tech., Tokyo Univ.
Sci., ²Dept. Biol. Sci., Grad. Sch. Sci., Osaka Univ., ³Dept. Integr. Biosci., Grad. Sch. Front. Sci., Univ. Tokyo)

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

- PL-095 Functional characterization of a novel transcription factor involved in flavin metabolism regulation in plants
Miho Harada¹, Junya Namba¹, Takanori Maruta¹, Takahiro Ishikawa¹, Kazuya Yoshimura², Shigeru Shigeoka³, Takahisa Ogawa¹
(¹Grad. Sch. Nat. Sci. Technol., Shimane Univ., ²Dept. Food Nutr. Sci., Coll. Biosci. Biotech., Chubu Univ., ³Exp. Farm, Kindai Univ.)
- PL-096 Identification of a regulatory factor for the alternative splicing event of chloroplastic ascorbate peroxidase
Masato Yamada¹, Tomoya Arata¹, Kanako Suzuki¹, Natsuko Furihata¹, Noriaki Tanabe², Takamasa Suzuki³, Ayako Nishizawa-
Yokoi^{4,5}, Shigeru Shigeoka⁶, Kazuya Yoshimura¹ (¹Dept. Food Nutr. Sci., Coll. Biosci. Biotech., Chubu Univ., ²Dept. Adv. Biosci.,
Fac. Agr., Kindai Univ., ³Dept. Biol. Chem., Coll. Biosci. Biotech., Chubu Univ., ⁴NIAS, NARO, ⁵JST, PRESTO, ⁶Exp. Farm, Kindai
Univ.)
- PL-097 Global view of translation and mRNA levels in the Arabidopsis deadenylase mutants
Taku Tokunaka¹, Toshihiro Arae^{1,2}, Seidai Takamatsu¹, Atsushi Toyoda³, Yukako Chiba^{1,4} (¹Grad. Sch. Life Sci., Hokkaido Univ.,
²Grad. Sch. Front. Sci., Univ. of Tokyo, ³NIG, ⁴Fac. Sci. Hokkaido Univ.)
- PL-098 Induction Of Transcriptional And Post-transcriptional Gene Silencing By Agrobacterium Infection
Emi Iida¹, Hikaru Sawano¹, Kazunori Kuriyama¹, Midori Tabara¹, Atsushi Takeda², Hiromitsu Moriyama¹, Toshiyuki Fukuhara¹
(¹Grad. Sch. Agri., Tokyo. Univ. Agri. Tech, ²Dept. Biotech., Ritsumeikan. Univ.)
- PL-099 Structural analysis of boron-dependent ribosome stalling on the AUGUAA sequence
Mayuki Tanaka¹, Takeshi Yokoyama^{2,3}, Madoka Nishimoto², Kengo Tsuda², Naoyuki Sotta¹, Hideki Shigematsu^{2,4}, Mikako
Shirouzu², Takuhiro Ito², Toru Fujiwara¹ (¹Grad. Sch. of Agri. Life Sci., Univ of Tokyo, ²RIKEN BDR, ³Grad. Sch. of Life Sci.,
Tohoku Univ., ⁴RIKEN RSC)
- PL-100 Crosstalk of N-terminal methionine excision and methionine homeostasis in plants
Kazuki Oda¹, Shiori Muraoka², Hitoshi Onouchi¹, Satoshi Naito^{1,3}, Yui Yamashita¹ (¹Grad. Schl. Agr., Hokkaido Univ., ²Schl. Agr.,
Hokkaido Univ., ³Grad. Schl. Life Sci., Hokkaido Univ.)

■ Systems biology

- PL-101 Supporting genome analysis of diatom: genome assembly of *Nitzschia* sp. PL1-4
Takako Mochizuki¹, Mika Sakamoto¹, Yasuhiro Tanizawa¹, Masaru Yagura¹, Takuro Nakayama², Goro Tanifuji³, Ryoma
Kamikawa⁴, Yasukazu Nakamura¹ (¹Genome Informatics Lab., NIG, ²Graduate School of Life Sciences, Tohoku University,
³Department of Zoology, National Museum of Nature and Science, ⁴Graduate School of Agriculture, Kyoto Univ.)

- PL-102 Genome and transcriptome analysis of the parasitic plant *Phtheirospermum japonicum*
Yuki Tanaka^{1,2}, Mitsutaka Kadota³, Osamu Nishimura³, Shigehiro Kuraku³, Satoko Yoshida⁴, Ken Shirasu^{1,2} (¹RIKEN CSRS, ²Grad. Sch. Sci., Univ. Tokyo, ³RIKEN BDR, ⁴Div. Bio. Sci., NAIST)
- PL-103 Unravelling the molecular mechanism of bud dormancy transition and predicting flowering time in *Somei-yoshino* by multi-site field transcriptomics
Masaaki Shimizu¹, Keiko Kitamura², Han Qingmin², Satake Akiko³ (¹Grad. Sch. Sys. Life Sci. Univ. Kyushu, ²Forest and Forestry Products Research Inst., ³Grad. Sch. Sci. Univ. Kyushu)
- PL-104 Development of a novel modeling method to predict metabolic regulation systems
Ryoichi Sato, Masami Yokota Hirai (RIKEN CSRS)
- PL-105 Marpolbase: development of the genome and expression database for the liverwort *Marchantia polymorpha*
Yasuhiro Tanizawa¹, Shogo Kawamura², Masaru Yagura¹, Takako Mochizuki¹, Mika Sakamoto¹, Shohei Yamaoka², Ryuichi Nishihama², Katsuyuki Yamato³, Takayuki Kohchi², Chang Liu⁴, Frédéric Berger⁵, Yasukazu Nakamura¹ (¹NIG, ²Grad. Sch. of Biostudies, Kyoto Univ., ³B.O.S.T., Univ. Kindai, ⁴Univ. Hohenheim, ⁵GMI)
- PL-106 Comparing of Annual Pattern of Gene Expression between *Arabidopsis thaliana* and *A. halleri*
Yasuyuki Nomura¹, Atsushi J. Nagano^{2,3} (¹Research Institute for Food and Agriculture, Ryukoku University, ²Faculty of Agriculture, Ryukoku University, ³Institute for Advanced Biosciences, Keio University)

■ New technology

- PL-107 Production of Transgene-Free Genome-Edited Plants (Null Segregants) in Japanese Cultivated Gentians
Masahiro Nishihara¹, Aiko Watanabe¹, Fumina Goto¹, Chiharu Yoshida¹, Shigekazu Takahashi¹, Keiichiro Nemoto¹, Akira Abe¹, Masashi Odashima², Shinobu Sasaki², Suguru Ozawa², Zenbi Naito² (¹Iwate Biotechnology Research Center, ²Iwate Agricultural Research Center)
- PL-108 A truncation of the CaMBD in the C terminal region of *OsGAD4* resulted in higher GABA production in rice plants
Nadia Akter, Kazuhito Akama (Department of Life Sciences, Shimane University)
- PL-109 Effect of Heat Treatment on The Mutation Efficiency Induced by SpCas9 in *Arabidopsis*
Shuta Kurokawa, Naoshi Yamanaka, Kappei Kobayashi, Hidetaka Kaya (Dept. Food Prod. Sci., Fac. Agr., Ehime University)
- PL-110 CRISPR/Cas9-mediated gene targeting using all-in-one vector in plants
Ayako Nishizawa-Yokoi^{1,2}, Masafumi Mikami¹, Seiichi Toki^{1,3} (¹NIAS, NARO, ²PRESTO, JST, ³Kihara Inst. Biol. Res.)
- PL-111 Establishment of the local gene induction method with IR-LEGO in *Physcomitrium patens*
Suguru Ohe¹, Takumi Tomoi², Joe Sakamoto², Yasuhiro Kamei^{2,3,4}, Yosuke Tamada^{1,5,6} (¹Sch. Eng., Utsunomiya Univ., ²Lab. Biothermol., NIBB, ³Spectrograph. Bioimag. Facil., NIBB, ⁴Sch. Life Sci., SOKENDAI, ⁵CORE, Utsunomiya Univ., ⁶REAL, Utsunomiya Univ.)
- PL-112 Development of a live-cell transcriptome system to elucidate the acquisition mechanism of totipotency in zygotes
Koutarou Torii, Hirofumi Shintaku (Wako Inst., Riken)
- PL-113 Identification of cis-regulatory elements that confers high expression
Takatoshi Kiba^{1,3}, Toru Kudo², Kentaro Yano², Norio Kato^{3,4} (¹Grad. Sch. Bioagri. Sci., Nagoya Univ., ²Sch. Agr., Meiji Univ., ³Plant Breeding Innovation Lab., RIKEN, ⁴Plant Innovation Center, Japan Tobacco Inc.)

■ Others

- PL-114 Collection and Maintenance of Plant Cell Lines at RIKEN BRC in FY2021
Toshihiro Kobayashi, Masatomo Kobayashi (RIKEN BRC)
- PL-115 Application of plant metabolome metadata to RDF and reanalysis of the raw data
Hideki Nagasaki¹, Takeshi Ara², Atsushi Fukushima¹, Sachiko Ohsawa³, Mikiko Takahashi¹, Norio Kobayashi⁴, Takatomo Fujisawa⁵, Nozomu Sakurai⁵, Hideki Hirakawa³, Masanori Arita^{1,5} (¹RIKEN CSRS, ²RISH, Kyoto Univ., ³Facility for Genome Informatics, KDRI, ⁴RIKEN ISC, ⁵DDBJ, NIG)

- PL-116 Current status of the resources related to *Lotus japonicus* and their applications
Shusei Sato¹, Yusdar Mustamin¹, Madihah Manggabarani¹, Masaru Bamba¹, Turgut Akyol², Stig Andersen², Nadia Kamal³, Klaus F. X. Mayer³, Masatsugu Hashiguchi⁴, Hidenori Tanaka⁴, Ryo Akashi⁴ (¹Grad. Sch. Life Sci., Tohoku Univ., ²Aarhus Univ., ³Helmholtz Zentrum München, ⁴Fac. Agri., Univ. Miyazaki)
- PL-117 Cultivation test of *Brachypodium* using different LEDs and resource development such as natural accessions
Hiroshi Abe¹, Kanako Ishiyama¹, Rumi Amano², Takumi Sato², Megumi Narukawa², Yasunori Ichihashi², Masatomo Kobayashi¹
(¹Experimental Plant Division, RIKEN BRC, ²Plant-Microbe Symbiosis Research and Development Team, RIKEN BRC)
- PL-118 Establishment of the effective distance learning of research ethics education program
Emiko Harada (The Univ. of Shiga Pref.)

