

# The 63rd Annual Meeting of the Japanese Society of Plant Physiologists

<https://jspp.org/annualmeeting/63/>



**Date: March 22 (Tue) through March 24 (Thu), 2022**

## Venue & Banquet: Online

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

(Japanese: <https://jspp.org/annualmeeting/63/>)

(English: [https://jspp.org/annualmeeting/63/e\\_greeting.php](https://jspp.org/annualmeeting/63/e_greeting.php))

The ORSAM portal site will be closed on March 31, 2022.

## Organizing Committee

Chairperson: Shinobu Satoh

General Affairs: Hiroshi Shiba, Miyako Kusano

Accounting: Hiroaki Iwai

Venue: Akira Kikuchi, Chiaki Matsukura, Taichi Oguchi, Satoko Nonaka, Jun Furukawa, Kosumi Yamada,

Exhibition and advertisement: Kenji Miura, Hiroshi Ezura, Tohru Ariizumi

Satellite Meeting: Koji Nomura

Presentations by High School Students: Michiyuki Ono, Iwane Suzuki

Gender Equality: Takuya Suzaki, Yuri Tajima

Program Committee: Taiji Kawakatsu, Nobutaka Mitsuda, Satoshi Iuchi

Banquet: Nobuyoshi Nakajima, Mitsuko Aono, Hikaru Saji

## Conference Secretaria

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## Meeting Information

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## Program

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# 1. General Information

## 1-1. Important Notice

### 1) Online meeting

Because of the spread of COVID-19, the 63rd Annual Meeting in Tsukuba will be held online from March 22th to 24th. 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/63/>, English: [https://jspp.org/annualmeeting/63/e\\_greeting.php](https://jspp.org/annualmeeting/63/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 63rd Annual Meeting of JSPP at Tsukuba, “Fukkun Sencho and The Plum Blossoms at Mt. Tsukuba”, was designed by Wang Ning and Li Jiawei, combining a mascot of Tsukuba, “Fukkun Sencho”, which symbolizes the futuristic image of Tsukuba city, and a symbol of nature in Tsukuba, “the plum blossoms at Mt. Tsukuba”, into a motif. The logo means scientific city Tsukuba, building a sustainable future in harmony with nature and 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://cudo.jp/cbf/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 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 28 and March 7. 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 during the Annual Meeting with asking questions via the comment box.

<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 Meeting. The presenter enters the meeting via the URL, which will be notified from the Organizing Committee by email. When your turn comes, please show your slides by sharing the screen and turn on the microphone and video in the Zoom Meeting.
- Screen Name should be composed of “Abbreviation of your Affiliation” and “your Name”.
- Your connection to the Zoom Meeting will be tested in advance. We will contact you with the details such as the date, time and method.
- On the turn of your presentation, please select the file for your presentation in Zoom’s “Screen Share”. Then, please turn on the “Microphone” and “Video” before giving your presentation.
- The question and answer session will be conducted by using the “Raise Hand” function or “Chat” function of Zoom Meeting. Please follow the instructions of the Chairperson. You can also ask / answer questions in the comments section of the abstract page of the Web Abstracts (ORSAM portal). If you have any questions or comments, please answer them by “Reply”.

## 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 can enter the meeting via the URL, which will be notified from the Organizing Committee by email. After entering the Zoom Meeting, your commission will convert to “Co-Host” by the operation from the Annual Meeting. The operation of Zoom function by the Chairperson will be announced later.
- Screen Name should be composed of “Abbreviation of your Affiliation” and “your Name”.
- The question and answer session will be conducted by using the “Raise hand” function or “Chat” function of Zoom Meeting. Details on how to proceed with the Q&A session will be left to the discretion of each Chairperson.

### **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 Meeting. You can attend a meeting of interest by selecting a “Zoom link” corresponding to each session/presentation. “Microphone” and “Video” is not available unless a Chairperson allows its use.
- A Zoom Meeting will be open 30 minutes prior to the start of each session.
- The question and answer session will be conducted by using the “Raise Hand” function or “Chat” function of Zoom Meeting. Please follow the instructions of the Chairperson.

#### ***3) Participation in poster presentations***

- Poster viewings are basically carried out during the Annual Meeting with asking questions via the comment box.
- 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.

#### ***4) Participation in poster presentations by High School Students***

- Poster viewings are basically carried out during the Annual Meeting with asking questions via the comment box.
- Poster discussions/interaction using Zoom Meeting are also scheduled at afternoon on Day 3. At the appointed time, enter each breakout room in the Zoom Meeting from “Room Q” in the ORSAM Portal site, and discuss/interact your interest 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 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 [jspp2022@nacos.com](mailto:jspp2022@nacos.com).

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

## 2. Contents of the Annual Meeting

### 2-1. Banquet

Date and time: Day 2, March 23 (Wed) 18:30–20:30

Venue: ORSAM portal site (SpatialChat)

### 2-2. JSPP Awards Ceremony and Award Lectures

Date and time: Day 2, March 23 (Wed) 16:30–18:30

Venue: Room X (Zoom webinar) Please see the program p.13 for details.

### 2-3. Symposia

Seven symposia will be held using the Zoom platform. For the contents and purpose of each symposium, please see the outline on the meeting website ([https://jspp.org/annualmeeting/63/e\\_greeting.php](https://jspp.org/annualmeeting/63/e_greeting.php)) and the program p.14 for details.

Date and time: Day 1, March 22 (Tue) 9:30–12:30

◆ S01 Improvement of genomics and technologies upgrades the value of bioresources (Room Y)

◆ S02 Plant resilience mechanism for irregular environmental fluctuations over time (Room Z)

Date and time: Day 1, March 22 (Tue) 13:45–16:45

◆ S03 The forefront of plant RNA molecular biology: Sequence, structure and function (Room Y)

◆ S04 Sensors and actuators in biology and architecture (Room Z)

Date and time: Day 2, March 23 (Wed) 9:00–12:00

◆ S05 Toward understanding the unique features of plant stem cells (Room Y)

Date and time: Day 2, March 23 (Wed) 13:15–16:15

◆ S06 Chemical signals that control parasitism, symbiosis, defense, and infection in plants (Room Y)

◆ S07 A multifaceted approach to uncovering the mechanism and dynamics of the plant-microbe holobiont. (Room Z)

### 2-4. The 18th Database Workshop

Date and time: Day 3, March 24 (Thu) 9:00–12:00

Venue: Room Z (Zoom Meeting)

Organizers: Kentaro Yano (Meiji Univ.)

Please see the outline on the meeting website ([https://jspp.org/annualmeeting/63/e\\_greeting.php](https://jspp.org/annualmeeting/63/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 and junior 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. The abstracts of poster presentations by high school and junior high school students will be distributed as a separate supplement (PDF).

Date and time: Day 3, March 24 (Thu) 13:00–16:00

Venue: Room Q (Zoom Meeting)

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)

16:30–17:00 Award ceremony

## 2-6. Luncheon Seminars

Registration is not required. Please see the outline on the meeting website ([https://jspp.org/annualmeeting/63/e\\_greeting.php](https://jspp.org/annualmeeting/63/e_greeting.php)) and the program p.27 for details.

### ◆ **PCP Luncheon Seminar “The changing landscape of peer-review”**

Date and time: Day 1, March 22 (Tue) 12:30–13:30

Venue: Room Z (Zoom Meeting)

Organizer: PCP Editors Committee, Sponsor: Oxford University Press

### ◆ **Leica Microsystems K.K. Luncheon Seminar**

Date and time: Day 1, March 22 (Tue) 12:30–13:30

Venue: Room X (Zoom Meeting)

Sponsor: Leica Microsystems K.K.

### ◆ **Luncheon Seminar on Gender Equality “What is the career path in Tsukuba Science City?**

~From the perspective of a female researcher~”

Date and time: Day 2, March 23 (Wed) 12:00–13:00

Venue: Room Z (Zoom Meeting)

Organizer: JSPP Gender Equality Committee

### ◆ **OLYMPUS CORPORATION Luncheon Seminar**

Date and time: Day 2, March 23 (Wed) 12:00–13:00

Venue: Room X (Zoom Meeting)

Organizer: OLYMPUS CORPORATION

### ◆ **Illumina K.K. Luncheon Seminar**

Date and time: Day 3, March 24 (Thu) 12:00–13:00

Venue: Room X (Zoom Meeting)

Organizer: Illumina K.K.

## 2-7. Satellite Meetings

Please see the outline on the meeting website ([https://jspp.org/annualmeeting/63/e\\_greeting.php](https://jspp.org/annualmeeting/63/e_greeting.php)) and the program p.31 for details.

### ◆ The 24th Plant Organelle Workshop

Date and time: March 21 (Mon) (The day before the Meeting), 13:00–18:40

Venue: Room K (Zoom Meeting)

Representative Organizers: Dr. Yoshiki Nishimura (Kyoto University)

Organelles in plant cells play key roles in the development, function, homeostasis, and environmental adaptation. The aim of this workshop is to offer an opportunity for plant scientists with diverse backgrounds to get together and share latest findings, ideas, and cutting-edge technologies to study plant organelles, for further discussion and future collaborations. Invited speakers will cover diverse topics, including chloroplasts, mitochondria, and other cellular organelles, from the molecular analysis to the field sciences.

This workshop is free to any participants. Please register at our website by Friday, March 11.

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

Contact addresses: Yoshiki Nishimura: [yoshiki@pmg.bot.kyoto-u.ac.jp](mailto:yoshiki@pmg.bot.kyoto-u.ac.jp)

Yusuke Kato: [yusuke.kato@setsunan.ac.jp](mailto:yusuke.kato@setsunan.ac.jp)

### ◆ Symposium on Phototrophic Prokaryotes

Date and time: The day before the Meeting, March 21 (Mon) 14:00–18:00

Venue: Room J (Zoom webinar)

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

Contents: Phototropic prokaryotes such as cyanobacteria and anoxygenic photosynthetic bacteria are now subjects for various fields of studies including biochemistry, molecular biology, structural biology, biophysics, bioorganic chemistry, and microbial ecology. This symposium invites speakers talking their latest achievements and provides new insights into studies on photosynthetic microorganisms including chloroplasts through discussion. Registration fee is free. After the workshop, we will have an online mixer. To register the symposium and/or mixer, please fill the Entry Form (<https://forms.gle/BcVsck5eN5r3vJTH6>). We are expecting your participation.

Contact addresses: Jiro Harada: [jiro\\_harada@med.kurume-u.ac.jp](mailto:jiro_harada@med.kurume-u.ac.jp)

Yusuke Tsukatani: [tsukatani@jamstec.go.jp](mailto:tsukatani@jamstec.go.jp)

Chihiro Azai: [cazai@fc.ritsumei.ac.jp](mailto:cazai@fc.ritsumei.ac.jp)

### ◆ The 39th Meeting of the Japanese Society for Young Plant Physiologists

Date and time: The day before the Meeting, March 21 (Mon) 18:30–20:00

Venue: Room L (Zoom Meeting)

Organizers: Dr. Rumi Amano (Kyoto Prefectural University), 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://jsppmeeting.wixsite.com/wakatenokai>).

Registration due on March 14: <https://forms.gle/8tm73Vfkt2Vuq2bQ8>

Contact addresses: Rumi Amano: [rumi.amano@kpu.ac.jp](mailto:rumi.amano@kpu.ac.jp)

Tatsuya Nobori: [tnobori@salk.edu](mailto:tnobori@salk.edu)

## **2-8. JSPP Committee Meetings**

Date and time: March 21 (Mon) (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<sup>table</sup> Day 1, Tue., March 22

	9	10	11	12	13	14	15	16	17	18	19	
<b>A</b>		Photosynthesis				Photosynthesis						
<b>B</b>		Plant-organism interaction B				Plant-organism interaction B						
<b>C</b>		Membrane trafficking				Organelles/Cytoskeleton						
<b>D</b>		Primary metabolism				Primary metabolism						
<b>E</b>		Reproductive growth				Reproductive growth						
<b>F</b>		Photoreceptors/Photoresponses				Photoreceptors/Photoresponses						
<b>G</b>		Environmental responses B				Environmental responses B						
<b>H</b>		Transcriptional, post-transcriptional or translational, post-translational regulations				Transcriptional, post-transcriptional or translational, post-translational regulations						
<b>X</b>					Luncheon Seminar Leica Microsystemes K.K.							
<b>Y</b>		Symposium S01 Improvement of genomics and technologies upgrades the value of bioresources				Symposium S03 The forefront of plant RNA molecular biology: Sequence, structure and function						
<b>Z</b>		Symposium S02 Plant resilience mechanism for irregular environmental fluctuations over time			Luncheon Seminar PCP	Symposium S04 Sensors and actuators in biology and architecture						
<b>P</b>		Poster viewings and discussions										
<b>Q</b>		Research Presentations by High School Students Poster viewings and discussions										
<b>Other</b>					Luncheon NBRP meeting							

	9	10	11	12	13	14	15	16	17	18	19
<b>A</b>	Photosynthesis					Photosynthesis					
<b>B</b>	Plant-organism interaction A					Systems biology					
<b>C</b>	Organelles/Cytoskeleton					Organelles/Cytoskeleton					
<b>D</b>	Secondary (specialized) metabolism					Secondary (specialized) metabolism					
<b>E</b>	Plant hormones/Signaling molecules					Plant hormones/Signaling molecules					
<b>F</b>	Flowering/Clock					Flowering/Clock					
<b>G</b>	Environmental responses C					Environmental responses C					
<b>H</b>	Vegetative growth					Vegetative growth					
<b>X</b>				Luncheon Seminar OLYMPUS CORPORATION				JSPP Awards: Ceremony and Lectures			
<b>Y</b>	Symposium S05 Toward understanding the unique features of plant stem cells					Symposium S06 Chemical signals that control parasitism, symbiosis, defense, and infection in plants					
<b>Z</b>				Luncheon Seminar on Gender Equality		Symposium S07 A multifaceted approach to uncovering the mechanism and dynamics of the plant-microbe holobiont					
<b>P</b>	Poster viewings and discussions										
<b>Q</b>	Research Presentations by High School Students Poster viewings and discussions										
<b>Other</b>				Luncheon NBRP meeting						Banquet ORSAM portal site (SpatialChat) (18:30-20:30)	

# Time<sup>table</sup> Day 3, Thu., March 24

	9	10	11	12	13	14	15	16	17	18	19
<b>A</b>	Environmental responses of photosynthesis										
<b>B</b>	Biomembrane/Ion and solute transport										
<b>C</b>	Cell wall										
<b>D</b>	New technology										
<b>E</b>	Epigenetic regulation										
<b>F</b>											
<b>G</b>	Environmental responses A										
<b>H</b>	Vegetative growth										
<b>X</b>				Luncheon Seminar Illumina K.K.							
<b>Y</b>											
<b>Z</b>	The 18th Database Workshop										
<b>P</b>	Poster viewings and discussions				Poster discussions using Zoom meeting						
					PF	PL					
<b>Q</b>	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	Award ceremony			
<b>Other</b>				Luncheon NBRP meeting							

Wed., March 23, 16:30–18:30 Room X

## 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 Committee
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 Masamitsu Wada (Tokyo Metropolitan Univ.)	JSPP President

### Award Lectures

Language: Japanese

17:05	<b>A01</b>	JSPP Award “Studies on transport mechanisms of mineral elements in crops” Jian Feng Ma (Institute of Plant Science and Resources, Okayama University)
17:25	<b>A02</b>	JSPP Young Investigator Award “Mechanisms of body axis formation in plant embryos” Minako Ueda (Grad. Sch. of Life Sci., Tohoku Univ.)
17:35	<b>A03</b>	JSPP Young Investigator Award “Elucidation of the post-transcriptional gene regulation to control cell differentiation in plants” Misato Ohtani (Grad. Sch. Front. Sci., Univ. Tokyo)
17:45	<b>A04</b>	JSPP Young Investigator Award “Molecular mechanisms of blue light-dependent stomatal opening” Atsushi Takemiya (Grad. Sch. Sci. Tech. Innov., Yamaguchi Univ.)
17:55	<b>A05</b>	JSPP Young Investigator Award “Functional and structural studies of diatom photosystem-light-harvesting supercomplexes” Ryo Nagao (RIIS, Okayama University)
18:05	<b>A06</b>	JSPP Young Investigator Award “Study on systemic signaling in plants and grafting” Michitaka Notaguchi (Bioscience and Biotechnology Center, Nagoya University)
18:15	<b>A07</b>	PCP Best Paper Award Jing Che, Naoki Yamaji, Takaaki Miyaji, Namiki Mitani-Ueno, Yuri Kato, Ren Fang Shen and Jian Feng Ma (2020) “Node-Localized Transporters of Phosphorus Essential for Seed Development in Rice.” <i>Plant and Cell Physiology</i> , 61 (8): 1387–1398 Jing Che (Institute of Plant Science and Resources, Okayama University), et al.

Tue., March 22, 9:30–12:22 Room Y

## Improvement of genomics and technologies upgrades the value of bioresources

Language: Japanese

**Organizers:** Yutaka Sato (National Institute of Genetics)  
Masatomo Kobayashi (RIKEN BioResource Research Center)

● Chairperson: Yutaka Sato

09:30		Opening remarks Yutaka Sato
09:35	<b>S01-1</b>	Diverse Resources of Plant Cell Cultures and Quality Control for Their Advanced Utilization <u>Toshihiro Kobayashi</u> (RIKEN BRC)
09:53	<b>S01-2</b>	Non-model algal resources provide insights into the unexpected features in eukaryotes <u>Shigekatsu Suzuki</u> , Haruyo Yamaguchi, Masanobu Kawachi (NIES)
10:11	<b>S01-3</b>	Development of a nested association mapping population of hexaploidy wheat: from genetic resources to genetic resources <u>Shuhei Nasuda</u> (Grad. Sch. Agric., Kyoto Univ.)
10:29	<b>S01-4</b>	Progress of chromosome scale genome assembly methods in barley <u>Kazuhiro Sato</u> (IPSR, Okayama Univ.)

● Chairperson: Masatomo Kobayashi

10:47	<b>S01-5</b>	Utilization of wild rice genetic resources enabled by genome information and editing <u>Katsutoshi Tsuda</u> , Yutaka Sato (National Institute of Genetics · SOKENDAI)
11:05	<b>S01-6</b>	Genomic basis for environmental adaptation of <i>Lotus japonicus</i> revealed by applying NBRP resources <u>Shusei Sato</u> <sup>1</sup> , Yusdar Mustamin <sup>1</sup> , Masaru Bamba <sup>1</sup> , Turgut Akyol <sup>2</sup> , Stig Andersen <sup>2</sup> , Masatsugu Hashiguchi <sup>3,4</sup> , Takuyu Hashiguchi <sup>4</sup> , Hidenori Tanaka <sup>4</sup> , Ryo Akashi <sup>4</sup> ( <sup>1</sup> Grad. Sch. Life Sci., Tohoku Univ., <sup>2</sup> Aarhus Univ., <sup>3</sup> Fac. Regional Innovation, Univ. of Miyazaki, <sup>4</sup> Fac. Agr., Univ. of Miyazaki)
11:23	<b>S01-7</b>	Molecular Genetics in <i>Chrysanthemum</i> : A Model Strain and its Whole Genome Sequence <u>Makoto Kusaba</u> , Michiharu Nakano, Toshiaki Kozuka, Kenji Taniguchi (Grad. Sch. Int. Sci. Life, Hiroshima Univ.)
11:41	<b>S01-8</b>	The Japanese morning glory: Our country's unique bioresource shines brightly with genome information <u>Atsushi Hoshino</u> <sup>1,2</sup> , Eiji Nitasaka <sup>3</sup> ( <sup>1</sup> NIBB, <sup>2</sup> Sch. Life Sci., SOKENDAI, <sup>3</sup> Grad. Sch. Sci., Kyushu Univ.)
11:59	<b>S01-9</b>	NBRP Tomato Historia, Current and Future <u>Hiroshi Ezura</u> (Fac. Life Environ. Sci., Univ. Tsukuba)
12:17		Closing remarks Masatomo Kobayashi

Co-sponsored by National BioResource Project, MEXT

Tue., March 22, 9:30–12:30 Room Z

## Plant resilience mechanism for irregular environmental fluctuations over time

Language: Japanese

**Organizers:** Motoyuki Ashikari (Nagoya University)  
Tomonao Matsushita (Kyoto University)

● Chairperson: Tomonao Matsushita

09:30 Opening remarks

● Chairperson: Toshinori Kinoshita

09:35 **S02-1** Regulatory mechanisms of plant growth phase transition in response to nitrogen nutrient deficiency  
Miho Sanagi<sup>1</sup>, Akio Kubo<sup>1</sup>, Junpei Takagi<sup>2</sup>, Takeo Sato<sup>2</sup> (<sup>1</sup>Grad. Sch. Life Sci., Hokkaido Univ., <sup>2</sup>Fac. Sci., Hokkaido Univ.)

10:00 **S02-2** Stage-gates for response to submergence in roots  
Mikio Nakazono<sup>1</sup>, Takaki Yamauchi<sup>2</sup>, Hirokazu Takahashi<sup>1</sup> (<sup>1</sup>Graduate School of Bioagricultural Sciences, Nagoya University, <sup>2</sup>Bioscience and Biotechnology Center, Nagoya University)

10:25 **S02-3** Stagegate of rice stem elongation under submergence  
Motoyuki Ashikari, Keisuke Nagai (Nagoya University)

● Chairperson: Motoyuki Ashikari

10:50 **S02-4** Plant resilience mechanism for heat stress  
Teruaki Taji (Dept. Bio., Tokyo Univ. Agriculture)

11:15 **S02-5** Regulation of stomatal movement and flowering under fluctuating environments  
Toshinori Kinoshita<sup>1</sup>, Takato Imaizumi<sup>2,3</sup> (<sup>1</sup>ITbM, Nagoya Univ., <sup>2</sup>Dept. Biol., Univ. Washington, <sup>3</sup>Ctr. Gene Res., Nagoya Univ)

11:40 **S02-6** Molecular mechanism of wound-induced responses as a strategy of plant resilience  
Akira Iwase<sup>1</sup>, Alice Lambolez<sup>1,2</sup>, Yu Chen<sup>1,2</sup>, Duncan Coleman<sup>1</sup>, David Favero<sup>1</sup>, Keiko Sugimoto<sup>1,2</sup> (<sup>1</sup>RIKEN CSRS, <sup>2</sup>Grad. Sch. Sci., Univ. Tokyo)

12:05 **S02-7** Robust regulation of a flowering repressor *FLC* under fluctuating environments  
Haruki Nishio<sup>1,2</sup>, Hiroshi Kudoh<sup>2</sup> (<sup>1</sup>DS center, Shiga Univ., <sup>2</sup>CER, Kyoto Univ.)

**Co-sponsored by Grant-in-Aid for Transformative Research Areas (A), Multi-layered regulatory system of plant resilience under fluctuating environment**

Tue., March 22, 13:45–16:40 Room Y

## The forefront of plant RNA molecular biology: Sequence, structure and function

Language: Japanese

**Organizers:** Yui Yamashita (Grad. Sch. Agr., Hokkaido Univ.)  
Masayuki Tsuzuki (Grad. Sch. Arts Sci., Univ. Tokyo)

● Chairperson: Yui Yamashita

13:45		Opening remarks
13:50	<b>S03-1</b>	How genes are transcribed and processed: the importance of UsnRNP function in plants Ippei Yamasaki <sup>1</sup> , Yuka Hatanaka <sup>2</sup> , Hirokazu Takahashi <sup>2</sup> , <u>Misato Ohtani</u> <sup>1,2,3</sup> ( <sup>1</sup> Grad. Sch. Front. Sci., Univ. Tokyo, <sup>2</sup> Div. Biol. Sci., NAIST, <sup>3</sup> RIKEN, CSRS)
14:10	<b>S03-2</b>	The mechanisms of secondary siRNA biogenesis in plants <u>Hiro-oki Iwakawa</u> (Institute for Quantitative Biosciences, The University of Tokyo)
14:30	<b>S03-3</b>	The function and mechanism of non-coding RNA transcription in plants <u>Masayuki Tsuzuki</u> (Grad. Sch. Arts. Sci., Univ. Tokyo)
14:50	<b>S03-4</b>	Structures insight into the C-to-U RNA editing enzyme in plant organelles suggests a unique regulation principal <u>Mizuki Takenaka</u> <sup>1</sup> , Sachi Takenaka <sup>1</sup> , Brody Frink <sup>1</sup> , Ayako Maeda <sup>1</sup> , Tenghua Wang <sup>1</sup> , Gert Weber <sup>2</sup> ( <sup>1</sup> Grad. Sch. Sci., Kyoto Univ., <sup>2</sup> Helmholtz-Zentrum Berlin für Materialien und Energie)
15:10		Short break
		● Chairperson: Masayuki Tsuzuki
15:15	<b>S03-5</b>	What are characteristics of plant NMD targets? <u>Yukio Kurihara</u> (RIKEN CSRS)
15:35	<b>S03-6</b>	Coordinated regulation of translational and transcriptional expression of transporter genes in response to boron concentration <u>Mayuki Tanaka</u> , Toru Fujiwara (Grad. Sch. Agri. Life Sci.)
15:55	<b>S03-7</b>	Mechanistic specificity of ribosome stalling involved in ER-stress response in plants Tomoya Imamichi <sup>1</sup> , Nao Kusumoto <sup>2</sup> , Seidai Takamatsu <sup>2</sup> , Yugo Honda <sup>1</sup> , Shiori Muraoka <sup>1</sup> , Hitoshi Onouchi <sup>1</sup> , Satoshi Naito <sup>1</sup> , <u>Yui Yamashita</u> <sup>1</sup> ( <sup>1</sup> Grad. Schl. Agr., Hokkaido Univ., <sup>2</sup> Grad. Schl. Life Sci., Hokkaido Univ.)
16:15	<b>S03-8</b>	Detailed analysis of mRNA sequence revealed relationship between mRNA sequence variants and translational control <u>Shotaro Yamasaki</u> , Ko Kato (Div. Biol. Sci., NAIST)
16:35		Closing remarks

Tue., March 22, 13:45–16:45 Room Z

**Sensors and actuators in biology and architecture**Language: Japanese

**Organizers:** Masatsugu Toyota (Dept. Biochem. & Mol. Biol., Saitama Univ.)  
Haruko Ueda (Dept. Biol., Konan Univ.)

## ● Chairperson: Masatsugu Toyota

13:45		Opening remarks Masatsugu Toyota
13:50	<b>S04-1</b>	Application Of Sensor And Actuator Technologies To Spatial Structures <u>Susumu Yoshinaka</u> (WASEDA University)
14:15	<b>S04-2</b>	Bio-inspired architecture <u>Yosuke Nakaso</u> (IIS, The Univ. of Tokyo)
14:40	<b>S04-3</b>	Dynamic microtubule reorganization as a sensor and actuator of growth fluctuation and stabilization <u>Shogo Takatani</u> <sup>1</sup> , Hiroyasu Motose <sup>2</sup> , Olivier Hamant <sup>1</sup> ( <sup>1</sup> ENS de Lyon, INRAE, RDP, <sup>2</sup> Grad. Sch. Nat. Sci., Okayama Univ.)

## ● Chairperson: Haruko Ueda

15:05	<b>S04-4</b>	Photosensor-induced changes in leaf anatomy <u>Eiji Gotoh</u> (Fac. Agric., Kyuhsu Univ.)
15:30	<b>S04-5</b>	Sensors and actuators regulating the fast movement of the Venus flytrap <u>Hiraku Suda</u> <sup>1</sup> , Yuuki Asakawa <sup>2</sup> , Satoru Tsugawa <sup>3</sup> , Masatsugu Toyota <sup>1,4,5</sup> ( <sup>1</sup> Grad. Sch. Sci. Eng., Saitama Univ., <sup>2</sup> Fac. Sci., Saitama Univ., <sup>3</sup> Grad. Sch. Sys. Sci. Tech., Akita Prefectural Univ., <sup>4</sup> Suntory Rising Stars Encouragement Program in Life Sciences (SunRiSE), <sup>5</sup> Department of Botany, University of Wisconsin-Madison)
15:55	<b>S04-6</b>	How a growing brain is constructed: sensing and actuation by densely packed cells <u>Takaki Miyata</u> (Nagoya Univ. Grad. Sch. Med.)
16:20		Discussion and Closing remarks Haruko Ueda

**Cosponsor: Plant-Structure Optimization Strategy**



Wed., March 23, 9:00–11:40 Room Y

**Toward understanding the unique features of plant stem cells**Language: English**Organizers:** Masaaki Umeda (NAIST)  
Hitoshi Sakakibara (Nagoya Univ.)

## ● Chairperson: Hitoshi Sakakibara

09:00		Opening remarks Masaaki Umeda
09:05	<b>S05-1</b>	Genome Maintenance Strategies in Plant Stem Cells <u>Masaaki Umeda</u> , Shiori S. Aki, Naoki Takahashi (Grad. Sch. Sci. Technol., NAIST)
09:20	<b>S05-2</b>	Analyses of stem cell genome diversity in long-lived plants <u>Akiko Satake</u> (Dept. Biol., Kyushu Univ.)
09:35	<b>S05-3</b>	Regulation of nodule initiation in legumes <u>Makoto Hayashi</u> (RIKEN CSRS)
09:50	<b>S05-4</b>	Evolutionary conserved mechanisms of stem cell proliferation in land plants <u>Kimitsune Ishizaki</u> (Grad. Sch. Sci., Kobe Univ.)
10:05	<b>S05-5</b>	Control of vegetative reproduction by KL signaling in <i>Marchantia polymorpha</i> <u>Junko Kyoizuka</u> , Aino Komatsu, Kyoichi Kodama, Kazato Kumagai, Hidemasa Suzuki (Tohoku, Life Sciences)

## ● Chairperson: Masaaki Umeda

10:20	<b>S05-6</b>	Role of cytokinin biosynthesis and translocation in the maintenance of shoot apical stem cells <u>Hitoshi Sakakibara</u> (Grad Sch Bioagric Sci, Nagoya Univ)
10:35	<b>S05-7</b>	Regulation of stem cell production by a cytochrome P450-derived signal in plants Kodai Takemoto, Kiyoshi Mashiguchi, <u>Shinjiro Yamaguchi</u> (Inst. Chem. Res., Kyoto Univ.)
10:50	<b>S05-8</b>	Analysis on the establishment of apical-basal axis and stem cells in rice embryo <u>Yutaka Sato</u> (National Institute of Genetics)
11:05	<b>S05-9</b>	Deceleration of cell cycle underpins a switch from proliferative to terminal division in plant stomatal lineage <u>Akie Shimotohno</u> <sup>1</sup> , Soon-Ki Han <sup>1</sup> , Arvid Herrmann <sup>2,3</sup> , Jiyuan Yang <sup>2,3</sup> , Rie Iwasaki <sup>1</sup> , Tomoaki Sakamoto <sup>4</sup> , Seisuke Kimura <sup>4</sup> , Eun-Deok Kim <sup>2,3</sup> , Keiko Torii U. <sup>1,2,3</sup> ( <sup>1</sup> Institute of Transformative Bio-Molecules (WPI-ITbM), Nagoya University, <sup>2</sup> Howard Hughes Medical Institute, University of Texas at Austin, <sup>3</sup> Department of Molecular Biosciences, University of Texas at Austin, <sup>4</sup> Department of Industrial Life Sciences and Center for Plant Sciences, Kyoto Sangyo University)
11:20	<b>S05-10</b>	Competitive action among BES/BZR transcription factors enables the robust control of vascular stem cells Tomoyuki Furuya, <u>Yuki Kondo</u> (Grad. Sch. Sci., Kobe Univ.)
11:35		Closing remarks Masaaki Umeda

**Co-sponsored by Grant-in-Aid for Scientific Research on Innovative Areas  
'Principles of pluripotent stem cells underlying plant vitality'**

Wed., March 23, 13:15–16:15 Room Y

## Chemical signals that control parasitism, symbiosis, defense, and infection in plants

Language: Japanese

**Organizers:** Masami Hirai (RIKEN CSRS)  
Masaharu Mizutani (Kobe University)  
Akifumi Sugiyama (Kyoto University)

● Chairperson: Masami Hirai

13:15		Opening remarks
13:20	<b>S06-1</b>	Mycorrhizal cheating mediated by signaling molecules <u>Kenji Suetsugu</u> (Graduate School of Science, Kobe Univ.)
13:40	<b>S06-2</b>	Regulation of arbuscular mycorrhizal fungi by plant-derived compounds <u>Hiromu Kameoka</u> <sup>1,2</sup> ( <sup>1</sup> Grad. Sch., Life Sci., Tohoku Univ., <sup>2</sup> JST PRESTO)
14:00	<b>S06-3</b>	Parasitic strategies of <i>Ralstonia solanacearum</i> on fungi as well as plants <u>Kenji Kai</u> (Grad. Sch. Life & Envi. Sci., Osaka Pref. Univ.)

● Chairperson: Masaharu Mizutani

14:20	<b>S06-4</b>	Identification of plant attractant of parasitic nematode, <i>M. incognita</i> <u>Shinichiro Sawa</u> (Kumamoto University, IRCAEB)
14:40		Break
14:45	<b>S06-5</b>	Plant defense system coordinated by herbivore's oral secretion components <u>Gen-ichiro Arimura</u> (Dept. Biol. Sci. Technol., Tokyo Univ. Sci.)

● Chairperson: Akifumi Sugiyama

15:05	<b>S06-6</b>	Counter-adaptation and physiological mechanisms of insects to gardenia defense substances <u>Naoko Yoshinaga</u> , Naoki Mori (Grad. Sch. Ag., Kyoto Univ.)
15:25	<b>S06-7</b>	The mystery of Insect Gall formation is being elucidated <u>Tomoko Hirano</u> , Masa H. Sato (Grad. Sch. Life and Envir. Sci., Kyoto Prefectural University)
15:45	<b>S06-8</b>	The influence toward underground interactions of plant communication on above ground by VOCs <u>Kaori Shiojiri</u> <sup>1</sup> , Akira Yamawo <sup>2</sup> ( <sup>1</sup> Ryukoku Univ. Agriculture, <sup>2</sup> Hirosaki Univ. Agriculture and Life Science)

● Chairperson: Masaharu Mizutani

16:05		Discussion
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Wed., March 23, 13:15–16:15 Room Z

## A multifaceted approach to uncovering the mechanism and dynamics of the plant-microbe holobiont

Language: Japanese

**Organizers:** Shunsuke Miyashima (NAIST)  
Kei Hiruma (The Tokyo University)  
Akira Mine (Kyoto University)

13:15		Opening remarks Kei Hiruma
● Chairperson: Kei Hiruma		
13:20	<b>S07-1</b>	Fluorescence lifetime imaging reveals spatiotemporal activation of immune response in Arabidopsis root <u>Shunsuke Miyashima</u> <sup>1,2</sup> ( <sup>1</sup> NAIST, <sup>2</sup> JST PRESTO)
13:50	<b>S07-2</b>	Minerals and photosynthates dynamics in root using radioisotope imaging <u>Ryohei Sugita</u> <sup>1</sup> , <u>Natsuko I. Kobayashi</u> <sup>2</sup> , <u>Tomoko M. Nakanishi</u> <sup>2</sup> , <u>Keitaro Tanoi</u> <sup>2</sup> ( <sup>1</sup> Radioisotope Research Center, Nagoya University, <sup>2</sup> Graduate School of Agricultural and Life Sciences, The University of Tokyo)
14:10	<b>S07-3</b>	Development of quantification techniques to unravel the plant physiological response <u>Yosuke Toda</u> <sup>1,2</sup> ( <sup>1</sup> phytometrics, <sup>2</sup> ITbM, Nagoya Univ.)
14:30		Break
● Chairperson: Akira Mine		
14:35	<b>S07-4</b>	Detecting beneficial organisms for rice by reconstructing ecological interaction networks under field conditions <u>Masayuki Ushio</u> <sup>1,2</sup> ( <sup>1</sup> Hakubi Center, Kyoto University, <sup>2</sup> Center for Ecological Research, Kyoto University)
15:10	<b>S07-5</b>	Diagnosis and surveillance of wheat stem rust using field transcriptomic data <u>Ayako Tsushima</u> <sup>1</sup> , <u>Clare M. Lewis</u> <sup>1</sup> , <u>Kerstin Flath</u> <sup>2</sup> , <u>Stephen Kildea</u> <sup>3</sup> , <u>Diane G.O. Saunders</u> <sup>1</sup> ( <sup>1</sup> John Innes Centre, <sup>2</sup> Institute for Plant Protection in Field Crops and Grassland, Julius-Kuehn-Institut (JKI), <sup>3</sup> Teagasc)
● Chairperson: Shunsuke Miyashima		
15:35	<b>S07-6</b>	Plant-microbiota “remote” interactions via secreted compounds manipulating host root growth-defense coordination <u>Jana Hucklenbroich</u> <sup>1</sup> , <u>Arpan Kumar Basak</u> <sup>2,3</sup> , <u>Kenji Yamada</u> <sup>3</sup> , <u>Ryohei Thomas Nakano</u> <sup>1</sup> ( <sup>1</sup> Max Planck Institute for Plant Breeding Research, Cologne, Germany, <sup>2</sup> Faculty of Biology, Jagiellonian University, Krakow, Poland, <sup>3</sup> Malopolska Centre of Biotechnology, Jagiellonian University, Krakow, Poland)
16:10		Closing remarks Akira Mine

Co-sponsored by Co-creation of plant adaptive traits via assembly of plant-microbe holobiont

Day 3, AM

Workshop

Thu., March 24, 9:00–12:00 Room Z

## The 18th Database Workshop

Language: Japanese

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

● Chairperson: Kentaro Yano

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09:00	<b>D01-1</b>	Literature-based curation of gene annotation, genomic variations, and transcriptomics information in RAP-DB <u>Yoshihiro Kawahara</u> <sup>1</sup> , Tomoko Hirozane-Kishikawa <sup>1</sup> , Xiaohui Wang <sup>1</sup> , Ryo Hirata <sup>2</sup> ( <sup>1</sup> Advanced Analysis Center, NARO, <sup>2</sup> IMSBIO Co., Ltd.)
09:30	<b>D01-2</b>	Gene screening for plant spermatozoid formation using NGS data <u>Shizuka Koshimizu</u> (Sch. Agri., Meiji Univ.)
09:50	<b>D01-3</b>	Databases, ‘AI text mining’ and deep learning methods in plant science <u>Kentaro Yano</u> (Bioinformatics, Sch. of Agri., Meiji Univ.)
10:20	<b>D01-4</b>	Tips for “collaboration with AI”, to “wet” plant researchers <u>Takashi Akagi</u> <sup>1,2</sup> ( <sup>1</sup> Grad. Sch. Environ. Life Sci., Okayama Univ., <sup>2</sup> JST-PRESTO)

**Co-sponsored by Japan Plant Informatics Consortium**

Tue., March 22, 12:30–13:30 Room X

**Leica Microsystems K.K. Luncheon Seminar**  
**New normal of fluorescence microscopy and fluorescence lifetime imaging**

Language: Japanese

**Sponsor:** Leica Microsystems K.K.

**Title 1**

**New normal of fluorescence microscopy with THUNDER**

**Speaker:** Nobuhide Tsurumaki (Leica Microsystems K.K.)

Nowadays, fluorescence observation is used by many researchers as a “normal” instrument in the research field. However, at COVID-19 calamity, it is becoming increasingly important to understand how to conduct research under time constraints. Therefore, we propose the “new normal of fluorescence microscopy” with the THUNDER imaging system, which is an ordinary fluorescence microscope that can acquire ultra-high-resolution images, focusing on how to make fluorescence observation more efficient and produce maximum results in a limited time.

**Title 2**

**Fluorescence lifetime imaging with Leica confocal microscope STELLARIS**

**Speaker:** Suguru Osari (Leica Microsystems K.K.)

Leica Microsystems has launched next generation confocal microscopes, STELLARIS. In addition to improved detection sensitivity and resolution, the new product also provides a fluorescence lifetime technology that can be easily used by anyone, which has been used only for specific applications. In this seminar, we will discuss “What is fluorescence lifetime?” and “What can you do with that?” The following are some of the technologies that STELLARIS can help you with in life science imaging.



Tue., March 22, 12:30–13:30 Room Z



**PCP Luncheon Seminar**  
**“The changing landscape of peer-review”**

Language: English

Peer-review is an essential component of science publishing, as it scrutinizes manuscripts for scientific accuracy and bias, and authors largely agree that the process generally improves the final published work. Reviewers are thus the unsung heroes of this process, as they offer their voluntary time and expertise to the scientific community. In this luncheon seminar, we discuss the changing landscape of peer-review and highlight the changes that PCP has incorporated to also support early career scientists in this process. In addition, we will discuss best practice tips for all reviewers.

**Speaker:** Wataru Sakamoto, Editor-in-Chief

**Symposium outline:**

1. Introduction - updates and new developments at PCP
2. The changing landscape of peer-review
3. Peer-review at PCP
4. Q & A - the audience will be given the opportunity to ask questions to the PCP Editors and editorial staff at the end of the seminar

Wed., March 23, 12:00–13:00 Room X

## OLYMPUS CORPORATION Luncheon Seminar

Language: Japanese

### For live imaging and deep Imaging of plant tissues

**Speaker:** Daisuke Kurihara, Ph.D.

Institute of Transformative Bio-Molecules (ITbM), Nagoya University

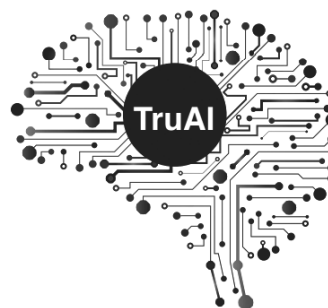
### Introduction of Application-Driven Objectives/TruAI™ Deep-Learning Technology

**Speaker:** Naoki Kozai

OLYMPUS CORPORATION



Silicone Immersion Objectives



TruAI™ Deep-Learning Technology

**Sponsor:** OLYMPUS CORPORATION

# OLYMPUS

Wed., March 23, 12:00–13:00 Room Z

**Seminar on Gender Equality**  
**What is the career path in Tsukuba Science City?**  
**~From the perspective of a female researcher~**

Language: Japanese

**Speaker:** Dr. Asako Matsumoto (Forestry and Forest Products Research Institute, Research Planning Department, Public Relations Division, Director)

Until entering high school, I grew up under the loving care of my parents, learning piano and ballet, and dreaming of becoming a piano teacher. However, I was taught by a wonderful biology teacher in high school and then decided to study agriculture at university and to become a researcher. But, even when I was studying at my local university, I never imagined what research life would be like in Tsukuba Science City. My research career in Tsukuba started as postdoctoral fellow on a research project. Then I got a job as a researcher, and now I'm currently working in a managerial position in the support department. In this seminar, I would like to talk candidly about the ups and downs of my work over the last 20-odd years, thinking about my work environment, work-life balance, and my career path. Finally, I would like to talk about my thoughts on my future career, as well as thinking about how the promotion of gender equality has helped me in my research career so far. Even though today's talk is just one example of a female researcher, I hope you will find some useful insights and ideas from it.



Thu., March 24, 12:00–13:00 Room X

**Illumina K.K. Luncheon Seminar**Language: Japanese**“The personal genomics era in plant”****Dr. Kenta Shirasawa**

(Laboratory of Plant Genetics and Genomics, Kazusa DNA Research Institute)

**Sponsor:** Illumina K.K.

Plant genomics, which began with *Arabidopsis* as a model, has expanded to involve non-model plants, and we are now entering the era of personal genomics, in which genome analysis is performed at the individual plant level. With the great advance in next-generation sequencing technology, it has become easier to obtain genome data of individuals. On the other hand, plant researchers are required not only to learn bioinformatics techniques, but also to have the computational resources to process huge amounts of data. In this talk, I would like to introduce the current status and challenges of personal genomics in plant conducted by our team, in addition to the efforts to get through the era of personal genomics by introducing the DRAGEN system.

Mon., March 21, 13:00–18:40 Room K

## The 24th Plant Organelle Workshop — Frontiers 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 Frontiers in the mechanisms of plant cell evolution	
13:05	Supramolecules linking chemistry and biology in the origin of life Muneyuki Matsuo (Hiroshima University)
13:40	Secretory activity is required for the oil body biogenesis in <i>Marchantia polymorpha</i> Takehiko Kanazawa (National Institute for Basic Biology)
14:15	Molecular basis of the functional gene transfer during photosynthetic eukaryote evolution Takayuki Hata (Kyoto Prefectural University, Setsunan University), Soichirou Satoh (Kyoto Prefectural University), Mitsuhiro Matsuo (Setsunan University), Hisayuki Kudo (Nagoya University), Naoto Takada (Kyoto Prefectural University), Junichi Obokata (Setsunan University)
14:50	Insight into molecular mechanism of RNA editing reaction in plant organelles through structural analysis Mizuki Takenaka (Kyoto University)
15:25	Break
Session 2 Emerging technologies for organelle research	
15:30	Sequence-selective control of mitochondrial DNA using synthetic DNA binders Takuya Hidaka (RIKEN)
16:05	Visualization of physiological responses in plants using a hyperspectral camera Kaori Kohzuma (Tohoku University)
16:40	Structure prediction of the enzyme which removes Mg from chlorophyll Hisashi Ito (Hokkaido University)
17:15	Break
Keynote lecture	
17:30	Elucidating the regulatory machinery of photosynthesis Toru Hisabori (Tokyo Institute of Technology)
18:30	General discussion
18:40	Mixer (Online)*

This workshop is open to any 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](mailto:yoshiki@pmg.bot.kyoto-u.ac.jp)  
Yusuke Kato: [yusuke.kato@setsunan.ac.jp](mailto:yusuke.kato@setsunan.ac.jp)

Mon., March 21, 14:00–18:00 Room J

**Symposium on Phototrophic Prokaryotes**Language: 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	Structural analysis of the type-I reaction center from Heliobacteria Genji Kurisu (Institute for Protein Research, Osaka University)
14:35	Structural diversity of photosynthetic reaction centers from a green sulfur bacterial perspective Chihiro Azai (College of Life Sciences, Ritsumeikan University)
15:05	Diversity of Chlorophylls and Energy Conversion Yousuke Amanuma <sup>1</sup> , Kyoko Matsunaga <sup>1</sup> , Toshiyuki Shinoda <sup>1</sup> , Seiji Akimoto <sup>2</sup> , <u>Tatsuya Tomo</u> <sup>1</sup> ( <sup>1</sup> Tokyo University of Science, <sup>2</sup> Kobe University)
15:35	Coffee break
15:55	Evolution of eukaryotic algae driven by phototoxicity of chlorophylls Yuichiro Kashiyama (Fukui University of Technology)
16:25	Investigation of the in vitro BciC enzymatic reactions approached from chemical modification <u>Mitsuaki Hirose</u> <sup>1</sup> , Jiro Harada <sup>2</sup> , Hitoshi Tamiaki <sup>1</sup> ( <sup>1</sup> Graduate School of Life Sciences, Ritsumeikan University, <sup>2</sup> Medical Biochemistry, Kurume University School of Medicine)
16:55	Light utilization strategies among diverse rhodopsin-possessing microbes Yu Nakajima (JAMSTEC)
17:25	Discussion
18:00	Get together

Entry Form: <https://forms.gle/BcVsck5eN5r3vJTH6>

The day before the meeting, PM

Satellite Meeting

Mon, March 21, 18:30–20:00 Room L

## The 39th Meeting of the Japanese Society for Young Plant Physiologists

Language: Japanese

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

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18:30–18:40	Opening remarks by Organizers
18:40–19:20	My greedy wish list to academia Dr. Kanako Bessho-Uehara (Graduate School of Life Sciences, Tohoku University)
19:20–20:00	It's a small world Dr. Hirofumi Nakagami (Max-Planck Institute for Plant Breeding Research)

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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 14: <https://forms.gle/8tm73Vfkt2Vuq2bQ8>

Contact addresses: Rumi Amano: [rumi.amano@kpu.ac.jp](mailto:rumi.amano@kpu.ac.jp)  
Tatsuya Nobori: [tnobori@salk.edu](mailto: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.
- 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, Tue., March 22, AM (9:30–12:15)

Time	Room A	Room B	Room C	Room D
	Photosynthesis	Plant-organism interaction B	Membrane trafficking	Primary metabolism
09:30	<p>1aA01 Molecular function of the PIFI protein involved in redox regulation of photosynthesis <u>Minami Murai</u><sup>1</sup>, Keisuke Yoshida<sup>2</sup>, Yufen Che<sup>3</sup>, Noriko Ishikawa<sup>4</sup>, Toru Hisabori<sup>2</sup>, Kentaro Ifuku<sup>1,4</sup> (1Fac. Agri., Kyoto Univ., 2Lab. Chem. Life Sci., Tokyo Tech., 3Grad. Sch. Biostudies, Kyoto Univ., 4Grad. Sch. Agri., Kyoto Univ.)</p>	<p>1aB01 Elucidation of the switching mechanism of chitin-triggered immunity and AM symbiosis in rice <u>Kana Miyata</u>, Moe Hosotani, Taisei Sugiyama, Yuto Takahashi, Hanae Kaku (Dept. Life Sciences, Sch. Agriculture, Meiji Univ.)</p>	<p>1aC01 A possible cargo receptor complex consists of KNS3 and its two homologs is required for ER exit of boric acid channels in Arabidopsis <u>Zhe Zhang</u><sup>1</sup>, Arisa Yamasaki<sup>1</sup>, Shunsuke Nakamura<sup>2</sup>, Shunsuke Takemura<sup>3</sup>, Sumie Ishiguro<sup>3</sup>, Junpei Takano<sup>1</sup> (1Grad. Sch. Life Env., Osaka Prefecture. Univ., 2Grad. Sch. Agr., Hokkaido Univ., 3Grad. Sch. Agr., Nagoya Univ.)</p>	<p>1aD01 <b>E</b> Important roles of PGDH-mediated serine synthesis in thallus growth, male gametogenesis and metabolism in <i>Marchantia polymorpha</i> <u>Mengyao Wang</u><sup>1,2</sup>, Hiromitsu Tabeta<sup>1,3,5</sup>, Kinuka Ohtaka<sup>1,2,6</sup>, Ayuko Kuwahara<sup>1</sup>, Kiminori Toyooka<sup>1</sup>, Mayuko Sato<sup>1</sup>, Mayumi Wakazaki<sup>1</sup>, Hiromichi Akashi<sup>1</sup>, Takayuki Kohchi<sup>4</sup>, Ryuichi Nishihama<sup>4,8</sup>, Keisuke Yoshida<sup>7</sup>, Ali Ferjani<sup>5</sup>, Masami Yokota Hirai<sup>1,2</sup> (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, 7Laboratory for Chemistry and Life Science, Institute of Innovative Research, Tokyo Institute of Technology, 8Department of Applied Biological Science, Faculty of Science and Technology, Tokyo University of Science)</p>
09:45	<p>1aA02 Enhancement of Oxygen-Evolving Activity of Photosystem II by a Mutation in the Loop 4 Region of PsbP <u>Ko Imaizumi</u><sup>1</sup>, Taishi Nishimura<sup>1</sup>, Ryo Nagao<sup>2,3</sup>, Keisuke Saito<sup>4,5</sup>, Takeshi Nakano<sup>1</sup>, Hiroshi Ishikita<sup>4,5</sup>, Takumi Noguchi<sup>2</sup>, Kentaro Ifuku<sup>6</sup> (1Grad. Sch. Biostudies, Kyoto Univ., 2Grad. Sch. Sci., Nagoya Univ., 3RIIS, Okayama Univ., 4RCAS, Univ. Tokyo, 5Dept. Appl. Chem., Univ. Tokyo, 6Grad. Sch. Agri., Kyoto Univ.)</p>	<p>1aB02 <b>E</b> Identification of a prehaustoria suppressor in the root parasitic plant <i>Phtheirospermum japonicum</i> <u>Lei Xiang</u>, Songkui Cui, Satoko Yoshida (Plant Sym., Div. Bio. Sci., NAIST)</p>	<p>1aC02 Analysis of PICALM members in Arabidopsis pollen <u>Kazuo Ebine</u><sup>1,2</sup>, Masaru Fujimoto<sup>3</sup>, Keita Muro<sup>4</sup>, Hidenori Takeuchi<sup>5,6</sup>, Tetsuya Higashiyama<sup>5,7</sup>, Takashi Ueda<sup>1,2</sup> (1Div. Cellular Dynamics, NIBB, 2Sch. Life Sci., SOKENDAI, 3Grad. Sch. Agri. and Life Sci., The Univ. Tokyo, 4Grad. Sch. Life and Environmental Sci., The Univ. Tokyo, 5ITBM, Nagoya Univ., 6Inst. Adv. Res., Nagoya Univ., 7Grad. Sch. Sci., The Univ. Tokyo)</p>	<p>1aD02 <b>E</b> Involvement of Chloroplastic Sec14-like Protein in the Regulation of Phosphorus Acquisition and Use <u>Mailun Yang</u><sup>1</sup>, Yasuhito Sakuraba<sup>1</sup>, Toshiki Ishikawa<sup>2</sup>, Namie Ohtsuki<sup>1</sup>, Maki Kawai-Yamada<sup>2</sup>, Shuichi Yanagisawa<sup>1</sup> (1Grad. Sch. Agr. Life Sci., Univ. Tokyo, 2Grad. Sch. Sci. Eng., Saitama Univ.)</p>
10:00	<p>1aA03 Modification of the Clear-Native PAGE system for improved stability of photosynthetic protein supercomplexes during electrophoresis <u>Shinsa Kameo</u>, Renon Matsumae, Ryouchi Tanaka, Atsushi Takabayashi (ILTS, Hokkaido Univ.)</p>	<p>1aB03 Identification of the secondary cell wall-inducing effectors from a gall-inducing aphid, <i>Schlechtendalia chinensis</i>. <u>Takumi Nakayama</u><sup>1</sup>, Issei Ohshima<sup>1</sup>, Seisuke Kimura<sup>2</sup>, Takakazu Matsuura<sup>3</sup>, Yoko Ikeda<sup>3</sup>, Seiji Takeda<sup>1</sup>, Tomoko Hirano<sup>1</sup>, Masa H. Sato<sup>1</sup> (1Graduate School of Life and Environmental Sciences, Kyoto Prefectural University, 2Faculty of Integrated Life Sciences, Kyoto Industry University, 3Institute of Plant Science and Resources, Okayama University)</p>	<p>1aC03 Analysis of RABH1 GTPase in <i>Arabidopsis thaliana</i> <u>Chihiro Ohori</u><sup>1</sup>, Yoko Ito<sup>2</sup>, Emi Ito<sup>2</sup>, Akihiko Nakano<sup>3</sup>, Takashi Ueda<sup>4,5</sup>, Tomohiro Uemura<sup>1</sup> (1Graduate School of Humanities and Sciences, Ochanomizu Univ., 2Institute for Human Life Innovation, Ochanomizu Univ., 3Live Cell Super-Resolution Imaging Research Team, RIKEN Center for Advanced Photonics, 4Division of Cellular Dynamics, National Institute for Basic Biology, 5The Department of Basic Biology, SOKENDAI)</p>	<p>1aD03 SNARE protein SYP61 and ubiquitin ligase ATL31 cooperatively regulate carbon/nitrogen-nutrient responses in Arabidopsis <u>Yoko Hasegawa</u><sup>1</sup>, Thais Huaranca Reyes<sup>1,2</sup>, Tomohiro Uemura<sup>3</sup>, Anirban Baral<sup>4</sup>, Yongming Luo<sup>1</sup>, Shugo Maekawa<sup>1,5</sup>, Shigetaka Yasuda<sup>1,6</sup>, Yoichiro Fukao<sup>7</sup>, Akihiko Nakano<sup>8</sup>, Junpei Takagi<sup>1</sup>, Rishikesh P. Bhalerao<sup>1</sup>, Junji Yamaguchi<sup>1</sup>, Takeo Sato<sup>1</sup> (1Fac. Sci. and Grad. Sch. Life Sci., Hokkaido Univ., 2Dept. Agri., Food and Environment, Univ. Pisa, 3Grad. Sch. Humanities and Sciences, Ochanomizu Univ., 4Forest Genetics and Plant Physiol., Swedish University of Agricultural Sciences, 5Dept. Life Sci., Col. Sci. Rikkyo Univ., 6Grad. Sch. Sci. Tech., NAIST, 7Grad. Sch. Life Sci., Ritsumeikan Univ., 8Live Cell Super-Resolution Imaging Research Team, RIKEN Center for Advanced Photonics)</p>
10:15	<p>1aA04 Lack of PGR5 suppresses the growth defects of <i>ntrc</i> mutant by changing electron distribution from ferredoxin <u>Yuki Okegawa</u><sup>1</sup>, Ken Motohashi<sup>2</sup>, Wataru Sakamoto<sup>1</sup> (1Inst. Plant Sci. Univ. Okayama, 2Fac. Life. Sci., Univ. Kyoto Sangyo)</p>	<p>1aB04 The gall-inducing CAP peptide is produced by the insect Cysteine Protease <u>Megumi Matsuzawa</u><sup>1</sup>, Tomoko Hirano<sup>1</sup>, Issei Ohshima<sup>1</sup>, Seisuke Kimura<sup>2</sup>, Naohiro Tomari<sup>3</sup>, Masa H. Sato<sup>1</sup> (1Grad. Sch. Life Environ. Sci., Kyoto Pref. Univ., 2Grad. Sch. Life Sci., Kyoto Sangyo Univ., 3Kyoto Municipal Industrial Research Institute)</p>	<p>1aC04 <b>E</b> Secreted AGP from Salt-Adapted Tobacco BY-2 Cells is GPI-Anchored and Associated with Lipophilic Moieties <u>Arinze Boniface Nweke</u><sup>1</sup>, Daiki Nagasato<sup>1</sup>, Ken Matsuoka<sup>1,2</sup> (1Department of Bioscience and Biotechnology, Graduate School of Bioresource and Bioenvironmental Sciences, Kyushu University, 2Department of Bioscience and Biotechnology, Faculty of Agriculture, Kyushu University)</p>	<p>1aD04 Analysis of physiological effects of Entner-Doudoroff pathway in cyanobacteria <u>Tatsumi Imada</u>, Yoshihiro Toya, Hiroshi Shimizu (Grad. Info. Sci. Tech., Univ. Osaka)</p>

Room E	Room F	Room G	Room H	Room Y	Room Z	Time
Reproductive growth	Photoreceptors/ Photoresponses	Environmental responses B	Transcriptional, post-transcriptional or translational, post-translational regulations			
<p><b>1aE01</b> A novel extracellular structure of egg cell regulates the process of double fertilization <b>Daichi Susaki</b><sup>1</sup>, Takao Oi<sup>2</sup>, Hidenori Takeuchi<sup>3,4</sup>, Shiori Nagahara<sup>3</sup>, Sakiko Enomoto<sup>5</sup>, Shigeo Arai<sup>5</sup>, Tetsu Kinoshita<sup>1</sup>, Daisuke Maruyama<sup>1</sup> (<sup>1</sup>KIBR, Yokohama City Univ., <sup>2</sup>Grad. Sch. of Bioagri. Sci., Nagoya Univ., <sup>3</sup>WPI-ITbM, Nagoya Univ., <sup>4</sup>Inst. for Adv. Res., Nagoya Univ., <sup>5</sup>MaSS, Nagoya Univ.)</p>	<p><b>1aF01</b> <b>E</b> Functional Characterization of Tomato <i>Phytochromes A</i> and <i>B1B2</i> Mutants in Response to Heat Stress <b>Islam Abdellatif</b><sup>1</sup>, Shaoze Yuan<sup>1</sup>, Renhu Na<sup>1</sup>, Shizue Yoshihara<sup>2</sup>, Haruyasu Hamada<sup>3</sup>, Takuya Suzuki<sup>1,4</sup>, Hiroshi Ezura<sup>1,4</sup>, Kenji Miura<sup>1,4</sup> (<sup>1</sup>Grad. Sch. Life and Environment Sci., Univ. Tsukuba, <sup>2</sup>Depart. Biol Sci., Univ. Osaka Prefecture, <sup>3</sup>Pharma and Supplemental Nutrition Solutions Vehicle, Kaneka Corporation, <sup>4</sup>Tsukuba-Plant Innovation Research Center, Univ. Tsukuba)</p>	<p><b>1aG01</b> Characterization and visualization of isoform selectivity of histone deacetylase inhibitors against HDACs in <i>Arabidopsis</i> <b>Minoru Ueda</b><sup>1,2</sup>, Norio Kudo<sup>3</sup>, Akihiro Matsui<sup>1,2</sup>, Akiko Nakata<sup>4</sup>, Maho Tanaka<sup>1,2</sup>, Satoshi Takahashi<sup>1,2</sup>, Junko Ishida<sup>1,2</sup>, Taku Sasaki<sup>1,5</sup>, Minoru Yoshida<sup>3,4,6</sup>, Motoaki Seki<sup>1,2,7</sup> (<sup>1</sup>Plant Genomic Network Research Team, RIKEN CSRS, <sup>2</sup>Plant Epigenome Regulation Lab., RIKEN CPR, <sup>3</sup>Chemical Genomics Research Group, RIKEN CSRS, <sup>4</sup>Drug Discovery Seed Compounds Exploratory Unit, RIKEN CSRS, <sup>5</sup>Grad. Sch. Sci., Univ. Tokyo, <sup>6</sup>Grad. Sch. Agr. Life Sci., Univ. Tokyo, <sup>7</sup>KIBR, Yokohama City Univ.)</p>	<p><b>1aH01</b> Analysis of splicing of AT-AC-type introns in <i>Arabidopsis</i> <b>Takamasa Suzuki</b>, Tomoko Niwa, Gaiki Ono, Shogo Sasaki, Yoshiaki Shiotani (Col. Biosci. Biotech., Chubu Univ.)</p>	Symposium S01	Symposium S02	09:30
<p><b>1aE02</b> Functional analysis of pistil SPR11 protein involved in the heterospecific pollen rejection in Brassicaceae <b>Yoshinobu Kato</b><sup>1,2</sup>, Shota Ishida<sup>1,3</sup>, Yuka Kimura<sup>1</sup>, Shun Tadokoro<sup>1</sup>, Seiji Takayama<sup>1</sup>, <b>Sota Fujii</b><sup>1,4</sup> (<sup>1</sup>Grad Sch Agric Lif Sci, The University of Tokyo, <sup>2</sup>JST PRESTO, <sup>3</sup>Institute of Livestock and Grassland Science, <sup>4</sup>Suntory SunRISE)</p>	<p><b>1aF02</b> Analysis of the green/red photoconversion mechanism of the photosensor RcaE controlling complementary chromatic acclimation <b>Takanari Kamo</b>, Toshihiko Eki, Yuu Hirose (Toyouhshi Univ. of Tech.)</p>	<p><b>1aG02</b> Functional Analysis of <i>Acquired Osmotolerant 19 (aot19)</i> Mutant of <i>Arabidopsis</i> <b>Kento Mori</b><sup>1</sup>, Masashi Tamura<sup>1</sup>, Keisuke Tanaka<sup>2</sup>, Izumi Yotsui<sup>1</sup>, Yoichi Sakata<sup>1</sup>, Teruaki Tajiri<sup>1</sup> (<sup>1</sup>Dept. Bioscience, Tokyo Univ. of Agriculture, <sup>2</sup>NODAI Genome Research Center)</p>	<p><b>1aH02</b> Identification of <i>Chlamydomonas</i> miRNA target genes by HITS-CLIP <b>Tomohito Yamasaki</b><sup>1</sup>, Hiroki Takahashi<sup>2</sup> (<sup>1</sup>Sci. and Tech., Kochi Univ., <sup>2</sup>MMRC, Chiba Univ.)</p>			09:45
<p><b>1aE03</b> Cuticles work as an interspecies reproductive barrier in Brassicaceae <b>Yoshinobu Kato</b><sup>1,2</sup>, Yuka Kimura<sup>1</sup>, Seiji Takayama<sup>1</sup>, Sota Fujii<sup>1,3</sup> (<sup>1</sup>Grad. Sch. Agric. Life Sci., Univ. Tokyo, <sup>2</sup>JST-PRESTO, <sup>3</sup>Suntory-SunRISE)</p>	<p><b>1aF03</b> Regulation of ethylene production by phytochrome under the shade <b>Toshiaki Kozuka</b><sup>1</sup>, Shougo Sakamoto<sup>1</sup>, Tomoyo Fukuda<sup>1</sup>, Hiroshi Yamatan<sup>2</sup>, Makoto Kusaba<sup>1</sup> (<sup>1</sup>Grad. Sch. Integr. Sci., Hiroshima Univ., <sup>2</sup>Inst. Crop Sci., NARO)</p>	<p><b>1aG03</b> Genetic analyses of <i>acquired osmotolerance-defective 10 (aod10)</i> mutant isolated from an osmotolerant <i>Arabidopsis thaliana</i> accession <b>Yako Takahashi</b><sup>1</sup>, Hirotaka Ariga<sup>2</sup>, Keisuke Tanaka<sup>3</sup>, Izumi Yotsui<sup>1</sup>, Yoichi Sakata<sup>1</sup>, Teruaki Tajiri<sup>1</sup> (<sup>1</sup>Dept. of Bioscience, Tokyo Univ. of Agriculture, <sup>2</sup>Div. of plant Sci., NARO, <sup>3</sup>NODAI Genome center)</p>	<p><b>1aH03</b> Acceleration of leaf senescence in the mutants of <i>Arabidopsis</i> deadenylases, AtCCR4a/b <b>Taku Tokunaka</b><sup>1</sup>, Yuya Suzuki<sup>1</sup>, Yukako Chiba<sup>1,2</sup> (<sup>1</sup>Grad. Sch. Life Sci., Hokkaido Univ., <sup>2</sup>Fac. Sci. Hokkaido Univ.)</p>			10:00
<p><b>1aE04</b> <b>E</b> Meiosis specific glucan synthase regulates proper timing of meiosis initiation and progression in rice anthers <b>Harsha Somashekar</b><sup>1,2</sup>, Manaki Mimura<sup>1</sup>, Katsutoshi Tsuda<sup>1,2</sup>, Ken-Ichi Nonomura<sup>1,2</sup> (<sup>1</sup>Plant Cytogenetics Laboratory, Department of Gene Function and, Phenomics, National Institute of Genetics, Mishima, Shizuoka 411-8540, Japan, <sup>2</sup>Department of Genetics, School of Life Science, The Graduate University of Advanced Studies (SOKENDAI), Mishima, Shizuoka 411-8540, Japan)</p>	<p><b>1aF04</b> Suppression of the shade avoidance response by the N-PAS domain of phyA <b>Kanako Shinohara</b>, Nobuyoshi Mochizuki, Tomomi Suzuki, Akira Nagatani (Grad. Sch. Sci., Univ. Kyoto)</p>	<p><b>1aG04</b> <i>CATION CALCIUM EXCHANGER4</i> promotes osmotolerance in <i>Arabidopsis thaliana</i> <b>Kazuki Kanamori</b><sup>1</sup>, Kohji Nishimura<sup>2</sup>, Hirotaka Ariga<sup>3</sup>, Masa H. Sato<sup>4</sup>, Keisuke Tanaka<sup>5</sup>, Izumi Yotsui<sup>1</sup>, Yoichi Sakata<sup>1</sup>, Teruaki Tajiri<sup>1</sup> (<sup>1</sup>Dept. of Bioscience, Tokyo Univ. of Agriculture, <sup>2</sup>Dept. of Life Science, Shimane Univ., <sup>3</sup>Div. of plant Sci., NARO, <sup>4</sup>Dept. of Life and Environmental Science, Kyoto Prefectural Univ., <sup>5</sup>NODAI Genome center)</p>	<p><b>1aH04</b> <i>AtCFI 25</i> is essential for proper 3'UTR length determination of mRNA <b>Xiaojuan Zhang</b><sup>1</sup>, Mika Nomoto<sup>2,3</sup>, Marta Garcia-León<sup>4</sup>, Naoki Takahashi<sup>5</sup>, Mariko Kato<sup>1</sup>, Kei Yura<sup>6,7,8</sup>, Masaaki Umeda<sup>4</sup>, Vicente Rubio<sup>4</sup>, Yasuomi Tada<sup>2,3</sup>, Tsuyoshi Furumoto<sup>9</sup>, Takashi Aoyama<sup>1</sup>, <b>Tomohiko Tsuge</b><sup>1</sup> (<sup>1</sup>ICR, Kyoto Univ., <sup>2</sup>Cen. Gene Res., Nagoya Univ., <sup>3</sup>Grad. Sch. Sci., Nagoya Univ., <sup>4</sup>Centro Nacional de Biotecnología, CSIC, <sup>5</sup>Grad. Sch. Sci. Tech., NAIST, <sup>6</sup>Sch. Adv. Sci. Eng., Waseda Univ., <sup>7</sup>Grad. Sch. Hum. Sci., Ochanomizu Univ., <sup>8</sup>Cen. Inter. AI Data Sci., Ochanomizu Univ., <sup>9</sup>Grad. Sch. Agr., Ryukoku Univ.)</p>			10:15

**E**=Presentation in English

● Day 1, Tue., March 22, AM (9:30–12:15)

Time	Room A	Room B	Room C	Room D
	Photosynthesis	Plant-organism interaction B	Membrane trafficking	Primary metabolism
10:30	1aA05 P700 Oxidation Prevents the Electron Accumulation at the Acceptor Side of Photosystem I to Suppress the ROS Production <u>Riu Furutani</u> <sup>1,2</sup> , <u>Shinya Wada</u> <sup>1,2</sup> , <u>Chikahiro Miyake</u> <sup>1,2</sup> (1Grad. Sch. Agri., Kobe Univ., 2JST CREST)	1aB05 Nutrition- and symbiosis regulator-dependent dynamics of root-associated microbiomes in rice <u>Asahi Adachi</u> <sup>1</sup> , <u>Sumire Kirita</u> <sup>1</sup> , <u>Masako Fuji</u> <sup>1</sup> , <u>Yuniar Devi Utami</u> <sup>1</sup> , <u>Shunsuke Imai</u> <sup>1</sup> , <u>Takumi Murakami</u> <sup>2</sup> , <u>Yuichi Hongoh</u> <sup>3</sup> , <u>Shigehiko Kanaya</u> <sup>1</sup> , <u>Yusuke Saijo</u> <sup>1</sup> (1Grad. Sch. Sci. Tech., NAIST, 2NIG, 3Sch. Life Sci. Tech., Tokyo Tech.)	1aC05 Secretory activity is required for normal formation of the oil body in <i>Marchantia polymorpha</i> <u>Takehiko Kanazawa</u> <sup>1,2</sup> , <u>Takashi Ueda</u> <sup>1,2</sup> (1Div. Cellular Dynamics, NIBB, 2SOKENDAI)	1aD05 Analysis of Photosynthesis-dependent Nitrate Uptake via Activation of Plasma Membrane H <sup>+</sup> -ATPase in Arabidopsis Leaves <u>Satoru Kinoshita</u> <sup>1</sup> , <u>Takamasa Suzuki</u> <sup>2</sup> , <u>Takatashi Kiba</u> <sup>3</sup> , <u>Hitoshi Sakakibara</u> <sup>3</sup> , <u>Toshinori Kinoshita</u> <sup>1,4</sup> (1Grad. Sch. of Science, Nagoya Univ., 2College of Bioscience and Biotechnology, Chubu Univ., 3Grad. Sch. of Bioagricultural Sciences, Nagoya Univ., 4WPI-ITbM, Nagoya Univ.)
10:45	1aA06 Analysis of P700 Oxidation Regulation in Arabidopsis <i>glu1/gln2</i> Mutants <u>Shinya Wada</u> <sup>1</sup> , <u>Takanori Maruta</u> <sup>2</sup> , <u>Chikahiro Miyake</u> <sup>1</sup> (1Grad. Sch. Agri. Sci., Kobe-Univ., 2Fac. Life Environ. Sci., Shimane Univ.)	1aB06 Growth and metabolome analyses of shoots in <i>Lotus japonicus</i> overnodulation mutants <u>Kensuke Kawade</u> <sup>1,2,3</sup> , <u>Daisuke Sugiura</u> <sup>4</sup> , <u>Akira Oikawa</u> <sup>3,5</sup> , <u>Masayoshi Kawaguchi</u> <sup>1,2</sup> (1NIBB, 2Sch. Life Sci., SOKENDAI, 3RIKEN CSRS, 4Grad. Sch. Bioagr. Sci., Nagoya Univ., 5Grad. Sch. Agr., Kyoto Univ.)	1aC06 SYP123-VAMP727 is involved in the secretion of the inner cell wall components to the root hair shank in Arabidopsis <u>Masa H. Sato</u> <sup>1</sup> , <u>Kazuo Ebine</u> <sup>2</sup> , <u>Takashi Ueda</u> <sup>2</sup> , <u>Takumi Higaki</u> <sup>3</sup> , <u>Hiroki Konno</u> <sup>4</sup> , <u>Takahiro Nakayama</u> <sup>4</sup> , <u>Tomoko Hirao</u> <sup>1</sup> (1Grad. Sch. Life and Environ. Kyoto Pref. Uni., 2Div. Cell Dynamics, NIBB, 3Grad. Sch. of Sci. Tech. Kumamoto Uni., 4Nano Life Sci. Inst., Kanazawa Uni.)	1aD06 Coexpression of Multiple Isoforms of Starch Synthase and Branching Enzyme of Rice in <i>Synechococcus</i> PCC 7942 <u>Eiji Suzuki</u> , <u>Hitoshi Yoshimura</u> , <u>Yuto Ishii</u> , <u>Ryuichiro Suzuki</u> (Faculty of Bioresour. Sci, Akita Pref Univ)
11:00	1aA07 [Cancelled]	1aB07 Optimization of rhizobial infection regulated by phosphatidylinositol transport protein <u>Akira Akamatsu</u> , <u>Naoya Takeda</u> (Biological and Environmental Sciences., Kwansai Gakuin University)	1aC07  Deubiquitinating enzymes limit the degradation of brassinosteroid receptor BRI1 in <i>Arabidopsis</i> <u>Yongming Luo</u> <sup>1</sup> , <u>Junpei Takagi</u> <sup>2</sup> , <u>Lucas A.N. Claus</u> <sup>3,4</sup> , <u>Chao Zhang</u> <sup>5</sup> , <u>Shigetaka Yasuda</u> <sup>1</sup> , <u>Yoko Hasegawa</u> <sup>1</sup> , <u>Junji Yamaguchi</u> <sup>2</sup> , <u>Libo Shan</u> <sup>6</sup> , <u>Eugenia Russinova</u> <sup>3,4</sup> , <u>Takeo Sato</u> <sup>2</sup> (1Grad. Sch. Sci., Hokkaido Univ., 2Fac. Sci., Hokkaido Univ., 3Department of Plant Biotechnology and Bioinformatics, Ghent Univ., Belgium, 4Center for Plant Systems Biology, VIB, Belgium, 5Department of Plant Pathology & Microbiology, Texas A&M Univ., USA, 6Department of Biochemistry & Biophysics, Texas A&M Univ., USA)	1aD07 A quantitative characterization of metabolic dynamics during photosynthesis start in cyanobacteria <u>Kenya Tanaka</u> <sup>1,2</sup> , <u>Mami Matsuda</u> <sup>3</sup> , <u>Tomokazu Shirai</u> <sup>4</sup> , <u>Tomohisa Hasunuma</u> <sup>1,3</sup> (1EGBRC, Kobe Univ., 2Grad. Sch. Eng. Sci. RCSEC, Osaka Univ., 3Grad. Sch. Sci. Technol. Innov., Kobe Univ., 4CSRS, Riken)
11:15	1aA08  Does the CrPTOX2-dependent safety valve complement the defects in cyclic electron transport in Arabidopsis? <u>Qi Zhou</u> <sup>1</sup> , <u>Caijuan Wang</u> <sup>2</sup> , <u>Hiroshi Yamamoto</u> <sup>1</sup> , <u>Toshiharu Shikanai</u> <sup>1</sup> (1Department of Botany, Graduate School of Science, Kyoto University, 2Guangdong Key Lab of Biotechnology for Plant Development, School of Life Sciences, South China Normal University)			1aD08 The function of high-affinity urea transporters in nitrogen-deficient conditions <u>Soichi Kojima</u> <sup>1</sup> , <u>Marcel Pascal Beier</u> <sup>1,2</sup> (1Grad. Sch. Agr., Tohoku Univ., 2Fac. Sci., Hokkaido Univ.)
11:30	1aA09 Reversible Dissociation of FMO Proteins on the Photosynthetic Reaction Center of Green Sulfur Bacteria <u>Tomomi Inagaki</u> , <u>Kazuki Terauchi</u> , <u>Chihiro Azai</u> (Grad. Sch. Life Sci., Univ. Ritsumeikan)			1aD09 A vacuolar glutamine efflux transporter in rice <u>Toshihiko Hayakawa</u> <sup>1</sup> , <u>Saori Ogasawara</u> <sup>1</sup> , <u>Masataka Ezaki</u> <sup>1</sup> , <u>Kuni Sueyoshi</u> <sup>2</sup> , <u>Shunya Saito</u> <sup>3</sup> , <u>Toru Kudo</u> <sup>4</sup> , <u>Soichi Kojima</u> <sup>1</sup> , <u>Nobuyuki Uozumi</u> <sup>3</sup> (1Grad. Sch. Agri. Sci., Tohoku Univ., 2Fac. Agri., Niigata Univ., 3Grad. Sch. Eng., Tohoku Univ., 4Ac-Planta Inc.)



Room E	Room F	Room G	Room H	Room Y	Room Z	Time
Reproductive growth	Photoreceptors/ Photoresponses	Environmental responses B	Transcriptional, post-transcriptional or translational, post-translational regulations			
<p>1aE05 Arabidopsis pollen tube has the directional growth capability even when the nuclei are eliminated from the apex <u>Kazuki Motomura</u><sup>1,2,3</sup>, Naoya Sugi<sup>4</sup>, Ayumi Matsumoto<sup>1</sup>, Hidenori Takeuchi<sup>3,5</sup>, Michitaka Notaguchi<sup>3,6</sup>, Tetsuya Higashiyama<sup>3,7,8</sup>, Tetsu Kinoshita<sup>4</sup>, Shohei Yamaoka<sup>9</sup>, Atsushi Takeda<sup>10</sup>, Daisuke Maruyama<sup>4</sup> (Res. Org. Sci. and Tech., Ritsumeikan Univ., <sup>2</sup>JST PRESTO, <sup>3</sup>WPI-ITbM, Nagoya Univ., <sup>4</sup>Kihara Inst. Biol. Res., Yokohama City Univ., <sup>5</sup>Inst. Adv. Res., Nagoya Univ., <sup>6</sup>Biosci. and Biotech. Ctr., Nagoya Univ., <sup>7</sup>Div. of Biol. Sci., Grad. Sch. Sci., Nagoya Univ., <sup>8</sup>Dept. of Biol. Sci., Grad. Sch. Sci., The Univ. Tokyo, <sup>9</sup>Grad. Sch. Biostudies, Kyoto Univ., <sup>10</sup>Col. of Life Sci., Ritsumeikan Univ.)</p> <p>1aE06 Analysis of novel abrupt movement to abiotic stimuli based on semi-dry pollen tube growth system Naoya Sugi, Tetsu Kinoshita, Daisuke Maruyama (Kihara Inst. Biol. Res., Yokohama City Univ.)</p> <p>1aE07 <b>E</b> Functional analysis of the endosperm genes expressed in an embryonic development-dependent manner in Arabidopsis <u>Yilin Zhang</u><sup>1</sup>, Daisuke Maruyama<sup>2</sup>, Erika Toda<sup>3,4</sup>, Takashi Okamoto<sup>5</sup>, Nobutaka Mitsuda<sup>5</sup>, Hironori Takasaki<sup>1</sup>, Masaru Ohme-Takagi<sup>1,6</sup> (Grad. Sch. Sci. Eng., Univ. Saitama, <sup>2</sup>KIBR., City Univ. Yokohama, <sup>3</sup>Dept. Biol. Sci., Metro. Univ. Tokyo, <sup>4</sup>Dept. Biol. Sci., Univ. Tokyo, <sup>5</sup>Bioprod. Res. Inst., AIST, <sup>6</sup>Institute of Tropical Plant Science and Microbiology, NCKU)</p> <p>1aE08 [Cancelled]</p> <p>1aE09 Mutational analysis of functional domains of Arabidopsis GEX1 required for nuclear membrane fusion <u>Ibu Kato</u>, Osamu Miyazono, Shuh-ichi Nishikawa (Fac. Sci. Niigata Univ.)</p>	<p>1aF05 The analysis of blue light responses and phototropins in <i>Zostera marina</i> <u>Naoya Miura</u>, Hajime Shiota (Grad. Sch. Nanobioscience., Yokohama City Univ.)</p> <p>1aF06 The ER membrane-bending protein RETICULON facilitates chloroplast relocation movement in <i>Marchantia polymorpha</i> <u>Kazuya Ishikawa</u><sup>1</sup>, Ryota Konno<sup>1</sup>, Yuta Fujii<sup>1</sup>, Masayuki Fujiwara<sup>2</sup>, Yoichiro Fukao<sup>3</sup>, Yutaka Kodama<sup>1</sup> (Ctr. Biosci. Res. Educ., Utsunomiya Univ., <sup>2</sup>Yanmar Holdings Co., Ltd., <sup>3</sup>Grad. Sch. Life Sci., Ritsumeikan Univ.)</p> <p>1aF07 Phototropin Dimerization Is Not Essential for Chloroplast Relocation Movement in <i>Marchantia polymorpha</i> <u>Minoru Noguchi</u>, Yutaka Kodama (Ctr. Biosci. Res. Educ., Utsunomiya Univ.)</p>	<p>1aG05 Effect of lack of potassium and sodium transporter <i>HKT2;1</i> on cesium absorption and transport in rice <u>Satomi Kanno</u><sup>1,5,6</sup>, Shigeto Fujimura<sup>2</sup>, Jun Furukawa<sup>4,5</sup>, Junko Takahashi<sup>4,5</sup>, Chenyu Li<sup>5</sup>, Takuro Shinano<sup>2,3</sup>, Nathalie Leonhardt<sup>6</sup> (IAR, Nagoya Univ., <sup>2</sup>Tohoku Agric. Res. Center, NARO, Japan, <sup>3</sup>Res. Fac. of Agric., Hokkaido University, <sup>4</sup>Center for Res. in Isotopes and Environ. Dynamics, <sup>5</sup>Life and Environ. Sci., <sup>6</sup>CEA, France)</p> <p>1aG06 Verification of transport activity of "Mugineic acids derivative - iron complex" in dicotyledons <u>Yoshinori Uchikawa</u><sup>1</sup>, Motofumi Suzuki<sup>2</sup>, Haruhiko Inoue<sup>1,3</sup> (Tokyo University Of science, <sup>2</sup>Aichi Steel Corporation, <sup>3</sup>National Agriculture and Food Research Organization)</p> <p>1aG07 Visualization of <sup>65</sup>Zn behavior and analysis of Zn-transport-related genes in two <i>Lotus japonicus</i> accessions with different Zn accumulation capacity <u>Yusaku Noda</u><sup>1</sup>, Nobuo Suzuki<sup>1</sup>, Yong-Gen Yin<sup>1</sup>, Naoki Kawachi<sup>1</sup>, Jun Furukawa<sup>2</sup> (<sup>1</sup>Takasaki Advanced Radiation., QST, <sup>2</sup>Grad. Sch. Life and Environmental Sci., Univ. Tsukuba)</p> <p>1aG08 <b>E</b> Precious metal recovery from urban mines using a hot spring alga <i>Galdieria sulphuraria</i> <u>Eri Adams</u><sup>1,2</sup>, Kazuki Maeda<sup>1,2</sup>, Tatsuya Kato<sup>2,3</sup>, Chiharu Tokoro<sup>2</sup> (Galdieria, Co., Ltd., <sup>2</sup>Waseda University, <sup>3</sup>Department of Physical Science and Engineering, Nagoya Institute of Technology)</p> <p>1aG09 OsZIP83 transcription factor facilitates rice iron translocation under protein-level regulation of OsHRZ ubiquitin ligases <u>Takanori Kobayashi</u><sup>1</sup>, Haruka Shinkawa<sup>1</sup>, Atsushi J. Nagano<sup>2,3</sup>, Naoko K. Nishizawa<sup>1</sup> (Res. Inst. Biores. Biotech., Ishikawa Pref. Univ., <sup>2</sup>Fac. Agri., Ryukoku Univ., <sup>3</sup>Inst. Adv. Biosci., Keio Univ.)</p>	<p>1aH05 Evolutional Analysis of the Target Genes of microRNA319 <u>Kazutaka Futagami</u>, Masayuki Tsuzuki, Yuichiro Watanabe (Grad. Sch. Arts and Sci., Univ. Tokyo)</p> <p>1aH06 Re-recognition: Modification in the C-terminal region of DICER-LIKE 1 impairs microRNA biogenesis in Arabidopsis <u>Rino Hashimoto</u><sup>1</sup>, Masayuki Tsuzuki<sup>2</sup>, Tetsuya Higashiyama<sup>1,3</sup>, Yuichiro Watanabe<sup>1,2</sup> (Grad. Sch. Sci., Univ. Tokyo, <sup>2</sup>Grad. Sch. Arts Sci., Univ. Tokyo, <sup>3</sup>WPI-ITbM., Nagoya Univ.)</p> <p>1aH07 Effects of T-DNA structures on the induction of plant gene silencing in agroinfiltration <u>Emi Iida</u><sup>1</sup>, Kazunori Kuriyama<sup>1</sup>, Midori Tabara<sup>3</sup>, Atsushi Takeda<sup>2</sup>, Nobuhiro Suzuki<sup>4</sup>, Hiromitsu Moriyama<sup>1</sup>, Toshiyuki Fukuhara<sup>1</sup> (Grad. Sch. Agri., Tokyo Univ. Agri. Tech., <sup>2</sup>Grad. Sch. Life Sci., Ritsumeikan Univ., <sup>3</sup>R-GIRO, Ritsumeikan Univ., <sup>4</sup>Inst. Plant Sci. &amp; Res., Okayama Univ.)</p> <p>1aH08 Study on the relationship between seed coat-specific RNA interference and dicer activity in soybean <u>Riho Yamanashi</u><sup>1</sup>, Kazunori Kuriyama<sup>1</sup>, Midori Tabara<sup>2</sup>, Hiromitsu Moriyama<sup>1</sup>, Toshiyuki Fukuhara<sup>1</sup> (Grad. Sch. Agr., Univ. A&amp;T, <sup>2</sup>R-GIRO, Univ. Ritsumeikan)</p>	Symposium S01	Symposium S02	10:30
				Improvement of genomics and technologies upgrades the value of bioresources (9:30-12:22)	Plant resilience mechanism for irregular environmental fluctuations over time (9:30-12:30)	10:45
						11:00
						11:15
						11:30

**E**=Presentation in English

● Day 1, Tue., March 22, AM (9:30–12:15)

Time	Room A	Room B	Room C	Room D
	Photosynthesis	Plant-organism interaction B	Membrane trafficking	Primary metabolism
11:45				<p>1aD10 An unknown-function protein CmNDB1 negatively regulates CmMYB1-dependent transcription of nitrate assimilation genes under nitrogen-repleted condition in a unicellular red alga <a href="#">Baifeng Zhou</a><sup>1,2</sup>, Hiroki Shima<sup>3</sup>, Kazuhiko Igarashi<sup>3</sup>, Kazuhiro Takaya<sup>4</sup>, Kan Tanaka<sup>2</sup>, Sousuke Imamura<sup>2,4</sup> (<sup>1</sup>School of Life Science and Technology, Tokyo Institute of Technology, <sup>2</sup>Laboratory for Chemistry and Life Science, Institute of Innovative Research, Tokyo Institute of Technology, <sup>3</sup>Department of Biochemistry, Tohoku University Graduate School of Medicine, <sup>4</sup>NTT Space Environment and Energy Laboratories, Nippon Telegraph and Telephone Corporation)</p>
12:00				<p>1aD11 Exploring metabolic responses and key regulators contributing to rice growth under low NH<sub>4</sub><sup>+</sup> concentrations by omics analysis <a href="#">Keisuke Kutsuwada</a><sup>1</sup>, Tomoko Nishizawa<sup>2</sup>, Mikiko Koizumi<sup>2</sup>, Makoto Kobayashi<sup>2</sup>, Takanari Tanabata<sup>3</sup>, Atsushi Fukushima<sup>4</sup>, Kazuki Saito<sup>2</sup>, Miyako Kusano<sup>2,5,6</sup> (<sup>1</sup>Univ of Tsukuba, Agro-bio Res Sci, <sup>2</sup>RIKEN, CSRS, <sup>3</sup>Kazusa DNA Res. Inst, <sup>4</sup>Kyoto Pref Univ, Life and Envi Sci, <sup>5</sup>Univ of Tsukuba, Life and Envi Sci, <sup>6</sup>T-PIRC)</p>



● Day 1, Tue., March 22, PM (13:45–16:15)


Time	Room A	Room B	Room C	Room D
	Photosynthesis	Plant-organism interaction B	Organelles/Cytoskeleton	Primary metabolism
13:45	<p><b>1pA01</b> Structural insights into the interaction mechanism between photosystem II and artificial electron acceptors <u>Shinji Kamada</u><sup>1</sup>, Yoshiki Nakajima<sup>2</sup>, Jian-Ren Shen<sup>2</sup> (<sup>1</sup>Faculty of Science, Okayama University, <sup>2</sup>Research Institute for Interdisciplinary Science and Graduate School of Natural Science and Technology, Okayama University)</p>	<p><b>1pB01</b> Detection of microbiota contributing to the improvement of rice eating quality <u>Hiroyuki Kato</u><sup>1</sup>, Hiroyuki Kanamori<sup>2</sup>, Masahiko Kumagai<sup>3</sup>, Hajime Goto<sup>4</sup>, Haruhiko Inoue<sup>5</sup>, Kiyosumi Hori<sup>1,2</sup> (<sup>1</sup>Grad. Sch. Fro., Univ. Tokyo, <sup>2</sup>NICS, NARO, <sup>3</sup>NAAC., NARO, <sup>4</sup>Yamagata Pref. Agri. Res. Cent., <sup>5</sup>NIAS, NARO)</p>	<p><b>1pC01</b> Dynamic analysis of liquid-liquid phase separated pyrenoid in response to CO<sub>2</sub> concentration changes <u>Tatsuhiko Kotoge</u>, Takashi Yamano, Hideya Fukuzawa (Graduate School of Biostudies, Kyoto University)</p>	<p><b>1pD01</b> The role of OsbZIP11 transcription factor in nitrogen deficiency response in rice <u>Nami Ohtsuki</u><sup>1</sup>, Yoshiaki Ueda<sup>2</sup>, Yasuhiro Sakuraba<sup>1</sup>, Shuichi Yanagisawa<sup>1</sup> (<sup>1</sup>Grad. Sch. Agr. Sci., Univ. Tokyo, <sup>2</sup>JIRCAS)</p>
14:00	<p><b>1pA02</b> Purification, crystallization, and X-ray crystallographic analysis of photosystem II of the thermophilic cyanobacterium <i>Thermosynechococcus vulcanus</i> cultured in the presence of yttrium <u>Hajime Fujii</u>, Yoshiki Nakajima, Jian-Ren Shen (Graduate School of Natural Science and Technology, Okayama University)</p>	<p><b>1pB02</b> Nod factor signaling regulates cell cycle reactivation during nodule development <u>Teruki Sugiyama</u>, Makoto Hayashi (CSRS, RIKEN)</p>	<p><b>1pC02</b> Cajal bodies, membrane-less nuclear structures, are involved in higher temperature response in <i>Arabidopsis</i> <u>Shohei Ohta</u><sup>1</sup>, Takayuki Sakurai<sup>2</sup>, Tomoo Shimada<sup>2</sup>, Kentaro Tamura<sup>1</sup> (<sup>1</sup>Grad. Sch. Sci., Univ. Shizuoka, <sup>2</sup>Grad. Sch. Sci., Kyoto University)</p>	<p><b>1pD02</b> <b>ⓑ</b> The role of Dof1.7 transcription factor in NIGT1-regulated nitrogen deficiency responses in <i>Arabidopsis</i> <u>Mengna Zhuo</u>, Yasuhiro Sakuraba, Shuichi Yanagisawa (Grad. Sch. Agri. Life Sci. Univ. Tokyo)</p>
14:15	<p><b>1pA03</b> Light-dependent kinetics of Photochemical Reflectance Index (PRI), a vegetation index <u>Kaori Kohzuma</u>, Kouki Hikosaka (Grad. Sch. Life Sci. Tohoku Univ.)</p>	<p><b>1pB03</b> <b>ⓐ</b> Attachment to multiple <i>Medicago sativa</i> hosts does not cause increased benefit to facultative root hemiparasite <i>Phtheirospermum japonicum</i> growth <u>Frederica Clarissa Frances</u><sup>1</sup>, Louis John Irving<sup>2</sup> (<sup>1</sup>Grad. Sch. Sci. Tech., Univ. of Tsukuba, <sup>2</sup>Fac. Life Environ. Sci., Univ. of Tsukuba)</p>	<p><b>1pC03</b> Importin alpha 1, 2, 4 function redundantly in stress responses <u>Airi Mori</u><sup>1</sup>, Valerie Gaudin<sup>2</sup>, Kentaro Tamura<sup>1</sup> (<sup>1</sup>Sch. Food and Nutritional Sci., Univ. Shizuoka, <sup>2</sup>IJPB, Inra, France)</p>	<p><b>1pD03</b> The role of LBD proteins in Gln-mediated repression of nitrogen response-related genes <u>Yosuke Torii</u>, Mineko Konishi, Yasuhiro Sakuraba, Shuichi Yanagisawa (Grad. Sch. Agr. Life Sci., Univ. Tokyo)</p>
14:30	<p><b>1pA04</b> Introduction of flavodiiron protein rescues defects in electron transport around PSI due to overproduction of Rubisco activase in rice <u>Mao Suganami</u><sup>1,2</sup>, So Konno<sup>2</sup>, Ryo Maruhashi<sup>2</sup>, Daisuke Takagi<sup>3</sup>, Youshi Tazoe<sup>4</sup>, Shinya Wada<sup>5</sup>, Hiroshi Yamamoto<sup>6</sup>, Toshiharu Shikanai<sup>6</sup>, Hiroyuki Ishida<sup>2</sup>, Yuji Suzuki<sup>7</sup>, Amane Makino<sup>2</sup> (<sup>1</sup>Faculty of Food and Agricultural Sciences, Institute of Fermentation Sciences, Fukushima University, <sup>2</sup>Graduate School of Agricultural Science, Tohoku University, <sup>3</sup>Faculty of Agriculture, Setsunan University, <sup>4</sup>Faculty of Agro-Food Science, Niigata Agro-Food University, <sup>5</sup>Graduate School of Agricultural Science, Kobe University, <sup>6</sup>Department of Botany, Graduate School of Science, Kyoto University, <sup>7</sup>Faculty of Agriculture, Iwate University)</p>	<p><b>1pB04</b> Biocontrol of bacterial wilt disease by beneficial microbes in tomato <u>Eriko Tanaka</u><sup>1,2</sup>, Masayuki Fujiwara<sup>1</sup>, Rikako Makishima<sup>1</sup>, Daisuke Umeki<sup>1</sup>, Yusuke Saijo<sup>2</sup> (<sup>1</sup>Yanmar Holdings Co., Ltd, <sup>2</sup>Nara Institute of Science and Technology)</p>	<p><b>1pC04</b> Exploration of subcellular sites for the biosynthesis and storage of phytosterols <u>Kazuki Isobe</u><sup>1</sup>, Yuri Yonetani<sup>1</sup>, Takashi L. Shimada<sup>2</sup>, Ikuko Hara-Nishimura<sup>3</sup>, Daisaku Ohta<sup>1,4</sup> (<sup>1</sup>Grad. Sch. Life &amp; Environ. Sci., Osaka Pref. Univ., <sup>2</sup>Grad. Sch. Hort., Chiba Univ., <sup>3</sup>Fac. Sci. Eng., Konan Univ., <sup>4</sup>Bioeconomy Research Institute, Research Center for the 21st Century)</p>	<p><b>1pD04</b> Lipids deacylation activated under high-light stress occurs at the <i>sn</i>-1 position in <i>Synechococcus elongatus</i> PCC 7942 <u>Nobuyuki Takatani</u><sup>1</sup>, Yuya Senoo<sup>2</sup>, Kazutaka Ikeda<sup>2</sup>, Makiko Aichi<sup>3</sup>, Hajime Wada<sup>4</sup>, Tatsuo Omata<sup>1</sup> (<sup>1</sup>Grad. Sch. Bioagr. Sci., Nagoya Univ., <sup>2</sup>Dept. Appl. Genomics, Kazusa DNA Res. Inst., <sup>3</sup>Col. of Biosci. and Biotech. Chubu Univ., <sup>4</sup>Grad. Sch. Arts Sci., Univ. Tokyo)</p>
14:45	<p><b>1pA05</b> Roles of galactolipase A1 in the repair of photosystem II <u>Haruhiko Jimbo</u>, Hajime Wada (Grad. Sch. Arts Sci., Univ. Tokyo, Japan)</p>	<p><b>1pB05</b> Involvement of the intracellular membrane trafficking in the interaction of parasitic plant with host plant <u>Risa Nishi</u>, Koh Aoki (Grad. Sch. Life Environ., Osaka Pref. Univ.)</p>	<p><b>1pC05</b> Analysis of the mechanism and regulation of protein transport to peroxisomes using <i>Arabidopsis apem</i> mutants <u>Shoji Mano</u><sup>1,2</sup>, Yasuko Hayashi<sup>3,4</sup>, Kazumi Hikino<sup>1</sup>, Masayoshi Otomo<sup>3</sup>, Masatake Kanai<sup>1</sup>, Mikio Nishimura<sup>5</sup> (<sup>1</sup>Dept. Cell Biol., Natl. Inst. Basic Biol., <sup>2</sup>Dept. Basic Biol., SOKENDAI, <sup>3</sup>Fac. Sci., Niigata Univ., <sup>4</sup>Grad. Sch. Sci. Tech., Niigata Univ., <sup>5</sup>Fac. Sci., Engineer. Konan Univ.)</p>	<p><b>1pD05</b> The Analysis of the function of GPAT genes on surface lipid synthesis in <i>Marchantia polymorpha</i> <u>Motoki Fuki</u><sup>1</sup>, Koichi Hori<sup>1</sup>, Yuta Ihara<sup>1</sup>, Kimitsune Ishizaki<sup>2</sup>, Mie Shimojima<sup>1</sup>, Hiroyuki Ohta<sup>1</sup> (<sup>1</sup>School of Life Science and Technology, Tokyo Institute of Technology, <sup>2</sup>Department of biology, Graduate school of science, Kobe University)</p>

Room E	Room F	Room G	Room H	Room Y	Room Z	Time
Reproductive growth	Photoreceptors/ Photoresponses	Environmental responses B	Transcriptional, post-transcriptional or translational, post-translational regulations			
<p><b>1pE01</b> Functional analysis of a gene encoding plasma membrane Ca<sup>2+</sup>-ATPase in the sperm chemotaxis in <i>Marchantia polymorpha</i> <u>Madoka Miyazaki</u><sup>1</sup>, Satoshi Hirao<sup>2</sup>, Taisuke Togawa<sup>1</sup>, Katsuyuki Yamato<sup>2</sup> (1Grad. Sch. BOST, Kindai Univ., 2BOST, Kindai Univ.)</p> <p><b>1pE02</b> Identification of the pollen tube receptor module that has innovated angiosperm reproduction Takuya T. Nagae<sup>1</sup>, Nozomi Naiki<sup>1</sup>, Miki Imoto<sup>1</sup>, Shiori Nagahara<sup>2</sup>, Tetsuya Higashiyama<sup>1,2,4</sup>, Kanako Bessho-Uehara<sup>5</sup>, <u>Hidenori Takeuchi</u><sup>2,3</sup> (1Grad. Sch. Sci., Nagoya Univ., 2ITbM, Nagoya Univ., 3Inst. Adv. Res., Nagoya Univ., 4Grad. Sch. Sci., Univ. Tokyo, 5Grad. Sch. Life Sci., Tohoku Univ.)</p> <p><b>1pE03</b> Molecular characterization of the self-incompatibility in the cruciferous vegetable, <i>Oleoena</i> <u>Koichi Onishi</u><sup>1</sup>, Naoki Ikeda<sup>1</sup>, Yukihiko Nakagawa<sup>2</sup>, Atushi Ogura<sup>1,2,3</sup>, Ken-ichi Kubo<sup>2</sup>, Fang-Sik Che<sup>1,2,3</sup> (1Grad. Sch. of Biosci., Nagahama Inst. of Bio-Sci. and Tech., 2Dept. of Bio-Sci., Nagahama Inst. of Bio-Sci. and Tech., 3Genome Editing Res. Inst. (GERI), Nagahama Inst. of Bio-Sci. and Tech.)</p> <p><b>1pE04</b> The style curvature is occurred by auxin-induced cell elongation in eelgrass <u>Misaki Obata</u><sup>1</sup>, Tamae Kikuchi<sup>1</sup>, Ayako Nakamura<sup>1,2</sup>, Yukihisa Shimada<sup>1,2</sup>, Hajime Shiota<sup>1</sup> (1Grad. Sch. Nanobio., Yokohama City Univ., 2Kihara Inst. Bio. Res., Yokohama City Univ.)</p> <p><b>1pE05</b> <i>A CUP-SHAPED COTYLEDON</i>-Cytokinin Regulatory Module in the Carpel Margin Meristem Jose Irepan Reyes-Olalde<sup>1,2</sup>, Stefan de Folter<sup>3</sup>, <u>Mitsuhiro Aida</u><sup>4</sup> (1Dept. Ecol. Funct., Univ. NAM, Mexico, 2Lab. Fitoquim., Univ. EVT, Mexico, 3UGA-LANGEBIO, CINVESTAV-IPN, Mexico, 4IROAST, Kumamoto Univ.)</p>	<p><b>1pF01</b> Involvement Of Lipid Transporter Flippase In Light-dependent Stomatal Opening At Low Temperatures <u>Yu Ishimaru</u><sup>1</sup>, Akira Nagatani<sup>2</sup>, Tomomi Suzuki<sup>2</sup> (1Grad. Sch. Sci., Univ. Kyoto, 2Univ. Kyoto)</p> <p><b>1pF02</b> Analysis of lipid-transporter flippase on its interaction with phototropin and BL-responses <u>Tomomi Suzuki</u><sup>1</sup>, Yu Ishimaru<sup>1</sup>, Hiromasa Shikata<sup>2,3</sup>, Akira Nagatani<sup>1</sup> (1Grad. Sch. Sci., Univ. Kyoto, 2Div. Plant Env. Res., NIBB, 3JST PRESTO)</p> <p><b>1pF03</b> UVB resistance and chloroplast movement in plant without CPD photolyase function in chloroplasts <u>Momo Otake</u><sup>1</sup>, Noriyuki Suetsugu<sup>2</sup>, Mika Teranishi<sup>1</sup>, Kaoru Yoshiyama (Okamoto)<sup>1</sup>, Masamitsu Wada<sup>3</sup>, Jun Hidema<sup>1</sup> (1Grad. Life. Sci., Tohoku Univ., 2Grad. Arts and Sci., Univ. Tokyo, 3Grad. Sci., Tokyo Metropolitan Univ.)</p> <p><b>1pF04</b> Functional analysis of BLUS1-interacting proteins in blue light-dependent stomatal opening <u>Kyoka Tahara</u>, Atsushi Takemiya (Grad. Sch. Sci. Tech. Innov., Yamaguchi Univ.)</p> <p><b>1pF05</b> <b>E</b> Towards a better understanding of the molecular mechanisms that govern AHL-mediated repression of PIF-activated gene transcription <u>David Favero</u><sup>1</sup>, Ayako Kawamura<sup>1</sup>, Akira Takebayashi<sup>1</sup>, Akira Iwase<sup>1</sup>, Keiko Sugimoto<sup>1,2</sup> (1RIKEN Cent. Sust. Res. Sci., 2Dep. Biol. Sci., Univ. Tokyo)</p>	<p><b>1pG01</b> <b>E</b> Ethanol treatment enhances drought stress tolerance in plants <u>Khurram Bashir</u>, Sultana Rasheed, Daisuke Todaka, Akihiro Matsui, Zarnab Ahmad, Yoshinori Utsumi, Vu Anh Thu, Satoshi Takahashi, Maho Tanaka, Junko Ishida, Yuuri Tsuboi, Shunsuke Watanabe, Eigo Ando, Makoto Seito, Hinata Motegi, Saya Kikuchi, Makoto Kobayashi, Miki Fujita, Fuminori Takahashi, Miyako Kusano, Yoshiki Habu, Kanako Kawaura, Jun Kikuchi, Masami Yokota Hirai, Mitsunori Seo, Kazuo Shinozaki, Toshinori Kinoshita, Motoaki Seki</p> <p><b>1pG02</b> <b>E</b> Ethanol treatment enhances drought stress avoidance in cassava (<i>Manihot esculenta</i> Crantz) <u>Anh Thu Vu</u><sup>1,6</sup>, Yoshinori Utsumi<sup>1</sup>, Maho Tanaka<sup>1,2</sup>, Chikako Utsumi<sup>1</sup>, Daisuke Todaka<sup>1</sup>, Satoshi Takahashi<sup>1,2</sup>, Yuri Kanno<sup>1</sup>, Mitsunori Seo<sup>1</sup>, Eigo Ando<sup>3</sup>, Kaori Sako<sup>1,4</sup>, Khurram Bashir<sup>1,5</sup>, Toshinori Kinoshita<sup>3</sup>, Xuan Hoi Pham<sup>6</sup>, Motoaki Seki<sup>1,2,7</sup> (1CSRS, RIKEN, 2CPR, RIKEN, 3WPI-ITbM, Nagoya Univ., 4Dep. Adv. Bioci. Kindai Univ., 5Dep. Biol. Lahore Univ. Management Sci., 6Agricultural Genetics Inst. Vietnam, 7Kihara Inst. Biol. Yokohama City Univ.)</p> <p><b>1pG03</b> Analyses of protein-protein interactions among signaling components involved in ABA and osmestress-regulated B-RAF signaling pathway in <i>Physcomitrium patens</i> <u>Marcos Takeshi Miyabe</u><sup>1</sup>, Tsukasa Toriyama<sup>1</sup>, Daisuke Takezawa<sup>2</sup>, Izumi Yotsui<sup>1</sup>, Teruaki Tajiri<sup>1</sup>, Yoichi Sakata<sup>1</sup> (1Dept. Bioscience, Tokyo Univ. Agriculture, 2Saitama Univ., Grad. Sch. Science and Engineering)</p> <p><b>1pG04</b> <b>E</b> Forward genetic analysis of ethylene receptor-related histidine kinases responsible for the activation of B3-RAF in the moss <i>Physcomitrium patens</i> <u>Rahul Sk</u><sup>1</sup>, Marcos Takeshi Miyabe<sup>1</sup>, Daisuke Takezawa<sup>2</sup>, Izumi Yotsui<sup>1</sup>, Teruaki Tajiri<sup>1</sup>, Yoichi Sakata<sup>1</sup> (1Tokyo Univ. Agri., Dept. Bioscience, 2Saitama Univ., Grad. Sch. Sci. and Eng.)</p> <p><b>1pG05</b> Sensor histidine kinases regulate both ABA and ethylene signaling pathways in the moss <i>Physcomitrium patens</i> <u>Akihisa Shinozawa</u><sup>1</sup>, Tsukasa Toriyama<sup>2</sup>, Masashi Saruhashi<sup>3</sup>, Mayuka Hiraide<sup>3</sup>, Daisuke Takezawa<sup>2</sup>, Izumi Yotsui<sup>2</sup>, Teruaki Tajiri<sup>2</sup>, Yoichi Sakata<sup>2</sup> (1NODAI Genome Research Center, Tokyo Univ. Agri., 2Dept Bioscience, Tokyo Univ. Agri., 3Grad. Sch. Sci and Eng., Univ. Saitama)</p>	<p><b>1pH01</b> DNA double-strand break repair impacts proximal promoter chromatin and transcription levels <u>Kohei Kawaguchi</u><sup>1</sup>, Mei Kazama<sup>1</sup>, Takayuki Hata<sup>2</sup>, Naoto Takada<sup>1</sup>, Chihiro Hayakawa<sup>1</sup>, Mitsuhiro Matsuo<sup>2</sup>, Junichi Obokata<sup>2</sup>, Soichirou Satoh<sup>1</sup> (1Grad. Sch. Life Env. Sci., Kyoto Pref. Univ., 2Fac. Agri., Setsunan Univ.)</p> <p><b>1pH02</b> The effect of histone H2A.Z on diversification of gene expression among closely-related <i>Arabidopsis</i> ecotypes <u>Kazuki Mukae</u><sup>1</sup>, Kohei Kawaguchi<sup>1</sup>, Takayuki Hata<sup>2</sup>, Junichi Obokata<sup>2</sup>, Soichirou Satoh<sup>1</sup> (1Grad. Sch. Life Env. Sci., Kyoto Pref. Univ., 2Fac. Agri., Setsunan)</p> <p><b>1pH03</b> RNA silencing caused by triplication of the <i>dihydroflavonol 4-reductase</i> gene produces white margin in Japanese morning glory flowers <u>Soya Nakagawa</u><sup>1,2</sup>, Kyeong-II Park<sup>3</sup>, Yasumasa Morita<sup>4</sup>, Shigeru Iida<sup>1</sup>, Atsushi Hoshino<sup>1,5</sup> (1NIBB, 2Grad. Sch. Agri., Univ. Miyazaki, 3Col. Life Appl. Sci., Yeungnam Univ., 4Fac. Agri., Meijo Univ., 5Sch. Life Sci., SOKENDAI)</p> <p><b>1pH04</b> Molecular evolution of cis-element binding affinity in the VNS family transcription factors, master regulators of water-conducting cell formation <u>Nobuhiro Akiyoshi</u><sup>1,2</sup>, Taizo Tamura<sup>2</sup>, Taku Demura<sup>2,3,4</sup>, Misato Ohtani<sup>1,2,3</sup> (1Grad. Sch. Front. Sci., Univ. Tokyo, 2Grad. Sch. Bio., NAIST, 3CSRS, RIKEN, 4CDG., NAIST)</p> <p><b>1pH05</b> Phosphorylation of plastidial serine biosynthetic enzyme 3-phosphoglycerate dehydrogenase <u>Yukiko Uemura</u><sup>1,2</sup>, Keisuke Yoshida<sup>1,2</sup>, Chris White-Gloria<sup>3</sup>, Greg B. Moorhead<sup>4</sup>, Ken-ichi Wakabayashi<sup>1,2</sup>, Toru Hisabori<sup>1,2</sup> (1Laboratory for Chemistry and Life Science, Institute of Innovative Research, Tokyo Institute of Technology, 2School of Life Science and Technology, Tokyo Institute of Technology, 3Department of Biological Sciences, University of Calgary)</p>	Symposium S03	Symposium S04	13:45
				The forefront of plant RNA molecular biology: Sequence, structure and function (13:45-16:40)	Sensors and actuators in biology and architecture (13:45-16:45)	14:00
						14:15
						14:30
						14:45

**E**=Presentation in English

● Day 1, Tue., March 22, PM (13:45–16:15)

Time	Room A	Room B	Room C	Room D
	Photosynthesis	Plant-organism interaction B	Organelles/Cytoskeleton	Primary metabolism
15:00	<p>1pA06 Effect of membrane lipid composition on complexes of photosystem II in the cyanobacterium <i>Synechocystis</i> sp. PCC 6803 <u>Kensuke Takagi</u>, Takashi Hirashima, Haruhiko Jimbo, Hajime Wada (Grad. Sch. Arts &amp; Sci., Univ. Tokyo, Japan)</p>	<p>1pB06 Host nutrient status affects the interaction between the holoparasitic plant <i>Orobancha minor</i> and its clover host <u>Mao Hattori</u> (Life Env. Sci. Univ. Tsukuba)</p>	<p>1pC06 Autophagy is induced during plant grafting for wound healing <u>Ken-ichi Kurotani</u><sup>1</sup>, Ryo Tabata<sup>2</sup>, Yaichi Kawakatsu<sup>2</sup>, Ryohei Sugita<sup>3</sup>, Koji Okayasu<sup>2</sup>, Keitaro Tano<sup>4</sup>, Michitaka Notaguchi<sup>1,2,5</sup> (<sup>1</sup>Biosci and Biotech Center, Nagoya Univ., <sup>2</sup>Grad. Sch. Bioagri. Sci., Nagoya Univ., <sup>3</sup>Radioisotope Res. Center, Nagoya Univ., <sup>4</sup>Grad. Sch. Agri. and Life Sci., Univ. Tokyo, <sup>5</sup>ITbM, Nagoya Univ.)</p>	<p>1pD06 Regulation of sterol biosynthesis by HISE1 is essential for growth in tomato <u>Yuto Omata</u><sup>1</sup>, Kentaro Ezura<sup>2</sup>, Shigeo Sugano<sup>2</sup>, Tsubasa Shoji<sup>3</sup>, Koji Takano<sup>3</sup>, Yozo Okazaki<sup>3,4</sup>, Kazuki Saito<sup>1,3</sup>, Haruko Ueda<sup>5</sup>, Ikuko Hara-Nishimura<sup>5</sup>, Takashi L. Shimada<sup>1</sup> (<sup>1</sup>Chiba Univ., <sup>2</sup>AIST, <sup>3</sup>RIKEN, <sup>4</sup>Mie Univ., <sup>5</sup>Fac. Sci. Engin., Konan Univ.)</p>
15:15	<p>1pA07 Analyses of Complete Knockout Mutants of Ferredoxin/Thioredoxin Pathway in <i>Arabidopsis</i> <u>Keisuke Yoshida</u>, Yuichi Yokochi, Kan Tanaka, Toru Hisabori (Lab. Chem. Life Sci., Tokyo Tech.)</p>		<p>1pC07 Analysis of the <i>peup10</i> Mutant Defective in Peroxisome Degradation via Autophagy <u>Shino Goto-Yamada</u><sup>1</sup>, Kazusato Oikawa<sup>2</sup>, Shoji Mano<sup>2,3</sup>, Mikio Nishimura<sup>4</sup>, Kenji Yamada<sup>1</sup> (<sup>1</sup>MCB, Jagiellonian Univ., <sup>2</sup>Dept. Cell Biol., Natl. Inst. Basic Biol., <sup>3</sup>Dept. Basic Biol., Graduate Univ. Advanced Studies, <sup>4</sup>Fac., Sci., Engineer. Konan Univ.)</p>	<p>1pD07 Analysis of triacylglycerol accumulation and DGAT2 orthologs in cyanobacteria <u>Shunya Takano</u>, Toshiki Ishikawa, Kimie Atsuzawa, Motoki Tanaka, Yasuko Kaneko, Yukako Hihara (Grad. Sch. Sci. Eng., Saitama Univ.)</p>
15:30	<p>1pA08 Search for “NH<sub>4</sub>”-responsive region” in sequences of <i>OsAS1</i> and <i>OsRBCS</i> promoters in rice <u>Dong-Kyung Yoon</u>, Shiori Sato, Eri Kondo, Hiroyuki Ishida, Tadahiko Mae, Amane Makino, Soichi Kojima, Keiki Ishiyama (Grad. Sch. Agr. Sci., Univ. Tohoku)</p>		<p>1pC08 Functional analysis of Macroautophagy related protein 2, ATG2, in a microautophagic process <u>Mako Yagyu</u>, Kohki Yoshimoto (Grad. Sch. Agri., Meiji Univ.)</p>	<p>1pD08 Role of a coiled-coil domain-containing protein (CCDC) in regulation of sulfur-deprivation responses in the green alga <i>Chlamydomonas reinhardtii</i> <u>Yoshinori Tsuji</u><sup>1</sup>, Yuya Okada<sup>1</sup>, Suzuka Nagafusa<sup>1</sup>, Asuka Miyamoto<sup>1</sup>, Haruka Shinkawa<sup>1,2</sup>, Yuki Niikawa<sup>1</sup>, Takashi Yamano<sup>1</sup>, Masataka Kajikawa<sup>1,3</sup>, Hideya Fukuzawa<sup>1</sup> (<sup>1</sup>Graduate school of Biostudies, Kyoto University, <sup>2</sup>Research Institute for Bioresources and Biotechnology, Ishikawa Prefectural University, <sup>3</sup>Factory of Biology-Oriented Science and Technology, Kindai University)</p>
15:45	<p>1pA09 Molecular analysis of CCM1/CBP1 complex for regulating CO<sub>2</sub>-concentrating mechanism in the green alga <i>Chlamydomonas reinhardtii</i>. <u>Junko Yasuda</u>, Daisuke Shimamura, Miho Ogaki, Yosuke Yamahara, Hirobumi Nakano, Takashi Yamano, Hideya Fukuzawa (Grad. Sch. Bio., Univ. Kyoto)</p>		<p>1pC09 Development of a functional actin modification method for direct actin imaging <u>Saku Kijima</u><sup>1</sup>, Shingo Sakamoto<sup>2</sup>, Nobutaka Mitsuda<sup>2</sup>, Yoshihisa Oda<sup>1,3</sup> (<sup>1</sup>Dept. Gene Funct. Phenomics, NIG, <sup>2</sup>Bioproduction Res. Inst., AIST, <sup>3</sup>Dep. Genetics, SOKENDAI)</p>	
16:00	<p>1pA10 Morphological change of pyrenoid affects gene expression involved in CO<sub>2</sub>-concentrating mechanism in the green alga <i>Chlamydomonas reinhardtii</i> <u>Daisuke Shimamura</u>, Yuki Niikawa, Donghui Hu, Takashi Yamano, Hideya Fukuzawa (Grad. Sch. Bio., Kyoto Univ)</p>			

Room E	Room F	Room G	Room H	Room Y	Room Z	Time
Reproductive growth	Photoreceptors/ Photoresponses	Environmental responses B	Transcriptional, post-transcriptional or translational, post-translational regulations			
<p><b>1pE06</b> <i>TAB1</i> promotes ovule development by maintaining the flower meristem in rice <u>Wakana Tanaka</u><sup>1</sup>, Suzuha Ohmori<sup>2,3</sup>, Naoto Kawakami<sup>3,4</sup>, Hiro-Yuki Hirano<sup>2</sup> (1Grad. Sch. Integr. Sci. Life, Hiroshima Univ., 2Grad. Sch. Sci., Univ. Tokyo, 3Grad. Sch. Agric., Meiji Univ., 4Sch. Agric., Meiji Univ.)</p>	<p><b>1pF06</b> Photobehavior and photoprotection ability in the four-celled <i>Vovocales</i> green alga <i>Tettrabaena socialis</i> Asuka Tanno<sup>1,2</sup>, Ryutarō Tokutsu<sup>3,4</sup>, Yoko Arakaki<sup>5</sup>, Noriko Ueki<sup>6</sup>, Jun Minagawa<sup>3,4</sup>, Kenjiro Yoshimura<sup>7</sup>, Toru Hisabori<sup>1,2</sup>, Hisayoshi Nozaki<sup>3,8</sup>, <u>Ken-ichi Wakabayashi</u><sup>1,2</sup> (1CLS, Tokyo Tech, 2LST, Tokyo Tech, 3Div. Env. Photobiol., NIBB, 4SOKENDAI, 5Dept. Biol. Sci., Grad. Sch. Sci., Univ. Tokyo, 6Sci. Res. Ctr., Hosei Univ., 7Col. Sys. Eng., Shiba Inst. Tech., 8Biodiv. Div., NIES)</p>	<p><b>1pG06</b> Functional analyses of ethylene receptor-related histidine kinases involved in osmotic stress responses of <i>Physcomitrium patens</i> <u>Hiroki Matsumura</u><sup>1</sup>, Marcos Takeshi Miyabe<sup>1</sup>, Tsukasa Toriyama<sup>1</sup>, Akihisa Shinozawa<sup>2</sup>, Daisuke Takezawa<sup>3</sup>, Izumi Yotsui<sup>1</sup>, Teruaki Tajiri<sup>1</sup>, Yoichi Sakata<sup>1</sup> (1Dept. Bioscience, Tokyo Univ. Agric., 2NODAI Genome Research Center, Tokyo Univ. Agric., 3Grad. Sch. Sci and Eng., Univ. Saitama)</p>	<p><b>1pH06</b> Analysis of transcriptional and translational changes by photoreception in <i>Arabidopsis</i> seedlings <u>Chika Akagi</u><sup>1,2</sup>, Yukio Kurihara<sup>2</sup>, Yoko Makita<sup>2</sup>, Masaharu Kawauchi<sup>2</sup>, Tomohiko Tsuge<sup>1</sup>, Takashi Aoyama<sup>1</sup>, Minami Matsui<sup>2</sup> (1Institute for Chemical Research, Kyoto University, 2RIKEN Center for Sustainable Resource Science Synthetic Genomics Research Group)</p>	Symposium S03 The forefront of plant RNA molecular biology: Sequence, structure and function (13:45-16:40)	Symposium S04 Sensors and actuators in biology and architecture (13:45-16:45)	15:00
<p><b>1pE07</b> Jasmonic acid-regulated chromatin switch directs petal abscission in <i>Arabidopsis</i> <u>Yuki Furuta</u>, Haruka Yamamoto, Nobutoshi Yamaguchi, Toshiro Ito (NAIST)</p>		<p><b>1pG07</b> Isolation and analysis of ABA-hypersensitive mutants of <i>Physcomitrium patens</i> <u>Ryutarō Oya</u><sup>1</sup>, Yuri Morikawa<sup>1</sup>, Teruaki Tajiri<sup>1</sup>, Daisuke Takezawa<sup>2</sup>, Yoichi Sakata<sup>1</sup>, Izumi Yotsui<sup>1</sup> (1Dept. Bioscience, Tokyo Univ. Agric., 2Grad. Sch. Sci and Eng., Univ. Saitama)</p>	<p><b>1pH07</b> Multiple uORFs Are Involved in Translational Repression in the <i>Arabidopsis</i> Clock Gene <i>LHY</i> <u>Haruka Aoyama</u><sup>1</sup>, Yuma Ise<sup>1</sup>, Akinori Takahashi<sup>2</sup>, Tadashi Yamamoto<sup>2</sup>, Yukako Chiba<sup>1,3</sup> (1Grad. Sch. Life Sci., Hokkaido Univ., 2OIST, 3Fac. Sci., Hokkaido Univ.)</p>			15:15
<p><b>1pE08</b> <i>Arabidopsis CRK14</i> gene encoding a receptor-like kinase is implicated in global proliferative arrest <u>Chisato Ishizaki</u><sup>1</sup>, Mayu Higuchi<sup>1</sup>, Yuma Matsushita<sup>1</sup>, Takamasa Suzuki<sup>2</sup>, Nobuyoshi Mochizuki<sup>3</sup>, Akira Nagatani<sup>3</sup>, Chiharu Ueguchi<sup>1</sup> (1Grad. Sch. Bioagr. Sci., Nagoya Univ., 2Col. Biosci. Biotech., Chubu Univ., 3Dep. Botany, Grad. Sch. Science, Kyoto Univ.)</p>		<p><b>1pG08</b> Analysis of water deficit response in plant leaves using an automated phenotyping system RIPPS <u>Miki Fujita</u>, Fuyuko Shimoda, Mieko Noda, Kazuo Shinozaki (RIKEN CSRS)</p>	<p><b>1pH08</b> RNA silencing in male organ development <u>Reina Komiya</u> (OIST)</p>			15:30
		<p><b>1pG09</b>  Spider silk expression in tobacco confers drought tolerance, with minimal effects on its mechanotypes <u>Shamitha Rao Morey</u><sup>1,2</sup>, Yoichi Hashida<sup>3</sup>, Masaki Odahara<sup>2</sup>, Keiji Numata<sup>1,2</sup> (1Laboratory of Biomaterial Chemistry, Graduate School of Engineering, Kyoto University, 2Biomacromolecules Research Team, RIKEN Center for Sustainable Resource Science, 3Faculty of Agriculture, Takasaki University of Health and Welfare)</p>				15:45
		<p><b>1pG10</b> SNS1 is required to survive long-term drought stress in plants <u>Sotaro Katagiri</u>, Yoshiaki Kamiyama, Taishi Umezawa (BASE, Tokyo Univ. Tech. and Agric.)</p>		16:00		

=Presentation in English

● Day 2, Wed., March 23, AM (9:00–12:00)

Time	Room A	Room B	Room C	Room D
	Photosynthesis	Plant-organism interaction A	Organelles/Cytoskeleton	Secondary (specialized) metabolism
09:00	<p>2aA01 Origin of phycobilin, the antennae pigment in cyanobacteria: theory of adaptive evolution to aerobic environment <u>Kumiko Ito-Miwa</u><sup>1,2</sup>, Satomi Kanno<sup>2</sup>, Yuri I. Fujii<sup>1,3</sup>, Chieko Onami<sup>4</sup>, Hideaki Miyashita<sup>3</sup>, Taro Matsuo<sup>1,2</sup> (<sup>1</sup>Grad. Sch. Sci., Nagoya Univ., <sup>2</sup>Inst. Adv. Stud., Nagoya Univ., <sup>3</sup>Grad. Sch. Human and Environmental Studies., Kyoto Univ., <sup>4</sup>Facul. Integ. Human Studies., Kyoto Univ.)</p>	<p>2aB01 <b>E</b> Guanosine-specific Single-stranded Ribonuclease Effectors of a Phytopathogenic Fungus Potentiate Host Immune Responses <u>Naoyoshi Kumakura</u><sup>1</sup>, Suthitar Singkaravanit-Ogawa<sup>2</sup>, Pamela Gan<sup>1</sup>, Ayako Tsushima<sup>1,6</sup>, Nobuaki Ishihama<sup>1</sup>, Shunsuke Watanabe<sup>1</sup>, Mitsunori Seo<sup>1</sup>, Shintaro Iwasaki<sup>3,4</sup>, Mari Narusaka<sup>5</sup>, Yoshihiro Narusaka<sup>5</sup>, Yoshitaka Takano<sup>2</sup>, Ken Shirasu<sup>1,6</sup> (<sup>1</sup>CSRS, RIKEN, <sup>2</sup>Grad. Sch. Agr., Kyoto Univ., <sup>3</sup>CPR, RIKEN, <sup>4</sup>Grad. Sch. Frontier Sci., Univ. Tokyo, <sup>5</sup>Research Inst. Biol. Sci., Okayama, <sup>6</sup>Grad. Sch. Sci., Univ. Tokyo)</p>	<p>2aC01 Functional analysis of single B-box type <i>CONSTANS-LIKE</i> genes in Arabidopsis thaliana <u>Mari Abumi</u>, Shougo Kuramoto, Yasuko Ito-Inaba, Takehito Inaba (Fac. Agr., Univ. Miyazaki)</p>	<p>2aD01 Functional analysis of chloroplast ACCase1 in the marine diatom <i>Phaeodactylum tricornutum</i> <u>Hajime Okuda</u>, Yusuke Matsuda, Yuya Okada (Grad. Sch. Sci., Univ. Kwansai-gakuin)</p>
09:15	<p>2aA02 Rapid HPLC Analysis of Menaquinones in the Photosynthetic Reaction Center of Green Sulfur Bacteria <u>Haruki Yoshino</u>, Yasuhiro Onoue, Kazuki Terachi, Chihiro Azai (Grad. Sch. Life Sci., Ritsumeikan Univ.)</p>	<p>2aB02 Analysis of QTR sequences for replication and migration of the endogenous pararetrovirus in petunia <u>Kazunori Kuriyama</u><sup>1</sup>, Midori Tabara<sup>2</sup>, Hideki Takahashi<sup>3</sup>, Hiromitsu Moriyama<sup>1</sup>, Toshiyuki Fukuhara<sup>1</sup> (<sup>1</sup>Tokyo Univ. of Agri. and Tech., <sup>2</sup>Ritsumeikan Univ., <sup>3</sup>Tohoku Univ.)</p>	<p>2aC02 Exploring factors that interact with Arabidopsis CONSTANS-LIKE6 <u>Shiho Shimizu</u>, Hiroko Kinoshita, Yasuko Ito-Inaba, Takehito Inaba (Fac. Agr., Univ. Miyazaki)</p>	<p>2aD02 Marchantia DWF5A which is responsible for sterol 7-position reduction reaction, is involved in the development of thallus <u>Miki Hatada</u><sup>1</sup>, Ryota Akiyama<sup>1</sup>, Kimitsune Ishizaki<sup>2</sup>, Masaharu Mizutani<sup>1</sup> (<sup>1</sup>Grad. Sch. Agri., Univ. Kobe, <sup>2</sup>Grad. Sch. Sci., Univ. Kobe)</p>
09:30	<p>2aA03 Analysis of energy transfer reaction after carotenoids excitation in the photosynthetic reaction center of heliobacteria <u>Risa Kojima</u><sup>1</sup>, Taiki Nohara<sup>2</sup>, Chihiro Azai<sup>3</sup>, Daisuke Kosumi<sup>4</sup>, Hirozo Oh-oka<sup>1</sup> (<sup>1</sup>Grad. Sch. Sci., Osaka Univ., <sup>2</sup>Grad. Sch. Sci. &amp; Tech., Kumamoto Univ., <sup>3</sup>Coll. Life Sci., Ritsumeikan Univ., <sup>4</sup>IINA, Kumamoto Univ.)</p>	<p>2aB03 Physiological analysis of <i>chitin-induced cell death mutant (ccd1)</i> of <i>Physcomitrium patens</i> <u>Takeru Ichihashi</u>, Yuki Ambe, Teruaki Taji, Yoichi Sakata, Izumi Yotsui (Dept. Bio. Sci., Tokyo Univ. of Agriculture)</p>	<p>2aC03 <i>Arabidopsis</i> CRL promotes complex formation of OEP80, a member of Omp85 protein family of plastid <u>Ryo Yoshimura</u><sup>1</sup>, Syun Minamikawa<sup>1</sup>, Ryohei Seta<sup>1</sup>, Takamasa Suzuki<sup>2</sup>, David Latrasse<sup>3</sup>, Sicar Sanchari<sup>3</sup>, Cécile Raynaud<sup>3</sup>, Moussa Benhamed<sup>3</sup>, Yasushi Yoshioka<sup>1</sup> (<sup>1</sup>Div. Biol. Sci., Grad. Sch. Sci, Nagoya Univ., <sup>2</sup>Col. Biosci. Biotech., Chubu Univ., <sup>3</sup>Inst. Plant Sci. Paris-Saclay, Univ. Paris-Sud)</p>	<p>2aD03 2-oxoglutarate dependent dioxygenases involved in biosynthesis of steroidal glycoalkaloids <u>Ryota Akiyama</u><sup>1</sup>, Masaru Nakayasu<sup>1,2</sup>, Bunta Watanabe<sup>3</sup>, Junpei Kato<sup>1</sup>, Hyoung Jae Lee<sup>1</sup>, Yoko Iijima<sup>4</sup>, Naoyuki Umemoto<sup>5</sup>, Toshiya Muranaka<sup>6</sup>, Kazuki Saito<sup>5,7</sup>, Yukihiro Sugimoto<sup>1</sup>, Masaharu Mizutani<sup>1</sup> (<sup>1</sup>Grad. Sch. Agric., Kobe Univ., <sup>2</sup>RISH, Kyoto Univ., <sup>3</sup>ICR, Kyoto Univ., <sup>4</sup>Sch. Adv. Eng., Kogakuin Univ., <sup>5</sup>CSRS, Riken, <sup>6</sup>Grad. Sch. Eng., Osaka Univ., <sup>7</sup>PMSC, Chiba Univ.)</p>
09:45	<p>2aA04 Binding of <math>\epsilon</math>-ring containing <math>\alpha</math>-carotene and lactucanin to photosynthetic machinery in <i>Eunonymus fortunei</i> <u>Kanoko Shimohara</u>, Atsushi Takabayashi, Ryouichi Tanaka (Inst. Low Temp. Sci., Hokkaido Univ.)</p>	<p>2aB04 <b>E</b> Immunity-related callose synthase regulates phosphate starvation response in <i>Arabidopsis thaliana</i> Kentaro Okada<sup>1,2</sup>, Koei Yachi<sup>1</sup>, Nguyen Tan Anh Nhi<sup>1</sup>, Haruka Sumi<sup>1</sup>, Satomi Kanno<sup>3</sup>, Tae-Hong Lee<sup>1</sup>, Chika Tateda<sup>1</sup>, Kei Hiruma<sup>1</sup>, Takaki Maekawa<sup>4</sup>, Michitaka Notaguchi<sup>2</sup>, <u>Yusuke Saijo</u><sup>1</sup> (<sup>1</sup>Grad. Sch. Sci and Tech. NAIST, <sup>2</sup>Biosci and Biotech Center, Nagoya Univ., <sup>3</sup>Inst. Adv. Res., Nagoya Univ., <sup>4</sup>Inst. Plant Sci, Cologne Univ.)</p>	<p>2aC04 <i>Arabidopsis CRL</i> is a novel auxiliary factor for TOC complex formation <u>Yasushi Yoshioka</u><sup>1</sup>, Sae Miyazaki<sup>1</sup>, Ryo Yoshimura<sup>1</sup>, Aya Murata<sup>1</sup>, Syogo Shibata<sup>1</sup>, Tomoya Asano<sup>2</sup>, Syun Minamikawa<sup>1</sup>, Ryohei Seta<sup>1</sup>, Hinako Uchida<sup>1</sup>, Mika Nomoto<sup>3</sup>, Yasuomi Tada<sup>3</sup>, Takamasa Suzuki<sup>1</sup>, Mitsuru Akita<sup>1</sup> (<sup>1</sup>Grad. Sch. Sci., Nagoya Univ., <sup>2</sup>Advanced Sci. Res. Center, Kanazawa Univ., <sup>3</sup>Gene Res. Center, Nagoya Univ., <sup>4</sup>College Biosci. Biotech., Chubu Univ., <sup>5</sup>Dept. Biosci., Grad. Sch. Agr., Ehime Univ.)</p>	<p>2aD04 <b>E</b> Investigation of the plant aroma glycosides for improving the tomato flavor <u>Yingtao Li</u><sup>1</sup>, Yusuke Kamiyoshihara<sup>2</sup>, Yusuke Aono<sup>1</sup>, Denise Tieman<sup>3</sup>, Harry Klee<sup>3</sup>, Miyako Kusano<sup>4,5,6</sup> (<sup>1</sup>Degree Programs in Life and Earth Sciences, University of Tsukuba, <sup>2</sup>College of Bioresource Sciences, Nihon University, <sup>3</sup>Department of Horticultural Sciences, University of Florida, <sup>4</sup>Faculty of life and environment science, University of Tsukuba, <sup>5</sup>Tsukuba Plant Innovation Research Center, University of Tsukuba, <sup>6</sup>RIKEN Center for Sustainable Resource Science)</p>



Room E	Room F	Room G	Room H	Room Y	Room Z	Time
Plant hormones/ Signaling molecules	Flowering/Clock	Environmental responses C	Vegetative growth			
<p>2aE01 Physiological analysis of Arabidopsis mutant that lost all members of ABA 8'-hydroxylase Momoka Miyata<sup>1</sup>, Ryosuke Mega<sup>2</sup>, June-Sik Kim<sup>3</sup>, Mitsunori Seo<sup>3</sup>, Eiji Nambara<sup>4</sup>, Masanori Okamoto<sup>1</sup> (<sup>1</sup>Utsunomiya Univ., <sup>2</sup>Yamaguchi Univ., <sup>3</sup>RIKEN CSRS, <sup>4</sup>Tronto Univ.)</p> <p>2aE02 Production of 12-oxo-phytyldienoic acid (OPDA) outside chloroplasts in Arabidopsis Takahiro Kanatani, Yuta Ihara, Takayuki Wakamatsu, Yuki Ebiya, Hiroyuki Ohta, Mie Shimojima (School of Life Science and Technology, Tokyo Institute of Technology)</p> <p>2aE03 Screening of novel mutants affecting gibberellin-related methyltransferase function in <i>Marchantia polymorpha</i> Eita Shimokawa<sup>1</sup>, Shogo Kawamura<sup>1</sup>, Rui Sun<sup>1</sup>, Kaori Suzuki<sup>1</sup>, Yoshihiro Yoshitake<sup>1</sup>, Yukiko Yasui<sup>1</sup>, Ryuichi Nishihama<sup>2</sup>, Shohei Yamaoka<sup>1</sup>, Kiyoshi Mashiguchi<sup>3</sup>, Shinjiro Yamaguchi<sup>3</sup>, Takayuki Kohchi<sup>1</sup> (<sup>1</sup>Graduate school of Biostudies, Kyoto Univ, <sup>2</sup>Department of Applied Biological Science, Tokyo University of Science, <sup>3</sup>Institute for Chemical research, Kyoto Univ)</p> <p>2aE04 Molecular mechanism of flowering regulation by gibberellin in <i>Arabidopsis</i> Jutarou Fukazawa, Yuki Ohashi, Kanako Nakai, Ryuhei Takahashi, Yohsuke Takahashi (Grad. Sch. Int. Sci. Life, Hiroshima Univ.)</p>	<p>2aF01 Analysis of the effects of environmental factors on FT transport Yusuke Murata, Mitsutomo Abe (Grad. Sch. Arts and Sci., The Univ. of Tokyo)</p> <p>2aF02 Group V B-box families repress flowering under low temperature Yoshinori Kondo<sup>1</sup>, Akane Kubota<sup>1</sup>, Shigeo Sugano<sup>2</sup>, Tomoaki Muranaka<sup>3</sup>, Nozomu Takahashi<sup>1</sup>, Takato Imaizumi<sup>4</sup>, Motomu Endo<sup>1</sup> (<sup>1</sup>NAIST, <sup>2</sup>AIST, <sup>3</sup>Kagoshima Univ, Dept of Environmental Sciences and Technology, <sup>4</sup>Univ of Washington, Dept of Biol)</p> <p>2aF03 Analysis of inter-individual flowering-induced communication in duckweed plants Minako Isoda, Tokitaka Oyama (Grad. Sch. Sci., Kyoto Univ.)</p> <p>2aF04 Detection and quantitative analysis of FT protein of <i>Ipomoea nil</i> on MRM assay by mass spectrometer Hitoshi Mori (Grad. Bioagr. Univ. Nagoya)</p>	<p>2aG01 <b>E</b> Identification of translationally regulated mRNA targets by oligouridylylate-binding protein1b (UBP1b) Kentaro Nakaminami<sup>1</sup>, Miwako Asanuma<sup>1</sup>, Maureen Hummel<sup>2</sup>, Maho Tanaka<sup>1,3</sup>, Satoshi Takahashi<sup>1,3</sup>, Julia Bailey-Serres<sup>2</sup>, Naoshi Dohmae<sup>1</sup>, Motoaki Seki<sup>1,3,4</sup> (<sup>1</sup>CSRS, RIKEN, <sup>2</sup>Riverside, Univ. California, <sup>3</sup>CPR, RIKEN, <sup>4</sup>Kihara Inst. Biol. Res., Yokohama City Univ.)</p> <p>2aG02 <b>E</b> Ethanol Induces Heat Tolerance through Stimulation of the Endoplasmic Reticulum Stress response Daisuke Todaka<sup>1</sup>, Akihiro Matsui<sup>1</sup>, Maho Tanaka<sup>1,2</sup>, Kayoko Mizunashi<sup>1</sup>, Satoshi Takahashi<sup>1,2</sup>, Yuji Sunaoshi<sup>1,3</sup>, Yuuri Tsuboi<sup>4</sup>, Junko Ishida<sup>1,2</sup>, Jun Kikuchi<sup>4</sup>, Miyako Kusano<sup>5,6,7</sup>, Makoto Kobayashi<sup>5</sup>, Kanako Kawaura<sup>3</sup>, Motoaki Seki<sup>1,2,3</sup> (<sup>1</sup>Plant Genomic Network Res. Team, RIKEN CSRS, <sup>2</sup>Plant Epigenome Regulation Lab., RIKEN Cluster for Pioneering Res., <sup>3</sup>Kihara Inst. Biol. Res., Yokohama City Univ., <sup>4</sup>Enviro. Metabolic Analysis Res. Team, RIKEN CSRS, <sup>5</sup>Metabolomics Res. Group, RIKEN CSRS, <sup>6</sup>Grad. Sch. Life Enviro. Sci., Univ. Tsukuba, <sup>7</sup>Tsukuba Plant Innovation Res. Center, Univ. Tsukuba)</p> <p>2aG03 Quantitative analysis of local gene induction through heat shock response with IR-LEGO in the moss <i>Physcomitrium patens</i> Takumi Tomoi<sup>1</sup>, Yuka Yoshida<sup>2</sup>, Suguru Ohe<sup>3</sup>, Joe Sakamoto<sup>1</sup>, Yosuke Tamada<sup>2,3,4,5,6</sup>, Yasuhiro Kamei<sup>1,7,8</sup> (<sup>1</sup>Lab. Biothermol., NIBB, <sup>2</sup>Grad. Sch. Reg. Dev. Creat., Utsunomiya Univ., <sup>3</sup>Sch. Eng., Utsunomiya Univ., <sup>4</sup>CORE, Utsunomiya Univ., <sup>5</sup>REAL, Utsunomiya Univ., <sup>6</sup>Div. Evol. Biol., NIBB, <sup>7</sup>Spectrography and Bioimaging Facility, NIBB, <sup>8</sup>Sch. Life Sci., SOKENDAI)</p> <p>2aG04 Temperature-sensing mechanism through PICC and PICL, Endoplasmic Reticulum transmembrane proteins with a long-coiled coil structure Takato Matsumoto<sup>1</sup>, Arisa Nakamura<sup>1</sup>, Yuta Yoshitomi<sup>2</sup>, Tsuyoshi Furumoto<sup>1,2</sup> (<sup>1</sup>Grad. Sch. Agr. Ryukoku. Univ., <sup>2</sup>Facu. Agr Ryukoku. Univ)</p>	<p>2aH01 The Role of Local Auxin Biosynthesis in Lateral Root Primordium Formation Sanae Kaneta<sup>1</sup>, Tatsuo Kakimoto<sup>2</sup> (<sup>1</sup>Sch. Sci., Osaka Univ., <sup>2</sup>Grad. Sch. Sci., Osaka Univ.)</p> <p>2aH02 Roles of the ROS-producing enzymes MpRBos in the meristematic zones in <i>Marchantia polymorpha</i> Yuto Yamashita, Yuki Hagiwara, Takafumi Hashimoto, Kenji Hashimoto, Kazuyuki Kuchitsu (Dept. Appl. Biol. Sci., Tokyo Univ. of Science)</p> <p>2aH03 Quantitative live-imaging and molecular genetic analysis of oscillation and gradient of Ca<sup>2+</sup> concentration at the growing tip of rhizoids in <i>Marchantia polymorpha</i> Toru Ikeuchi, Mariko Higashijima, Naoki Abe, Kenji Hashimoto, Kazuyuki Kuchitsu (Dept. Appl. Biol. Sci., Tokyo Univ. of Science.)</p> <p>2aH04 Tomato mutant collections of the vegetative tissue/organ development isolated from the large mutation pools in NBRP-tomato Koichi Sugimoto, Tohru Ariizumi, Hiroshi Ezura (Univ. Tsukuba, T-PIRC)</p>	Symposium S05 Toward understanding the unique features of plant stem cells (9:00-11:40)		09:00  09:15  09:30  09:45

**E**=Presentation in English

● Day 2, Wed., March 23, AM (9:00–12:00)

Time	Room A	Room B	Room C	Room D
	Photosynthesis	Plant-organism interaction A	Organelles/Cytoskeleton	Secondary (specialized) metabolism
10:00	<p><b>2aA05</b> <b>E</b></p> <p>Functional evaluation of the <i>chlL</i>, <i>chlN</i>, <i>chlB</i> genes for chlorophyll biosynthesis encoded by the non-photosynthetic plastid genome of a novel coral-inhabiting apicomplexa <i>Corallicolococcus aquarius</i>            Nguyen Le<sup>1</sup>, Haruki Yamamoto<sup>1</sup>, Waldan Kwang<sup>2</sup>, Patrick Keeling<sup>2</sup>, Yuichi Fujita<sup>1</sup>            (<sup>1</sup>Grad. Sch. Bioagricultural Sci., Nagoya Univ., <sup>2</sup>Department of Botany, Univ. British Columbia)</p>	<p><b>2aB05</b></p> <p>Inactivation of abscisic acid responses provides a critical step in antibacterial water defense under high humidity            Shigetaka Yasuda, Taishi Hirase, Haruka Ishizaki, Yusuke Saijo (Grad. Sch. Sci and Tech., NAIST)</p>	<p><b>2aC05</b></p> <p>Study on Transport Pathway of Tmr, <i>Agrobacterium</i> Cytokinin Biosynthesis Enzyme, into the Plastid in Host Plant Cell            Takahiro Suzuki, Mimi Hashimoto-Sugimoto, Hitoshi Mori, Takatoshi Kiba, Hitoshi Sakakibara (Grad. Sch. Bioagr. Sci., Nagoya Univ.)</p>	<p><b>2aD05</b> <b>E</b></p> <p>Comparative analysis of plant NADPH-cytochrome P450 reductase classes in <i>Lotus japonicus</i> towards triterpenoids biosynthesis            Istiandari Pramesti<sup>1</sup>, Shuhei Yasumoto<sup>1,2</sup>, Ery Odette Fukushima<sup>3</sup>, Hikaru Seki<sup>1,2</sup>, Toshiya Muranaka<sup>1,2</sup> (<sup>1</sup>Department of Biotechnology, Graduate School of Engineering, Osaka University, Suita, Osaka, Japan, <sup>2</sup>Industrial Biotechnology Initiative Division, Institute for Open and Transdisciplinary Research Initiatives, Osaka University, Suita, Osaka, Japan, <sup>3</sup>Universidad Regional Amazónica IKIAM, Via Muyuna Km 7, Tena, Ecuador)</p>
10:15	<p><b>2aA06</b></p> <p>Core structure of a thermophilic cyanobacterial light-harvesting phycobilisome            Keisuke Kawakami<sup>1</sup>, Tasuku Hamaguchi<sup>1</sup>, Yuu Hirose<sup>2</sup>, Daisuke Kosumi<sup>3</sup>, Makoto Miyata<sup>4</sup>, Nobuo Kamiya<sup>4</sup>, Koji Yonekura<sup>1,3</sup> (<sup>1</sup>RIKEN SPring-8 Center, <sup>2</sup>Toyoashi University of Technology, <sup>3</sup>Kumamoto University, <sup>4</sup>Osaka City University, <sup>5</sup>Tohoku University)</p>	<p><b>2aB06</b></p> <p>Sugar influx via transporters enhances defense signaling            Kohji Yamada<sup>1</sup>, Akira Mine<sup>2</sup> (<sup>1</sup>Grad. Sch. Tech. Ind. Sci., Tokushima Univ., <sup>2</sup>Grad. Sch. Agri., Kyoto Univ.)</p>	<p><b>2aC06</b></p> <p>Yeast-two-hybrid screen to identify host plant proteins that interact with Tmr, <i>Agrobacterium</i> cytokinin synthase            Ryuya Makino (Grad. Sch. Bio. Sci., Nagoya Univ.)</p>	<p><b>2aD06</b></p> <p>Identification of target genes reducing oxalate accumulation in spinach using VIGS            Shoya Ichikawa<sup>1</sup>, Kazuhiro Ishibashi<sup>2</sup>, Tadasu Frusho<sup>3</sup>, Izumi Yotsui<sup>1</sup>, Yoichi Sakata<sup>1</sup>, Teruaki Taji<sup>1</sup> (<sup>1</sup>Grad. Sch. Bio., Univ. Tokyo, <sup>2</sup>National Agriculture and Food Research Organization, <sup>3</sup>Sch. Int., Univ. Tokyo)</p>
10:30	<p><b>2aA07</b></p> <p>ChaetoBase – The Centric Diatom <i>Chaetoceros gracilis</i> Genome Database – and Functional Analysis of Fucoxanthin Chlorophyll <i>a/c</i>-Binding Proteins (Light-Harvesting Complex Proteins)            Minoru Kumazawa<sup>1</sup>, Hiroyo Nishide<sup>2</sup>, Ryo Nagao<sup>3</sup>, Natsuko Inoue-Kashino<sup>4</sup>, Jian-Ren Shen<sup>5</sup>, Takeshi Nakano<sup>1</sup>, Ikuo Uchiyama<sup>2</sup>, Yasuhiro Kashino<sup>4</sup>, Kentaro Ifuku<sup>5</sup> (<sup>1</sup>Grad. Sch. Biostudies, Kyoto Univ., <sup>2</sup>NIBB, <sup>3</sup>RIIS, Okayama Univ., <sup>4</sup>Grad. Sch. Sci., Univ. Hyogo, <sup>5</sup>Grad. Sch. Agri. Kyoto Univ.)</p>	<p><b>2aB07</b> <b>E</b></p> <p>The Small GTPase OsRac1 forms two distinct immune receptor complexes containing the PRR OsCERK1 and the NLR Pit            Akira Akamatsu<sup>1</sup>, Masayuki Fujiwara<sup>2</sup>, Satoshi Hamada<sup>3</sup>, Yoji Kawano<sup>4</sup> (<sup>1</sup>Kwansei Gakuin University, <sup>2</sup>Yanmar Holdings Co., Ltd., <sup>3</sup>Nara Institute of Science and Technology, <sup>4</sup>Okayama University)</p>	<p><b>2aC07</b></p> <p>Expression and localization analysis of RETICULATA-RELATED3 and RETICULATA-RELATED4 proteins in <i>C<sub>4</sub> Flaveria</i>            Hayate Machino<sup>1</sup>, Hiroaki Hanata<sup>1</sup>, Ryusei Inoue<sup>1</sup>, Tsuyoshi Furumoto<sup>2</sup>, Kenji Nishimura<sup>1</sup>, Yuri Munekage<sup>1</sup> (<sup>1</sup>Grad. Sch. Sci. Tech., Kwansei Gakuin Univ., <sup>2</sup>Facu. Sch. Agr., Univ. Ryukoku)</p>	<p><b>2aD07</b></p> <p>Challenge to modify <i>Ocimum</i> species' fragrance by grafting            Shogo Hirose, Kaito Sakai, Keigo Hidaka, Rio Fukuta, An Yokoi, Mayu Tanaka, Atsushi Morikami, Masato Tsuru, Hironaka Tsukagoshi (Faculty of Agriculture, Meiji University)</p>
10:45	<p><b>2aA08</b></p> <p>Quantitative assessment of spillover from photosystem II (PSII) to PSI at 77 K            Ichiro Terashima, Riichi Oguchi, Masaru Kono (Plant Ecol., Dept. Biological Sci., Univ. Tokyo)</p>	<p><b>2aB08</b> <b>E</b></p> <p>Immunogenic OsPep peptides promote rice growth dependent on root microbes            Masako Fujii<sup>1</sup>, Yuniar Devi Utami<sup>1,2</sup>, Shigetaka Yasuda<sup>1</sup>, Yuni Tajima<sup>1</sup>, Takuma Ishizaki<sup>3</sup>, Yuichi Hongoh<sup>2</sup>, Yutaka Sato<sup>4</sup>, Yusuke Saijo<sup>1</sup> (<sup>1</sup>Grad. Sch. Sci. and Tech., NAIST, <sup>2</sup>Grad. Sch. Biosci. Biotech., Tokyo Institute of Tech., <sup>3</sup>JIRCAS, <sup>4</sup>NIG)</p>	<p><b>2aC08</b></p> <p>Identification of interactors of the bundle sheath chloroplast protein RETICULATA-RELATED 3 in <i>C<sub>4</sub> Flaveria bidentis</i>            Ryusei Inoue<sup>1</sup>, Hiroaki Hanata<sup>1</sup>, Hayate Machino<sup>1</sup>, Reiko Nakagawa<sup>2</sup>, Tsuyoshi Furumoto<sup>3</sup>, Kenji Nishimura<sup>1</sup>, Yuri Munekage<sup>1</sup> (<sup>1</sup>Grad. Sch. Sci. Tech., Kwansei Gakuin Univ., <sup>2</sup>RIKEN BDR, <sup>3</sup>Facu. Sch. Agr., Univ. Ryukoku)</p>	<p><b>2aD08</b></p> <p>Characterization of Transporter Genes Located within Biosynthetic Gene Cluster for Camptothecin Production in Ophiorrhiza pumila            Nozomi Nitanda, Amit Rai, Kazuki Saito, Mami Yamazaki (Grad. Sch. Pharm. Sci., Chiba Univ.)</p>
11:00	<p><b>2aA09</b></p> <p>Unique chromatic acclimation of the cyanobacterium <i>Pleurocapsa</i> sp. PCC 7319 controlled by dual photosensors            Takuto Otsu, Toshihiko Eki, Yuu Hirose (Toyoashi Univ. of Tech.)</p>	<p><b>2aB09</b></p> <p>Two different immune pathways activated by the NB-LRR type receptor Xa1 regulate bacterial blight resistance in rice            Ayaka Yoshihisa<sup>1</sup>, Satomi Yoshimura<sup>1</sup>, Motoki Shimizu<sup>2</sup>, Koji Yamaguchi<sup>1</sup>, Tsutomu Kawasaki<sup>1</sup> (<sup>1</sup>Grad. Sch. Agr., Univ. Kindai, <sup>2</sup>Iwate Biotech., Res., Ctr.)</p>	<p><b>2aC09</b></p> <p>Diverse regulation of nuclear gene expression by plastid signaling            Midori Inose<sup>1</sup>, Masafumi Henzan<sup>1</sup>, Toko Funaki<sup>1</sup>, Mitsumasa Hanaoka<sup>1,2</sup> (<sup>1</sup>Grad. Sch. Horticult., Chiba Univ., <sup>2</sup>Plant Mol. Sch. Cent., Chiba Univ.)</p>	

Room E	Room F	Room G	Room H	Room Y	Room Z	Time
Plant hormones/ Signaling molecules	Flowering/Clock	Environmental responses C	Vegetative growth			
<p>2aE05 Screening and Analysis of molecular mechanism of novel plant growth promoter PPG <u>Kazuma Ohata</u><sup>1</sup>, Shun Takeno<sup>2,3</sup>, Shota Tanaka<sup>2,3</sup>, Keiya Kaga<sup>1,7</sup>, Ayumi Yamagami<sup>1</sup>, Setsuko Shimada<sup>2</sup>, Minami Matsui<sup>2</sup>, Yusuke Kakei<sup>4</sup>, Yukihisa Shimada<sup>4</sup>, Shoji Segami<sup>5</sup>, Ryosuke Sasaki<sup>2</sup>, Masami Yokota Hirai<sup>2</sup>, Yasumitsu Kondo<sup>2</sup>, Naoshi Dohmae<sup>2</sup>, Tetsuo Kushi<sup>3</sup>, Masayoshi Maeshima<sup>5</sup>, Tadao Asami<sup>6</sup>, Hiroyuki Osada<sup>2</sup>, Kazuo Shinozaki<sup>2</sup>, Masaru Ohme-Takagi<sup>7</sup>, Takeshi Nakano<sup>1</sup> (<sup>1</sup>Grad. Sch. Biostudies, Kyoto Univ., <sup>2</sup>RIKEN CSRS, <sup>3</sup>Grad. Agri. Chem., Meiji Univ., <sup>4</sup>Yokohama City Univ., <sup>5</sup>Grad Sch. Biol. Agri., Nagoya Univ., <sup>6</sup>Grad. Sch. Appl. Biol. Chem., Univ. of Tokyo, <sup>7</sup>Grad. Sch. Sci. Eng., Saitama Univ)</p>	<p>2aF05 Analysis of florigen intercellular transport and concentration gradient formation in the shoot apical meristem of rice <u>Juri Nakamura</u>, Mari Tanaka, Hiroyuki Tsuji (Kihara Institute for Biological Research, Yokohama City Univ.)</p>	<p>2aG05 Identification And Analysis Of Conditionally Interacting Proteins Of The Stress-Responsive Transcription Factor DREB2A <u>Haruho Funamori</u><sup>1</sup>, Fuminori Takahashi<sup>2,3</sup>, Satoshi Kidokoro<sup>1</sup>, Yoko Kamei<sup>1</sup>, Kazuo Shinozaki<sup>3</sup>, Kazuko Yamaguchi-Shinozaki<sup>1,4</sup>, Junya Mizoi<sup>1</sup> (<sup>1</sup>Grad. Sch. Agr. Life Sci., Univ. Tokyo, <sup>2</sup>Fac. Adv. Eng., Tokyo Univ. Sci., <sup>3</sup>Center for Sustainable Resource Science, RIKEN, <sup>4</sup>Res. Inst. Agr. Life Sci., Tokyo Univ. Agr.)</p>	<p>2aH05 Cytokinin-inducible basic-Helix-Loop-Helix Family Transcription Factors are involved in the Secondary Growth in <i>Arabidopsis thaliana</i> <u>Yoshiyuki Sakurai</u><sup>1</sup>, Yurina Shimada<sup>1</sup>, Kazuma Uesaka<sup>2</sup>, Takafumi Yamashino<sup>1</sup> (<sup>1</sup>Grad. Sch. Bioagr. Sci., Nagoya Univ., <sup>2</sup>The Center for Gene Research, Nagoya Univ.)</p>	Symposium S05 Toward understanding the unique features of plant stem cells (9:00-11:40)		10:00
<p>2aE06 Elucidation of Structure and Function of Novel Cytokinin Produced by Phytopathogen <i>Rhodococcus fascians</i> <u>Mika Yoshino</u><sup>1</sup>, Alicia Surjana<sup>1</sup>, Mikiko Kojima<sup>2</sup>, Kensuke Kouki<sup>1</sup>, Toshio Nishikawa<sup>1</sup>, Hitoshi Sakakibara<sup>1,2</sup> (<sup>1</sup>Grad. Sch. Bio. Sci., Nagoya Univ., <sup>2</sup>RIKEN CSRS)</p>	<p>2aF06 Spatial integration of florigen and cytokinin signalling regulates reproductive development in rice <u>Moeko Sato</u><sup>1</sup>, Yuki Sakamoto<sup>2</sup>, Mari Tanaka<sup>1</sup>, Jun Ito<sup>1</sup>, Ken-ichiro Taoka<sup>1</sup>, Masafumi Mikami<sup>3</sup>, Masaki Endo<sup>3</sup>, Hidemi Kitano<sup>4</sup>, Sachihito Matsunaga<sup>5</sup>, Hiroyuki Tsuji<sup>1</sup> (<sup>1</sup>KIBR, Yokohama City Univ., <sup>2</sup>Dept. Biol. Sci., Grad. Sci. Osaka Univ., <sup>3</sup>Inst. Agrobiol. Sci., NARO, <sup>4</sup>Biosci. and Biotech. Cen., Nagoya Univ., <sup>5</sup>Grad. Sch. Front. Sci., Univ. Tokyo)</p>	<p>2aG06 Functional Analyses of <i>sensitive to long-term heat 3 (sloh3)</i> Mutant of <i>Arabidopsis thaliana</i> <u>Naoya Endo</u>, Ryo Tsukimoto, Kazuho Isono, Izumi Yotsui, Yoichi Sakata, Teruaki Taji (Dept. Bioscience, Tokyo Univ. of Agriculture)</p>	<p>2aH06 <i>SORFC03</i>, a short ORF-encoded peptide, is involved in repressing lateral root development under high nitrogen conditions in <i>Arabidopsis</i> <u>Kazuhiro Ito</u><sup>1</sup>, Yuki Hisanaga<sup>1</sup>, Sakina Kawano<sup>1</sup>, Atsushi Mabuchi<sup>1</sup>, Kousuke Hanada<sup>2</sup>, Koh Iba<sup>1</sup>, Kensuke Kusumi<sup>1</sup> (<sup>1</sup>Dept. Biol., Fac. Sci., Kyushu Univ., <sup>2</sup>Dept. Bioscience and Bioinformatics, Kyushu Institute of Technology)</p>			10:15
<p>2aE07 The Study of Novel Cytokinin Produced by <i>fas</i> Genes <u>Kazuki Miyata</u><sup>1</sup>, Alicia Surjana<sup>1</sup>, Mikiko Kojima<sup>2</sup>, Kensuke Kouki<sup>1</sup>, Toshio Nishikawa<sup>1</sup>, Hitoshi Sakakibara<sup>1,2</sup> (<sup>1</sup>Grad. Sch. Bio. Sci., Nagoya Univ., <sup>2</sup>RIKEN CSRS)</p>	<p>2aF07 Purification of florigen activation complex <u>Eri Funayama</u><sup>1</sup>, Ken-ichiro Taoka<sup>1</sup>, Yoichiro Fukao<sup>2</sup>, Hiroyuki Tsuji<sup>1</sup> (<sup>1</sup>Kihara Institute for Biological Research, Yokohama City Univ., <sup>2</sup>Col. of Life Sci., Ritsumeikan Univ.)</p>	<p>2aG07 Conserved Two-component Hik2-Rre1 Signalling Is Activated Under Temperature Upshift and Plastoquinone-reducing Conditions in the Cyanobacterium <i>Synechococcus elongatus</i> PCC 7942 Nachiketa Bairagi<sup>1,2</sup>, Satoru Watanabe<sup>3</sup>, Kaori Nimura-Matsune<sup>3</sup>, Kenya Tanaka<sup>4,5</sup>, Tatsuhiro Tsurumaki<sup>1,2</sup>, Shuji Nakanishi<sup>5</sup>, <u>Kan Tanaka</u><sup>1</sup> (<sup>1</sup>CLS, IIR, Tokyo Tech., <sup>2</sup>Dept. LST, Tokyo Tech., <sup>3</sup>Dept. Biosci, Tokyo Univ. Agric., <sup>4</sup>EBRC, Kobe Univ., <sup>5</sup>Grad. Sch. Eng. Sci., Osaka Univ.)</p>	<p>2aH07 <b>E</b> Auxin response of exaggerated root cut response in <i>aux/iaa3/shy2-101</i> dominant mutant <u>Feiyang Lin</u><sup>1</sup>, Kang Xu<sup>1</sup>, Yota Fujise<sup>2</sup>, Ken-ichiro Hayashi<sup>3</sup>, Takehide Kato<sup>4</sup>, Miyo T. Morita<sup>5</sup>, Hidehiro Fukaki<sup>6</sup>, Masaaki K. Watahiki<sup>1,2</sup> (<sup>1</sup>Grad. Sch. Life Sci., Univ. Hokkaido Univ., <sup>2</sup>Fac. Sci, Hokkaido Univ., <sup>3</sup>Dep. Biochem., Okayama Univ. Sci., <sup>4</sup>Div. of Biol. Sci., Grad. Sch. of Sci. and Tech., NAIST, <sup>5</sup>NIBB, <sup>6</sup>Grad. Sch. of Sci., Kobe Univ.)</p>			10:30
<p>2aE08 Functional Analysis of a Non-canonical Strigolactone Biosynthetic Enzyme in Rice <u>Kiyoshi Mashiguchi</u><sup>1,2</sup>, Takahiro Kobayashi<sup>1</sup>, Naoki Kitaoka<sup>2,3</sup>, Hiroki Taniguchi<sup>4</sup>, Hironori Hashida<sup>2</sup>, Hiroki Tokunaga<sup>2,5</sup>, Junko Kyoizuka<sup>2</sup>, Kohki Akiyama<sup>4</sup>, Shinjiro Yamaguchi<sup>1,2</sup> (<sup>1</sup>ICR, Kyoto Univ., <sup>2</sup>Grad. Sch. Life Sci., Tohoku Univ., <sup>3</sup>Grad. Sch. Agri., Hokkaido Univ., <sup>4</sup>Grad. Sch. Life &amp; Environ. Sci., Osaka Pref. Univ., <sup>5</sup>RIKEN CSRS)</p>		<p>2aG08 The survival strategy of a red-leaf variety of <i>Oxalis corniculata</i> against high temperature and high light stress <u>Hayata Misu</u><sup>1,2</sup>, Ichiro Terashima<sup>1,2</sup>, Yuya Fukano<sup>3</sup>, Wataru Yamori<sup>3</sup> (<sup>1</sup>Laboratory of Plant Ecology, <sup>2</sup>Department of Biological Sciences, Graduate School of Science, The University of Tokyo, <sup>3</sup>Institute for Sustainable Ecosystem Services, Graduate School of Agricultural and Life Sciences, The University of Tokyo)</p>	<p>2aH08 MhYPNOS-mediated regulatory mechanism of gemma dormancy in <i>Marchantia polymorpha</i> <u>Nami Yoshimura</u><sup>1</sup>, Mikako Yoshikawa<sup>1</sup>, Arisa Yasuda<sup>2</sup>, Hiroataka Kato<sup>1</sup>, Yuuki Sakai<sup>1</sup>, Tetsuro Mimura<sup>1,3,4</sup>, Yuki Kondo<sup>1</sup>, Hidehiro Fukaki<sup>1</sup>, Kimitsune Ishizaki<sup>1</sup> (<sup>1</sup>Grad. Sch. Sci., Kobe Univ., <sup>2</sup>Fac. Sci., Kobe Univ., <sup>3</sup>Grad. Sch. Agri. Life Sci., Univ. Tokyo, <sup>4</sup>Col. Biosci. Biotech., National Cheng Kung Univ.)</p>			10:45
<p>2aE09 Analysis of the transcriptional module responsible for temperature-dependent rice germination <u>Hideki Yoshida</u><sup>1,2</sup>, Ko Hirano<sup>2</sup>, Kenji Yano<sup>2,3</sup>, Fanniao Wang<sup>2</sup>, Masaki Mori<sup>2</sup>, Mayuko Kawamura<sup>2</sup>, Eriko Koketsu<sup>2</sup>, Masako Hattori<sup>2</sup>, Reynante Ordonio<sup>2</sup>, Peng Huang<sup>2</sup>, Makoto Matsuoka<sup>1,2</sup> (<sup>1</sup>IFeS, Fukushima Univ., <sup>2</sup>BBC, Nagoya Univ., <sup>3</sup>AIP, RIKEN)</p>		<p>2aG09 Bolting Characteristics of Dioecious Spinach in Different Male and Female Plants at Constant and Fluctuating Temperature Conditions in Growth Chambers <u>Yuki Yoneda</u>, Hiroki Kawashima (WARC, NARO)</p>	<p>2aH09 Metabolic reprogramming yields a key metabolite that promotes Compensated Cell Enlargement in <i>figus</i> <u>Hiromitsu Tabeta</u><sup>1,2,3</sup>, Muneo Sato<sup>2</sup>, Shizuka Gunji<sup>1</sup>, Hirokazu Tsukaya<sup>4</sup>, Masami Yokota Hirai<sup>2</sup>, Ali Ferjan<sup>1</sup> (<sup>1</sup>Grad. Sch. Edu., Tokyo Gakugei Univ., <sup>2</sup>RIKEN CSRS, <sup>3</sup>Grad. Sch. Art Sci., Univ. Tokyo, <sup>4</sup>Grad. Sch. Sci., Univ. Tokyo)</p>		11:00	

**E**=Presentation in English

● Day 2, Wed., March 23, AM (9:00–12:00)

Time	Room A	Room B	Room C	Room D
	Photosynthesis	Plant-organism interaction A	Organelles/Cytoskeleton	Secondary (specialized) metabolism
11:15	<p>2aA10 Effects of light and oxygen on chlorophyll <i>d</i> biosynthesis in a marine cyanobacterium <i>Acaryochloris marina</i> Yuki Tsuzuki<sup>1</sup>, Yusuke Tsukatani<sup>2</sup>, Hisanori Yamakawa<sup>1</sup>, Shigeru Itoh<sup>3</sup>, Yuichi Fujita<sup>1</sup>, Haruki Yamamoto<sup>1</sup> (<sup>1</sup>Grad. Sch. Bioagr. Sci., Nagoya Univ., <sup>2</sup>JAMSTEC, <sup>3</sup>Grad. Sch. Sci., Nagoya Univ.)</p>	<p>2aB10 ㊦ Root-specific <i>CLE3</i> expression is required for <i>WRKY33</i> activation in Arabidopsis shoots Dichao Ma<sup>1,2</sup>, Satoshi Endo<sup>1,3</sup>, Eriko Betsuyaku<sup>4</sup>, Toru Fujiwara<sup>2</sup>, Shigevuki Betsuyaku<sup>4</sup>, Hiroo Fukuda<sup>1,5</sup> (<sup>1</sup>Grad. Sch. Sci., Univ. Tokyo, <sup>2</sup>Grad. Sch. Agr. Life Sci., Univ. Toky, <sup>3</sup>Inst. Interdiscip. Res., KUAS, <sup>4</sup>Fac. Agr., Ryukoku Univ., <sup>5</sup>Fac. Bioenvir. Sci., KUAS)</p>	<p>2aC10 <i>Chlamydomonas</i> cpSRP consists of cpSRP43 and cpSRP54 and binds to ALB3.1 in the thylakoid membranes Hiroshi Kuroda<sup>1</sup>, Shin-Ichiro Ozawa<sup>2</sup>, Shino Hamao<sup>1</sup>, Yuichiro Takahashi<sup>1</sup> (<sup>1</sup>RIIS, Okayama Univ., <sup>2</sup>IPSR, Okayama Univ.)</p>	
11:30				
11:45				

Room E	Room F	Room G	Room H	Room Y	Room Z	Time
Plant hormones/ Signaling molecules	Flowering/Clock	Environmental responses C	Vegetative growth			
<p>2aE10 Analysis of the molecular mechanism of stomatal closure induced by the primary metabolite malate Yoshiharu Mimata, Shintaro Munemasa, Toshiyuki Nakamura, Yoshimasa Nakamura, Yoshiyuki Murata (Grad. Sch. Env. life Sci., Okayama Univ.)</p>		<p>2aG10 Dissecting causal mechanisms underlying loss of acquired osmotolerance in <i>Arabidopsis thaliana</i> Wt-1 Takahiro Hirano<sup>1</sup>, Hirotaka Ariga<sup>2</sup>, Izumi Yotsui<sup>1</sup>, Yoichi Sakata<sup>1</sup>, Teruaki Taji<sup>1</sup> (<sup>1</sup>Dept. of Bioscience, Tokyo Univ. of Agriculture, <sup>2</sup>Div. of Plant Sci., NARO)</p>	<p>2aH10 Genetics and multi-omics integration analyses identified cell differentiation state maintenance mechanisms in <i>hope-1</i> mutant hypocotyls Mizuki Shiratori<sup>1,2</sup>, Kazuki Takahashi<sup>2</sup>, Hiromitsu Tabeta<sup>1,2,3</sup>, Hiroyuki Koga<sup>4</sup>, Shizuka Gunji<sup>2</sup>, Muneo Sato<sup>3</sup>, Gorou Horiguchi<sup>5,6</sup>, Masami Yokota Hirai<sup>3</sup>, Hirokazu Tsukaya<sup>4</sup>, Ali Ferjani<sup>2</sup> (<sup>1</sup>Grad. Sch. Art Sci., Univ. Tokyo, <sup>2</sup>Dept. Biol., Tokyo Gakugei Univ., <sup>3</sup>RIKEN CSRS, <sup>4</sup>Grad. Sch. Sci., Univ. Tokyo, <sup>5</sup>Dept. Life Sci., Rikkyo Univ., <sup>6</sup>Res. Ctr. Life Sci., Rikkyo Univ.)</p>			11:15
		<p>2aG11 A cytochrome P450 protein identified via FOX hunting using <i>Eutrema salsugineum</i> cDNAs improves acquired osmotolerance Takuma Kajino<sup>1</sup>, Masahiro Yamaguchi<sup>1</sup>, Jumpei Narushima<sup>2</sup>, Yukio Yaguchi<sup>3</sup>, Izumi Yotsui<sup>1</sup>, Yoichi Sakata<sup>1</sup>, Teruaki Taji<sup>1</sup> (<sup>1</sup>Dept. Bioscience, Tokyo Univ. of Agriculture, <sup>2</sup>Division of Bichem, NIHS, <sup>3</sup>Research Institute for Agriculture and Life Science)</p>	<p>2aH11 Elucidation of effects of atmospheric low-temperature plasma irradiation on plant growth and their molecular mechanisms using <i>Marchantia polymorpha</i> as a model Shoko Tsuboyama<sup>1</sup>, Takamasa Okumura<sup>2</sup>, Kazunori Koga<sup>2,3</sup>, Masaharu Shiratani<sup>2</sup>, Kazuyuki Kuchitsu<sup>1</sup> (<sup>1</sup>Dept. Appl. Biol. Sci., Tokyo Univ. of Sci., <sup>2</sup>ISEE, Kyushu Univ., <sup>3</sup>NINS)</p>			11:30
			<p>2aH12 Analysis of Cell Stiffness in Developing Xylem Vessel Cells in Arabidopsis Tadashi Kunieda<sup>1,2</sup>, Jumpei Kawamura<sup>1</sup>, Ayumu Bessho<sup>1</sup>, Keisuke Kishida<sup>1</sup>, Yoichiroh Howokawa<sup>2,3</sup>, Taku Demura<sup>1,2</sup> (<sup>1</sup>Div. of Biol. Sci., NAIST, <sup>2</sup>CDG, NAIST, <sup>3</sup>Div. of Mat. Sci., NAIST)</p>			11:45

● Day 2, Wed., March 23, PM (13:15–16:15)

Time	Room A	Room B	Room C	Room D
	Photosynthesis	Systems biology	Organelles/Cytoskeleton	Secondary (specialized) metabolism
13:15	<p>2pA01 Functional Analysis Of The Third Nitrogenase-like Enzyme In Photosynthetic Bacterium <i>Rhodobacter capsulatus</i> Yoshiki Morimoto<sup>1</sup>, Kazuma Uesaka<sup>2</sup>, Yuichi Fujita<sup>1</sup>, Haruki Yamamoto<sup>1</sup> (<sup>1</sup>Grad. Sch. Bioagr. Sci., Nagoya Univ., <sup>2</sup>Center for Gene Research, Nagoya University)</p>	<p>2pB01 A de-novo gene originated from mitochondria controls flowering timing in <i>Arabidopsis thaliana</i> Tomoyuki Takeda<sup>1</sup>, Kazumasa Shirai<sup>1</sup>, Youwang Kim<sup>1</sup>, Mieko Higuchi-Takeuchi<sup>2</sup>, Minami Shimizu<sup>2</sup>, Takayuki Kondo<sup>1</sup>, Tomokazu Ushijima<sup>3</sup>, Tomonao Matsushita<sup>4</sup>, Kazuo Shinozaki<sup>2</sup>, Kousuke Hanada<sup>1</sup> (<sup>1</sup>Department of Bioscience and Bioinformatics, Kyushu Institute of Technology, <sup>2</sup>RIKEN Center for Sustainable Resource Science, <sup>3</sup>Department of Agricultural Science and Technology, Faculty of Agriculture, Setsunan University, <sup>4</sup>Department of Botany, Graduate School of Science, Kyoto University)</p>	<p>2pC01 Chloroplast photorelocation movement in <i>Arabidopsis thaliana</i> grown under different light conditions Aya Masuda<sup>1</sup>, Yuki Sakamoto<sup>1</sup>, Takumi Higaki<sup>2</sup>, Motoki Tominaga<sup>3,4</sup>, Shingo Takagi<sup>1</sup> (<sup>1</sup>Grad. Sch. Sci., Osaka Univ., <sup>2</sup>Kumamoto University, Faculty of Advanced Science and Technology, <sup>3</sup>Fac. Educ. Integrated Arts. Sci., Bio., Univ. Waseda, <sup>4</sup>Grad. Sch. Adv. Sci. and Eng., Univ. Waseda)</p>	<p>2pD01 Cluster-forming CYP71Bs of <i>Arabidopsis thaliana</i> metabolize free indole-related compounds Kai Uchida, Masami Yokota Hirai (RIKEN CSRS)</p>
13:30	<p>2pA02 Loss of <i>rsbU</i> gene enhances heterotrophic growth in the dark and represses photoautotrophic growth of the cyanobacterium <i>Leptolyngbya boryana</i> Marie Nishio, Shintaro Hida, Nobuyuki Takatani, Haruki Yamamoto, Yuichi Fujita (Grad. Sch. Bioagr. Sci., Nagoya Univ.)</p>	<p>2pB02 Comparative genome/transcriptome analysis under high temperature conditions at the ripening stage of rice Kyonoshin Maruyama<sup>1</sup>, Hiroaki Sakai<sup>2</sup>, Asako Kobayashi<sup>3</sup>, Tetsuya Sakurai<sup>4</sup>, Yuuko Mizukami<sup>6</sup>, Aoi Hamagashira<sup>5</sup>, Kenichirou Mori<sup>6</sup> (<sup>1</sup>JIRCAS, <sup>2</sup>NAAC, <sup>3</sup>Fukui Agr. Exp. Stn, <sup>4</sup>Mul. Sci., Kochi Univ., <sup>5</sup>Ama Agri. Forest. Fish. Office, <sup>6</sup>Aichi Agri. Res. Center)</p>	<p>2pC02 Roles of plastid anionic lipids during the development of etioplasts in dark-grown <i>Arabidopsis thaliana</i> Akiko Yoshihara<sup>1</sup>, Hajime Wada<sup>2</sup>, Noriko Nagata<sup>3</sup>, Koichi Kobayashi<sup>4</sup> (<sup>1</sup>Grad. Sch. Sci., Osaka pref. Univ., <sup>2</sup>Grad. Sch. Art. Sci., Univ. Tokyo, <sup>3</sup>Fac. Sci., Japan Women's Univ., <sup>4</sup>Grad. Sch. Sci., Osaka pref. Univ.)</p>	<p>2pD02 Identification of acyltransferase genes involved in biosynthesis of phenylethanoid glycoside by using sesame cell culture Yoshiro Fuji<sup>1,4</sup>, Hiroshi Matsufuji<sup>2</sup>, Tomoyoshi Akashi<sup>3</sup>, Masami Yokota Hirai<sup>4</sup> (<sup>1</sup>College of Bioresource Sciences, Nihon University, <sup>2</sup>Department of Food Bioscience and Biotechnology, College of Bioresource Sciences, Nihon University, <sup>3</sup>Department of Applied Biological Science, College of Bioresource Sciences, Nihon University, <sup>4</sup>RIKEN Center for Sustainable Resource Science)</p>
13:45	<p>2pA03 Search for genes involved in photosynthesis-dependent nitrogen-fixing growth of the cyanobacterium <i>Leptolyngbya boryana</i> by transposon tagging Mari Banba<sup>1</sup>, Kazuma Uesaka<sup>2</sup>, Chie Tomatsu<sup>1</sup>, Haruki Yamamoto<sup>1</sup>, Kunio Ihara<sup>2</sup>, Yuichi Fujita<sup>1</sup> (<sup>1</sup>Grad. Sch. Bioagr. Sci., Nagoya Univ., <sup>2</sup>Center for Gene Research, Nagoya Univ.)</p>	<p>2pB03 Development of RIKEN Plant Metabolome MetaDatabase Atsushi Fukushima<sup>1,2</sup>, Mikiko Takahashi<sup>1</sup>, Hideki Nagasaki<sup>1,3</sup>, Yusuke Aono<sup>4</sup>, Makoto Kobayashi<sup>1</sup>, Miyako Kusano<sup>1,4</sup>, Kazuki Saito<sup>1</sup>, Norio Kobayashi<sup>1</sup>, Masanori Arita<sup>1,5</sup> (<sup>1</sup>RIKEN CSRS, <sup>2</sup>Grad. Sch. Life Environ. Sci., Kyoto Pref. Univ., <sup>3</sup>KAZUSA DNA Research Institute, <sup>4</sup>Grad. Sch. of Life &amp; Env. Sci., Univ. Tsukuba, <sup>5</sup>DDBJ, National Institute of Genetics)</p>	<p>2pC03 Metabolic changes caused by overaccumulation of the bacterial alarmone ppGpp contribute to increased plant biomass under nitrogen deficiency Mina Goto<sup>1</sup>, Akira Oikawa<sup>2</sup>, Shinji Masuda<sup>1</sup> (<sup>1</sup>Dept. Life Sci. &amp; Technol., Tokyo Inst. Tech., <sup>2</sup>Grad. Schl. Agri., Univ. Kyoto)</p>	<p>2pD03 Transgenic <i>Forsythia</i> plants expressing a sesame cytochrome P450 produce beneficial lignans Tomotsugu Kovama<sup>1</sup>, Erika Matsumoto<sup>1</sup>, Toshiaki Okuda<sup>1</sup>, Jun Murata<sup>1</sup>, Manabu Horikawa<sup>1</sup>, Naoki Hata<sup>2</sup>, Atsushi Okazawa<sup>3</sup>, Eiichiro Ono<sup>4</sup>, Honoo Satake<sup>1</sup> (<sup>1</sup>Suntory Foundation for Life Sciences, <sup>2</sup>Sch. Environ. Sci., The Univ. of Shiga Pref., <sup>3</sup>Grad. Sch. Life Environ. Sci., Osaka Pref. Univ., <sup>4</sup>Suntory Global Innovation Center (SIC) Ltd)</p>
14:00	<p>2pA04 Extracellular vesicle-mediated secretion of proteochlorophyllide in the cyanobacterium <i>Leptolyngbya boryana</i> Kentaro Usui, Haruki Yamamoto, Takao Oi, Mitsutaka Taniguchi, Hitoshi Mori, Yuichi Fujita (Grad. Sch. Bioagr. Sci., Nagoya Univ.)</p>	<p>2pB04 <b>E</b> Gene-to-gene Spearman correlation using the sample principal component scores is a simple sample-balancing methodology for gene coexpression calculation Takeshi Obayashi<sup>1</sup>, Yuichi Aoki<sup>2</sup> (<sup>1</sup>Grad. Sch. Info. Sci., Tohoku Univ., <sup>2</sup>ToMMO, Tohoku Univ.)</p>	<p>2pC04 Analysis for the mechanism of suppression of chloroplast development by novel BR signaling factor BPG4 Ryo Tachibana<sup>1</sup>, Momo Marugami<sup>2</sup>, Susumu Abe<sup>2</sup>, Ayumi Yamagami<sup>1</sup>, Syohei Nosaki<sup>3</sup>, Takuya Miyakawa<sup>4</sup>, Takehito Inaba<sup>5</sup>, Minami Matsui<sup>6</sup>, Tetsuo Kushi<sup>2</sup>, Tadao Asami<sup>4</sup>, Kentaro Ifuku<sup>1</sup>, Takeshi Nakano<sup>1</sup> (<sup>1</sup>Grad. Sch. Biostudies., Kyoto Univ., <sup>2</sup>Dept. Agri., Meiji Univ., <sup>3</sup>Sch. Life and Environmental sci., Tsukuba Univ., <sup>4</sup>Grad. Sch. Agri. Life Sci., Univ. Tokyo, <sup>5</sup>Dept. Agri. Univ., Miyazaki Univ., <sup>6</sup>RIKEN CSRS, <sup>7</sup>Grad. Sch. Agri., Kyoto Univ.)</p>	<p>2pD04 Secretion of saponins from roots and its effects on rhizosphere microbiota Masaru Nakayasu<sup>1</sup>, Shinichi Yamazaki<sup>2</sup>, Yuichi Aoki<sup>2</sup>, Kazufumi Yazaki<sup>1</sup>, Akifumi Sugiyama<sup>1</sup> (<sup>1</sup>Kyoto University, <sup>2</sup>Tohoku University Tohoku Medical Megabank Organization)</p>
14:15	<p>2pA05 <i>Synechocystis</i> sp. PCC6803 has a cold-sensitive elongation pathway from hypogeic acid to oleic acid Asuka Kobayashi<sup>1</sup>, Nattiwong Pankasem<sup>2</sup>, Kotaro Kobayashi<sup>3</sup>, Florence Corellou<sup>4</sup>, Iwane Suzuki<sup>5</sup> (<sup>1</sup>Sch. Life &amp; Environ. Sci., Univ. Tsukuba, <sup>2</sup>Div. Biol. Sci., Univ. California, San Diego, USA, <sup>3</sup>Grad. Sch. Life &amp; Environ. Sci., Univ. Tsukuba, <sup>4</sup>Lab. Biogenesis Membrane, CNRS-Univ. Bordeaux, France, <sup>5</sup>Fac. Life &amp; Environ. Sci., Univ. Tsukuba)</p>	<p>2pB05 Exploration of the origin of ASYMMETRIC LEAVES2 (AS2) in genome database Hidekazu Iwakawa<sup>1,2</sup>, Shoko Kojima<sup>2</sup>, Michiko Sasabe<sup>3</sup>, Shogo Matsumoto<sup>1</sup>, Yasunori Machida<sup>4</sup>, Chiyoko Machida<sup>2</sup> (<sup>1</sup>Grad. Sch. Bioagricultural Sci. Nagoya Univ., <sup>2</sup>Grad. Sch. Biosci. and Biotech., Chubu Univ., <sup>3</sup>Dep., Biol., Faculty of Agriculture and Life Sci., Hirotsaki Univ., <sup>4</sup>Grad. Sch. Sci. Nagoya Univ.)</p>	<p>2pC05 Changes in morphology of <i>Chlamydomonas</i> chloroplasts depending on culture conditions Naoki Sato<sup>1</sup>, Takashi Moriyama<sup>1</sup>, Mayumi Wakazaki<sup>2</sup>, Mayuko Sato<sup>2</sup>, Kiminori Toyooka<sup>2</sup> (<sup>1</sup>University of Tokyo, Graduate School of Arts and Sciences, <sup>2</sup>RIKEN CSRS)</p>	<p>2pD05 Investigation of Brassica-specific volatile organic compounds in the soil of field-grown Komatsuna Mizuki Sano<sup>1</sup>, Yusuke Aono<sup>1</sup>, Takumi Sato<sup>5</sup>, Hiroe Imai<sup>6</sup>, Iwao Ohtsu<sup>2</sup>, Naoto Nihei<sup>7</sup>, Yasunori Ichihashi<sup>8</sup>, Miyako Kusano<sup>2,3,4</sup> (<sup>1</sup>Deg. Prog. Life and Earth Sci. Univ. Tsukuba, <sup>2</sup>Dept. Life and Env. Sci. Univ. Tsukuba, <sup>3</sup>T-PIRC, Univ. Tsukuba, <sup>4</sup>CSRS, RIKEN, <sup>5</sup>BRC, RIKEN, <sup>6</sup>R&amp;D Center for Tailor-Made-QOL, <sup>7</sup>Faculty of Food and Agri. Sci, Univ. Fukushima)</p>

Room E	Room F	Room G	Room H	Room Y	Room Z	Time
Plant hormones/ Signaling molecules	Flowering/Clock	Environmental responses C	Vegetative growth			
<p>2pE01 Brassinosteroids promote reestablishment of the stem cell niche in resected roots <u>Naoki Takahashi</u>, Masaaki Umeda (Grad. Sch. Sci. Tech., NAIST)</p> <p>2pE02 <b>E</b> Involvement of phytoene desaturase activity and auxin signaling for root-cut response in <i>Arabidopsis thaliana</i> <u>Kang Xu</u><sup>1</sup>, Emi Yumoto<sup>2</sup>, Masashi Asahina<sup>2</sup>, Ken-ichiro Hayashi<sup>3</sup>, Takehide Kato<sup>4</sup>, Miyo T. Morita<sup>5</sup>, Hidehiro Fukaki<sup>6</sup>, Masaaki K. Watahiki<sup>1,7</sup> (<sup>1</sup>Grad. Sch. Life., Univ. Hokkaido, <sup>2</sup>Dept. Biosci., Univ. Teikyo, <sup>3</sup>Dept. Biochem., Univ. Okayama of Science, <sup>4</sup>Div. Bio. Sci., Grad. Sch. Sci. Tech., NAIST, <sup>5</sup>NIBB, <sup>6</sup>Grad. Sch. Sci., Univ. Kobe, <sup>7</sup>Div. BioSci., Fac. Sci., Univ. Hokkaido)</p> <p>2pE03 IAA-amino acid conjugation enzyme GH3 plays a fundamental role in IAA homeostasis <u>Kosuke Fukui</u><sup>1</sup>, Kazushi Arai<sup>1</sup>, Kota Akamine<sup>1</sup>, Yuki Aoi<sup>2</sup>, Hiroyuki Kasahara<sup>3,4</sup>, Ken-ichiro Hayashi<sup>1</sup> (<sup>1</sup>Okayama Univ. of Sci., <sup>2</sup>Uni. Grad. Sch. Agri. Sci., Tokyo Univ. of Agri. and Tech., <sup>3</sup>Grad. Sch. Agri., Tokyo Univ. of Agri. and Tech., <sup>4</sup>CSRS, Riken)</p> <p>2pE04 Analysis of JA-SA Dose-dependent phytohormone responses by large-scale transcriptome analysis in <i>Arabidopsis thaliana</i> <u>Atsuki Tomita</u><sup>1,2</sup>, Taro Maeda<sup>2,3</sup>, Natsumi Mori-Moriyama<sup>3</sup>, Yasuyuki Nomura<sup>3</sup>, Yoko Kurita<sup>3</sup>, Makoto Kashima<sup>4</sup>, Masaru Tomita<sup>1,2</sup>, Shigeyuki Betsuyaku<sup>5</sup>, Atsushi J. Nagano<sup>2,3,5</sup> (<sup>1</sup>Dept. Environment &amp; Info. Studies., Keio Univ., <sup>2</sup>IAB, Keio Univ., <sup>3</sup>Res. Inst. Food Agr., Ryukoku Univ., <sup>4</sup>Coll. Sci. Eng., Aoyama Gakuin Univ., <sup>5</sup>Fac. Agr., Ryukoku Univ.)</p> <p>2pE05 Effects of a novel compound that induce accumulation of both jasmonic acid and salicylic acid in <i>Arabidopsis</i> <u>Shiori Matsumoto</u><sup>1</sup>, Kentaro Namiki<sup>1</sup>, Ryuhei Toya<sup>1</sup>, Hiroki Kikuchi<sup>1</sup>, Kentaro Maeda<sup>1</sup>, Erika Nishida<sup>1</sup>, Nobutaka Kitahata<sup>1,2</sup>, Yuho Saito<sup>1</sup>, Masataka Nakano<sup>1</sup>, Taiki Funahashi<sup>1</sup>, Yutaka Nakazawa<sup>1</sup>, Kenji Hashimoto<sup>1</sup>, Koji Kuramochi<sup>1</sup>, Hiroshi Abe<sup>3</sup>, Fuminori Takahashi<sup>3,4</sup>, Tadao Asami<sup>2</sup>, Seisuke Kimura<sup>5</sup>, Kazuyuki Kuchitsu<sup>1</sup> (<sup>1</sup>Dept. Appl. Biol. Sci., Tokyo Univ. of Science, <sup>2</sup>Univ. of Tokyo, <sup>3</sup>RIKEN, <sup>4</sup>Dept. Biol. Sci. &amp; Tech., Tokyo Univ. of Science, <sup>5</sup>Kyoto Sangyo Univ.)</p>	<p>2pF01 Functional analysis on receiver-like domain of PRR7 that is implicated in the circadian clock in <i>Arabidopsis thaliana</i> <u>Chiaki Teramae</u>, Motohiro Ichiko, Takafumi Yamashino (Grad. Sch. Bioagr. Sci., Nagoya Univ.)</p> <p>2pF02 Analysis of maintenance mechanism of cellular circadian rhythms in <i>Arabidopsis</i> leaves at low temperature <u>Shunji Nakamura</u>, Tokitaka Oyama (Grad. Sch. Sci., Kyoto Univ.)</p> <p>2pF03 Diel transcriptome of a short-day duckweed under three photoperiod conditions <u>Tomoaki Muranaka</u> (Fac. of Agri., Kagoshima Univ.)</p> <p>2pF04 The binding model for the period-lengthening molecule and its target <u>Akari Maeda</u><sup>1</sup>, Hiromi Matsuo<sup>1</sup>, Kazuhiro Fujimoto<sup>2,3</sup>, Toshinori Kinoshita<sup>2,3</sup>, Junichiro Yamaguchi<sup>4</sup>, <u>Norihito Nakamichi</u><sup>1</sup> (<sup>1</sup>Grad. Sch. Bioagr., Nagoya Univ., <sup>2</sup>Grad. Sch. Science, Nagoya Univ., <sup>3</sup>ITbM, Nagoya Univ., <sup>4</sup>Faculty of Sci. Eng., Waseda Univ.)</p> <p>2pF05 The analysis of quantitative regulation of proteins involved in temperature compensation of the plant circadian clock <u>Akari Maeda</u><sup>1</sup>, Hiromi Matsuo<sup>2</sup>, Toshinori Kinoshita<sup>1,3</sup>, Norihito Nakamichi<sup>2</sup> (<sup>1</sup>Grad. Sch. Sci., Nagoya Univ., <sup>2</sup>Grad. Sch. Agric., Nagoya Univ., <sup>3</sup>ITbM., Nagoya Univ.)</p>	<p>2pG01 Temperature variable MRI as a tool for exploring diversity of freezing behaviors in complex plant organs <u>Masaya Ishikawa</u><sup>1</sup>, T. Stait-Gardner<sup>2</sup>, Hikaru Kubo<sup>1</sup>, Norihisa Matsushita<sup>1</sup>, Kenji Fukuda<sup>1</sup>, W.S. Price<sup>2</sup> (<sup>1</sup>Grad. Sch. Agr Life Sci. Univ. Tokyo, <sup>2</sup>Western Sydney Univ.)</p> <p>2pG02 Role of autophagy in cold stress response of <i>Arabidopsis thaliana</i> <u>Akito Sato</u>, Ryota Mihara, Yasuko Ito-Inaba, Takehito Inaba (Fac. Agr., Univ. Miyazaki)</p> <p>2pG03 The Involvement of FLA8 in Cold Acclimation and Freezing Tolerance <u>Yukino Shibasaki</u><sup>1</sup>, Kim Johnson<sup>2</sup>, Antony Baicic<sup>2</sup>, Toshihisa Kotake<sup>1</sup>, Daisuke Takahashi<sup>1</sup> (<sup>1</sup>Grad. Sch. Sci. Eng., Saitama Univ., <sup>2</sup>La Trobe Inst. Food Agr., La Trobe Univ.)</p> <p>2pG04 Analysis of regulatory mechanisms of cold-inducible gene expression mediated by clock-related transcription factors in <i>Arabidopsis</i> <u>Satoshi Kidokoro</u><sup>1</sup>, Izumi Konoura<sup>1</sup>, Kentaro Hayashi<sup>1</sup>, Fumiyouki Soma<sup>1</sup>, Takamasa Suzuki<sup>2</sup>, Kazuo Shinozaki<sup>3</sup>, Kazuko Yamaguchi-Shinozaki<sup>1,4</sup> (<sup>1</sup>Grad. Sch. Agr. Life Sci., Univ. Tokyo, <sup>2</sup>Biosci. Biotech., Chubu Univ., <sup>3</sup>Center for Sustainable Resource Science, RIKEN, <sup>4</sup>Res. Inst. Agr. Life Sci., Tokyo Univ. Agr.)</p> <p>2pG05 [Cancelled]</p>	<p>2pH01 Functional analysis of cytokinin in cell fate regulation of vascular stem cells <u>Shunji Shimadzu</u><sup>1,2</sup>, Alif Meem Nurani<sup>1</sup>, Kazuki Yamada<sup>3</sup>, Kyomi Shibata<sup>3</sup>, Tomoyuki Furuya<sup>2</sup>, Kyoko Ohashi-Ito<sup>1</sup>, Kimitsune Ishizaki<sup>2</sup>, Hidehiro Fukaki<sup>2</sup>, Masashi Asahina<sup>3,4</sup>, Hiroo Fukuda<sup>5</sup>, Yuki Kondo<sup>2</sup> (<sup>1</sup>Grad. Sch. Sci., The Univ. Tokyo, <sup>2</sup>Grad. Sch. Sci., Kobe Univ., <sup>3</sup>Dept. Bisci., Teikyo Univ., <sup>4</sup>Adv. Instrum. Anal. Cent., Teikyo Univ., <sup>5</sup>Fac. Bioenv. Sci. KUAS)</p> <p>2pH02 Research on the function of the circadian clock gene GI in vascular stem cell differentiation <u>Takuma Arano</u><sup>1</sup>, Haruka Uchimura<sup>1</sup>, Hiroo Fukuda<sup>3</sup>, Yuki Kondo<sup>2</sup> (<sup>1</sup>Grad. Sch. Sci., The Univ. Tokyo, <sup>2</sup>Grad. Sch. Sci., Kobe Univ., <sup>3</sup>Fac. Bioenv. Sci. KUAS)</p> <p>2pH03 The <i>fsp1/stur2</i> Mutation that Increases the Auxin Content Restores Lateral Root Formation in the <i>fwr/gnom</i> Mutant of <i>Arabidopsis thaliana</i> <u>Chieko Goto</u><sup>1</sup>, Akira Ikegami<sup>1</sup>, Tatsuaki Goh<sup>1,2</sup>, Hiroyuki Kasahara<sup>3,4</sup>, Yuki Kondo<sup>1</sup>, Kimitsune Ishizaki<sup>1</sup>, Tetsuro Mimura<sup>1,5,6</sup>, Hidehiro Fukaki<sup>1</sup> (<sup>1</sup>Grad. Sch. Sci., Kobe Univ., <sup>2</sup>Div. Biol. Sci., NAIST, <sup>3</sup>Grad. Sch. of Agri., Tokyo Univ. of Agri. and Tech., <sup>4</sup>RIKEN, CSRS, <sup>5</sup>Grad. Sch. Agri. Life Sci., Univ. Tokyo, <sup>6</sup>Col. Biosci. Biotech., National Cheng Kung Univ.)</p> <p>2pH04 Functional Analysis of RLF, a Cytochrome <i>b<sub>5</sub></i>-like Heme Binding Protein, in Lateral Root Formation <u>Kentaro Iwata</u><sup>1</sup>, Chieko Goto<sup>1</sup>, Kaisei Maruyama<sup>2</sup>, Hinatamaru Fukumura<sup>1</sup>, Yuki Kondo<sup>1</sup>, Kimitsune Ishizaki<sup>1</sup>, Hiroyuki Kasahara<sup>3,4</sup>, Hidehiro Fukaki<sup>1</sup> (<sup>1</sup>Grad. Sch. of Sci., Kobe Univ., <sup>2</sup>Fac. of Agri., Tokyo Univ. of Agri. and Tech., <sup>3</sup>Grad. Sch. of Agri., Tokyo Univ. of Agri. and Tech., <sup>4</sup>RIKEN, CSRS)</p> <p>2pH05 Transcriptomic Characterization of the Initial to Early Stages of Direct Shoot Regeneration in <i>Torenia fournieri</i> <u>Hatsune Morinaka</u><sup>1</sup>, Akihito Mamiya<sup>2</sup>, Hiroaki Tamaki<sup>3</sup>, Takamasa Suzuki<sup>4</sup>, Momoko Ikeuchi<sup>1,5</sup>, Akira Iwase<sup>1</sup>, Tetsuya Higashiyama<sup>3,6</sup>, Keiko Sugimoto<sup>1</sup>, Munetaka Sugiyama<sup>3</sup> (<sup>1</sup>CSRS, RIKEN, <sup>2</sup>Dept. Biol., Grad. Sch. Sci., Kobe Univ., <sup>3</sup>Dept. Biol. Sci., Grad. Sch. Sci., Univ. Tokyo, <sup>4</sup>Dept. Biol. Chem., Coll. Biosci. Biotech., Chubu Univ., <sup>5</sup>Faculty of Sci., Niigata Univ., <sup>6</sup>ITbM, Nagoya Univ.)</p>	Symposium S06 Chemical signals that control parasitism, symbiosis, defense, and infection in plants (13:15-16:15)	Symposium S07 A multifaceted approach to uncovering the mechanism and dynamics of the plant-microbe holobiont (13:15-16:15)	13:15  13:30  13:45  14:00  14:15

**E**=Presentation in English

● Day 2, Wed., March 23, PM (13:15–16:15)

Time	Room A	Room B	Room C	Room D
	Photosynthesis	Systems biology	Organelles/Cytoskeleton	Secondary (specialized) metabolism
14:30		<p>2pB06 Data driven crop design technology <u>Takashi Hirayama</u><sup>1</sup>, Daisuke Saisho<sup>1</sup>, Jun Ito<sup>2</sup>, Koosuke Hattori<sup>3</sup>, Satoshi Okada<sup>1</sup>, Yoko Ikeda<sup>1</sup>, Taizo Umezaki<sup>3</sup>, Hiroyuki Tsuji<sup>2</sup>, Keiichi Mochida<sup>4</sup> (<sup>1</sup>IPSR, Okayama Univ., <sup>2</sup>KIBR, YCU, <sup>3</sup>CSRS, RIKEN, <sup>4</sup>Dept. Tech., Chubu Univ.)</p>	<p>2pC06 Trial analyses of RNA editing with the targeted base editing method for the mitochondrial genome of <i>Arabidopsis thaliana</i> <u>Issei Nakazato</u><sup>1</sup>, Chang Zhou<sup>1</sup>, Yoshiko Tamura<sup>1</sup>, Reiko Masuda<sup>1</sup>, Nobuhiro Tsutsumi<sup>1</sup>, Mizuki Takenaka<sup>2</sup>, Shin-ichi Arimura<sup>1</sup> (<sup>1</sup>Grad. Sch. of Agr. and Life Sci., Univ. of Tokyo, <sup>2</sup>Grad. Sch. of Sci., Kyoto Univ.)</p>	
14:45		<p>2pB07 Developmental state transition in the shoot apical meristem of barley Jun Ito<sup>1</sup>, Yuko Nomura<sup>1</sup>, Kotaro Takahagi<sup>2</sup>, Satoshi Okada<sup>3</sup>, Shuhei Kuge<sup>1</sup>, Nao Sato<sup>1</sup>, Shunichi Arai<sup>1</sup>, Hiroki Matsumoto<sup>1</sup>, Midori Sugimura<sup>1</sup>, Midori Seki<sup>1</sup>, Koosuke Hattori<sup>4</sup>, Taizo Umezaki<sup>4</sup>, Yoko Ikeda<sup>3</sup>, Daisuke Saisho<sup>3</sup>, Keiichi Mochida<sup>2</sup>, Takashi Hirayama<sup>3</sup>, <u>Hiroyuki Tsuji</u><sup>1</sup> (<sup>1</sup>KIBR, YCU, <sup>2</sup>CSRS, RIKEN, <sup>3</sup>IPSR, Okayama Univ., <sup>4</sup>Dept. Tech., Chubu Univ.)</p>	<p>2pC07 Identification of a protein suppressing distortion of secondary cell wall patterns Takema Sasaki<sup>1,2</sup>, Moe Yamada<sup>3</sup>, Saku Kijima<sup>1</sup>, Takeshi Higa<sup>1</sup>, Mayuko Sato<sup>4</sup>, Mayumi Wakazaki<sup>4</sup>, Kiminori Toyooka<sup>4</sup>, Yohei Kondo<sup>5</sup>, Motosuke Tsutsumi<sup>5,6</sup>, Kohei Otomo<sup>5,6,7</sup>, Takashi Murata<sup>8</sup>, Tomomi Nemoto<sup>5,6,9,10</sup>, <u>Yoshihisa Oda</u><sup>1,2</sup> (<sup>1</sup>NIG, Gene Funct., <sup>2</sup>SOKENDAI, Genetics, <sup>3</sup>Nagoya Univ. Biol. Sci., <sup>4</sup>RIKEN, CSRS, <sup>5</sup>ExCELLS, <sup>6</sup>NIPS, <sup>7</sup>Juntendo Univ., Grad. Sch. Med., <sup>8</sup>Kanagawa Inst. Tech., Applied Bio., <sup>9</sup>SOKENDAI, Physiol. Sci., <sup>10</sup>Hokkaido Univ., RIES)</p>	
15:00		<p>2pB08 Diversity of developmental trajectories in barley illustrated through deep phenotyping <u>Keiichi Mochida</u><sup>1,3,5</sup>, June-Sik Kim<sup>1</sup>, Kotaro Takahagi<sup>1,3</sup>, Asaka Kanatani<sup>1</sup>, Komaki Inoue<sup>1</sup>, Yukiko Uehara<sup>1</sup>, Minami Shimizu<sup>1</sup>, Daisuke Saisho<sup>2</sup>, Jun Ito<sup>3</sup>, Koosuke Hattori<sup>4</sup>, Satoshi Okada<sup>2</sup>, Yoko Ikeda<sup>2</sup>, Taizo Umezaki<sup>4</sup>, Hiroyuki Tsuji<sup>3</sup>, Takashi Hirayama<sup>2</sup> (<sup>1</sup>CSRS, RIKEN, <sup>2</sup>IPSR, Okayama Univ., <sup>3</sup>KIBR, Yokohama City Univ., <sup>4</sup>Dept. of Technology, Chubu Univ., <sup>5</sup>School of Data and Information Sciences, Nagasaki Univ.)</p>	<p>2pC08 Role of the microtubule-associated protein CORD in Marchantia <u>Takema Sasaki</u><sup>1,2</sup>, Kimitsune Ishizaki<sup>3</sup>, Hiroyasu Motose<sup>4</sup>, Yoshihisa Oda<sup>1,2</sup> (<sup>1</sup>Gene Funct., NIG, <sup>2</sup>Genetics, SOKENDAI, <sup>3</sup>Grad. Sch. Sci., Kobe Univ., <sup>4</sup>Grad. Sch. Nat. Sci., Okayama Univ.)</p>	
15:15		<p>2pB09 Analysis of temperature dependency in JA/SA response using DeLTa-Seq, direct-lysate targeted RNA-Seq Makoto Kashima<sup>1</sup>, Natsumi Mori-Moriyama<sup>2</sup>, Yasuyuki Nomura<sup>2</sup>, Shigeyuki Betsuyaku<sup>3</sup>, <u>Atsushi J. Nagano</u><sup>3,4</sup> (<sup>1</sup>Coll. Sci. Eng., Aoyama Gakuin Univ., <sup>2</sup>Res. Inst. Food Agr., Ryukoku Univ., <sup>3</sup>Fac. Agr., Ryukoku Univ., <sup>4</sup>IAB, Keio Univ.)</p>		



Room E	Room F	Room G	Room H	Room Y	Room Z	Time
Plant hormones/ Signaling molecules	Flowering/Clock	Environmental responses C	Vegetative growth			
<p>2pE06 Exploration of modified sites and analysis for molecular function in phosphorylation of BIL7 protein that promotes plant growth in brassinosteroid signaling <u>Yusuke Nakamura</u><sup>1</sup>, Tomoko Miyaji<sup>2</sup>, Ayumi Yamagami<sup>1</sup>, Akira Nozawa<sup>3</sup>, Tatsuya Sawazaki<sup>3</sup>, Kensuke Suzuki<sup>2</sup>, Naoshi Dohmae<sup>2</sup>, Takuya Miyagawa<sup>3</sup>, Minami Matsu<sup>2</sup>, Shozo Fujioka<sup>2</sup>, Tadao Asami<sup>4</sup>, Takeshi Nakano<sup>1</sup> (1Grad. Sch. Biostudies., Kyoto Univ., 2RIKEN, CSRS, 3Proteo-Science Center, Ehime Univ., 4Grad. Sch. Appl. Biol. Chem., Univ. of Tokyo)</p> <p>2pE07 Structure determination of TGW6, which limits grain size in rice <u>Tatsuki Akabane</u><sup>1</sup>, Nobuhiro Suzuki<sup>2</sup>, Wataru Tsuchiya<sup>2</sup>, Takuya Yoshizawa<sup>3</sup>, Hiroyoshi Matsumura<sup>3</sup>, Etsuko Katoh<sup>2</sup>, Naoki Hirotsu<sup>1</sup> (1Graduate School of Life Sciences, Toyo Univ., 2Research Center for Advanced Analysis, NARO, 3College of Life Sciences, Ritsumeikan Univ.)</p> <p>2pE08 Secreted peptide AT32 inhibits brassinosteroid signaling via binding to brassinosteroid receptor <u>Takayuki Kondo</u><sup>1</sup>, Tomoyuki Takeda<sup>1</sup>, Iwai Ohbayashi<sup>1</sup>, You-wang Kim<sup>1</sup>, Masanori Okamoto<sup>2</sup>, Yutaka Kodama<sup>2</sup>, Takeshi Yoshizumi<sup>2</sup>, Takeshi Haraguchi<sup>4</sup>, Mieko Higuchi-Takeuchi<sup>3</sup>, Minami Shimizu<sup>3</sup>, Mika Nomoto<sup>5</sup>, Yasuomi Tada<sup>5</sup>, Yusuke Jikumaru<sup>6</sup>, Yuji Kamiya<sup>3</sup>, Kazuo Shinozaki<sup>3</sup>, Keiko Kuwata<sup>7</sup>, Shunsuke Oishi<sup>7</sup>, Junichi Taira<sup>1</sup>, Hiroshi Sakamoto<sup>1</sup>, Takahiro Kusakabe<sup>8</sup>, Jaeman Lee<sup>8</sup>, Kousuke Hanada<sup>1,3</sup> (1Dept of Biosci. &amp; Bioinform., Kyushu Inst. Technol., 2Center for Biosci. Res. &amp; Edu., Utsunomiya Univ., 3RIKEN CSRS, 4Grad. Sch. Sci., Chiba Univ., 5Center for Gene Res., Nagoya Univ., 6Agilent Technologies, 7ITbM, Nagoya Univ., 8Grad. Sch. Agr., Kyushu Univ.)</p> <p>2pE09 Analysis for plant progesterone receptor candidate <i>AmPR1</i> in plant growth and abiotic stress resistance <u>Rira Daibo</u><sup>1</sup>, Ayumi Yamagami<sup>1</sup>, Ayaka Uebayashi<sup>2,3</sup>, Setsuko Shimada<sup>2</sup>, Mayumi Iino<sup>2</sup>, Mayumi Okamoto<sup>4</sup>, Shun Kobayashi<sup>4</sup>, Akinori Matsui<sup>4</sup>, Isao Shimizu<sup>4</sup>, Yusuke Kakei<sup>5</sup>, Yukihisa Shimada<sup>5</sup>, Masaaki Sakuta<sup>3</sup>, Tadao Asami<sup>6</sup>, Takao Yokota<sup>7</sup>, Takeshi Nakano<sup>1</sup> (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>2pF06 Effect of solution pH on the protein-based circadian clock in cyanobacteria Kumiko Ito-Miwa<sup>1,2</sup>, Yasuhiro Onoue<sup>3</sup>, Takao Kondo<sup>1</sup>, <u>Kazuki Terauchi</u><sup>3</sup> (1Grad. Sch. Sci., Nagoya Univ., 2Inst. Adv. Stud., Nagoya Univ., 3Col. Life Sci., Ritsumeikan Univ.)</p>	<p>2pG06 <b>E</b> Mechanical properties of Arabidopsis thaliana roots <u>Marcel Pascal Beier</u><sup>1</sup>, Yunshu Wang<sup>2</sup>, Kyoko Miwa<sup>4</sup>, Shumpei Hayashi<sup>5</sup>, Hirotaka Hida<sup>3</sup>, Toru Fujiwara<sup>2</sup> (1Faculty of Science/ Institute for the Advancement of Higher Education, Hokkaido University, 2Department of Applied Biological Chemistry, Graduate School of Agricultural and Life Sciences, The University of Tokyo, 3Department of Mechanical Engineering, Graduate school of Kobe university, 4Division of Biosphere Science, Graduate School of Environmental Science, Hokkaido University)</p> <p>2pG07 Functional analysis of non-specific phospholipase C5 in the membrane lipid remodeling during phosphate starvation in arabidopsis <u>Honami Watanabe</u><sup>1</sup>, Yuta Ihara<sup>1</sup>, Yushi Yoshitake<sup>2</sup>, Hiroyuki Ohta<sup>1</sup>, Mie Shimojima<sup>1</sup> (1School of Life Science and Technology, Tokyo Institute of Technology, 2Department of Life Science, School of Agriculture, Meiji University)</p> <p>2pG08 Autophagy triggered by ER stress is an important phosphate salvage system under the early phase of phosphate starvation <u>Yushi Yoshitake</u><sup>1</sup>, Daiki Shinozaki<sup>2</sup>, Kohki Yoshimoto<sup>1,2</sup> (1Life sci. Agri. Meiji univ., 2Grad. Sch. Agri., Meiji univ.)</p> <p>2pG09 <b>E</b> An environmental response on root hairs under phosphate starvation in Arabidopsis <u>Michitaro Shibata</u><sup>1</sup>, Ayako Kawamura<sup>1</sup>, Keiko Sugimoto<sup>1,2</sup> (1RIKEN CSRS, 2Dep. Biol. Sci., Univ. Tokyo)</p>	<p>2pH06 <b>E</b> A possible function of WIND1 transcription factor as an epigenetic regulator <u>Akira Iwase</u><sup>1,2</sup>, Arika Takebayashi<sup>1</sup>, Ayako Kawamura<sup>1</sup>, Takamasa Suzuki<sup>3</sup>, Keiko Sugimoto<sup>1</sup> (1RIKEN CSRS, 2JST PRESTO, 3Col. Biosci. Biotech., Chubu Univ.)</p> <p>2pH07 <b>E</b> Photomorphogenic regulators PIF3 and HY5 antagonistically modulate plant regeneration in response to light signals <u>Yu Chen</u><sup>1,2</sup>, David Favero<sup>2</sup>, Ayako Kawamura<sup>2</sup>, Keiko Sugimoto<sup>1,2</sup> (1Grad. Sch. Sci., Univ. Tokyo, 2CSRS, RIKEN)</p> <p>2pH08 The single MYB gene <i>GROM</i> regulates gemma cup formation of the liverwort <i>Marchantia polymorpha</i> <u>Hirotaka Kato</u><sup>1</sup>, Yukiko Yasui<sup>1,2</sup>, Yuki Kondo<sup>1</sup>, Hidehiro Fukaki<sup>1</sup>, Tetsuro Mimura<sup>1,3,4</sup>, Kimitsune Ishizaki<sup>1</sup> (1Grad. Sch. Sci., Kobe Univ., 2Grad. Sch. Biostudies, Kyoto Univ., 3Grad. Sch. Agri. Life Sci., Univ. Tokyo, 4Col. Biosci. Biotech., National Cheng Kung Univ.)</p> <p>2pH09 Polarity switch of receptor-like kinases <u>Akira Yoshinari</u><sup>1</sup>, Reika Isoda<sup>1</sup>, Keiko Kuwata<sup>1</sup>, Wolf Frommer<sup>1,2,3</sup>, Masayoshi Nakamura<sup>1</sup> (1Institute of Transformative Bio-Molecules (WPI-ITbM), Nagoya University, 2Heinrich Heine University Düsseldorf, 3Max Planck Institute for Breeding Research, Köln)</p>	<p>Symposium S06 Chemical signals that control parasitism, symbiosis, defense, and infection in plants (13:15-16:15)</p>	<p>Symposium S07 A multifaceted approach to uncovering the mechanism and dynamics of the plant-microbe holobiont (13:15-16:15)</p>	<p>14:30</p> <p>14:45</p> <p>15:00</p> <p>15:15</p>

**E**=Presentation in English

● Day 2, Wed., March 23, PM (13:15–16:15)

Time	Room A	Room B	Room C	Room D
	Photosynthesis	Systems biology	Organelles/Cytoskeleton	Secondary (specialized) metabolism
15:30		<p>2pB10 <b>E</b></p> <p>Multi-omics analysis highlighted important factors for parthenocarpy for tomato fruits during early fruit set</p> <p><u>Kanjana Worarad</u><sup>1</sup>, Miyako Kusano<sup>1,2,3</sup>, Atsushi Fukushima<sup>3,5</sup>, Ken Kamiya<sup>1</sup>, Yozo Okazaki<sup>3,4</sup>, Yasuhino Higashi<sup>3</sup>, Ryo Nakabayashi<sup>3</sup>, Makoto Kobayashi<sup>3</sup>, Yuka Mitani<sup>3</sup>, Tetsuya Mori<sup>3</sup>, Tomoko Nishizawa<sup>3</sup>, Kazuki Saito<sup>3</sup>, Shuhei Hao<sup>1</sup>, Yoshihito Shinozaki<sup>1</sup>, Tohru Ariizumi<sup>1,2</sup>, Hiroshi Ezura<sup>1,2</sup></p> <p>(<sup>1</sup>Graduate School of Life and Environmental Science, Tsukuba-Plant Innovation Research Center (T-PIRC), University of Tsukuba, <sup>2</sup>Tsukuba Plant Innovation Research Center, University of Tsukuba, <sup>3</sup>RIKEN Center for Sustainable Resource Science, <sup>4</sup>Graduate School and Faculty of Bioresources, Mie University, <sup>5</sup>Graduate School of Life and Environmental Sciences, Kyoto Prefectural University)</p>		
15:45				
16:00				

Room E	Room F	Room G	Room H	Room Y	Room Z	Time
Plant hormones/ Signaling molecules	Flowering/Clock	Environmental responses C	Vegetative growth			
<p>2pE10 <b>E</b> Molecular Mechanisms of Host Tropism in Orobanchaceae Parasitic Plants <u>Satoshi Ogawa</u><sup>1</sup>, Songkui Cui<sup>2</sup>, Satoko Yoshida<sup>2,3</sup>, Ken Shirasu<sup>1,4</sup> (<sup>1</sup>CSRS, RIKEN, <sup>2</sup>Grad. Sch. of Sci. Tech., NAIST, <sup>3</sup>JST, PRESTO, <sup>4</sup>Grad. Sch. of Sci., Univ. of Tokyo)</p>		<p>2pG10 <b>E</b> Involvement of mechanosensitive channels of a stem parasitic plant, <i>Cuscuta campestris</i>, in the initiation of prehaustorium <u>Jihwan Park</u>, Koh Aoki (Grad. Sch. Life Environ. Sci., Osaka Pref. Univ)</p>	<p>2pH10 Transcriptional network to synchronize alteration in the developing lateral root primordia (LRP) and LRP-overlay cells <u>Kosuke Mase</u><sup>1</sup>, Honomi Mizuno<sup>1</sup>, Koki Tomida<sup>1</sup>, Keigo Nakamura<sup>1</sup>, Nanari Furukawa<sup>1</sup>, Shiho Ueno<sup>1</sup>, Takamasa Suzuki<sup>2</sup>, Atsushi Morikami<sup>1</sup>, Hironaka Tsukagoshi<sup>1</sup> (<sup>1</sup>Faculty of Agriculture, Meijo University, <sup>2</sup>College of Bioscience and Biotechnology, Chubu University)</p>	Symposium S06 Chemical signals that control parasitism, symbiosis, defense, and infection in plants (13:15-16:15)	Symposium S07 A multifaceted approach to uncovering the mechanism and dynamics of the plant-microbe holobiont (13:15-16:15)	15:30
<p>2pE11 Analysis of ectopic vascular cell differentiation regulated by Arabidopsis ANAC and DOF transcription factors Ryosuke Sato<sup>1</sup>, Keita Matsuoka<sup>1</sup>, Kyomi Shibata<sup>1</sup>, Yuki Kondo<sup>2</sup>, Shinobu Satoh<sup>3</sup>, <u>Masashi Asahina</u><sup>1,4</sup> (<sup>1</sup>Dept. Biosci., Teikyo Univ., <sup>2</sup>Grad. Sch. Sci., Kobe Univ., <sup>3</sup>Life &amp; Environ Sci., Univ. Tsukuba, <sup>4</sup>Adv. Instrum. Anal., Teikyo Univ.)</p>		<p>2pH11 Mechanism of root development by VLCFA responsive transcription factor <u>Yuta Uemura</u><sup>1</sup>, Saori Kimura<sup>1</sup>, Tomomichi Ota<sup>1</sup>, Takamasa Suzuki<sup>2</sup>, Atsushi Morikami<sup>1</sup>, Hironaka Tsukagoshi<sup>1</sup> (<sup>1</sup>Grad. Sch. Agr., Meijo Univ., <sup>2</sup>College Biosci. Biotech., Chubu Univ.)</p>	15:45			
<p>2pE12 Role of R1R2R3-type Myb transcription factors in auxin-mediated control of the cell cycle <u>Miyabi Arashidani</u>, Ye Zhang, Naoki Takahashi, Masaaki Umeda (Grad. Sch. Sci. Tech., NAIST)</p>		<p>2pH12 Analysis of the mechanism of lateral root development via circadian rhythm modulation induced by very long chain fatty acids (VLCFAs) <u>Saori Kimura</u><sup>1</sup>, Akari Maeda<sup>2</sup>, Yuta Uemura<sup>1</sup>, Tomomichi Ota<sup>1</sup>, Kosuke Mase<sup>1</sup>, Yuki Komine<sup>1</sup>, Takamasa Suzuki<sup>3</sup>, Atsushi Morikami<sup>1</sup>, Norihito Nakamichi<sup>2</sup>, Hironaka Tsukagoshi<sup>1</sup> (<sup>1</sup>Meijo Univ., <sup>2</sup>Nagoya Univ., <sup>3</sup>Chubu Univ.)</p>	16:00			

**E**=Presentation in English

# ● Day 3, Thu., March 24, AM (9:00–12:00)

Time	Room A	Room B	Room C	Room D
	Environmental responses of photosynthesis	Biomembrane/ Ion and solute transport	Cell wall	New technology
09:00	<p>3aA01 NADP pool size regulation by light-responsive reversible phosphorylation between NADP<sup>+</sup> and NAD<sup>+</sup> <u>Shin-nosuke Hashida</u><sup>1</sup>, Chinami Ishiyama<sup>2</sup>, Yusuke Fukuda<sup>2</sup>, Yuito Hamazaki<sup>3</sup>, Maki Kawai-Yamada<sup>4</sup> (1Bio. Environ. Chem., CRIEPI, 2CERES, Co., 3Plant., Tokyo Biotech. Col., 4Grad. Sch. Sci. Eng., Saitama Univ.)</p>	<p>3aB01 Functional Analyses of the Two Distinctive Types of the Two-Pore Channels (TPCs) and the Slow Vacuolar Channel in <i>Marchantia polymorpha</i> and their Evolution in Plants <u>Kazuyuki Kuchitsu</u><sup>1,2</sup>, Kenji Hashimoto<sup>1,2</sup>, Mateusz Koselski<sup>3</sup>, Shoko Tsuboyama<sup>1</sup>, Kazimierz Trębacz<sup>3</sup> (1Dept. Appl. Biol. Sci., Tokyo Univ. of Science, 2Interdiscipl. Agr. Sci. Tech. Course, Tokyo Univ. of Science, 3Maria Curie-Skłodowska Univ.)</p>	<p>3aC01 Regulation of secondary cell wall patterns in protoxylem vessels <u>Takeshi Higa</u><sup>1</sup>, Yohei Kondo<sup>2</sup>, Taku Demura<sup>3</sup>, Hiroo Fukuda<sup>4</sup>, Yoshihisa Oda<sup>1,3</sup> (1NIG, Gene Funct., 2ExCELLS, 3NAIST, CDG, 4KUAS, Bioenv. Sci., 5SOKENDAI, Genetics)</p>	<p>3aD01 Deep live-cell imaging of plants with adaptive optics microscope <u>Shuto Hatsumi</u><sup>1</sup>, Masayuki Hattori<sup>2</sup>, Takeshi Kurokura<sup>1</sup>, Yutaka Kodama<sup>1</sup>, Yutaka Hayano<sup>2</sup>, Hirotsugu Yamamoto<sup>1</sup>, Yosuke Tamada<sup>1</sup> (1Grad. Sch. Reg. Dev. Creat., Utsumomiya Univ., 2Adv. Tech. Cntr., Natl. Astron. Obs. Jpn.)</p>
09:15	<p>3aA02 Physiological Analysis of the Anti-sigma Factor Ortholog PmgA and the Anti-sigma Antagonist Ortholog Ssr1600 in the Cyanobacterium <i>Synechocystis</i> sp. PCC 6803 <u>Shogo Tachibana</u>, Yuji Takahashi, Yukako Hihara (Grad. Sch. Sci. Eng., Saitama Univ.)</p>	<p>3aB02 <b>E</b> Mapping and characterization of QTLs for sorghum seed ionome reveals differential cadmium accumulation in a recombinant inbred population <u>Fiona W. Wacera</u><sup>1</sup>, Kiyoshi Yamazaki<sup>2</sup>, Hideki Takanashi<sup>2</sup>, Toru Fujiwara<sup>2</sup>, Nobuhiro Tsutsumi<sup>2</sup>, Wataru Sakamoto<sup>1</sup> (1Okayama University, Institute of Plant Science and Resources, 2The University of Tokyo, Graduate School of Agricultural and Life Sciences)</p>	<p>3aC02 Importance of plasma membrane integrity for secondary cell wall formation in xylem vessel cells <u>Eri Kamon</u><sup>1</sup>, Chihiro Noda<sup>2</sup>, Taku Demura<sup>2,3</sup>, Misato Ohtani<sup>1,2</sup> (1Grad. Sch. Front. Sci., Univ. Tokyo, 2Grad. Sch. Sci. Tech., NAIST, 3NAIST, CDG)</p>	<p>3aD02 Multi-imaging analysis based on fluorescence lifetime of fluorescent proteins <u>Tsuyoshi Aoyama</u><sup>1</sup>, Nagisa Sugimoto<sup>1</sup>, Yoshikatsu Sato<sup>1,2</sup> (1ITbM, Nagoya Univ., 2Grad. Sch. Sci., Nagoya Univ.)</p>
09:30	<p>3aA03 Function and role of molecular hydrogen in <i>Synechocystis</i> sp. PCC6803 <u>Yuta Asano</u>, Hisataka Ohta, Tatsuya Tomo (Grad. Sch. Sci, Tokyo University of Science)</p>	<p>3aB03 Analyses of stomatal closure mediated by ALMT-type malate transporters <u>Takayuki Sasaki</u>, Michiyo Ariyoshi, Yoko Yamamoto, Izumi C. Mori (IPSR, Okayama Univ.)</p>	<p>3aC03 The role of a cell wall-related gene as a putative xylem transport modifier in drought response <u>Satoshi Endo</u><sup>1</sup>, Hiroo Fukuda<sup>2</sup> (1Inst. Interdiscip. Res., Kyoto Univ. Adv. Sci., 2Grad. Sch. Bioenviron. Sci., Kyoto Univ. Adv. Sci.)</p>	<p>3aD03 Very fast and highly efficient base editing method for <i>Arabidopsis</i> <u>Kenta Katayama</u>, Jun Teramoto, Ken-ichiro Taoka, Keiji Nishida, Akihiko Kondo (Eng. Biol. Res. Ctr., Kobe Univ.)</p>
09:45	<p>3aA04 “Verification of the” adaxial and abaxial axis “of C4 plant leaves that change in accord with the amount of light” <u>Saki Ueda</u><sup>1</sup>, Yuuki Nakamura<sup>2</sup>, Mao Fujiyoshi<sup>2</sup>, Tsuyoshi Furumoto<sup>1,2</sup> (1Grad. Sch. Agr. Ryukoku, Univ., 2Facu. Agr. Ryukoku, Univ)</p>	<p>3aB04 Involvement of PYL5 and PYL8 ABA receptors on methyl jasmonate-induced stomatal closure Ye Yin<sup>1,2</sup>, Takayuki Sasaki<sup>3</sup>, Yoshimasa Nakamura<sup>1</sup>, Shintaro Munemasa<sup>1</sup>, Yoshiyuki Murata<sup>1</sup>, <u>Izumi C. Mori</u><sup>3</sup> (1Grad. Sch. Env. Life, Okayama Univ., 2Qingdao Univ. Sci. Tech., 3IPSR, Okayama Univ.)</p>	<p>3aC04 Boron-dependent translation of a putative Golgi-localized methyltransferase and its role in boron deficient environments <u>Yuka Watanabe</u>, Yasunori Chaki, Kyoko Miwa (Graduate School of Env. Science, Hokkaido Univ.)</p>	<p>3aD04 <b>E</b> Targeted base editing in the mitochondria genome of <i>Arabidopsis thaliana</i> <u>Chang Zhou</u><sup>1</sup>, Issei Nakazato<sup>1</sup>, Yoshiko Tamura<sup>1</sup>, Nobuhiro Tsutsumi<sup>1</sup>, Mizuki Takenaka<sup>2</sup>, Shin-ichi Arimura<sup>1</sup> (1Graduate School of Agricultural and Life Sciences, University of Toky, 2Graduate School of Science, Kyoto University)</p>
10:00	<p>3aA05 Effects of high-light acclimation on the repair of photosystem II in each phyllotaxis in <i>Arabidopsis thaliana</i> <u>Mizuki Kitamura</u><sup>1</sup>, Azusa Shinjo<sup>2</sup>, Yoshitaka Nishiyama<sup>2</sup> (1Undergrad. Sch. Sci., Saitama Univ., 2Grad. Sch. Sci. Eng., Saitama Univ.)</p>	<p>3aB05 <b>E</b> A novel protein, DISM01, regulates the Mo distribution in the rice plant <u>Prashant Kandwal</u>, Toru Fujiwara, Takehiro Kamiya (The University of Tokyo)</p>	<p>3aC05 Glucosylceramide is important for plant growth under low boron conditions <u>Minoru Nagano</u><sup>1</sup>, Rina Komiyama<sup>1</sup>, Aoi Yasui<sup>1</sup>, Tomoya Matsuura<sup>1</sup>, Toshiki Ishikawa<sup>2</sup>, Yuto Takenaka<sup>1</sup>, Takeshi Ishimizu<sup>1</sup>, Maki Kawai-Yamada<sup>2</sup>, Yoichiro Fukao<sup>1</sup> (1Col. Life Sci., Ritsumeikan Univ., 2Grad. Sch. Sci. Eng., Saitama Univ.)</p>	<p>3aD05 In vivo generation of extrachromosomal linear DNAs as a basis of the constitutive approach for their cellular function <u>Koh Aoki</u>, Atsuya Mitsuda (Osaka Pref. Univ.)</p>

Room E	Room F	Room G	Room H	Room Y	Room Z	Time
Epigenetic regulation		Environmental responses A	Vegetative growth			
3aE01 [Cancelled]		3aG01 Effects of anesthesia on the wound-responsive gene and phytohormone, graft union of plant <u>Sakuya Hirayama</u> <sup>1</sup> , Yushuke Abe <sup>2</sup> , Ryosuke Satoh <sup>2</sup> , Kyomi Shibata <sup>3</sup> , Emi Yumoto <sup>3</sup> , Koji Miyamoto <sup>1,2</sup> , Ken Yokawa <sup>4</sup> , Shinobu Satoh <sup>5</sup> , Masashi Asahina <sup>1,2,3</sup> (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)	3aH01 Analysis of target proteins for a stomatal-increasing compound Chatty <u>Ayami Nakagawa</u> <sup>1</sup> , Keiko Kuwata <sup>1</sup> , Shuya Yamada <sup>1</sup> , Gregory Perry <sup>1</sup> , Tsuyoshi Hirota <sup>1</sup> , Ayato Sato <sup>1</sup> , Naoyuki Uchida <sup>2</sup> , Akie Shimotohno <sup>1</sup> , Kenichiro Itami <sup>1</sup> , Kei Murakami <sup>3</sup> , Keiko Torii U. <sup>1,4,5</sup> (1ITbM, Nagoya Univ., 2Center for Gene Res., Nagoya Univ., 3School of Sci., Kwansei Gakuin Univ., 4Dep. of Mol. Biosci., Univ. Texas at Austin, 5Howard Hughes Medical Institute)		The 18th Database Workshop (9:00-12:00)	09:00
3aE02 Combinations of maternal-specific repressive epigenetic marks in the endosperm control seed dormancy <u>Hikaru Sato</u> <sup>1,3</sup> , Juan Santos-González <sup>2</sup> , Claudia Köhler <sup>1,2</sup> (1Dept. of Plant Biology, Swedish University of Agricultural Sciences, 2Max Planck Institute of Molecular Plant Physiology, 3Current address: Dept. of Integrated Biosciences, University of Tokyo)		3aG02 Oxidative Regulation of Chloroplast Proteins by Thioredoxin and Thioredoxin-Like Proteins in <i>Arabidopsis thaliana</i> <u>Yuka Fukushi</u> <sup>1,2</sup> , Yuichi Yokochi <sup>1,2</sup> , Ken-ichi Wakabayashi <sup>1,2</sup> , Keisuke Yoshida <sup>1,2</sup> , Toru Hisabori <sup>1,2</sup> (1Laboratory for Chemistry and Life Science, Institute of Innovative Research, Tokyo Institute of Technology, 2School of Life Science and Technology, Tokyo Institute of Technology)	3aH02 Investigation of Molecular Mechanisms of Meristematic Activity That Enables Indeterminate Leaf Growth <u>Yasutake Moriyama</u> , Hiroyuki Koga, Hirokazu Tsukaya (Grad. Sch. of Sci., Univ. of Tokyo)			09:15
3aE03 <b>E</b> A New Concept of Grafting on Drought-Stress Tolerance in Tomato Plants <u>Maria Isabel Fuentes Merlos</u> <sup>1</sup> , Masaru Bamba <sup>1</sup> , Makoto Endo <sup>2</sup> , Shusei Sato <sup>1</sup> , Atsushi Higashitani <sup>1</sup> (1Grad. Sch. Life Sci., Tohoku Univ., 2Takii Co LTD)		3aG03 Oxidative Deactivation of Chloroplast ATP Synthase by Thioredoxin-Like Proteins <u>Takatoshi Sekiguchi</u> <sup>1,2</sup> , Keisuke Yoshida <sup>1,2</sup> , Ken-ichi Wakabayashi <sup>1,2</sup> , Toru Hisabori <sup>1,2</sup> (1Laboratory for Chemistry and Life Science, Institute of Innovative Research, Tokyo Institute of Technology, 2School of Life Science and Technology, Tokyo Institute of Technology)	3aH03 A bHLH transcription factor module controls setal development in the sporophyte of <i>Marchantia polymorpha</i> <u>Kenta Moriya</u> <sup>1</sup> , Jeanne Loue-Manifel <sup>2,3</sup> , Ryuichi Nishihama <sup>4,5</sup> , Yoshito Oka <sup>1</sup> , Tomonao Matsushita <sup>1</sup> , Gwyneth Ingram <sup>2</sup> , Justin Goodrich <sup>3</sup> , Takayuki Kohchi <sup>4</sup> , Tomoo Shimada <sup>1</sup> (1Grad. Sch. Sci., Kyoto Univ., 2RDP, ENS-Lyon, 3Inst. of Mol. Plant Sci., Univ. of Edinburgh, 4Grad. Sch. Biostudies, Kyoto Univ., 5Dept. Appl. Biol. Sci., Tokyo Univ. of Sci.)			09:30
3aE04 Auxin-mediated regulation of genome integrity <u>Shiori S. Aki</u> , Masaaki Umeda (Graduate School of Science and Technology, Nara Institute of Science and Technology)		3aG04 <b>E</b> Carbonyl scavenger dipeptides mitigate salt stress in plants <u>Most Sharmin Sultana</u> <sup>1</sup> , Jun'ichi Mano <sup>2</sup> (1Tottori University, 2Yamaguchi University)	3aH04 Investigation of the action mechanism of Bubblin, a small compound that perturbs stomatal development <u>Kazuaki Murakami</u> <sup>1</sup> , Sintaro Anzai <sup>1</sup> , Yumiko Sakai <sup>1</sup> , Kentaro Tamura <sup>2</sup> , Keisuke Matsuda <sup>3</sup> , Toshiro Imai <sup>3</sup> , Kento Okoshi <sup>3</sup> , Yasuhiro Sato <sup>4</sup> , Atsushi J. Nagano <sup>5,6</sup> , Yoshito Oka <sup>1</sup> , Tomonao Matsushita <sup>1</sup> , Tomoo Shimada <sup>1</sup> (1Grad. Sch. Sci., Kyoto Univ., 2Sch. Food & Nutritional Sci., Univ. Shizuoka, 3Department of Applied Chemistry and Bioscience, Chitose Institute of Science and Technology, 4IEU, University of Zurich, 5Faculty of Agriculture, Ryukoku Univ., 6Institute for Advanced Biosciences, Keio Univ.)			09:45
3aE05 Analysis of chromatin crosstalk involved in <i>de novo</i> formation of the CENH3 mark during <i>Arabidopsis</i> zygote development <u>Shiori Nagahara</u> <sup>1</sup> , Tetsuya Higashiyama <sup>1,2,3</sup> , Frederic Berger <sup>4</sup> , Hidenori Takeuchi <sup>1,5</sup> (1ITbM, Nagoya Univ., 2Grad. Sch. Sci., Nagoya Univ., 3Grad. Sch. Sci., Univ. Tokyo, 4GMI, 5Inst. Adv. Res., Nagoya Univ.)		3aG05 Functional analysis of the transcriptional regulation of the antioxidant enzyme by ethanol in plants under salinity stress <u>Kaori Sako</u> <sup>1,2</sup> , Akihiro Matsui <sup>2</sup> , Maho Tanaka <sup>2</sup> , Ryutaro Mano <sup>1</sup> , Sumire Fujiwara <sup>3</sup> , Nobutaka Mitsuda <sup>3</sup> , Masahiro Tamoi <sup>1</sup> , Motoaki Seki <sup>2</sup> (1Dep. Adv. Biosci., Kindai Univ., 2CSRS, RIKEN, 3Bioprod. Res. Inst., AIST)	3aH05 A novel mechanism underlying columella stem cell maintenance in <i>Arabidopsis</i> <u>Miho Kihira</u> <sup>1</sup> , Teruki Sugiyama <sup>1,2</sup> , Chikage Umeda-Hara <sup>1</sup> , Masaaki Umeda <sup>1</sup> (1Grad. Sch. Sci. Tech., NAIIST, 2CSRS, RIKEN)			10:00

**E**=Presentation in English

# ● Day 3, Thu., March 24, AM (9:00–12:00)

Time	Room A	Room B	Room C	Room D
	Environmental responses of photosynthesis	Biomembrane/ Ion and solute transport	Cell wall	New technology
10:15	<p>3aA06 Roles of the extrinsic proteins of photosystem II in photoinhibition during high-temperature acclimation in <i>Synechocystis</i> sp. PCC 6803 <u>Kazaha Izaki</u>, Yoshitaka Nishiyama (Grad. Sch. Sci. Eng., Saitama Univ.)</p>	<p>3aB06 Evaluation of Root Sodium Exclusion Ability in Plants with Tissue-specific Expression of SOS1 Using Real-time Radioisotope Imaging <u>Mio Nagoya</u><sup>1</sup>, Takaaki Ogura<sup>1</sup>, Ryohei Sugita<sup>2</sup>, Natsuko I. Kobayashi<sup>1</sup>, Tomoko M. Nakanishi<sup>1,3</sup>, Keitaro Tanoi<sup>1</sup> (<sup>1</sup>Grad. Sch. Agric. Life Sci., Univ. Tokyo, <sup>2</sup>Radioisotope Research Cent., Nagoya Univ., <sup>3</sup>Hoshi Univ.)</p>	<p>3aC06 <b>E</b> The ZHOUP1/ICE1 transcription factors control programmed cell death and formation of a novel water conducting tissue in the liverwort <i>Marchantia polymorpha</i> <u>Yen-Ting Lu</u><sup>1,2</sup>, Jeanne Loue-Manifel<sup>2,3</sup>, Norbert Bollier<sup>4</sup>, Ryuichi Nishihama<sup>5</sup>, Takayuki Kohchi<sup>5</sup>, Moritz Nowack<sup>6</sup>, Gwyneth Ingram<sup>3</sup>, Justin Goodrich<sup>2</sup> (<sup>1</sup>Grad. Sch. BioSci., NAIST, <sup>2</sup>IMPS, University of Edinburgh, <sup>3</sup>CNRS, ENS de Lyon, <sup>4</sup>INRAE, Université de Bordeaux, <sup>5</sup>Grad. Sch. Biostudies, Kyoto University, <sup>6</sup>VIB-UGent Center)</p>	<p>3aD06 Fusion peptide-mediated plastid transformation of tobacco, rice, and kenaf <u>Masaki Odahara</u><sup>1</sup>, Yoko Horii<sup>1</sup>, Jun Itami<sup>1</sup>, Yuki Negishi<sup>1</sup>, Keiji Numata<sup>1,2</sup> (<sup>1</sup>Biomacromolecules Res. Team, Riken, <sup>2</sup>Dept. Eng., Kyoto Univ.)</p>
10:30	<p>3aA07 Chilling-stress tolerance and P700 oxidation in photosystem I <u>Ko Takeuchi</u><sup>1</sup>, Yufen Che<sup>1</sup>, Minoru Kumazawa<sup>1</sup>, Takeshi Nakano<sup>1</sup>, Chikahiro Miyake<sup>2</sup>, Kentaro Hfuku<sup>3</sup> (<sup>1</sup>Grad. Sch. Biostudies, Univ. Kyoto, <sup>2</sup>Grad. Sch. Agri., Univ. Kobe, <sup>3</sup>Grad. Sch. Agri., Univ. Kyoto)</p>	<p>3aB07 Multiple motifs are required for the polar localization of silicon transporter Lsi1 in rice <u>Noriyuki Konishi</u>, Jian Feng Ma (Okayama Univ. IPSR)</p>	<p>3aC07 Changes in cotyledon shape and pavement cell morphology in <i>RIC1</i>-overexpressors <u>Kotomi Kikukawa</u><sup>1</sup>, Kouichi Soga<sup>2</sup>, Hisako Imamura<sup>3</sup>, Toshihisa Kotake<sup>4</sup>, Takumi Higaki<sup>1</sup> (<sup>1</sup>Grad. Sch. Sci. Tech., Univ. Kumamoto, <sup>2</sup>Grad. Sch. Sci., Univ. Osaka City, <sup>3</sup>Grad. Sch. Med. Sci., Univ. Kyushu, <sup>4</sup>Grad. Sch. Sci. Eng., Univ. Saitama)</p>	
10:45	<p>3aA08 Changes in intracellular redox state by addition of amino acids in cyanobacteria <u>Yuma Ito</u>, Kintake Sonoike (Waseda University)</p>	<p>3aB08 <b>E</b> Regulation mechanism of boron uptake in rice <u>Sheng Huang</u>, Noriyuki Konishi, Naoki Yamaji, Namiki Mitani-Ueno, Jian Feng Ma (Institute of Plant Science and Resources, Okayama University)</p>	<p>3aC08 Effect of <math>\beta</math>-1,4-glucanase overexpression or exogenous treatment in grafting <u>Yaichi Kawakatsu</u><sup>1</sup>, Michitaka Notaguchi<sup>1,2,3</sup> (<sup>1</sup>Bioscience and Biotechnology Center, Nagoya University, <sup>2</sup>Graduate School of Bioagricultural Sciences, Nagoya University, <sup>3</sup>Institute of Transformative Bio-Molecules, Nagoya University)</p>	
11:00	<p>3aA09 <b>E</b> Functional interaction between Cystathionine-<math>\beta</math>-synthase X proteins and NADPH-thioredoxin reductase C in <i>Arabidopsis thaliana</i> <u>Minh Chau Tran</u><sup>1,2</sup>, Shouko Mihara<sup>1,2</sup>, Ken-ichi Wakabayashi<sup>1,2</sup>, Keisuke Yoshida<sup>1,2</sup>, Toru Hisabori<sup>1,2</sup> (<sup>1</sup>Laboratory for Chemistry and Life Science, Institute of Innovative Research, Tokyo Institute of Technology, <sup>2</sup>School of Life Science and Technology, Tokyo Institute of Technology)</p>	<p>3aB09 A tonoplast-localized magnesium transporter is involved in stomatal opening in <i>Arabidopsis</i> <u>Shin-ichiro Inoue</u><sup>1</sup>, Maki Hayashi<sup>1</sup>, Sheng Huang<sup>2</sup>, Kengo Yokosho<sup>2</sup>, Eiji Gotoh<sup>3</sup>, Shuka Ikematsu<sup>4</sup>, Masaki Okumura<sup>1</sup>, Takamasa Suzuki<sup>5</sup>, Toshinori Kinoshita<sup>1,4</sup>, Jian Feng Ma<sup>2</sup> (<sup>1</sup>Grad. Sch. Sci., Nagoya Univ., <sup>2</sup>IPSR., Okayama Univ., <sup>3</sup>Grad. Sch. Agric., Kyushu Univ., <sup>4</sup>ITbM., Nagoya Univ., <sup>5</sup>Col. Biosci. Biotechnol., Chubu Univ.)</p>	<p>3aC09 Studies on graft-induced Germin-Like Protein family genes <u>Moe Mori</u><sup>1</sup>, Ken-ichi Kurotani<sup>2</sup>, Michitaka Notaguchi<sup>1,2,3</sup> (<sup>1</sup>Graduate School of Bioagricultural Sciences, Nagoya University, <sup>2</sup>Bioscience and Biotechnology Center, Nagoya University, <sup>3</sup>Institute of Transformative Bio-Molecules, Nagoya University)</p>	
11:15	<p>3aA10 The amino acid substitution of PETC-Pro171-Leu stimulates the electron transfer suppression in the cytochrome <i>b<sub>6</sub>f</i> under acidic luminal conditions in the green alga <i>Chlamydomonas reinhardtii</i> <u>Shin-Ichiro Ozawa</u><sup>1</sup>, Felix Buchert<sup>2</sup>, Ruby Reuys<sup>2</sup>, Michael Hippler<sup>1,2</sup>, Yuichiro Takahashi<sup>3</sup> (<sup>1</sup>IPSR, Okayama Univ., <sup>2</sup>IPBB, Munster Univ., <sup>3</sup>RIIS, Okayama Univ.)</p>	<p>3aB10 Effect of Sulfate and Magnesium on the phosphate-uptake in the cyanobacterium <i>Synechocystis</i> sp. PCC 6803 <u>Jinwoong Lee</u><sup>1</sup>, Yasushi Iwata<sup>2</sup>, Yuji Suzuki<sup>3</sup>, Iwane Suzuki<sup>4</sup> (<sup>1</sup>Grad. Sch. Life Environ. Sci., Univ. Tsukuba, <sup>2</sup>Res. Inst. Adv. Elect. Photon., Natl. Inst. Adv. Ind. Sci. Tech., <sup>3</sup>Taiyo Service, <sup>4</sup>Fac. Life Environ. Sci., Univ. Tsukuba)</p>	<p>3aC10 <b>E</b> Xylem formation enhances scion growth of <i>Nicotiana</i> interfamily grafting <u>Chaokun Huang</u><sup>1</sup>, Ken-ichi Kurotani<sup>2</sup>, Ryo Tabata<sup>1</sup>, Michitaka Notaguchi<sup>1,2,3</sup> (<sup>1</sup>Grad. Sch. Agr., Univ. Nagoya, <sup>2</sup>Bioscience and Biotechnology Center, Univ. Nagoya, <sup>3</sup>Institute of Transformative Bio-Molecules, Univ. Nagoya)</p>	
11:30		<p>3aB11 The Role of Casparian Strips in the High Boron Tolerance in <i>Arabidopsis</i> <u>Keita Muro</u>, Jio Kamiyo, Junpei Takano (Grad. Sch. Life and Env., Osaka Pref. Univ.)</p>	<p>3aC11 <b>E</b> Chemical screening to identify graft promoting molecules in Fabaceae <u>Qianqian Luo</u><sup>1</sup>, Xueyao Shu<sup>1</sup>, Yaichi Kawakatsu<sup>2</sup>, Ryoko Morinobe<sup>1</sup>, Lalita Jantean<sup>1</sup>, Hejin Son<sup>1</sup>, Ayato Sato<sup>3</sup>, Ken-ichi Kurotani<sup>2</sup>, Michitaka Notaguchi<sup>1,2,3</sup> (<sup>1</sup>Grad. Sch. Bioagri-Sci., Univ. Nagoya, <sup>2</sup>Bioscience and Biotechnology Center, Univ. Nagoya, <sup>3</sup>Institute of Transformative Bio-Molecules(ITbM), Univ. Nagoya)</p>	
11:45		<p>3aB12 Identification of the Si transporter Lsi3 involved in efficient xylem loading of Si in rice roots <u>Sheng Huang</u><sup>1</sup>, <u>Naoki Yamaji</u><sup>1</sup>, Gen Sakurai<sup>2</sup>, Namiki Mitani-Ueno<sup>1</sup>, Noriyuki Konishi<sup>1</sup>, Jian Feng Ma<sup>1</sup> (<sup>1</sup>IPSR, Okayama Univ., <sup>2</sup>NARO (NIAES))</p>		

Room E	Room F	Room G	Room H	Room Y	Room Z	Time
Epigenetic regulation		Environmental responses A	Vegetative growth			
<p>3aE06 <b>E</b> Proteolysis of histone methyltransferases controls cell cycle progression in <i>Arabidopsis</i> <u>Kar Yee Mooe</u><sup>1</sup>, Akiko Masada<sup>1</sup>, Haruka Manabe<sup>1</sup>, Hiromoto Takatsuka<sup>2</sup>, Shiori S. Aki<sup>1</sup>, Masaaki Umeda<sup>1</sup> (<sup>1</sup>Graduate School of Science and Technology, Nara Institute of Science and Technology, <sup>2</sup>School of Biological Science and Technology, College of Science and Engineering, Kanazawa University)</p>		<p>3aG06 Oxidative stress-responsive regulation of phage-like particle GTA-mediated gene transfer in purple photosynthetic bacterium <i>Rhodobacter capsulatus</i> Tohma Aritoshi, <u>Takayuki Shimizu</u>, Tatsuru Masuda (Grad. Sch. Arts and Sci., Univ. Tokyo)</p>	<p>3aH06 Negative control of the <i>ATML1</i> gene during epidermal cell specification <u>Shinobu Takada</u><sup>1</sup>, Gerd Jürgens<sup>2</sup>, Hiroyuki Iida<sup>3</sup> (<sup>1</sup>Dept. Biol. Sci., Grad. Sch. Sci., Osaka Univ., <sup>2</sup>ZMBP, University of Tübingen, <sup>3</sup>Institute of Biotechnology, HiLIFE, University of Helsinki)</p>		The 18th Database Workshop (9:00-12:00)	10:15
<p>3aE07 Redundant and specific roles of DNA demethylase family members in regulating the DNA methylome and pathogen resistance <u>Daisuke Miki</u> (Shanghai Center for Plant Stress Biology, CAS)</p>		<p>3aG07 Fluctuation of copy number of mitochondrial DNA may regulate their gene-expression levels in <i>Arabidopsis thaliana</i> <u>Hiroki Ayabe</u><sup>1</sup>, Atsushi Toyoda<sup>2</sup>, Akitoshi Iwamoto<sup>2</sup>, Nobuhiro Tsutsumi<sup>1</sup>, Shin-ichi Arimura<sup>1</sup> (<sup>1</sup>Grad. Sch. of Agri. and Life Sci., Univ. Tokyo, <sup>2</sup>Department of Genomics and Evolutionary Biology, National Institute of Genetics, <sup>3</sup>Fac. of Sci., Univ. Kanagawa)</p>	<p>3aH07 <b>E</b> A hypothesis on the evolution of meristem zonation by CLE gene duplication <u>Yuki Hirakawa</u> (Grad. Sch. Sci., Gakushuin Uni.)</p>			10:30
<p>3aE08 Elucidation of the role of cohesin in the formation of chromosomal higher-order structure in <i>Cyanidioschyzon merolae</i> <u>Takuya Sakamoto</u><sup>1</sup>, Minami Nakayama<sup>1</sup>, Daniel Slane<sup>2</sup>, Yayoi Inui<sup>2</sup>, Tomoko Matsunaga<sup>2</sup>, Yamato Yoshida<sup>3</sup>, Takamasa Suzuki<sup>4</sup>, Kan Tanaka<sup>5</sup>, Sachihiko Matsunaga<sup>2</sup> (<sup>1</sup>Fac. Sci. Tech., Tokyo Univ. Sci., <sup>2</sup>Grad. Sch. Fro. Sci., Univ. Tokyo, <sup>3</sup>Grad. Sch. Sci., Univ. Tokyo, <sup>4</sup>Col. Biosci. Biotech., Chubu Univ., <sup>5</sup>Inst. Innov. Res., Tokyo Inst. Tech.)</p>		<p>3aG08 Effect of a dominant-negative ACTIN8 expression on plant posture <u>Yuzuki Miyake</u><sup>1</sup>, Hiroki Yagi<sup>2</sup>, Koichi Toyokura<sup>3</sup>, Ikuko Hara-Nishimura<sup>2</sup>, Haruko Ueda<sup>1,2</sup> (<sup>1</sup>Grad. Sch. Nat. Sci., Konan Univ., <sup>2</sup>Fac. Sci. Engin., Konan Univ., <sup>3</sup>Bioscience and Biotechnology Center, Nagoya Univ.)</p>	<p>3aH08 Analysis of a target gene of MpCLE2 signaling in the stem cell zone of <i>Marchantia polymorpha</i> <u>Go Takahashi</u>, Tomohiro Kiyosue, Yuki Hirakawa (Grad. Sch. Sci., Gakushuin Uni.)</p>			10:45
		<p>3aG09 Gravity Response and Amyloplast Sedimentation in <i>Marchantia polymorpha</i> <u>Mimi Hashimoto-Sugimoto</u><sup>1</sup>, Takuya Norizuki<sup>2,3</sup>, Shoji Segami<sup>4,5</sup>, Yusaku Ohta<sup>6</sup>, Takashi Ueda<sup>3,5</sup>, Miyo T. Morita<sup>1,5,7</sup> (<sup>1</sup>Grad. Sch. Bioagr. Sci., Nagoya Univ., <sup>2</sup>IMCR, Gunma Univ., <sup>3</sup>Div. Cellular Dynamics, NIBB, <sup>4</sup>Div. Evolutionary Biol., NIBB, <sup>5</sup>Sch. Life Sci., SOKENDAI, <sup>6</sup>ExCELLS, NIBB, <sup>7</sup>Div. Plant Environ. Res., NIBB)</p>	<p>3aH09 Comparison of plastid- and cytosolic-ribosome stress response pathways in <i>Arabidopsis thaliana</i> Yumi Nagashima<sup>1</sup>, Yui Fujii<sup>1</sup>, Saki Ito<sup>1</sup>, Katsutomo Ohshiro<sup>1</sup>, Iwai Ohbayashi<sup>2</sup>, Munetaka Sugiyama<sup>3</sup>, Hirokazu Tsukaya<sup>4</sup>, <u>Gorou Horiguchi</u><sup>1,2</sup> (<sup>1</sup>Dept. Life Sci., Coll. Sci., Rikkyo Univ., <sup>2</sup>Center Life Sci., Coll. Sci., Rikkyo Univ., <sup>3</sup>Dept. Life Sci., National Cheng Kung Univ., <sup>4</sup>Grad. Sch. Sci., Univ. Tokyo)</p>			11:00
		<p>3aG10 Analysis for molecular functions of BIL8 that regulates plant gravitropism in brassinosteroid signaling <u>Shin Suzuki</u><sup>1</sup>, Ayumi Yamagami<sup>1</sup>, Genki Nakata<sup>2</sup>, Minami Matsui<sup>3</sup>, Tetsuo Kushiro<sup>2</sup>, Tadao Asami<sup>4</sup>, Takeshi Nakano<sup>1</sup> (<sup>1</sup>Grad. Sch. Biostudies., Kyoto Univ., <sup>2</sup>Dept. Agri., Meiji Univ., <sup>3</sup>RIKEN CSRS, <sup>4</sup>Grad. Sch. Agri. Life Sci., University of Tokyo)</p>	<p>3aH10 Intercellular signaling that drives substomatal chamber formation <u>Yuki Yoshida</u>, Shinichiro Sawa (Kumamoto Univ.)</p>			11:15
			<p>3aH11 Interactions between Auxin and <i>CUP-SHAPED COTYLEDON</i> Genes during Embryogenesis of <i>Arabidopsis thaliana</i> <u>Yusei Kenzaki</u><sup>1</sup>, Mizuki Yamada<sup>2</sup>, Ayame Imoto<sup>3</sup>, Syunsuke Tanaka<sup>1</sup>, Tatsuya Miyazaki<sup>1</sup>, Mitsuhiro Aida<sup>2</sup> (<sup>1</sup>Fac. Sci., Kumamoto Univ., <sup>2</sup>IROAST, Kumamoto Univ., <sup>3</sup>Grad. sch. Biol. Sci., NAIST)</p>			11:30
			<p>3aH12 Effects of <i>CUP-SHAPED COTYLEDON</i> Genes on Cytokinin Signaling during <i>Arabidopsis thaliana</i> Embryogenesis <u>Sawaki Urabe</u><sup>1</sup>, Takumi Sakamoto<sup>1</sup>, Mitsuhiro Aida<sup>2</sup> (<sup>1</sup>Fac. Sci., Kumamoto Univ., <sup>2</sup>IROAST, Kumamoto Univ.)</p>		11:45	

**E**=Presentation in English

# List of Chairpersons of Oral Presentations

## Day 1, Tue., March 22, AM

1aA01-09 Photosynthesis Ryo Nagao  
Shinya Wada  
Yuki Okegawa

1aB01-07 Plant-organism interaction B  
Kensuke Kawade  
Kana Miyata

1aC01-07 Membrane trafficking Kazuo Ebine  
Takehiko Kanazawa

1aD01-11 Primary metabolism Shugo Maekawa  
Soichi Kojima  
Takatoshi Kiba

1aE01-09 Reproductive growth Yoshinobu Kato  
Kazuki Motomura  
Sota Fujii

1aF01-07 Photoreceptors/Photoresponses  
Toshiaki Kozuka  
Kazuya Ishikawa

1aG01-11 Environmental responses B  
Satomi Kanno  
Eri Adams  
Minoru Ueda

1aH01-08 Transcriptional, post-transcriptional or translational,  
post-translational regulations  
Takamasa Suzuki  
Tomohito Yamasaki

## Day 1, Tue., March 22, PM

1pA01-10 Photosynthesis Kaori Kohzuma  
Keisuke Yoshida  
Mao Suganami

1pB01-06 Plant-organism interaction B  
Makoto Hayashi  
Koh Aoki

1pC01-09 Organelles/Cytoskeleton Kenichi Kurotani  
Saku Kijima  
Shoji Mano

1pD01-08 Primary metabolism Nobuyuki Takatani  
Yoshinori Tsuji

1pE01-08 Reproductive growth Wakana Tanaka  
Hidenori Takeuchi

1pF01-06 Photoreceptors/Photoresponses  
Kenichi Wakabayashi  
Tomomi Suzuki

1pG01-10 Environmental responses B  
Miki Fujita  
Akihisa Shinozawa  
Izumi Yotsui

1pH01-08 Transcriptional, post-transcriptional or translational,  
post-translational regulations  
Nobuhiro Akiyoshi  
Tomohiko Tsuge

## Day 2, Wed., March 23, AM

2aA01-10 Photosynthesis Kumiko Ito  
Yuichi Fujita  
Keisuke Kawakami

2aB01-10 Plant-organism interaction A  
Naoyoshi Kumakura  
Shigetaka Yasuda  
Kohji Yamada

2aC01-10 Organelles/Cytoskeleton Yasushi Yoshioka  
Hiroshi Kuroda  
Yuri Munekage-Nakajima

2aD01-08 Secondary (specialized) metabolism  
Ryota Akiyama  
Mami Yamazaki

2aE01-10 Plant hormones/Signaling molecules  
Jutarou Fukazawa  
Hideki Yoshida  
Kiyoshi Mashiguchi

2aF01-07 Flowering/Clock Shigeo Sugano  
Hiroyuki Tsuji

2aG01-11 Environmental responses C  
Daisuke Todaka  
Kentaro Nakaminami  
Takumi Tomoi



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2aH01-12 Vegetative growth Tadashi Kunieda  
Shoko Tsuboyama  
Shizuka Gunji

.....  
2pH01-12 Vegetative growth Chieko Goto  
Hirotaka Kato  
Akira Yoshinari

### Day 2, Wed., March 23, PM

.....  
2pA01-05 Photosynthesis Mari Banba  
Iwane Suzuki  
.....  
2pB01-10 Systems biology Atsushi Fukushima  
Keiichi Mochida  
Hidekazu Iwakawa  
.....  
2pC01-08 Organelles/Cytoskeleton Takema Sasaki  
Yuki Sakamoto  
.....  
2pD01-05 Secondary (specialized) metabolism  
Akifumi Sugiyama  
Yushiro Fuji  
.....  
2pE01-12 Plant hormones/Signaling molecules  
Naoki Takahashi  
Satoshi Ogawa  
Takayuki Kondo  
.....  
2pF01-06 Flowering/Clock Tomoaki Muranaka  
Shogo Ito  
.....  
2pG01-10 Environmental responses C  
Masaya Ishikawa  
Satoshi Kidokoro  
Michitaro Shibata

### Day 3, Thu., March 24, AM

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3aA01-10 Environmental responses of photosynthesis  
Shin-nosuke Hashida  
Shin-ichiro Ozawa  
Yoshitaka Nishiyama  
.....  
3aB01-12 Biomembrane/Ion and solute transport  
Noriyuki Konishi  
Shin-ichiro Inoue  
Keita Muro  
.....  
3aC01-11 Cell wall Minoru Nagano  
Satoshi Endo  
Yaichi Kawakatsu  
.....  
3aD01-06 New technology Tsuyoshi Aoyama  
Kenta Katayama  
.....  
3aE01-08 Epigenetic regulation Hikaru Sato  
Shiori Nagahara  
.....  
3aG01-10 Environmental responses A  
Kaori Sako  
Mimi Hashimoto-Sugimoto  
Takayuki Shimizu  
.....  
3aH01-12 Vegetative growth Ayami Nakagawa  
Shinobu Takada  
Yuki Hirakawa



# 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      Biochemical characterization of PSI-PBS supercomplexes from *Anabaena* sp. PCC 7120 grown under an iron-deficient condition  
Shota Shimizu<sup>1</sup>, Koji Kato<sup>2</sup>, Takehiro Suzuki<sup>3</sup>, Naoshi Dohmae<sup>3</sup>, Jian-Ren Shen<sup>1,2</sup>, Ryo Nagao<sup>2</sup> (1Grad. Sch. Sci. Tech., Okayama Univ., 2RIIS, Okayama Univ., 3RIKEN)
- PF-002      Control of light-harvesting functions during non-photochemical quenching in a green alga *Chlorella variabilis* grown under different fluctuating light conditions  
Yoshifumi Ueno<sup>1</sup>, Shimpei Aikawa<sup>2</sup>, Seiji Akimoto<sup>1</sup> (1Grad. Sch. Sci., Kobe Univ., 2JIRCAS)
- PF-003      The Physiological Insight In The FZL Protein In The Membrane Remodeling At The Grana Margin In *Arabidopsis* Chloroplasts  
Yu Ogawa<sup>1</sup>, Mari Takusagawa<sup>2</sup>, Megumi Iwano<sup>3</sup>, Lianwei Peng<sup>4</sup>, Fumiyoshi Myouga<sup>5</sup>, Toshiharu Shikanai<sup>2</sup>, Wataru Sakamoto<sup>1</sup> (1IPSR, Univ. Okayama, 2Grad. Sch. Sci., Univ. Kyoto, 3Grad. Sch. Bio., Univ. Kyoto, 4Univ. Shanghai Normal, 5Wako Inst., Riken)
- PF-004      Effects of detergents on S-state transition and crystal quality of photosystem II  
Yoshiki Nakajima, Michihiro Suga, Jian-Ren Shen (Res. Inst. Interdiscip. Sci., Univ. Okayama)
- PF-005      Functional analysis of an essential gene in cyanobacteria that is conserved among oxygen-evolving photosynthetic organisms  
Yoshiki Shirotani<sup>1</sup>, Kimie Atsuzawa<sup>2</sup>, Egi Apdila Tritya<sup>3</sup>, Yasuko Kaneko<sup>2</sup>, Koichiro Awai<sup>3</sup>, Shigeeki Ehira<sup>1</sup> (1Grad. Sch. Sci., Tokyo Metropolitan Univ., 2Grad. Sch. Sci and Eng, Saitama Univ., 3Dept. Bio. Sci. Fac. Sci., Shizuoka Univ.)
- PF-006      Robust estimates of cuticular conductance to water on a stomatous leaf surface  
Jun Tominaga<sup>1,2</sup>, Joseph Stinziano<sup>1</sup>, David Hanson<sup>1</sup> (1UNM, 2Grad. Sch. Int. Sci. Life., Hiroshima Univ.)
- PF-007      Identification of novel functional domains and motifs of CCM1 regulating CO<sub>2</sub>-concentrating mechanism in the green alga *Chlamydomonas reinhardtii*  
Miho Ogaki, Daisuke Shimamura, Takashi Yamano, Hideya Fukuzawa (Grad. Sch. Sci., Kyoto Univ)
- PF-008      Effects of photosynthesis and cell growth on phycobilisome degradation during nitrogen starvation in *Synechocystis* sp. PCC 6803  
Akiko Yoshihara, Koichi Kobayashi (Grad. Sch. Sci., Osaka Pref. Univ.)
- PF-009      Functions of C8-vinyl-bacteriochlorophyll *e* and -chlorophyll *a* synthesized in the brown-colored green sulfur bacteria cells under red-light illumination  
Jiro Harada<sup>1</sup>, Yusuke Kinoshita<sup>2</sup>, Tadashi Mizoguchi<sup>2</sup>, Ken Yamamoto<sup>1</sup>, Hitoshi Tamiaki<sup>2</sup> (1Dept. Med. Biochem., Kurume Univ. Sch. Med., 2Grad. Sch. Life Sci., Ritsumeikan Univ.)

**■ Environmental responses of photosynthesis**

- PF-010      Differences in responses of two strains of *Arcyochloris marina* to light qualities  
Zhe Wang<sup>1</sup>, Yoshifumi Ueno<sup>1</sup>, Makio Yokono<sup>2</sup>, Jian-Ren Shen<sup>3</sup>, Ryo Nagao<sup>3</sup>, Reona Toyofuku<sup>4</sup>, Tatsuya Tomo<sup>4</sup>, Seiji Akimoto<sup>1</sup> (1Grad. Sch. Sci., Kobe Univ., 2NIBB, 3RIIS, Okayama Univ., 4Grad. Sch. Sci., Tokyo Univ. Sci.)
- PF-011      Effect of Fatty Acid Composition on Photoinhibition of Photosystem II in Cyanobacteria  
Kazuki Kurima<sup>1</sup>, Haruhiko Jimbo<sup>2</sup>, Natsumi Hosoya<sup>1</sup>, Hajime Wada<sup>2</sup> (1Fac. Soc. Inf. Stu., Otsu Women's Univ., 2Grad. Sch. Arts and Sci., Univ. Tokyo)
- PF-012      Characterization of distribution patterns of iron and protein on thylakoid membranes of barley cultivar 'Sarab1' with higher iron-use efficiency  
Kyoko Higuchi, Kimika Hoshi, Takumi Togashi, Akihiro Saito, Takuji Ohyama (Tokyo Univ. Agr.)
- PF-013      Photosynthetic Iron-Use Efficiency "PIUE" is a new quantitative trait for assessing the adaptation of photosystems to iron deficiency in barley  
Akihiro Saito<sup>1</sup>, Mayuko Furuhashi<sup>1</sup>, Hiroshi Hisano<sup>2</sup>, Takuji Ohyama<sup>1</sup>, Kyoko Higuchi<sup>1</sup> (1Agric. Chem., Tokyo Univ. Agric., 2IPSR, Okayama Univ.)

**■ Primary metabolism**

- PF-014      Functional analysis of the ACT domain of ACTPK1, the negative regulator for ammonium uptake into rice roots  
Mako Uchino<sup>1</sup>, Marcel Pascal Beier<sup>2</sup>, Jin Ishizawa<sup>1</sup>, Toshihiko Hayakawa<sup>1</sup> (1Grad. Sch. Agri. Sci., Tohoku Univ., 2Grad. Sch. Sci., Hokkaido Univ.)

- PF-015 Phenotypic and transcriptomic characterization of rice introgression lines in response to nitrogen stress  
Bright Adu<sup>1,2</sup>, Argete Aizelle<sup>1</sup>, Yoshihiro Ohmori<sup>1</sup>, Toru Fujiwara<sup>1</sup> (<sup>1</sup>Lab of Plant Nutrition, Univ. Tokyo, <sup>2</sup>Intl Prog. in Agric. Devt Studies (IPADS))
- PF-016 Analysis of intracellular localization of phosphatidic acid phosphohydrolases during phosphate starvation in Arabidopsis  
Hiroyasu Ito, Yuta Ihara, Hiroyuki Ohta, Mie Shimojima (School of Life Science and Technology, Tokyo Institute of Technology)
- PF-017 Organic acids synthesis of *Synechocystis* sp. PCC 6803 under different spectral lights  
Masakazu Toyoshima<sup>1,2</sup>, Yoshihiro Toya<sup>2</sup>, Hiroshi Shimizu<sup>2</sup> (<sup>1</sup>Grad. Sch. Eng., Kobe Univ., <sup>2</sup>IST, Osaka Univ.)
- PF-018 Cross-species comparison of sulfur deficiency responsive genes in plants  
Mutsumi Watanabe, Aiko Yamagiwa, Ryo Tsukada, Takayuki Tohge (NAIST)
- PF-019 Analysis of sugar alcohol components in immature male strobili of Japanese cedar  
Tomohiro Igasaki<sup>1</sup>, Shojiro Hishiyama<sup>2</sup>, Koh Hashida<sup>2</sup>, Koichi Kakegawa<sup>2</sup> (<sup>1</sup>Dept For Mol Genet Biotech, FFPRI, <sup>2</sup>Dept For Res Chem, FFPRI)

## ■ Secondary (specialized) metabolism

- PF-020 Search for  $\gamma$ -oryzanol biosynthetic gene from rice  
Tamami Kumagai<sup>1</sup>, Miyu Asari<sup>1</sup>, Ange Yan<sup>1</sup>, Karin Uruma<sup>1</sup>, Wakako Tsuzuki<sup>2</sup>, Kentaro Yano<sup>1</sup>, Tetsuo Kushiro<sup>1</sup> (<sup>1</sup>Grad. Sch. Agri., Meiji Univ., <sup>2</sup>Home Econ., Tokyo Kasei Univ.)
- PF-021 Analysis of chemical diversity of methoxylated-flavonoids and the genes encoding flavonoid-*O*-methyltransferases  
Yuting Liu, Takayuki Tohge (Grad. Sch. Sci., Tech., NAIST)
- PF-022 Estimation of Optimal UV Light Intensity and wavelength for Production of the Pharmaceutical Drug Components, Vinblastine, Contained in *Catharanthus roseus* (L.) G. Don  
Tatsuki Hanyu, Keiko Ohashi (Kaneko) (Grad. Sch. Agr., Univ. tamagawa)
- PF-023 Genetic transformation of *Eucalyptus camaldulensis* to suppress hydrolyzable tannin biosynthesis  
Ko Tahara, Mitsuru Nishiguchi (Forestry and Forest Products Research Institute)
- PF-024 Initiation process of Monoterpenoid indole alkaloid biosynthesis during seed germination in *Catharanthus roseus*  
Mai Uzaki<sup>1,2</sup>, Kotaro Yamamoto<sup>3,4</sup>, Amit Rai<sup>2</sup>, Akio Murakami<sup>5</sup>, Miwa Ohnishi<sup>6</sup>, Chizuko Shichijo<sup>5</sup>, Kimitsune Ishizaki<sup>5</sup>, Hidehiro Fukaki<sup>5</sup>, Sarah O'Connor<sup>4</sup>, Tetsuro Mimura<sup>7,8</sup>, Masami Yokota Hirai<sup>1,2</sup> (<sup>1</sup>Grad. Sch. Bioagric. Sci., Nagoya Univ., <sup>2</sup>RIKEN CSRS, <sup>3</sup>Grad. Sch. Pharm. Sci., Chiba Univ., <sup>4</sup>Dept. Nat. Prod. Bio., MPI, <sup>5</sup>Grad. Sch. Sci., Kobe Univ., <sup>6</sup>Grad. Sch. Sci., Kyoto Univ., <sup>7</sup>Col. Biosci. Biotech., National Cheng Kung Univ., <sup>8</sup>Grad. Sch. Agricul. Life Sci., UTokyo)

## ■ Biomembrane/Ion and solute transport

- PF-025 Enzymatic characteristics and tissue distribution of cactus vacuolar membrane H<sup>+</sup>-pyrophosphatase  
Ryosuke Sato<sup>1,2</sup>, Takumi Ando<sup>1</sup>, Yuichiro Yoshida<sup>1</sup>, Takamasa Suzuki<sup>1</sup>, Kaoru Sanda<sup>1</sup>, Takanori Horibe<sup>1</sup>, Takashi Tsuge<sup>1</sup>, Natsuki Takada-Tanaka<sup>3</sup>, Masayoshi Maeshima<sup>1</sup> (<sup>1</sup>Col. Biosci. Biotech., Chubu Univ., <sup>2</sup>Forest BioRes. Cent., <sup>3</sup>Grad. Sch. Bioagr., Nagoya Univ.)
- PF-026 Cell Type-Specific Functional Analysis of Sodium Ion Transporter SOS1 in Roots  
Takaaki Ogura<sup>1</sup>, Mio Nagoya<sup>1</sup>, Ryohei Sugita<sup>2</sup>, Natsuko I. Kobayashi<sup>1</sup>, Tomoko M. Nakanishi<sup>1,3</sup>, Keitaro Tanoi<sup>1</sup> (<sup>1</sup>Grad. Sch. Agr. Life Sci., Univ. Tokyo, <sup>2</sup>Radioisotope Res. Cent., Nagoya Univ., <sup>3</sup>Hoshi Univ.)
- PF-027 Mutagenesis Analysis of Arabidopsis Magnesium Ion Transporter AtMRS2-1  
Xiaoyu Yang<sup>1</sup>, Natsuko I. Kobayashi<sup>1</sup>, Yoshiki Hayashi<sup>2</sup>, Koichi Ito<sup>2</sup>, Motoyuki Hattori<sup>3</sup>, Yoshitaka Moriwaki<sup>1</sup>, Keitaro Tanoi<sup>1</sup> (<sup>1</sup>Grad. Sch. Agr. Life Sci., Utokyo, <sup>2</sup>Grad. Sch. Front. Sci., Utokyo, <sup>3</sup>Sch. Life Sci., Fudan Univ.)
- PF-028 The possibility that the arrangement of vascular bundle at the site of adventitious root emergence in common reed contributes to prevention of Na translocation  
Kyoko Higuchi, Mikiya Obara, Akihiro Saito, Takuji Ohyama (Tokyo Univ. Agr.)
- PF-029 SIET4 is required for cell-specific deposition of Si in rice  
Namiki Mitani-Ueno<sup>1</sup>, Naoki Yamaji<sup>1</sup>, Yuuma Yoshioka<sup>2</sup>, Takaaki Miyaji<sup>2,3</sup>, Jian Feng Ma<sup>1</sup> (<sup>1</sup>IPSR, Okayama Univ., <sup>2</sup>Grad. Sch. Med., Dent. & Pharm. Sci., Okayama Univ., <sup>3</sup>Adv. Sci. Res. Ctr., Okayama Univ.)
- PF-030 Controls of the water transport activities of *Arabidopsis* tonoplast intrinsic proteins 3, AtTIP3s  
Shigeko Utsugi, Maki Katsuhara (IPSR, Okayama Univ.)

## ■ Membrane trafficking

- PF-031 Analysis of intracellular localization of *Arabidopsis thaliana* VAMP714  
Tomoko Eguchi<sup>1</sup>, Sae Endo<sup>1</sup>, Emi Ito<sup>2</sup>, Akihiko Nakano<sup>3</sup>, Tomohiro Uemura<sup>1</sup> (<sup>1</sup>Graduate School of Humanities and Sciences, Ochanomizu Univ, <sup>2</sup>Institute for Human Life Innovation, Ochanomizu Univ., <sup>3</sup>Live Cell Super-Resolution Imaging Research Team, RIKEN Center for Advanced Photonics.)
- PF-032 Analysis of functions and subcellular localization of novel *Arabidopsis thaliana* TGN-localized protein family  
Natalia Julia Rzepecka, Emi Ito, Yoko Ito, Tomohiro Uemura (Graduate School of Humanities and Sciences Ochanomizu University)

## ■ Organelles/Cytoskeleton

- PF-033 Defects in Organelle DNA degradation suppress early senescence phenotype in *atg* mutant  
Tsuneaki Takami, Islam Md. Faridul, Wataru Sakamoto (Inst. Plant Sci. Res., Okayama Univ.)
- PF-034 The search for chloroplast proteins involved in new pest and pathogen resistance  
Yohei Matsunaga, Hiromi Kozen, Atsushi Kasai, Hisae Hirata, Reiko Motohashi (Grad. Sch. Inte. Sci. and Tech., Shizuoka Univ.)
- PF-035 [Cancelled]
- PF-036 Diversity and similarity of light-dependent nuclear positioning in land plants  
Kosei Iwabuchi<sup>1</sup>, Hiroki Yagi<sup>2</sup>, Kenta Moriya<sup>3</sup>, Nanaka Oki<sup>2</sup>, Reina Yokohata<sup>2</sup>, Asami Nakata<sup>2</sup>, Saya Hiromoto<sup>2</sup>, Aino Komatsu<sup>4</sup>, Yuuki Sakai<sup>5</sup>, Tomoo Shimada<sup>3</sup>, Shingo Takagi<sup>6</sup>, Ryuichi Nishihama<sup>7</sup>, Takayuki Kohchi<sup>8</sup>, Yo-hei Watanabe<sup>2</sup>, Haruko Ueda<sup>2</sup>, Ikuko Hara-Nishimura<sup>2</sup> (<sup>1</sup>Fac. Med., Osaka Med. Pharm. Univ., <sup>2</sup>Fac. Sci. Eng., Konan Univ., <sup>3</sup>Grad. Sch. Sci, Kyoto Univ., <sup>4</sup>Grad. Sch. Life Sci., Tohoku Univ., <sup>5</sup>Grad. Sch. Sci., Kobe Univ., <sup>6</sup>Grad. Sch. Sci., Osaka Univ., <sup>7</sup>Fac. Sci. Technol., Tokyo Univ. Sci., <sup>8</sup>Grad. Sch. Biostudies, Kyoto Univ.)
- PF-037 Asymmetric division in the spore of *Marchantia polymorpha*  
Yuuki Sakai, Yuki Kondo, Hidehiro Fukaki, Kimitsune Ishizaki (Grad. Sch. Sci., Kobe Univ.)
- PF-038 Equal transmission of cp nucleoids based on the phase transition  
Yoshiki Nishimura<sup>1</sup>, Takashi Hamaji<sup>2</sup>, Yusuke Kobayashi<sup>3</sup>, Mari Takusagawa<sup>1</sup>, Toshiharu Shikanai<sup>1</sup> (<sup>1</sup>Lab of Plant Mol Genet., Dep of Bot, Kyoto Univ., <sup>2</sup>Res. & Dev. Initiative, Chuo Univ., <sup>3</sup>Grad. Sch. of Sci. & Eng., Ibaraki Univ.)

## ■ Cell wall

- PF-039 Possible involvement of the ROS-producing enzyme Rbohs in the cell wall integrity and cross-linking of cell wall glycoproteins, classical extensins, in *Marchantia polymorpha*  
Kenji Hashimoto, Mariko Higashijima, Yuto Yamashita, Naoaki Abe, Sachi Shirato, Kazuyuki Kuchitsu (Dept. Appl. Biol. Sci., Tokyo Univ. of Science)
- PF-040 Involvement of auxin in ROS production during tissue reunion of *Arabidopsis* incised stem  
Tatsuya Yamazaki<sup>1</sup>, Jiuyi Li<sup>2</sup>, Masashi Asahina<sup>3,4</sup>, Kazuyuki Kuchitsu<sup>5</sup>, Shinobu Satoh<sup>6</sup> (<sup>1</sup>Grad. Sch. Life and Earth Sci., Univ. Tsukuba, <sup>2</sup>Grad. Sch. Life and Environmental Sci., Univ. Tsukuba, <sup>3</sup>Dep. of Biosci., Teikyo Univ., <sup>4</sup>Advanced Instrumental Analysis center, Teikyo Univ., <sup>5</sup>Dep. Applied Biological Sci., Tokyo Univ. Sci., <sup>6</sup>Faculty of Life and Environmental Sci., Univ. Tsukuba)
- PF-041 Effects of suppression of KDO biosynthesis in *Arabidopsis*  
Shun Suzuki, Toshiro Shimizu, Kentaro Ifuku, Toru Matoh, Masaru Kobayashi (Graduate School of Agriculture, Kyoto University)

## ■ Cell cycle/Cell division

- PF-042 Effect of chromosome polytenization on root growth in autopolyploid series of *Arabidopsis thaliana*  
Suzuka Kikuchi<sup>1</sup>, Takuya Sakamoto<sup>2</sup>, Sachihiko Matsunaga<sup>3</sup>, Munetaka Sugiyama<sup>4</sup>, Akitoshi Iwamoto<sup>1,5</sup> (<sup>1</sup>Grad. Sch. Sci., Kanagawa Univ., <sup>2</sup>Fac. Sci. and Tech., Tokyo Univ. Sci., <sup>3</sup>Grad. Sch. Frontier Sci., Univ. Tokyo, <sup>4</sup>Grad. Sch. Sci., Univ. Tokyo, <sup>5</sup>Fac. Sci., Kanagawa Univ.)
- PF-043 Analysis of SOG1 mutant responses to DNA-damaging reagents by QuBAREY (quantitative PCR-based *Arabidopsis* root DNA-damage assay)  
Shimpei Uraguchi, Maho Suzuki, Natsuho Tamaru, Risa Todoroki, Masakazu Sato, Yuka Ohshiro, Ryosuke Nakamura, Yasukazu Takanezawa, Masako Kiyono (Sch. Pharm., Kitasato Univ.)

- PF-044 Identification of novel inner nuclear membrane protein  
Yoshiki Akiyama<sup>1</sup>, Mio Shibuta<sup>2</sup>, Yuki Sakamoto<sup>3</sup>, Yayoi Inui<sup>1</sup>, Takuya Sakamoto<sup>4</sup>, Sachihiko Matsunaga<sup>1</sup> (<sup>1</sup>Dept. of Integr. Biosci., Grad. Sch. of Front. Sci., Univ. of Tokyo, <sup>2</sup>Fac. Sci., Univ. Yamagata, <sup>3</sup>Dept. of Biosci., Grad. Sch. of Sci., Univ. of Osaka, <sup>4</sup>Dept. of Appl. Biol. Sci., Fac. of Sci. and Tech., Tokyo Univ. of Sci.)

## ■ Vegetative growth

- PF-045 Cloning and functional analyses of *SET* gene whose loss-of-function suppresses *det3-1* flowering stem dwarfism  
Shizuka Gunji<sup>1</sup>, Ryosuke Kizu<sup>1,2</sup>, Hiromu Kimura<sup>1</sup>, Reina Hashimoto<sup>1</sup>, Natsuko Ishizuki<sup>1</sup>, Mao Ichikawa<sup>1</sup>, Tamae Motoike<sup>1</sup>, Hiroyuki Koga<sup>3</sup>, Kenya Hanai<sup>1</sup>, Tomonari Hirano<sup>4</sup>, Yusuke Kazama<sup>5</sup>, Tomoko Abe<sup>6</sup>, Nobutaka Mitsuda<sup>7</sup>, Gorou Horiguchi<sup>8,9</sup>, Shinichiro Sawa<sup>10</sup>, Hirokazu Tsukaya<sup>3</sup>, Ali Ferjani<sup>1</sup> (<sup>1</sup>Dept. Biol., Tokyo Gakugei Univ., <sup>2</sup>Grad. Sch. Art Sci., Univ. Tokyo, <sup>3</sup>Grad. Sch. Sci., Univ. Tokyo, <sup>4</sup>Fac. Agr., Miyazaki Univ., <sup>5</sup>Fac. Biosci. Biotech. Fukui Prefec. Univ., <sup>6</sup>RIKEN Nishina Center, <sup>7</sup>AIST, <sup>8</sup>Dept. Life Sci., Rikkyo Univ., <sup>9</sup>Res. Ctr. Life Sci., Rikkyo Univ., <sup>10</sup>Fac. Adv. Sci. Technol., Kumamoto Univ.)
- PF-046 Analysis of the vegetative reproduction in the hornwort *Anthoceros angustus*  
Hidemasa Suzuki, Junko Kyozyuka (Laboratory of Plant Development, Graduate School of Life Sciences, Tohoku University)
- PF-047 Roles of cell layer-specific autophagy in Arabidopsis root cap detachment  
Tatsuaki Goh<sup>1</sup>, Kaoru Sakamoto<sup>1</sup>, Pengfei Wang<sup>2</sup>, Byung-Ho Kang<sup>2</sup>, Keiji Nakajima<sup>1</sup> (<sup>1</sup>Div. Biol. Sci., NAIST, <sup>2</sup>SKL, SLS, The Chinese University of Hong Kong)
- PF-048 Analysis of a Novel Arabidopsis Mutant Showing Abnormalities in Root and Shoot Development  
Ryoko Muraoka, Yuki Kondo, Kimitsune Ishizaki, Hidehiro Fukaki (Grad. Sch. Sci., Kobe Univ.)
- PF-049 Analysis of the Arabidopsis Mutants Showing Altered Response to the TOLS2 Peptide, an Inhibitor of Lateral Root Formation  
Nanako Maehara<sup>1</sup>, Akihito Mamiya<sup>1</sup>, Chieko Goto<sup>1</sup>, Tatsuaki Goh<sup>2</sup>, Yuki Kondo<sup>1</sup>, Kimitsune Ishizaki<sup>1</sup>, Tetsuro Mimura<sup>1,3,4</sup>, Hidehiro Fukaki<sup>1</sup> (<sup>1</sup>Grad. Sch. Sci., Kobe Univ., <sup>2</sup>Div. Biol. Sci., NAIST, <sup>3</sup>Grad. Sch. Agri. Life Sci., Univ. Tokyo, <sup>4</sup>Col. Biosci. Biotech., National Cheng Kung Univ.)
- PF-050 Analysis of the Regulatory Mechanisms of Root Growth and Development via the K<sup>+</sup> Efflux Channel GORK  
Daisuke Ide<sup>1</sup>, Riku Nishimaru<sup>1</sup>, Yuka Aoki<sup>1</sup>, Koichi Toyokura<sup>1,2</sup>, Tatsuaki Goh<sup>1,3</sup>, Tetsuro Mimura<sup>1,4,5</sup>, Yuki Kondo<sup>1</sup>, Kimitsune Ishizaki<sup>1</sup>, Hidehiro Fukaki<sup>1</sup> (<sup>1</sup>Grad. Sch. Sci., Kobe Univ., <sup>2</sup>Grand Green Co., Ltd., <sup>3</sup>Div. Biol. Sci., NAIST, <sup>4</sup>Grad. Sch. Agric. Life Sci., Univ. Tokyo, <sup>5</sup>Col. Biosci. Biotech., National Cheng Kung Univ.)
- PF-051 Functional analysis of the gene responsible for the *ghost white* mutant which has white fruit at the immature (green color) stage  
Katsuyuki Nakamura<sup>1</sup>, Yuji Kinjo<sup>1</sup>, Chikako Fukasawa<sup>1</sup>, Xiaonan Xie<sup>2</sup>, Reiko Motohashi<sup>1</sup> (<sup>1</sup>Grad. Sch. Inte. Sci. and Tech., Univ. Shizuoka, <sup>2</sup>Cent. for Bio. Res. and Edu., Univ. Utsunomiya)
- PF-052 Analysis of Natural Allelic Variation Loci that Control the Capacity of *Arabidopsis thaliana* Seeds to Germinate at High Temperatures  
Kaho Nagata, Naoto Kawakami (Grad. Sch. Agri., Meiji Univ.)
- PF-053 Screening and analysis of germination-promoting compounds using *hfl* loss-of-function mutant seeds in *Arabidopsis thaliana*  
Nanami Aoki<sup>1</sup>, Yuka Furuna<sup>1</sup>, Toshinori Kinoshita<sup>2,3</sup>, Ayumu Kondo<sup>1</sup>, Shigeo Toh<sup>1</sup> (<sup>1</sup>Agri., Meijo Univ., <sup>2</sup>Grad. Sch. Sci., Nagoya Univ., <sup>3</sup>WPI-ITbM, Nagoya Univ.)
- PF-054 The developmental analysis of *Cuscuta* root: how to be a vestigial structure?  
Momoko Tobinai, Mariko Asaoka, Toshiya Yokoyama, Kazuhiko Nishitani (Kanagawa Uni., Dept. of Biol. Sci.)
- PF-055 Abscisic acid suppresses PD formation in the moss *Physcomitrium patens*  
Chiyo Jinno<sup>1</sup>, Tomomichi Fujita<sup>2</sup> (<sup>1</sup>Grad. Sch. Life Sci., Univ. Hokkaido, <sup>2</sup>Fac. Sci., Univ. Hokkaido)
- PF-056 Mathematical model analysis of costoid phyllotaxis and examination of the model validity  
Takaaki Yonekura, Munetaka Sugiyama (Grad. Sch. Sci., Univ. Tokyo)

## ■ Reproductive growth

- PF-057 Functional analysis of MpBZR3 on the regulation of gametangia development in *Marchantia polymorpha*  
Tomoyuki Furuya<sup>1</sup>, Shohei Yamaoka<sup>2</sup>, Kimitsune Ishizaki<sup>1</sup>, Ryuichi Nishihama<sup>2,3</sup>, Takashi Araki<sup>2</sup>, Takayuki Kohchi<sup>2</sup>, Hiroo Fukuda<sup>4</sup>, Yuki Kondo<sup>1</sup> (<sup>1</sup>Grad. Sch. Sci., Kobe Univ., <sup>2</sup>Grad. Sch. Biostudies, Kyoto Univ., <sup>3</sup>Fac. Sci. Tech., Dept. Appl. Biol. Sci., Tokyo Univ., <sup>4</sup>Fac. Bioenv. Sci., KUAS)

- PF-058 Analysis of unknown inflorescence structure “double ridge” in by 3D imaging and laser microdissection-RNA-seq  
Naoto Sato<sup>1</sup>, Jun Ito<sup>1</sup>, Yuko Nomura<sup>1</sup>, Midori Sugimura<sup>1</sup>, Noriko Takeda-Kamiya<sup>2</sup>, Kiminori Toyooka<sup>2</sup>, Hiroyuki Tsuji<sup>1</sup> (<sup>1</sup>KIBR, Yokohama City Univ., <sup>2</sup>CSRS, RIKEN)
- PF-059 Analysis of RopGEFs in Arabidopsis pollen tube growth and guidance  
Nozomi Naiki<sup>1</sup>, Tetsuya Higashiyama<sup>1,2,3</sup>, Hidenori Takeuchi<sup>2,4</sup> (<sup>1</sup>Grad. Sch. Sci., Nagoya Univ., <sup>2</sup>ITbM, Nagoya Univ., <sup>3</sup>Grad. Sch. Sci., Univ. Tokyo, <sup>4</sup>Inst. Adv. Res., Nagoya Univ.)
- PF-060 Functional analysis of a gene encoding EF-hand protein, MpCAPS, in the sperm chemotaxis in *Marchantia polymorpha*  
Mizuki Morita, Katsuyuki Yamato (BOST, Kindai Univ.)
- PF-061 *Oryza sativa* ELONGATION OF SILIQUES WITHOUT POLLINATION 1 and 2 play the roles in regulation of ovary enlargement and the accumulation of nutrient in rice  
Kaori Nagawa-Miyawaki<sup>1</sup>, Saku Kijima<sup>1</sup>, Riho Shirahama<sup>1,3</sup>, Shingo Sakamoto<sup>1</sup>, Miho Ikeda<sup>2</sup>, Hironori Takasaki<sup>2</sup>, Masaru Ohme-Takagi<sup>2</sup>, Nobutaka Mitsuda<sup>1</sup>, Yoshimi Oshima<sup>1</sup> (<sup>1</sup>Bioprod. Res. Inst., AIST, <sup>2</sup>Grad. Sch. of Sci. and Eng., Saitama Univ., <sup>3</sup>Dep. BioEng., Nagaoka Univ. Tech)

## ■ Plant hormones/Signaling molecules

- PF-062 Identification and characterization of a gene for cell wall-localized cytokinin activating enzyme in *Oryza sativa*  
Mikiko Kojima<sup>1,2</sup>, Nobue Makita<sup>1</sup>, Alicia Surjana<sup>2</sup>, Tokunori Hobo<sup>3</sup>, Toru Kudo<sup>1</sup>, Tsuyu Ando<sup>4,5</sup>, Ayahiko Shoumura<sup>4,5</sup>, Toshio Yamamoto<sup>5,6</sup>, Hitoshi Sakakibara<sup>2</sup> (<sup>1</sup>CSRS., RIKEN, <sup>2</sup>Grad. Sch. Bioagri. Sci., Nagoya Univ, <sup>3</sup>Biosci. Biotec. Ctr., Nagoya Univ., <sup>4</sup>STAFF Inst, <sup>5</sup>NARO, <sup>6</sup>IPSR., Okayama Univ)
- PF-063 Analysis of ABA/osmostress-dependent SnRK2 activation through B-RAF in *Physcomitrium patens*  
Naoya Kohara<sup>1</sup>, Tsukasa Toriyama<sup>1</sup>, Izumi Yotsui<sup>1</sup>, Teruaki Taji<sup>1</sup>, Daisuke Takezawa<sup>2</sup>, Yoichi Sakata<sup>1</sup> (<sup>1</sup>Dept Bioscience, Tokyo Univ. Agric., <sup>2</sup>Grad. Sch. Sci and Eng., Univ. Saitama)
- PF-064 What is wounding stress? Relationship between regeneration and pattern recognition receptors in *Arabidopsis*  
Yosuke Sasai<sup>1,2</sup>, Akira Iwase<sup>2,3</sup>, Keiko Sugimoto<sup>1,2</sup> (<sup>1</sup>Univ. Tokyo, Dep. Biol. Sci., <sup>2</sup>RIKEN, CSRS, <sup>3</sup>JST, PRESTO)
- PF-065 Chemical and physiological analyses in the Arabidopsis mutant for key enzyme genes in abscisic acid biosynthesis  
Minami Nakano<sup>1</sup>, Naoto Kawakami<sup>2</sup>, Masanori Okamoto<sup>1</sup> (<sup>1</sup>Utsunomiya Univ., <sup>2</sup>Meiji Univ.)
- PF-066 *BSH2* is a novel gene involved in brassinosteroid signaling to promote plant growth and drought stress resistance  
Rina Su<sup>1</sup>, Ayumi Yamagami<sup>1</sup>, Tomoko Miyaji<sup>2</sup>, Masaaki Sakuta<sup>3</sup>, Tadao Asami<sup>4</sup>, Kazuo Shinozaki<sup>2</sup>, Takeshi Nakano<sup>1</sup> (<sup>1</sup>Grad. Bios., Univ. Kyoto, <sup>2</sup>RIKEN·CSRS, <sup>3</sup>Grad., Univ. Ochanomizu, <sup>4</sup>Dept. Appl. Biol. Chem., Univ. Tokyo)

## ■ Photoreceptors/Photoresponses

- PF-067 Analyses of N-terminal intrinsically disordered region of phytochrome B in Arabidopsis  
Tomoya Miura<sup>1</sup>, Takahito Takei<sup>1,2</sup>, Nobuyuki Shiina<sup>3</sup>, Akira Nagatani<sup>4</sup>, Takahiro Hamada<sup>1,5</sup> (<sup>1</sup>Grad. Sch. Sci., Okayama Univ. Sci., <sup>2</sup>Grad. Sch. Sci., Univ. Tokyo, <sup>3</sup>NIBB, <sup>4</sup>Grad. Sch. Sci., Kyoto Univ., <sup>5</sup>JST PRESTO)
- PF-068 Screening for novel factors involved in phototropin responses by using an artificial microRNA-based approach  
Rio Matsumoto, Ryoko Hujii, Arisa Mifujii, Atsushi Takemiya (Grad. Sch. Sci. Tech. Innov., Yamaguchi Univ.)
- PF-069 The phosphorylation status of NONPHOTOTROPIC HYPOCOTYL3 affects hypocotyl phototropism in Arabidopsis  
Tatsuya Sakai<sup>1</sup>, Tarou Kimura<sup>1</sup>, Ken Haga<sup>2</sup> (<sup>1</sup>Grad. Sch. Sci. & Tech., Niigata Univ., <sup>2</sup>Fund. Eng., Nippon Inst. Tech.)

## ■ Flowering/Clock

- PF-070 Functional analysis of *cis*-elements involved in the regulation of gene expression in *Arabidopsis FT* genes using a novel SpCas9-NGv1  
Mayuka Yamamoto<sup>1</sup>, Akito Yoshida<sup>1</sup>, Katsuya Negishi<sup>2</sup>, Natsumi Ono<sup>1</sup>, Mitsutomo Abe<sup>3</sup>, Seiichi Toki<sup>2,4</sup>, Kappei Kobayashi<sup>1</sup>, Hidetaka Kaya<sup>1</sup> (<sup>1</sup>Fac. Agri., Ehime Univ, <sup>2</sup>Inst. Agrobiol. Sci., NARO, <sup>3</sup>Grad. Sch. Arts Sci., Univ. Tokyo, <sup>4</sup>Dept. Plant Life Sci., Fac. Agri., Ryukoku Univ)
- PF-071 Analysis of the genetic loci with G x E interaction effects on flowering time in *Lotus japonicus*  
Ayumu Waku<sup>1</sup>, Tomomi Wakabayashi<sup>2</sup>, Shusei Sato<sup>1</sup> (<sup>1</sup>Grad. Sch. Lif. Sci., Univ. Tohoku, <sup>2</sup>Grad. Sch. Sci. Tech., NAIST)
- PF-072 Elucidation Of Tissue-Specific Functions Of Circadian Clock Components  
Shunichiro Ohata, Nozomu Takahashi, Akane Kubota, Motomu Endo (Div of Bioscience, NAIST)



- PF-073 Circadian clocks in fast dividing cyanobacteria  
Keiko Imai<sup>1</sup>, Hikari Kunihiro<sup>2</sup>, Sunao Tominaga<sup>2</sup>, Hiroshi Ito<sup>2</sup> (<sup>1</sup>Cell Biology Kansai Med. Univ., <sup>2</sup>Laboratory for Biological Rhythms, Kyushu University)
- PF-074 Phenological analysis of transgenic Japanese cedar over-expressing clock genes  
Mine Nose<sup>1</sup>, Ken-ichi Konagaya<sup>2</sup>, Manabu Kurita<sup>1</sup>, Yuko Yasuda<sup>1</sup> (<sup>1</sup>Forest Tree Breeding Center, FFPRI, <sup>2</sup>Forest Bio-Research Center, FFPRI)

## ■ Environmental responses A

- PF-075 Molecular regulatory mechanism of the Rboh-mediated ROS production by Ca<sup>2+</sup> binding and phosphorylation, and its physiological significance and evolution in land plants  
Takafumi Hashimoto<sup>1</sup>, Kenji Hashimoto<sup>1</sup>, Takuya Miyakawa<sup>2</sup>, Masaru Tanokura<sup>2</sup>, Kazuyuki Kuchitsu<sup>1</sup> (<sup>1</sup>Dept. Appl. Biol. Sci., Tokyo Univ. of Sci., <sup>2</sup>Dept. Appl. Biol. Chem., Univ. of Tokyo)
- PF-076 Physiological significance of pyridine nucleotides metabolism by Nudix hydrolases in Arabidopsis  
Momoko Ueki<sup>1</sup>, Takanori Maruta<sup>1</sup>, Takahiro Ishikawa<sup>1</sup>, Kazuya Yoshimura<sup>2</sup>, Shigeru Shigeoka<sup>3</sup>, Takahisa Ogawa<sup>1</sup> (<sup>1</sup>Dept. Life Sci. Biotechnol., Fac. Life Environ. Sci., Shimane Univ, <sup>2</sup>Dept. Food Nutr. Sci., Coll. Biosci. Biotech., Chubu Univ, <sup>3</sup>Exp. Farm, Kindai Univ.)
- PF-077 Measurement ROS activity by luminol-based assay in *Nicotiana benthamiana*, Arabidopsis and turnip  
Lalita Jantean<sup>2</sup>, Kentaro Okada<sup>1</sup>, Ken-ichi Kurotani<sup>1</sup>, Michitaka Notaguchi<sup>1,2,3</sup> (<sup>1</sup>Bioscience and Biotechnology Center, Univ. Nagoya, <sup>2</sup>Graduate School of Bioagricultural Sciences, Univ. Nagoya, <sup>3</sup>Institute of Transformative Bio-Molecules, Univ. Nagoya)
- PF-078 Localization of LZYZ3 on the plasma membrane is crucial for the gravity signal transduction in roots  
Hiromasa Shikata, Miyo T. Morita (National Institute for Basic Biology)
- PF-079 Stress-responsive rapid long-distance signaling involving Ca<sup>2+</sup>, ROS and electrical signals in *Marchantia polymorpha*  
Kenjiro Watanabe, Kota Hasegawa, Yuki Kamiya, Hiroki Shindo, Kenji Hashimoto, Kazuyuki Kuchitsu (Dept. Appl. Biol. Sci., Tokyo Univ. of Sci.)
- PF-080 A new method mimicking hard soil to apply mechanical stimulation on Arabidopsis roots  
Takashi Okamoto, Hiroyasu Motose, Taku Takahashi (Grad. Sch. Nat. Sci and Tech, Okayama Univ.)

## ■ Environmental responses B

- PF-081 Comprehensive analysis of gene expression and metabolite changes in response to drought stress in wheat  
Yuanjie Weng<sup>1</sup>, June-Sik Kim<sup>2</sup>, Ryosuke Mega<sup>3</sup>, Hisashi Tsujimoto<sup>4</sup>, Masanori Okamoto<sup>1</sup> (<sup>1</sup>Utsunomiya Univ., <sup>2</sup>RIKEN·CSRS, <sup>3</sup>Yamaguchi Univ., <sup>4</sup>Tottori Univ.)
- PF-082 Functional analysis of MBD10 in the abscisic acid response of Arabidopsis thaliana  
Yangdan Li, Fuko Minegishi, Yuki Tamura, Mizuki Saigusa, Kota Yamasita, Sotaro Katagiri, Yoshiaki Kamiyama, Taishi Umezawa (BASE, Tokyo Univ. Agric. Tech.)
- PF-083 Comparative phosphoproteomic analysis using *abi1-1* mutants of Arabidopsis thaliana in ABA response  
Kota Yamashita, Mizuki Saigusa, Taishi Umezawa (BASE, Tokyo Univ. Agric. Tech.)
- PF-084 Subcellular localization analysis of ARK encoding a B-RAF essential for ABA/osmostress responses of *Physcomitrium patens*  
Yuko Ikeda<sup>1</sup>, Tsukasa Toriyama<sup>1</sup>, Daisuke Takezawa<sup>2</sup>, Izumi Yotsui<sup>1</sup>, Teruaki Taji<sup>1</sup>, Yoichi Sakata<sup>1</sup> (<sup>1</sup>Dept. of Bioscience, Tokyo Univ. Agric., <sup>2</sup>Grad. Sch. Sci and Eng., Univ. Saitama)
- PF-085 Screening Of Marine Red Macroalga, *Pyropia Yezoensis*, Genes Involved In Potassium And Sodium Homeostasis  
Ayako Miya<sup>1</sup>, Eri Adams<sup>2</sup>, Ryoung Shin<sup>1</sup> (<sup>1</sup>RIKEN CSRS Environmental Response Research Unit, <sup>2</sup>Galdieria, Co., Ltd.)
- PF-086 A role of a receptor kinase FERONIA in responses to low boron in *Arabidopsis thaliana*  
Miko Yamazawa, Kyoko Miwa (Grad. Sch. of Environ. Sci., Hokkaido Univ.)
- PF-087 Diversity of FEP/IMA Genes across Higher Plants  
Aleksandr Sorokin<sup>1,2</sup>, Takashi Hirayama<sup>1,2</sup> (<sup>1</sup>Graduate School of Environmental and Life Science, Okayama Univ., <sup>2</sup>Institute of Plant Science and Resources, Okayama Univ.)
- PF-088 The expression of barley *CISP* genes is induced in the excessive heavy metal stress condition  
Shin-ichiro Kidou<sup>1,2</sup>, Mengchao Ying<sup>1,3</sup> (<sup>1</sup>Grad. Sch. of Sci., Nagoya City Univ., <sup>2</sup>Research Center for Biological Diversity, Nagoya City Univ., <sup>3</sup>Chinese Center for Disease Control and Prevention)

- PF-089 Role of mitochondrial RNA editing in heavy metal tolerance in *Arabidopsis thaliana*  
Fumiaki Asahi, Koki Misawa, Riho Sawai, Izumi Yotsui, Teruaki Taji, Yoichi Sakata (Dept. of Bioscience Tokyo Univ. of Agriculture)

## ■ Environmental responses C

- PF-090 Relationships between heat shock proteins and translational regulation under heat stress condition  
Mei Ichikawa<sup>1</sup>, Yukiko Yamamoto<sup>1</sup>, Hiroko Iwanaga<sup>1</sup>, Akie Miura<sup>1</sup>, Takahito Takei<sup>1,2</sup>, Yuichiro Watanabe<sup>3</sup>, Takahiro Hamada<sup>1,4</sup>  
 (1Fac. Sci., Okayama Univ. Sci., 2Grad. Sch. Sci., Univ. Tokyo, 3Grad. Sch. Arts and Sci., Univ. Tokyo, 4JST PRESTO)
- PF-091 A novel prolonged-cold responsive promoter regulates gene expression via H3K27me3  
Hanako Shimizu<sup>1</sup>, Haruki Nishio<sup>2</sup>, Hiroshi Kudoh<sup>1</sup> (1CER, Kyoto Univ., 2DS Center, Shiga Univ.)
- PF-092 Cytosolic pH homeostasis protects guard cells from SO<sub>2</sub>-induced cell death  
Lia Ooi<sup>1,2</sup>, Sophie Filleur<sup>3</sup>, Izumi C. Mori<sup>1</sup> (1Institute of Plant Science and Resources, Okayama University, 2Hayashibara Co., Ltd. / NAGASE Group, 3Institute of Integrative Biology of the Cell (I2BC), CNRS, Gif sur Yvette – France)
- PF-093 Structural comparison of MsbA homologs of *Synechocystis* sp. PCC6803  
Sato Kashiwagi<sup>1</sup>, Ayumi Matsushashi<sup>2</sup>, Kengo Matsushima<sup>3</sup>, Junji Uchiyama<sup>1,2,4</sup>, Hisataka Ohta<sup>1,2,4</sup> (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., Inst. of Arts and Sci.)
- PF-094 Possible involvement of Arabidopsis *WAK* (wall-associated kinase) in low-calcium response  
Shuichi Hashimoto, Yusuke Shikanai, Takehiro Kamiya, Toru Fujiwara (Grad. Sch. Agri. Life Sci., UTokyo)
- PF-095 Reduction of carotenoid accumulation suppressed cell growth of *Euglena gracilis* under the dark condition as well as under the light condition  
Yuki Koshitsuka<sup>1</sup>, Shun Tamaki<sup>2</sup>, Takeyuki Maruyama<sup>3</sup>, Tomonori Utsuka<sup>3</sup>, Hyota Kikuchi<sup>3</sup>, Koji Miyamoto<sup>1,3</sup>, Kengo Suzuki<sup>2,4</sup>, Keiichi Mochida<sup>2,5</sup>, Tomoko Shinomura<sup>1,3</sup> (1Grad. Sci. Eng., Teikyo Univ., 2RIKEN BZP, 3Sch. Sci. Eng., Teikyo Univ., 4euglena Co., Ltd., 5RIKEN CSRS)
- PF-096 AraR is involved in the mechanism of reactive oxygen species (ROS) scavenging in *Synechocystis* sp. PCC6803  
Yuka Kakegawa<sup>1</sup>, Ayami Nakahara<sup>1</sup>, Junji Uchiyama<sup>1,2</sup>, Hisataka Ohta<sup>1,2</sup> (1Dept. of Math. and Sci. Edu., Grad. Sch. of Sci., Tokyo Univ. of Sci., 2Dept. of liberal arts Edu., Tokyo Univ. of Sci.)
- PF-097 Atmospheric NO<sub>2</sub> suppresses the transcriptional activity of PIF4 to suppress hypocotyl elongation in Arabidopsis  
Misa Takahashi, Atsushi Sakamoto, Hiromichi Morikawa (Grad. Sch. of Int. Sci. for Life, Hiroshima Univ.)
- PF-098 Functional analysis of rice SOG1 and SOG1-like transcription factors involved in DNA damage response  
Ayako Nishizawa-Yokoi<sup>1</sup>, Ritsuko Motoyama<sup>1</sup>, Tsuyoshi Tanaka<sup>2</sup>, Akiko Mori<sup>1</sup>, Keiko Iida<sup>1</sup>, Seiichi Toki<sup>1,3,4</sup> (1NIAS, NARO, 2NAAC, NARO, 3Grad. Sch. Nanobioscience, Yokohama City Univ., 4Fac. Agric., Ryukoku Univ.)

## ■ Plant-organism interaction A

- PF-099 Single-cell RNA sequencing of inner tissues of Arabidopsis identifies the rare cell types myrosin and glucosinolate-producing cells  
Taro Maeda<sup>1</sup>, Shigeo Sugano<sup>2</sup>, Makoto Shirakawa<sup>3</sup>, Satoshi Kondo<sup>4</sup>, Atsushi J. Nagano<sup>1,5</sup> (1IAB, Keio Univ., 2Life Sci. and Biotech., AIST, 3Grad. Sch. of Sci. and Tech., NAIST, 4Agri. and Biotech. Biz. Div., Toyota Motor Co., 5Fac. of Agri, Ryukoku Univ.)
- PF-100 Characterization of honeydew-associated microbes of brown planthoppers and their role in rice defense  
David Wari, Yuko Hojo, Akio Tani, Tomonori Shinya, Ivan Galis (Inst. Plant Sci. & Res., Okayama Univ.)
- PF-101 Identification of novel transcription factors affecting plant growth negatively during the defense responses  
KwiMi Chung, Masaru Ohme-Takagi, Nobutaka Mitsuda (Bioprod. Res. Inst., AIST)
- PF-102 Analysis of a protein kinase mediating sugar responsive modulation of immunity in *Arabidopsis thaliana*  
Linnan Jie<sup>1</sup>, Miho Sanagi<sup>1</sup>, Kohji Yamada<sup>2</sup>, Shigetaka Yasuda<sup>3</sup>, Yusuke Saijo<sup>3</sup>, Junji Yamaguchi<sup>4</sup>, Junpei Takagi<sup>4</sup>, Takeo Sato<sup>4</sup> (1Grad. Sch. Life Sci., Hokkaido Univ., 2Grad. Sch. Tech. Ind. Sco. Sci., Tokushima Univ., 3Grad. Sch. Sci. Tech., NAIST, 4Fac. Sci., Hokkaido Univ.)
- PF-103 Function of novel effector RHIF from plant pathogenic bacteria, *Acidovorax avenae*, in the host or non-host plants  
Minami Nakamura<sup>1</sup>, Machiko Kondo<sup>2</sup>, Honoka Omori<sup>1</sup>, Hinata Tokuda<sup>2</sup>, Fang-Sik Che<sup>1,2,3</sup> (1Grad. Sch. of Biosci., Nagahama Inst. of Bio-sci and Tech., 2Dept. of Bio-sci., Nagahama Inst. of Bio-sci and Tech., 3GERI, Nagahama Inst. of Bio-sci and Tech.)

## ■ Plant-organism interaction B

- PF-104 Hyphal Branching Activity of Monoterpene Glycosides Produced in Gibberellin-Treated *Eustoma grandiflorum* Roots for *Rhizophagus irregularis*  
Takaya Tominaga<sup>1</sup>, Kotomi Ueno<sup>2</sup>, Katsushi Yamaguchi<sup>3</sup>, Shuji Shigenobu<sup>3</sup>, Hironori Kaminaka<sup>2</sup> (<sup>1</sup>United Grad. Sch. Agr., Tottori Univ., <sup>2</sup>Fac. Agr., Tottori Univ., <sup>3</sup>NIBB)
- PF-105 Identification and functional analyses of growth-promoting bacteria in rice under nutrient deficiency  
Shota Kido<sup>1</sup>, Masako Fuji<sup>1</sup>, Yusa Aritoshi<sup>1</sup>, Shunsuke Imai<sup>1</sup>, Yuniar Devi Utami<sup>1</sup>, Taiyo Toriba<sup>2</sup>, Junko Kyozuka<sup>2</sup>, Kiwamu Minamisawa<sup>2</sup>, Yusuke Saijo<sup>1</sup> (<sup>1</sup>Grad. Sch. Sci. and Tech., NAIST, <sup>2</sup>Grad. Sch. Life Sci., Univ. Tohoku)
- PF-106 A study on the relationship between rhizosphere environment and plant growth using synthetic microbial community (SynCom)  
Shinichi Yamazaki<sup>1</sup>, Masaru Nakayasu<sup>2</sup>, Yuichi Aoki<sup>1</sup>, Akifumi Sugiyama<sup>2</sup> (<sup>1</sup>ToMMo, Univ. Tohoku, <sup>2</sup>RISH, Univ. Kyoto)
- PF-107 Quantitative Analysis of Sodium, Potassium, and Cesium Contents in the Creeping Wood Sorrel in Fukushima: A Study on the Ecological Effects of Radioactive Contamination  
Ko Sakauchi<sup>1</sup>, Wataru Taira<sup>2</sup>, Joji Otaki<sup>3</sup> (<sup>1</sup>Grad. Sch. Sci. Eng., Univ. Ryukyus, <sup>2</sup>Research Planning office, Univ. Ryukyus, <sup>3</sup>Fac. Sci., Univ. Ryukyus)

## ■ Epigenetic regulation

- PF-108 Development of DNA Methylation Editing Technology Using CRISPR/Cas9 System in *Arabidopsis thaliana*  
Shunya Hirata<sup>1</sup>, Yuna Okawa<sup>1</sup>, Yoko Ikeda<sup>2</sup>, Hiro Takahashi<sup>4</sup>, Taisuke Nishimura<sup>3</sup>, Chiyoko Machida<sup>5</sup>, Kappei Kobayashi<sup>1</sup>, Hidetaka Kaya<sup>1</sup> (<sup>1</sup>Faculty of Agriculture, Ehime University, <sup>2</sup>IPSR, Okayama University, <sup>3</sup>Department of Bioengineering, Nagaoka University of Technology, <sup>4</sup>Faculty of Pharmaceutical Health, Kanazawa University, <sup>5</sup>Faculty of Applied Biology, Chubu University)

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

- PF-109 Light Regulated Transcription Start Sites of *Heme Oxygenase 1* in *Arabidopsis thaliana*  
Yingxi Chen<sup>1</sup>, Kohji Nishimura<sup>2</sup>, Yoshiharu Y Yamamoto<sup>3</sup>, Takayuki Shimizu<sup>1</sup>, Tatsuru Masuda<sup>1</sup> (<sup>1</sup>Grad. Sch. Arts Sci., Univ. Tokyo, <sup>2</sup>Fac. Life Envi. Sci., Univ. Shimane, <sup>3</sup>U. Grad. Sch. Agr., Univ. Gifu)
- PF-110 Sucrose-induced post-transcriptional control of *S, bZIP* family genes in *Arabidopsis thaliana*  
Yugo Honda<sup>1</sup>, Shugo Sugawara<sup>1</sup>, Hitoshi Onouchi<sup>1</sup>, Satoshi Naito<sup>1,2</sup>, Yui Yamashita<sup>1</sup> (<sup>1</sup>Grad. Sch. Agr., Univ. Hokkaido, <sup>2</sup>Grad. Sch. Life Sci., Univ. Hokkaido)
- PF-111 Involvement of minor-type splicing in the nutrient-dependent regulation of plant growth  
Kodai Ishibashi<sup>1</sup>, Toshihiro Arae<sup>1</sup>, Takeshi Yoshizumi<sup>2</sup>, Yukio Kurihara<sup>2</sup>, Takashi Kuromori<sup>2</sup>, Minami Matsui<sup>2</sup>, Misato Ohtani<sup>1,2,3</sup> (<sup>1</sup>Grad. Sch. Front. Sci., Univ. Tokyo, <sup>2</sup>RIKEN, CSRS, <sup>3</sup>Div. Biol. Sci., Grad. Sch. Sci. Tech., NAIST)
- PF-112 Arabidopsis deadenylase AtCCR4 and RNA binding protein APUM5 are involved in the negative regulation of environmental stress-responsive genes  
Hayato Iwamura<sup>1</sup>, Kotone Morita<sup>2</sup>, Toshihiro Arae<sup>3</sup>, Yukako Chiba<sup>2,4</sup> (<sup>1</sup>Schl. Science, Hokkaido Univ., <sup>2</sup>Grad. Schl. Life Sci. Hokkaido Univ., <sup>3</sup>Grad. Schl. Front. Sci., Univ. Tokyo, <sup>4</sup>Fac. Sci., Hokkaido Univ.)
- PF-113 Translational regulatory mechanism of an Arabidopsis nuclear-encoded transcript coding for two functional proteins  
Kodai Nakao<sup>1</sup>, Toshiya Kakiuchi<sup>1</sup>, Masaki Ito<sup>2</sup>, Yuji Nomoto<sup>2</sup>, Hiro Takahashi<sup>3</sup>, Yui Yamashita<sup>1</sup>, Satoshi Naito<sup>1</sup>, Hitoshi Onouchi<sup>1</sup> (<sup>1</sup>Grad. Sch. Agric., Hokkaido Univ., <sup>2</sup>Sch. Biol. Sci. Tech., Kanazawa Univ., <sup>3</sup>Sch. Med. Sci., Kanazawa Univ.)
- PF-114 Translational regulation of an Arabidopsis polyamine synthase gene via a non-AUG-initiated uORF  
Yuta Hiragori<sup>1</sup>, Miharuru Yasumuro<sup>2</sup>, Noriya Hayashi<sup>1</sup>, Shun Sasaki<sup>1</sup>, Yui Yamashita<sup>1</sup>, Satoshi Naito<sup>1</sup>, Hitoshi Onouchi<sup>1</sup> (<sup>1</sup>Grad. Sch. Agr., Hokkaido Univ., <sup>2</sup>Sch. Agr., Hokkaido Univ.)
- PF-115 Transcriptomics Of Wheat NAM Population And Its Parental Line  
Yasuyuki Nomura<sup>1</sup>, Shuhei Nasuda<sup>2</sup>, Kentaro Shimizu<sup>3,4</sup>, Atsushi J. Nagano<sup>5,6</sup> (<sup>1</sup>Res. Inst. Food Agri., Ryukoku University, <sup>2</sup>Grad. Sch Agri., Kyoto Univ., <sup>3</sup>Dept. Evol. Biol. Envir. Studies, Univ. Zurich, <sup>4</sup>Kihara Biol. Inst. Res., Yokohama City Univ., <sup>5</sup>Fac. Agri., Ryukoku Univ., <sup>6</sup>IAB, Keio Univ.)
- PF-116 A model study for genome-wide *cis*-decoding with explainable deep learning in kiwifruit ripening responses  
Eriko Kuwada<sup>1</sup>, Koki Takeshita<sup>2</sup>, Naoko Fujita<sup>1</sup>, Seiichi Uchiha<sup>2</sup>, Takashi Akagi<sup>1,3</sup> (<sup>1</sup>Grad. Sch. Environ. & Life Sci., Okayama Univ., <sup>2</sup>Dept. Adv. Info. Tech., Kyushu Univ., <sup>3</sup>JST-PRESTO)

## ■ New technology

- PF-117 Development of a Vector System Capable of Expressing Two Genes in the Same Amount by Agroinfiltration  
Yuya Yamada, Shoya Yokoyama, Takushi Hachiya, Tsuyoshi Nakagawa (Dep. Mol. Func. Genomics, Shimane Univ.)
- PF-118 Observation of internal structure of Arabidopsis stem using micro X-ray CT and calculation of the second moment of inertia  
Miyuki Nakata<sup>1,2</sup>, Mao Nakao<sup>1</sup>, Ryosuke Sano<sup>1</sup>, Taku Demura<sup>1,2</sup> (<sup>1</sup>NAIST·BS, <sup>2</sup>NAIST·CDG)
- PF-119 Development of cryopreservation protocol for a variety of duckweed meristems by V-cryo-plate method  
Shogo Ito<sup>1</sup>, Daisuke Tanaka<sup>2</sup>, Tokitaka Oyama<sup>1</sup> (<sup>1</sup>Dept. Bot., Div. Biol. Sci., Grad. Sch. Sci., Kyoto Univ., <sup>2</sup>Research Center of Genetic Resources, NARO)
- PF-120 Speed-up of plant genotyping using simple DNA extraction and cyclodextrin PCR  
Yoichi Nakanishi<sup>1</sup>, Terumi Kawashima<sup>1</sup>, Mayuko Naganawa<sup>1</sup>, Masayoshi Maeshima<sup>1,2</sup>, Sumie Ishiguro<sup>1</sup> (<sup>1</sup>Gad. Sch. Bioagr. Sci., Nagoya Univ., <sup>2</sup>Grad. Sch. Biosci. Biotech., Chubu Univ.)
- PF-121 Examination of conditions for plant regeneration from immature embryo tissues of Japanese beech tree *Fagus crenata*  
Yasunori Ohmiya<sup>1</sup>, Yoshihisa Hosoi<sup>2</sup> (<sup>1</sup>Forest Tree Breeding Center, FFPRI, Forest Research and Management Organization, <sup>2</sup>FFPRI, Forest Research and Management Organization)

## ■ Others

- PF-122 RIKEN BRC provides the information of FOX lines through Exp-Plant Catalog  
Satoshi Iuchi, Masatomo Kobayashi (RIKEN BRC)
- PF-123 Transcriptome analysis of quick growth Mongolian plant *Chloris virgata*  
Shintaro Kawabata<sup>1</sup>, Bolortuya Byambajav<sup>2</sup>, Ayumi Yamagami<sup>1</sup>, Davaapurev Bekh-Ochir<sup>2</sup>, Fuminori Takahashi<sup>3</sup>, Komaki Inoue<sup>3</sup>, Asaka Kanatani<sup>3</sup>, Keiichi Mochida<sup>3</sup>, Minoru Kumazawa<sup>1</sup>, Kentaro Ifuku<sup>1</sup>, Kazuo Shinozaki<sup>3</sup>, Tadao Asami<sup>4</sup>, Batkhuu Javzan<sup>2</sup>, Takeshi Nakano<sup>1</sup> (<sup>1</sup>Grad. Sch. Sci., Univ. Kyoto, <sup>2</sup>National Univ. of Mongolia, <sup>3</sup>CSRS, Riken, <sup>4</sup>Grad. Sch. Sci., Univ. Tokyo)

■ Photosynthesis

- PL-001 Rapid and easy isolation of Chl *d*  
Seiya Sakai<sup>1</sup>, Yasuho Takashima<sup>1</sup>, Kotaro Kobayashi<sup>2</sup>, Iwane Suzuki<sup>2</sup>, Masataka Nakazato<sup>3</sup>, Hideaki Miyashita<sup>4</sup>, Masami Kobayashi<sup>1</sup> (<sup>1</sup>Department of Materials Science, Univ. Tsukuba, <sup>2</sup>Faculty of Life and Environmental Sciences, Univ. Tsukuba, <sup>3</sup>Chlorophyll Laboratory, <sup>4</sup>Graduate School of Human and Environment Studies, Kyoto University)
- PL-002 Development of a high-throughput photosynthesis measurement system  
Nagisa Iwasaka<sup>1</sup>, Jun Tominaga<sup>2</sup>, Shunichi Takahashi<sup>3</sup>, Ayato Sato<sup>4</sup>, Toshinori Kinoshita<sup>4</sup>, Atsushi Sakamoto<sup>2</sup>, Hiroshi Shimada<sup>2</sup> (<sup>1</sup>Sch. Sci., Hiroshima Univ., <sup>2</sup>Grad. Sch. Life, Hiroshima Univ., <sup>3</sup>Tropical Center, Univ. Ryukyuu, <sup>4</sup>ITbM, Nagoya Univ.)
- PL-003 Cryo-EM structure of photosystem II monomer provides insights into the importance of  $\beta$ -carotene, SQDG and PsbO for the dimer formation  
Huaxin Yu<sup>1,2</sup>, Tasuku Hamaguchi<sup>3</sup>, Yoshiki Nakajima<sup>1</sup>, Koji Kato<sup>1</sup>, Keisuke Kawakami<sup>3</sup>, Fusamichi Akita<sup>1,4</sup>, Koji Yonekura<sup>3,5,6</sup>, Jian-Ren Shen<sup>1</sup> (<sup>1</sup>Research Institute for Interdisciplinary Science and Graduate School of Natural Science and Technology, Okayama University, 3-1-1 Tsushima Naka, Okayama 700-8530, Japan, <sup>2</sup>Department of Picobiology, Graduate School of Life Science, University of Hyogo, Hyogo 678-1297, Japan, <sup>3</sup>Biostructural Mechanism Laboratory, RIKEN SPring-8 Center, 1-1-1 Kouto, Sayo-cho, Sayo-gun, Hyogo 679-5148, Japan, <sup>4</sup>Japan Science and Technology Agency, PRESTO, 4-1-8 Honcho, Kawaguchi, Saitama 332-0012, Japan, <sup>5</sup>Institute of Multidisciplinary Research for Advanced Materials, Tohoku University, 2-1-1 Katahira, Aoba-ku, Sendai 980-8577, Japan, <sup>6</sup>Advanced Electron Microscope Development Unit, RIKEN-JEOL Collaboration Center, RIKEN Batou Zone Program, 1-1-1 Kouto, Sayo, Hyogo 679-5148, Japan)
- PL-004 Site-directed mutations at D1-R140 or D2-T231 interacting with one phosphatidylglycerol molecule (PG714) affect both acceptor and donor sides of PSII  
Toshiyuki Shinoda<sup>1</sup>, Yoshiki Tanase<sup>1</sup>, Yuto Sugawara<sup>2</sup>, Kaichiro Endo<sup>3</sup>, Tatsuya Tomo<sup>4</sup>, Jian-Ren Shen<sup>5</sup>, Haruhiko Jimbo<sup>3</sup>, Hajime Wada<sup>3</sup>, Naoki Mizusawa<sup>1,2,6</sup> (<sup>1</sup>Fac. Biosci. Appl. Chem., Hosei Univ., <sup>2</sup>Grad. Sch. Sci. Eng., Hosei Univ., <sup>3</sup>Grad. Sch. Arts Sci., Univ. Tokyo, <sup>4</sup>Grad. Sch. Sci., Tokyo Univ. Sci., <sup>5</sup>RIIS, Okayama Univ., <sup>6</sup>Res. Micro-Nano Tech., Hosei Univ.)
- PL-005 Studies on structure-function relationships between the Rieske/cytb complex and *c*-type cytochromes in anaerobic green sulfur bacteria  
Hiraku Kishimoto<sup>1</sup>, Chihiro Azai<sup>2</sup>, Risa Mutoh<sup>3</sup>, Hideaki Tanaka<sup>4</sup>, Yohei Miyanoiri<sup>4</sup>, Genji Kurisu<sup>4</sup>, Hirozo Oh-oka<sup>1</sup> (<sup>1</sup>Grad. Sch. Sci., Osaka Univ., <sup>2</sup>Col. Life Sci., Ritsumeikan Univ., <sup>3</sup>Fac. Sci., Fukuoka Univ., <sup>4</sup>Inst. Protein Res., Osaka Univ.)
- PL-006 Effects of suppression of chloroplast triosephosphate isomerase on photosynthesis in rice  
Yuji Suzuki<sup>1</sup>, Keiki Ishiyama<sup>2</sup>, Dong-Kyung Yoon<sup>2</sup>, Yuki Takegahara-Tamakawa<sup>1</sup>, Eri Kondo<sup>2</sup>, Mao Suganami<sup>2</sup>, Shinya Wada<sup>3</sup>, Chikahiro Miyake<sup>3</sup>, Amane Makino<sup>2</sup> (<sup>1</sup>Fac. Agr. Iwate Univ., <sup>2</sup>Grad. Sch. Agr. Sci. Tohoku Univ., <sup>3</sup>Grad. Sch. Agr. Sci. Kobe Univ.)
- PL-007 Localization of FlpA and Identification of Its Interaction Factors for Regulation of the Light-dependent H<sup>+</sup> extrusion/uptake in the Cyanobacterium *Synechocystis* sp. PCC6803  
Akane Echigo, Shinji Masuda (Department of Life Science & Technology, Tokyo Institute of Technology)
- PL-008 Uphill energy transfer mechanism for photosynthesis in the Antarctic alga  
Makiko Kosugi<sup>1</sup>, Masato Kawasaki<sup>2</sup>, Yutaka Shibata<sup>3</sup>, Kojiro Hara<sup>4</sup>, Shinichi Takaichi<sup>5</sup>, Toshio Moriya<sup>2</sup>, Naruhiko Adachi<sup>2</sup>, Yasuhiro Kamei<sup>6</sup>, Yasuhiro Kashino<sup>7</sup>, Sakae Kudoh<sup>8</sup>, Hiroyuki Koike<sup>9</sup>, Toshiya Senda<sup>2</sup> (<sup>1</sup>Astrobiology Center, <sup>2</sup>High Energy Accelerator Res. Org. (KEK), <sup>3</sup>Grad. Sch. Sci., Tohoku Univ., <sup>4</sup>Grad. Biol. Production, Akita Pref. Univ., <sup>5</sup>Grad. Sch. Life Sci., Tokyo Univ. Agriculture, <sup>6</sup>Nat. Inst. Basic Biol. (NIBB), <sup>7</sup>Grad. Sch. Sci., Univ. Hyogo, <sup>8</sup>Nat. Inst. Polar Res., <sup>9</sup>Fac. Sci. Engineering, Chuo Univ.)
- PL-009 A theoretical model of the far-red light absorbing photosystem I reaction center of a cyanobacterium *Acaryochloris marina* using chlorophyll *d* and construction of chlorophyll-exchange models  
Akihiro Kimura<sup>1</sup>, Hirotaka Kito<sup>2</sup>, Toshimichi Aota<sup>1</sup>, Tasuku Hamaguchi<sup>3</sup>, Koji Yonekura<sup>3</sup>, Keisuke Kawakami<sup>3</sup>, Kyoko Shinzawa-Itoh<sup>4</sup>, Natsuko Inoue-Kashino<sup>4</sup>, Kentaro Ifuku<sup>5</sup>, Yasuhiro Kashino<sup>4</sup>, Eiki Yamashita<sup>6</sup>, Shigeru Itoh<sup>1</sup> (<sup>1</sup>Physics, Grad Sch Sci, Nagoya Univ., <sup>2</sup>System Informatics, Kobe Univ., <sup>3</sup>RIKEN SPring-8 Center, <sup>4</sup>Grad Sch Science, Univ. Hyogo, <sup>5</sup>Grad Sch Agriculture, Kyoto Univ., <sup>6</sup>Grad Sch Sci, Osaka Univ)

## ■ Environmental responses of photosynthesis

- PL-010 Characterization of cyclic electron transport by Delayed luminescence in *Arabidopsis*  
So Yahagi<sup>1</sup>, Masakazu Katsumata<sup>2</sup>, Reiko Motohashi<sup>1</sup> (<sup>1</sup>Grad. Sch. Inte. Sci. and Tech., Shizuoka Univ., <sup>2</sup>Hamamatsu Photonics Co., Ltd.)
- PL-011 Modification of excitation energy-transfer processes in *Euglena gracilis* strain Z under different light qualities  
Yuki Sorihashi<sup>1</sup>, Yoshifumi Ueno<sup>1</sup>, Runa Sakamoto<sup>2</sup>, Jian-Ren Shen<sup>2,3</sup>, Ryo Nagao<sup>3</sup>, Seiji Akimoto<sup>1</sup> (<sup>1</sup>Grad. Sch. Sci., Kobe Univ., <sup>2</sup>Fac. Sci., Okayama Univ., <sup>3</sup>RIIS, Okayama Univ.)
- PL-012 Time-course transcriptomic analysis of photosynthetic acclimation to submerged condition in an amphibious plant *Hydrophila difformis*  
Genki Horiguchi, Naoki Hirotsu (Grad. Sch. Life Sci., Toyo Univ.)

## ■ Primary metabolism

- PL-013 Analysis of a transcription factor mediating metabolism and developmental transition during nitrogen deficiency in *Arabidopsis*  
Miho Sanagi<sup>1</sup>, Akio Kubo<sup>1</sup>, Yasutake Sato<sup>1</sup>, Filip Rolland<sup>2</sup>, Takatoshi Kiba<sup>3</sup>, Junpei Takagi<sup>4</sup>, Takato Imaizumi<sup>5</sup>, Junji Yamaguchi<sup>4</sup>, Takeo Sato<sup>4</sup> (<sup>1</sup>Grad. Sch. Life Sci., Hokkaido Univ., <sup>2</sup>Dept. Biol., KU Leuven, <sup>3</sup>Grad. Sch. Bioagr. Sci., Nagoya Univ., <sup>4</sup>Fac. Sci., Hokkaido Univ., <sup>5</sup>Dept. Biol., Univ. Washington)
- PL-014 Analysis of regulatory mechanism of SnRK1 kinase activity mediating nitrogen-responsive flowering in *Arabidopsis*  
Akio Kubo<sup>1</sup>, Miho Sanagi<sup>1</sup>, Yasutake Sato<sup>1</sup>, Filip Rolland<sup>2</sup>, Junji Yamaguchi<sup>3</sup>, Junpei Takagi<sup>3</sup>, Takeo Sato<sup>3</sup> (<sup>1</sup>Grad. Sch. Life Sci., Hokkaido Univ., <sup>2</sup>Biology Department, KU Leuven, <sup>3</sup>Fac. Sci., Hokkaido Univ.)
- PL-015 Function of *slr2103* encoding a homolog of type 2 diacylglycerol acyltransferase in the cyanobacterium, *Synechocystis* sp. PCC 6803  
Kazuho Hirai<sup>1</sup>, Motohide Aoki<sup>1</sup>, Yoshitaka Nishiyama<sup>2</sup>, Mikio Tsuzuki<sup>1</sup>, Norihiro Sato<sup>1</sup> (<sup>1</sup>Tokyo University of Pharmacy and Life Sciences, <sup>2</sup>Saitama University)
- PL-016 Enzymatic and physiological analysis of *Arabidopsis* phosphoacetylglucosamine mutase essential for UDP-GlcNAc synthesis  
Yutaroh Sakuta<sup>1</sup>, Yukiya Ono<sup>2</sup>, Yasushi Sato<sup>1</sup> (<sup>1</sup>Grad. Sch. Sci. Eng., Ehime Univ., <sup>2</sup>Fac. Sci., Ehime Univ.)
- PL-017 Effects of Methionine Overaccumulation on Growth of *Arabidopsis thaliana*  
Kazuki Oda<sup>1</sup>, Shiori Muraoka<sup>1</sup>, Hitoshi Onouchi<sup>1</sup>, Takamasa Suzuki<sup>2</sup>, Satoshi Naito<sup>1</sup>, Yui Yamashita<sup>1</sup> (<sup>1</sup>Grad. Schl. Agr., Hokkaido Univ., <sup>2</sup>Col. Biosci. Biotech., Chubu Univ.)
- PL-018 Effect of Overexpression of Lutein Synthesis Enzyme Genes on Carotenoid Composition in Green Leaves  
Kouki Mizuno<sup>1</sup>, Kenji Miura<sup>2</sup>, Satomi Takeda<sup>1</sup> (<sup>1</sup>Grad. Sch. Sci., Osaka Prefecture Univ., <sup>2</sup>Grad. Sch. Life and Earth Sci., Univ. of Tokuba)
- PL-019 Function of NoPSL1 during phosphorus deficiency in the marine microalga *Nannochloropsis oceanica*  
Yoshihiro Sato, Masako Iwai, Hiroyuki Ohta, Noriaki Tounosu, Mie Shimojima (Sch. Life Science and Technology, Univ. Tokyo Institute of Technology)

## ■ Secondary (specialized) metabolism

- PL-020 A study on pathway reconstruction and intracellular dynamics of the related enzymes in indican biosynthesis  
Shintaro Inoue<sup>1,2</sup>, Rihito Morita<sup>2</sup>, Yoshiko Minami<sup>2</sup> (<sup>1</sup>Bio-Innov. Res. Cent., Tokushima Univ., <sup>2</sup>Dept. of Biochem., Okayama Univ. of Sci.)
- PL-021 Cross-species metabolomic analysis of indolic metabolites in Brassica plants  
Nodoka Shinya, Takafumi Shimizu, Mutsumi Watanabe, Takayuki Tohge (Grad. Sch. of Sci. and Tech., NAIST)
- PL-022 Analysis of a  $\beta$ -glucosidase involved in the regulation of isoflavone amounts in soybean root apoplast and rhizosphere  
Hinako Matsuda<sup>1</sup>, Yumi Yamazaki<sup>1</sup>, Eiko Moriyoshi<sup>1</sup>, Masaru Nakayasu<sup>1</sup>, Shinichi Yamazaki<sup>2</sup>, Yuichi Aoki<sup>2</sup>, Hisabumi Takase<sup>3</sup>, Shin Okazaki<sup>4</sup>, Akito Kaga<sup>5</sup>, Kazufumi Yazaki<sup>1</sup>, Akifumi Sugiyama<sup>1</sup> (<sup>1</sup>Kyoto Univ., <sup>2</sup>Tohoku Univ., <sup>3</sup>KUAS, <sup>4</sup>Tokyo Univ. of Agri. and Tech., <sup>5</sup>NARO)
- PL-023 Enzymatic analysis of methyl chloride synthesis activities in Dipterocarpaceae trees  
Yuko Nakamura<sup>1</sup>, Takuya Saito<sup>2</sup>, Tatsuo Nakamura<sup>1</sup> (<sup>1</sup>Grad. Sch. Environ. Info. Sci., Yokohama Natl. Univ., <sup>2</sup>Earth System Div., Natl. Inst. Env. Studies)

## ■ Biomembrane/Ion and solute transport

- PL-024 Osmotic responses in protoplasts of mutant cells lacking tonoplast intrinsic protein AtTIP2;2 in *Arabidopsis thaliana*  
Hina Fujimoto<sup>1</sup>, Yuka Motohiro<sup>1</sup>, Tsuneo Kuwagata<sup>2</sup>, Yuko T. Hanba<sup>3</sup>, Kumi Sato-Nara<sup>4</sup> (<sup>1</sup>Graduate School of Humanities and Sciences, Nara Women's University, <sup>2</sup>NARO National Institute for Agro-Environmental Science, <sup>3</sup>Department of Applied Biology, Kyoto Institute of Technology, <sup>4</sup>Research Group of Biological Sciences, Division of Natural Sciences, Nara Women's University)
- PL-025 Identification and characterization of flavin transporters in plants  
Hikari Kuwata<sup>1</sup>, Takuto Sugimoto<sup>1</sup>, Ayaka Daifuku<sup>2</sup>, Takanori Maruta<sup>1,2</sup>, Takahiro Ishikawa<sup>1,2</sup>, Kazuya Yoshimura<sup>3</sup>, Shigeru Shigeoka<sup>4</sup>, Takahisa Ogawa<sup>1,2</sup> (<sup>1</sup>Grad. Sch. Nat. Sci. Technol., Shimane Univ., <sup>2</sup>Dept. Life Sci. Biotechnol., Fac. Life Environ. Sci., Shimane Univ., <sup>3</sup>Dept. Food Nutr. Sci., Coll. Biosci. Biotech., Chubu Univ., <sup>4</sup>Exp. Farm, Kindai Univ.)
- PL-026 Analysis of potassium ion transporters expressed in the shoot tissues  
Taro Yamanashi<sup>1</sup>, Taiki Higashi<sup>1</sup>, Takeshi Uchiyama<sup>1</sup>, Yumiko Shirakawa<sup>1</sup>, Hayato Ikeda<sup>2</sup>, Hidetoshi Kikunaga<sup>2</sup>, Toshimi Suda<sup>2</sup>, Mutumi Yamagami<sup>3</sup>, Masaru Tuzii<sup>1</sup>, Yasuhiro Ishimaru<sup>1</sup>, Nobuyuki Uozumi<sup>1</sup> (<sup>1</sup>Department of Biomolecular Engineering Graduate School of Engineering Tohoku University, <sup>2</sup>Research center for electron photon science, Tohoku University, <sup>3</sup>Institute for Environmental sciences)
- PL-027 Physiological role of aquaporins in high environmental tolerance of cactus  
Ryosuke Sato<sup>1,2</sup>, Takanori Horibe<sup>2</sup>, Takamasa Suzuki<sup>2</sup>, Masashi Asahina<sup>3,4</sup>, Takashi Tsuge<sup>2</sup>, Maki Katsuhara<sup>5</sup>, Masayoshi Maeshima<sup>2</sup> (<sup>1</sup>Forest Bio Res. Cent., <sup>2</sup>Col. Biotech., Chubu Univ., <sup>3</sup>Dep. Biosci., Teikyo Univ., <sup>4</sup>Adv. Instrum. Anal. Cent., Teikyo Univ., <sup>5</sup>IPSR, Okayama Univ.)
- PL-028 Root-specific activation of plasma membrane H<sup>+</sup>-ATPase increases nutrient contents and biomass in *Arabidopsis thaliana*  
Kota Monden<sup>1</sup>, Daisuke Sugiura<sup>2</sup>, Takehiro Kamiya<sup>3</sup>, Tsuyoshi Nakagawa<sup>1</sup>, Takushi Hachiya<sup>1</sup> (<sup>1</sup>Dept. Mol. Genet., Int. Gent. Sci. Res., Shimane Univ., <sup>2</sup>Grad. Sch. Bio. Sci., Nagoya Univ., <sup>3</sup>Grad. Sch. Agr. Sci., Tokyo Univ.)
- PL-029 Effects of light quality on the concentration of mineral elements in leafy vegetables grown under artificial lighting  
Kazuki Serizawa, Keiko Ohashi (Kaneko) (Grad. Sch. Agr., Univ. Tamagawa)
- PL-030 Identification of QTL regulating leaf magnesium concentration by natural accessions in *Arabidopsis thaliana*  
Akane Kodaka<sup>1</sup>, Natsuko I. Kobayashi<sup>2</sup>, Toru Kudo<sup>3</sup>, Misako Kato<sup>1</sup>, Keitaro Tanoi<sup>2</sup> (<sup>1</sup>Grad. Sch. Life Sci., Ocha Univ., <sup>2</sup>Grad. Sch. Agr. Life Sci., Univ. Tokyo, <sup>3</sup>Ac-Planta Inc.)

## ■ Membrane trafficking

- PL-031 *Arabidopsis* PLD $\zeta$ 1 and PLD $\zeta$ 2 localize to *trans*-Golgi network and post-Golgi membrane compartments in root tissue, respectively  
Ryota Shimamura<sup>1</sup>, Yohei Ohashi<sup>2</sup>, Yukimi Yamamoto Taniguchi<sup>1</sup>, Mariko Kato<sup>1</sup>, Tomohiko Tsuge<sup>1</sup>, Takashi Aoyama<sup>1</sup> (<sup>1</sup>ICR, Kyoto Univ., <sup>2</sup>MRC, Cambridge)

## ■ Organelles/Cytoskeleton

- PL-032 Genetic and biochemical characterization of the plastidial sulfurtransferase of AtSTR14 in *Arabidopsis thaliana*.  
Suheng Chen, Shinji Masuda (School of Life Science and Technology, Tokyo Tech)
- PL-033 Establishment of a method for isolating intact guard cell chloroplasts and proteomic comparison between guard cell chloroplasts and mesophyll cell chloroplasts  
Boseok Song, Sho Yamagaki, Sakura Nishimura, Jo Narimatsu, Koh Iba, Juntaro Negi (Grad. Sch. Sci., Kyushu Univ.)
- PL-034 CreHBD1 protein works as a DNA clip to organize chloroplast nucleoids in *Chlamydomonas reinhardtii*  
Mari Takusagawa<sup>1</sup>, Yusuke Kobayashi<sup>1,2</sup>, Yoichiro Fukao<sup>3</sup>, Kumi Hidaka<sup>1,4</sup>, Masayuki Endo<sup>1,4</sup>, Hiroshi Sugiyama<sup>1,4</sup>, Takashi Hamaji<sup>1</sup>, Yoshinobu Kato<sup>1,5</sup>, Isamu Miyakawa<sup>6</sup>, Osami Misumi<sup>6</sup>, Toshiharu Shikanai<sup>1</sup>, Yoshiki Nishimura<sup>1</sup> (<sup>1</sup>Grad. Sch. Sci., Kyoto Univ., <sup>2</sup>Grad. Sch. Sci. Eng., Ibaraki Univ., <sup>3</sup>Grad. Sch. Life Sci., Ritsumeikan Univ., <sup>4</sup>iCeMS, Kyoto Univ., <sup>5</sup>Grad. Sch. Agric. Life Sci., Univ. Tokyo, <sup>6</sup>Grad. Sch. Sci. Tech., Yamaguchi Univ.)
- PL-035 Chloroplast-to-nucleus retrograde signaling for light-dependent transcriptional regulation in *Cyanidioschyzon merolae*  
Haruka Saito<sup>1</sup>, Hikaru Ohara<sup>1</sup>, Yuki Kobayashi<sup>2</sup>, Kan Tanaka<sup>2</sup>, Masayuki Igarashi<sup>3</sup>, Ryutarō Utsumi<sup>4</sup>, Toshihide Okajima<sup>4</sup>, Mitsumasa Hanaoka<sup>1,5</sup> (<sup>1</sup>Grad. Sch. Horticult., Chiba Univ., <sup>2</sup>Lab. Chem. Life Sci., Tokyo Inst. Tech., <sup>3</sup>Inst. Microb. Chem., <sup>4</sup>SANKEN, Osaka Univ., <sup>5</sup>Plant Mol. Sch. Cent., Chiba Univ.)

- PL-036 Imaging of microtubules in the shoot apical meristem of rice  
Ryosuke Takata, Jun Ito, Hiroyuki Tsuji (KIBR., Yokohama City Univ.)
- PL-037 GRAS Family Transcription Factor Is A New Regulator Of Asymmetric Cell Division And Polarity In Moss *Physcomitrium Patens*  
Alisa Vyacheslavova<sup>1</sup>, Teh Ooi-kock<sup>2</sup>, Renqi Wang<sup>1</sup>, Mitsuyasu Hasebe<sup>3</sup>, Tomomichi Fujita<sup>2</sup> (<sup>1</sup>Hokkaido University, Graduate School of Life Science, <sup>2</sup>Hokkaido University, School of Science, <sup>3</sup>National Institute for Basic Biology, Division of Evolutionary Biology)
- PL-038 Molecular mechanisms of microtubule nucleation in plant cells  
Noriyoshi Yagi<sup>1</sup>, Takehide Kato<sup>2</sup>, Sachihiko Matsunaga<sup>3</sup>, David Ehrhardt<sup>4</sup>, Takashi Hashimoto<sup>2</sup>, Masayoshi Nakamura<sup>1</sup> (<sup>1</sup>ITbM, Nagoya U., <sup>2</sup>Div. Bio. Sci., NAIIST, <sup>3</sup>Grad. Sch. Front. Sci., U. Tokyo, <sup>4</sup>Dept. Plant Bio., Carnegie Inst. Sci.)

## ■ Cell wall

- PL-039 Prior secondary cell wall formation is required for gelatinous layer deposition and posture control in gravi-stimulated aspen  
Naoki Takata<sup>1</sup>, Taku Tsuyama<sup>2</sup>, Soichiro Nagano<sup>3</sup>, Kei'ichi Baba<sup>4</sup>, Yuko Yasuda<sup>3</sup>, Shingo Sakamoto<sup>5,6</sup>, Nobutaka Mitsuda<sup>5,6</sup>, Toru Taniguchi<sup>7</sup> (<sup>1</sup>Forest Bio Res. Cent., For. Forest Prod. Res. Inst., <sup>2</sup>Fac. Agri., Miyazaki Univ., <sup>3</sup>Forest Tree Breeding Cent., For. Forest Prod. Res. Inst., <sup>4</sup>RISH, Kyoto Univ., <sup>5</sup>Bioprod. Res. Inst., AIST, <sup>6</sup>Global Zero Emission Res. Cent., AIST, <sup>7</sup>Tohoku Reg. Breeding Office, Forest Tree Breeding Cent., For. Forest Prod. Res. Inst.)
- PL-040 Functional Analysis of a Novel Gene *Procambium Protein (PCP)1* Involved in the Secondary Cell Wall Formation in *Arabidopsis thaliana*  
Tomoya Yokoi<sup>1</sup>, Tomoko Hirano<sup>2</sup>, Masa H. Sato<sup>2</sup> (<sup>1</sup>Sch. Life and Environmental Sciences, Univ. Kyoto Prefectural, <sup>2</sup>Grad. Sch. Life and Environmental Sciences, Univ. Kyoto Prefectural)

## ■ Cell cycle/Cell division

- PL-041 Functional analyses of HPY2/AtNSE2/AtMMS21 and SMC5/6 complex in the regulation of plant cell cycle  
Takashi Ishida<sup>1</sup>, Mika Yoshimura<sup>1</sup>, Keiko Sugimoto<sup>2</sup> (<sup>1</sup>Kumamoto University, Faculty of Advanced Science and Technology (FAST), <sup>2</sup>RIKEN Center for Sustainable Resource Science (CSRS))
- PL-042 Meiotic observations in *Streptocarpus*  
Michael Möller<sup>1</sup>, Kanae Nishii<sup>1,2</sup> (<sup>1</sup>Royal Botanic Garden Edinburgh, <sup>2</sup>Kanagawa Uni.)
- PL-043 Evolution of the SURVIVIN component of the CHROMOSOMAL PASSENGER COMPLEX is driven by molecular convergence  
Shinichiro Komaki<sup>1</sup>, Eelco C Tromer<sup>2</sup>, Geert De Jaeger<sup>3</sup>, Nancy De Winne<sup>3</sup>, Maren Heese<sup>4</sup>, Takashi Hashimoto<sup>1</sup>, Arp Schnittger<sup>4</sup> (<sup>1</sup>Grad. Sch. Biol. Sci., NAIIST, <sup>2</sup>Univ. Groningen, <sup>3</sup>Univ. Ghent, <sup>4</sup>Univ. Hamburg)
- PL-044 Analyses on the regulation of the cell cycle responding to nucleolar stress in Arabidopsis  
Iwai Ohbayashi<sup>1,2</sup>, Akitoshi Iwamoto<sup>3</sup>, Takaaki Yonekura<sup>4</sup>, Munetaka Sugiyama<sup>4</sup> (<sup>1</sup>Dept. Life Sci., National Cheng Kung Univ., <sup>2</sup>Inst. Tropical Plant Sci., National Cheng Kung Univ., <sup>3</sup>Dept. Sci., Kanagawa Univ., <sup>4</sup>Grad. Sch. Sci., Univ. Tokyo)

## ■ Vegetative growth

- PL-045 Characterization of cambium stem cells using nuclear RNA-seq analysis identifies stem cell-specific signatures  
Dongbo Shi<sup>1,2,3</sup>, Keiko Sugimoto<sup>1</sup>, Thomas Greb<sup>2</sup> (<sup>1</sup>RIKEN CSRS, <sup>2</sup>COS Heidelberg, <sup>3</sup>JST PRESTO)
- PL-046 Wounding periderm formation in Arabidopsis roots  
Hiroyuki Iida, Jennifer López Ortiz, Jing Zhang, Ari Pekka Mähönen (HiLIFE, Univ of Helsinki)
- PL-047 Functional analysis of H3K27me3 demethylase genes in the moss *Physcomitrium patens*  
Yuuya Kumagai<sup>1</sup>, Yosuke Tamada<sup>1,2,3,4</sup> (<sup>1</sup>Grad. Sch. Reg. Dev. Creat., Utsunomiya Univ., <sup>2</sup>Sch. Eng. Utsunomiya Univ., <sup>3</sup>CORE, Utsunomiya Univ., <sup>4</sup>REAL, Utsunomiya Univ.)
- PL-048 An innovative rewiring of ethylene and light signal molecular network to adapt the aquatic environment in the amphibious plant *Rorippa aquatica*  
Shuka Ikematsu<sup>1,2,3</sup>, Tatsushi Umase<sup>2</sup>, Mako Shiozaki<sup>2</sup>, Sodai Nakayama<sup>2</sup>, Fuko Noguchi<sup>2</sup>, Tomoaki Sakamoto<sup>2,3</sup>, Seisuke Kimura<sup>2,3</sup>, Keiko Torii U.<sup>1,4,5</sup> (<sup>1</sup>ITbM, Nagoya Univ., <sup>2</sup>Life Sci., Kyoto Sangyo Univ., <sup>3</sup>Center for Plant Sci., Kyoto Sangyo Univ., <sup>4</sup>HHMI, <sup>5</sup>Molecular Biosci., Univ. of Texas)



- PL-049 Functional Analysis of *WANDERING ROOT1* and *WAD2* Genes, Rice *DECUSSATE* Homologues, in *Arabidopsis* Root System Construction  
Ikumi Azuma<sup>1</sup>, Risa Kimura<sup>1</sup>, Ken-Ichiro Hibara<sup>2</sup>, Tatsuaki Goh<sup>1,3</sup>, Akihito Mamiya<sup>1</sup>, Tetsuro Mimura<sup>1,4,5</sup>, Yuki Kondo<sup>1</sup>, Kimitsune Ishizaki<sup>1</sup>, Jun-Ichi Itoh<sup>4</sup>, Hidehiro Fukaki<sup>1</sup> (<sup>1</sup>Grad. Sch. Sci., Kobe Univ., <sup>2</sup>Fac. Agri., Kibi International Univ., <sup>3</sup>Div. Biol. Sci., NAIST, <sup>4</sup>Grad. Sch. Agric. Life Sci., Univ. Tokyo, <sup>5</sup>Col. Biosci. Biotech., National Cheng Kung Univ.)
- PL-050 Molecular mechanism of plant callus formation accelerated by FPX and promoter of plant growth (PPG)  
Kotomi Maekawa<sup>1</sup>, Shota Tanaka<sup>2,3</sup>, Shun Takeno<sup>2,3</sup>, Ayumi Yamagami<sup>1</sup>, Yusuke Kakei<sup>4</sup>, Yukihisa Shimada<sup>4</sup>, Yoshimitu Kondou<sup>2</sup>, Naoshi Dohmae<sup>2</sup>, Setsuko Shimada<sup>2</sup>, Minami Matsui<sup>2</sup>, Tetsuo Kushiro<sup>3</sup>, Naoyuki Osada<sup>2</sup>, Tadao Asami<sup>5</sup>, Kazuo Shinozaki<sup>2</sup>, Takeshi Nakano<sup>1,2</sup> (<sup>1</sup>Dept. Biostudies., Kyoto. Univ., <sup>2</sup>RIKEN·CSRS, <sup>3</sup>Dept. Agri. Chem., Meiji. Univ., <sup>4</sup>Yokohama City Univ., <sup>5</sup>Dept. Appl. Biol. Chem., Tokyo. Univ.)
- PL-051 Effect of metacaspase on dark-induced senescence of leaves  
Hiroshi Hayashi, Taisei Wakamatsu, Keita Fukutani, Rika Shimamoto, Miku Chiba (Fac. Biosci. Biotec., Fukui Pref. Univ.)
- PL-052 *Sdr4 like1 (SFL1)* of *Arabidopsis* regulates phase transition from seed dormancy to germination  
Lipeng Zheng<sup>1</sup>, Masahiko Otani<sup>1</sup>, Kazuhiko Sugimoto<sup>2</sup>, Naoto Kawakami<sup>1</sup> (<sup>1</sup>Grad. Sch. Agri., Univ. Meiji, <sup>2</sup>NICS)
- PL-053 Roles of PPsase1, VHP2;1 and VHP2;2 in early developmental stages and PPI homeostasis of *Arabidopsis thaliana*  
Hiroshi Tojo<sup>1,2</sup>, Hiromitsu Tabeta<sup>1,2,3</sup>, Masami Yokota Hirai<sup>3</sup>, Javot Hélène<sup>4</sup>, Ali Ferjani<sup>2</sup> (<sup>1</sup>Grad. Sch. Art Sci., Univ. Tokyo, <sup>2</sup>Dept. Biol., Tokyo Gakugei Univ., <sup>3</sup>RIKEN CSRS, <sup>4</sup>CNRS, AIX Marseille Univ)
- PL-054 Development of transformation and genome editing protocols in *Rorippa aquarica*  
Rumi Amano<sup>1</sup>, Tomoko Hirano<sup>1</sup>, Tomoaki Sakamoto<sup>2,3</sup>, Seisuke Kimura<sup>2,3</sup>, Masa H. Sato<sup>1</sup> (<sup>1</sup>Grad. Sci. & Env., Kyoto Pref. Univ., <sup>2</sup>Facul. Life Sci., Kyoto Sangyo Univ., <sup>3</sup>Center for Ecological Evolutionary Developmental Biology, Kyoto Sangyo Univ.)
- PL-055 A Simulation Research on Cell Division Patterns and Plant Organ Morphogenesis  
Zining Wang<sup>1</sup>, Xiaofeng Yin<sup>1</sup>, Hiroyasu Inoue<sup>2</sup>, Atsushi Mochizuki<sup>3</sup>, Hirokazu Tsukaya<sup>1</sup> (<sup>1</sup>Grad. Sch. Sci., Univ. Tokyo, <sup>2</sup>Dept. Micro Eng., Kyoto Univ., <sup>3</sup>Inst. Front. Life Med. Sci., Kyoto Univ.)

## ■ Reproductive growth

- PL-056 Dwarfism and photomorphogenic development in the dark of *dei3-1* mutant of *Arabidopsis thaliana* are suppressed by *set* mutation  
Ryosuke Kizu<sup>1,2</sup>, Reina Hashimoto<sup>2</sup>, Shizuka Gunji<sup>2</sup>, Hiroyuki Koga<sup>3</sup>, Nobutaka Mitsuda<sup>4</sup>, Kenya Hanai<sup>2</sup>, Gorou Horiguchi<sup>5,6</sup>, Shinichiro Sawa<sup>7</sup>, Hirokazu Tsukaya<sup>3</sup>, Ali Ferjani<sup>2</sup> (<sup>1</sup>Grad. Sch. Art Sci., Univ. Tokyo, <sup>2</sup>Dept. Biol., Tokyo Gakugei Univ., <sup>3</sup>Grad. Sch. Sci., Univ. Tokyo, <sup>4</sup>AIST, <sup>5</sup>Dept. Life Sci., Rikkyo Univ., <sup>6</sup>Res. Ctr. Life Sci., Rikkyo Univ., <sup>7</sup>Fac. Adv. Sci. Technol., Kumamoto Univ.)
- PL-057 Somatic embryogenesis in angiosperm is promoted by reactive oxygen species(ROS)  
Kiryu Tsurukai<sup>1</sup>, Shohei Soeda<sup>2</sup>, Yoshiki Maeyama<sup>2</sup>, Shuto Sugai<sup>2</sup>, Kazuki Yamaguchi<sup>2</sup>, Rinako Homma<sup>2</sup>, Katsumi Higashi<sup>1,2</sup> (<sup>1</sup>Grad. Sch. Sci. Eng., Teikyo Univ. Sci., <sup>2</sup>Facu. Lif. Env. Sci., Teikyo Univ. Sci.)
- PL-058 A novel “stylish” pre-zygotic inter-specific barrier in *Arabidopsis thaliana*  
Hiroki Miura<sup>1</sup>, Yuka Kimura<sup>1</sup>, Yuko Wada<sup>2</sup>, Seiji Takayama<sup>1</sup>, Sota Fujii<sup>1,3</sup> (<sup>1</sup>Grad Sch Agric Lif Sci, The University of Tokyo, <sup>2</sup>Grad Sch Agric Bio Sci, Nara Institute of Science and Technology, <sup>3</sup>Suntory SunRISE)
- PL-059 Time-lapse observation of meiotic chromosomes of *Arabidopsis* pollen mother cells  
Maho Kusano, Misato Fujita, Yoshitaka Azumi (Dept. Biol. Sci., Sch. Sci., Kanagawa Univ.)
- PL-060 Isolation and characterization of genes involved in the function of female gametophyte and pollen tube attraction  
Masahiro Kanaoka (Grad. Sch. Sci., Nagoya Univ.)
- PL-061 Study of SPRI2 that may transcriptionally regulate interspecific incompatibility in Brassicaceae  
Eri Yamamoto<sup>1</sup>, Yuka Kimura<sup>1</sup>, Yuko Shimosato<sup>2</sup>, Tangpranomkorn Surachat<sup>1</sup>, Shoko Furukawa<sup>2</sup>, Yuko Wada<sup>2</sup>, Seiji Takayama<sup>1</sup>, Sota Fujii<sup>1,3</sup> (<sup>1</sup>Grad. Sch. Agricultural and Life Sciences, Tokyo Univ., <sup>2</sup>Nara Institute of Science and Technology, <sup>3</sup>Suntory Rising Stars Encouragement Program in life Sciences)

## ■ Plant hormones/Signaling molecules

- PL-062 Functional Analysis Of A Novel Brassinosteroid Signaling Factor BMY2  
Kenya Haratani<sup>1</sup>, Kenjiro Fujita<sup>3</sup>, Reika Hasegawa<sup>4</sup>, Ayumi Yamagami<sup>1</sup>, Miho Ikeda<sup>4</sup>, Nobutaka Mitsuda<sup>5</sup>, Satoshi Kidokoro<sup>6</sup>, Kazuko Yamaguchi-Shinozaki<sup>6</sup>, Kazuo Shinozaki<sup>2</sup>, Masaru Ohme-Takagi<sup>4,5</sup>, Tadao Asami<sup>6</sup>, Takeshi Nakano<sup>1</sup> (<sup>1</sup>Grad. Sch.

- Biostudies., Kyoto Univ., <sup>2</sup>CSRS, RIKEN., <sup>3</sup>Grad. Agric., Meiji Univ., <sup>4</sup>Grad. Sch. Sci. Eng., Saitama Univ., <sup>5</sup>AIIST., <sup>6</sup>Grad. Sch. Agri. Life Sci., University of Tokyo.)
- PL-063 Functional analysis of JAZs that specifically interact with JA receptor OsCOI2 in rice  
Hideo Inagaki<sup>1</sup>, Emi Yumoto<sup>2</sup>, Kengo Hayashi<sup>3</sup>, Takuya Kaji<sup>3</sup>, Yousuke Takaoka<sup>3</sup>, Masashi Asahina<sup>1,2</sup>, Minoru Ueda<sup>3,4</sup>, Koji Miyamoto<sup>1</sup> (<sup>1</sup>Grad. Sch. Sci. & Eng., Teikyo Univ., <sup>2</sup>Adv. Instrum. Anal. Cent., Teikyo Univ., <sup>3</sup>Grad. Sch. Sci., Tohoku Univ., <sup>4</sup>Grad. Sch. Life Sci., Tohoku Univ.)
- PL-064 Functional analysis of aberrant protein phosphatase 2 C in parasitic weed *Striga*  
Daisuke Fukuhara<sup>1</sup>, Hijiri Fujioka<sup>2</sup>, Yukihiko Sugimoto<sup>2</sup>, Masanori Okamoto<sup>1</sup> (<sup>1</sup>Utsunomiya Univ., <sup>2</sup>Kobe Univ.)
- PL-065 RNA-seq analysis for exploring the regulatory functions of two bHLH transcription factors BHHs involved in brassinosteroid signaling  
Zhana Chagan<sup>1</sup>, Yuichiro Tanaka<sup>1,2</sup>, Reika Hasegawa<sup>3</sup>, Ayumi Yamagami<sup>1</sup>, Miho Ikeda<sup>3</sup>, Nobutaka Mitsuda<sup>4</sup>, Minoru Kumazawa<sup>1</sup>, Kentaro Ifuku<sup>6</sup>, Tetsuo Kushiro<sup>2</sup>, Masaru Ohme-Takagi<sup>3,4</sup>, Tadao Asami<sup>5</sup>, Takeshi Nakano<sup>1</sup> (<sup>1</sup>Grad. Sch. Bios., Kyoto Univ., <sup>2</sup>Grad. Sch. Agri., Meiji Univ., <sup>3</sup>Grad. Sch. Sci. Eng., Saitama Univ., <sup>4</sup>AIIST, <sup>5</sup>Grad. Sch. Agri. Life Sci., Univ. Tokyo, <sup>6</sup>Grad. Sch. Agri., Kyoto Univ.)
- PL-066 The physiological role of *trans*-zeatin-type cytokinins in rice  
Takatoshi Kiba<sup>1</sup>, Kahori Mizutani<sup>1</sup>, Yumiko Takebayashi<sup>2</sup>, Mikiko Kojima<sup>2</sup>, Tokunori Hobo<sup>3</sup>, Hitoshi Sakakibara<sup>1</sup> (<sup>1</sup>Grad. Sch. Bioagri. Sci., Nagoya Univ., <sup>2</sup>RIKEN CSRS, <sup>3</sup>Biosci. Biotech. Ctr., Nagoya Univ.)

## ■ Photoreceptors/Photoresponses

- PL-067 Clock gene *PRR7* regulates phototropin-mediated light responses  
Takahiro Morimoto<sup>1</sup>, Carlo Feliciano Maliwat Gian<sup>1</sup>, Hinako Kasuya<sup>1</sup>, Akane Kubota<sup>1</sup>, Nozomu Takahashi<sup>1</sup>, Norihito Nakamichi<sup>2</sup>, Motomu Endo<sup>1</sup> (<sup>1</sup>NAIST, <sup>2</sup>Nagoya Univ, School of Agricultural Sciences Graduate School of Bioagricultural Sciences)
- PL-068 Importance of  $\beta$ -carotene in the eyespot formation and phototaxis in *Euglena gracilis*  
Shun Tamaki<sup>1</sup>, Koji Yamada<sup>1,2</sup>, Marumi Ishikawa<sup>1</sup>, Toshihisa Nomura<sup>1,3</sup>, Kazunari Ozasa<sup>4</sup>, Keiichi Mochida<sup>1,3</sup>, Kengo Suzuki<sup>1,2</sup> (<sup>1</sup>RIKEN BZP, <sup>2</sup>euglena Co., Ltd., <sup>3</sup>RIKEN CSRS, <sup>4</sup>RIKEN RAP)
- PL-069 Analyses of guard-cell plasma membrane H<sup>+</sup>-ATPase in whole leaves under light-dark transition  
Eigo Ando<sup>1,4</sup>, Toshinori Kinoshita<sup>2,3</sup>, Ichiro Ando<sup>1</sup> (<sup>1</sup>Dep. Biol. Sci., Grad. Sch. Sci., Univ. Tokyo, <sup>2</sup>Div. Biol. Sci., Grad. Sch. Sci., Nagoya Univ., <sup>3</sup>WPI-ITbM, Nagoya Univ., <sup>4</sup>JSPS Research Fellow)

## ■ Flowering/Clock

- PL-070 Dissection of developmental state transition in the shoot apical meristem of barley grown under field conditions by single meristem RNA-seq  
Jun Ito<sup>1</sup>, Yuko Nomura<sup>1</sup>, Kotaro Takahagi<sup>2</sup>, Satoshi Okada<sup>3</sup>, Nao Sato<sup>1</sup>, Hiroki Matsumoto<sup>1</sup>, Shunichi Arai<sup>1</sup>, Midori Sugimura<sup>1</sup>, Midori Seki<sup>1</sup>, Koosuke Hattori<sup>4</sup>, Taizo Umezaki<sup>4</sup>, Daisuke Saisho<sup>3</sup>, Keiichi Mochida<sup>2</sup>, Takashi Hirayama<sup>3</sup>, Hiroyuki Tsuji<sup>1</sup> (<sup>1</sup>KIBR, Yokohama City Univ., <sup>2</sup>CSRS, RIKEN, <sup>3</sup>IPSR, Okayama Univ., <sup>4</sup>Dept. of Technology, Chubu Univ.)
- PL-071 Protomer exchange of dimeric clock protein, KaiA from cyanobacteria  
Yasuhiro Onoue, Chisato Ohki, Kazuki Terauchi (College of Life Sci., Ritsumeikan Univ.)
- PL-072 Nutrient-mediated organ-organ coupling contributes to the stabilization of circadian clock  
Kyohei Uemoto<sup>1,2</sup>, Yumi Kunimoto<sup>2</sup>, Fumito Mori<sup>3</sup>, Hiroshi Ito<sup>3</sup>, Haruki Egashira<sup>2</sup>, Akane Kubota<sup>2</sup>, Toshinori Kinoshita<sup>4</sup>, Takashi Araki<sup>1</sup>, Motomu Endo<sup>2</sup> (<sup>1</sup>Grad. Sch. Biostudies., Kyoto Univ., <sup>2</sup>Div. Biological Science., NAIST, <sup>3</sup>Faculty of Design., Kyushu Univ., <sup>4</sup>Institute of Transformative Bio-Molecules., Nagoya Univ)
- PL-073 Different Root Expression Patterns of circadian clock in *Arabidopsis thaliana*  
Yu Leng<sup>1</sup>, Akane Kubota<sup>1</sup>, Nozomu Takahashi<sup>1</sup>, Tatsuki Goh<sup>2</sup>, Motomu Endo<sup>1</sup> (<sup>1</sup>Plant Physiology., NAIST, <sup>2</sup>Plant Developmental Signaling., NAIST)
- PL-074 Phase separation of florigen activation complex  
Mayu Enomoto<sup>1</sup>, Suai Anzawa<sup>1</sup>, Yuka Koizumi<sup>1</sup>, Ken-ichiro Taoka<sup>2</sup>, Takashi Kodama<sup>3</sup>, Toshimichi Fujiwara<sup>3</sup>, Hiroyuki Tsuji<sup>2</sup>, Chojiro Kojima<sup>1</sup> (<sup>1</sup>Grad. Sch. of Engr Sci., YNU, <sup>2</sup>Kihara Institute for Biological Research, YCU, <sup>3</sup>Institute for Protein Research, Univ. of Osaka)

## ■ Environmental responses A

- PL-075 The development of quantification method in cyclic di-GMP and the rapid increase in *Synechococcus elongatus* PCC7942  
Shinsuke Kutsuna<sup>1</sup>, Marina Kameda<sup>1</sup>, Setsuyuki Aoki<sup>2</sup>, Robert Kanaly<sup>1</sup> (<sup>1</sup>Grad. Sch. Bio-Nano, <sup>2</sup>Grad. Sch. Info)
- PL-076 Enhanced Ozone Tolerance In Arabidopsis Plants Provided By A Phycocyanin-encoding Gene  
Shoko Saji<sup>1</sup>, Hikaru Saji<sup>1</sup>, Kimiyo Sage-Ono<sup>2</sup>, Michiyuki Ono<sup>2</sup>, Nobuyoshi Nakajima<sup>1</sup>, Mitsuko Aono<sup>1</sup> (<sup>1</sup>Biodiversity Div., Natl. Inst. Environ. Studies, <sup>2</sup>GRC, T-PIRC, Univ. Tsukuba)
- PL-077 Evaluation Of Light Regulation Of Ascorbate Biosynthesis In *Marchantia Polymorpha*  
Tetsuya Ishida<sup>1</sup>, Haruka Kaji<sup>2</sup>, Yasuhiro Tanaka<sup>3</sup>, Takahisa Ogawa<sup>1,2,3</sup>, Takanori Maruta<sup>1,2,3</sup>, Shigeru Shigeoka<sup>4</sup>, Takahiro Ishikawa<sup>1,2,3</sup> (<sup>1</sup>Grad. Sci. Nat. Sci. Technol., Shimane Univ., <sup>2</sup>Facu. Life. Environ. Sci., Shimane Univ., <sup>3</sup>Uni. Grad. Sch. Agricul. Sci., Tottori Univ., <sup>4</sup>Exp. Farm, Kindai Univ.)
- PL-078 Moss *Physcomitrium patens* Responds to Both Microgravity and Hypergravity and Changes Its Gene Expression  
Yuki Yamashita<sup>1</sup>, Maki Yokoi<sup>1</sup>, Chiyo Jinno<sup>1</sup>, Marcel Pascal Beier<sup>2</sup>, Akihisa Shinozawa<sup>3</sup>, Yoichi Sakata<sup>3</sup>, Hiroyuki Kamachi<sup>4</sup>, Yuko T. Hanba<sup>5</sup>, Ichirou Karahara<sup>4</sup>, Yuji Hiwatashi<sup>6</sup>, Atsushi Kume<sup>7</sup>, Tomomichi Fujita<sup>8</sup> (<sup>1</sup>Grad. Sch. Life Sci., Hokkaido Univ., <sup>2</sup>IAHE, Hokkaido Univ., <sup>3</sup>Dept. BioSci., Tokyo Univ. Agric., <sup>4</sup>Fac. Sci., Univ. Toyama, <sup>5</sup>Dept. Applied Biol., Kyoto Inst. Technol., <sup>6</sup>Sch. Food Ind. Sci., Miyagi Univ., <sup>7</sup>Fac. Agric., Kyushu Univ., <sup>8</sup>Fac. Sci., Hokkaido Univ.)
- PL-079 Mechanical stimulation via one-axis clinostat enhances *Arabidopsis thaliana* shoot growth  
Yunshu Wang<sup>1</sup>, Marcel Pascal Beier<sup>1,2</sup>, Toru Fujiwara<sup>1</sup> (<sup>1</sup>Grad. Sch. Agri., Univ. Tokyo, <sup>2</sup>Faculty of Sci., Hokkaido Univ.)

## ■ Environmental responses B

- PL-080 Functional analysis of chloroplast-localized NAD kinase2 in plant water stress responses  
Yuriko Osakabe<sup>1</sup>, Ryosuke Hashimoto<sup>2</sup>, Atsuko Miyagi<sup>3,4</sup>, Muneo Sato<sup>5</sup>, Kohji Yamada<sup>2</sup>, Masami Yokota Hirai<sup>5</sup>, Maki Kawai-Yamada<sup>3</sup>, Keishi Osakabe<sup>2</sup> (<sup>1</sup>Sch. Life Sci. & Tech., Tokyo Tech., <sup>2</sup>Fac. Biosci. Bioindust., Tokushima Univ., <sup>3</sup>Grad. Sch. Sci. Eng., Saitama Univ., <sup>4</sup>Fac. Agri., Yamagata Univ, <sup>5</sup>RIKEN CSRS)
- PL-081 Analysis of the transcription factor SGR5 that functions in the drought resistance mechanism  
Moeca Arai<sup>1,2</sup>, Keiko Kigoshi<sup>1</sup>, Maki Kawai<sup>1,2</sup>, Yoshimi Nakano<sup>1</sup>, Nobutaka Mitsuda<sup>1</sup>, Sumire Fujiwara<sup>1,2</sup> (<sup>1</sup>Bioprod. Res. Inst., AIST, <sup>2</sup>Grad. Biol. Sci., Univ. Tsukuba)
- PL-082 Large-scale analysis of SnRK2-dependent ABA-responsive TSS changes in Arabidopsis  
Yusuke Ohori<sup>1</sup>, Akihiro Ezoe<sup>2</sup>, Kousuke Hanada<sup>2</sup>, Tomokazu Ushijima<sup>3</sup>, Yutaka Suzuki<sup>4</sup>, Tomonao Matsushita<sup>5</sup>, Taishi Umezawa<sup>1</sup> (<sup>1</sup>Tokyo Univ. Agric. Tech., <sup>2</sup>Kyushu Inst. Tech, <sup>3</sup>Setunan Univ., <sup>4</sup>Tokyo Univ., <sup>5</sup>Kyoto Univ.)
- PL-083 Functional analysis of Arabidopsis B3-RAFTs involved in activation of SnRK2  
Tomoki Ohtani<sup>1</sup>, Goro Masuda<sup>1</sup>, Tsukasa Toriyama<sup>1</sup>, Daisuke Takezawa<sup>2</sup>, Izumi Yotsui<sup>1</sup>, Teruaki Tajiri<sup>1</sup>, Yoichi Sakata<sup>1</sup> (<sup>1</sup>Department of Bioscience, Tokyo University of Agriculture, <sup>2</sup>Department of science and Engineering, Saitama University)
- PL-084 The serine protease HtrA is involved in abiotic stress tolerance and protein homeostasis in a halotolerant cyanobacterium  
Tanutch Patipong<sup>1,2</sup>, Takashi Hibino<sup>1,3</sup>, Hakuto Kageyama<sup>1,3</sup>, Rungaroon Waditee-Sirisattha<sup>2</sup> (<sup>1</sup>Grad. Sch. Environ. Hum. Sci., Meijo Univ., <sup>2</sup>Fac. Sci., Chulalongkorn Univ., <sup>3</sup>Fac. Sci. Tech., Meijo Univ.)
- PL-085 The role of MYCCB-SPX module in phosphate starvation of nonvascular plant *Marchantia polymorpha*  
Hinatamaru Fukumura<sup>1</sup>, Ginga Kitaura<sup>1</sup>, Hirotaka Kato<sup>1</sup>, Yuuki Sakai<sup>1</sup>, Yuki Kondo<sup>1</sup>, Hidehiro Fukaki<sup>1</sup>, Tetsuro Mimura<sup>1,2,3</sup>, Kimitsune Ishizaki<sup>1</sup> (<sup>1</sup>Grad. Sch. Sci., Kobe Univ, <sup>2</sup>Grad. Sch. Agri. Life Sci., Univ. Tokyo, <sup>3</sup>Col. Biosci. Biotech., National Cheng Kung Univ.)
- PL-086 Time-dependent regulation of carbon and energy metabolism and related gene expression for triacylglycerol synthesis in *Chlorella* under As-stress conditions  
Yukari Iijima, Yutaro Oishi, Shoko Fujiwara, Norihiro Sato (Grad. Sch. Sci., Univ. Toyaku)
- PL-087 Differential effects of non-essential alkaline metal ions (Na, Li, Cs) on the plant's cell growth and uptakes of nutritional metal ions.  
Yui Katsuta<sup>1</sup>, Natsuko Kadowaki<sup>1</sup>, Yoh Sakuma<sup>2</sup>, Dharmendra K. Gupta<sup>2,3</sup>, Masahiro Inouhe<sup>2</sup> (<sup>1</sup>Department of Biology, Faculty of Science, Ehime University, <sup>2</sup>Biology, Graduate School of Science and Technology, Ehime University, <sup>3</sup>Ministry of Environment, Forest & Climate Change, Government of India)
- PL-088 Absorption and Cell wall binding of Lithium and Sodium Ions in Protonema Cells of *Tremadon longicollis*  
Ryosuke Nakanishi, Yoh Sakuma, Masahiro Inouhe (Biology. Grad. Sch. Sci. & Eng., Ehime Univ.)

## ■ Environmental responses C

- PL-089 Search for novel transcriptional regulators of heat-activated retrotransposons in *Arabidopsis thaliana*  
Syoei Gyuu<sup>1</sup>, Kanako Takehira<sup>1</sup>, Atushi Kato<sup>2</sup>, Hidetaka Ito<sup>2</sup> (<sup>1</sup>Life Sci, HOKKAIDO Univ., <sup>2</sup>Sci, HOKKAIDO Univ.)
- PL-090 Extreme environmental stress tolerance of sporangium in the moss *Physcomitrium patens*  
Changhyun Maeng<sup>1</sup>, Hirono Kobari<sup>2</sup>, Sayaka Takahashi<sup>3</sup>, Atsushi Kume<sup>4</sup>, Hajime Mita<sup>3</sup>, Yuji Hiwatashi<sup>2</sup>, Tomomichi Fujita<sup>5</sup> (<sup>1</sup>Grad. Sch. Life Sci. Hokkaido Univ., <sup>2</sup>Sch. Food Ind. Sci. Miyagi Univ., <sup>3</sup>Dept. Life. Environ. Appl. Chem. Fukuoka Inst. Technol., <sup>4</sup>Fac. Agric. Kyushu Univ., <sup>5</sup>Fac. Sci. Hokkaido Univ.)
- PL-091 Isolation and characterization of an *Arabidopsis* ecotype with high CO<sub>2</sub> sensitivity  
Tomoki Shuno, Satoko Nakae, Toku Higashibaba, Atsushi Mabuchi, Juntaro Negi, Koh Iba, Keina Monda (Dept. Biol., Fac. Sci., Univ. Kyushu)
- PL-092 Isolation and analysis of *Arabidopsis* mutant with low-sensitivity to CO<sub>2</sub> but normal sensitivity to abscisic acid  
Satoko Nakae, Tomoki Shuno, Toku Higashibaba, Atsushi Mabuchi, Juntaro Negi, Koh Iba, Keina Monda (Dept. Biol., Fac. Sci., Univ. Kyushu)
- PL-093 An analysis of the relationship between stomatal conductance and leaf hydraulics in the dark in *Arabidopsis thaliana*  
Nanae Takai, Ko Noguchi, Yusuke Mizokami (Life Sci., Univ. Tokyo Pharma and Life Sci)
- PL-094 Functional analysis of SIGMA FACTOR-BINDING PROTEIN 1 in tomato  
Rinna Adachi<sup>1</sup>, Kazuaki Utsugi<sup>1</sup>, Mari Narusaka<sup>2</sup>, Yoshihiro Narusaka<sup>2</sup>, Keishi Osakabe<sup>1</sup>, Yuriko Osakabe<sup>3</sup> (<sup>1</sup>Fac. Biosci. Bioindust., Tokushima Univ, <sup>2</sup>RIBS, Okayama, <sup>3</sup>Sch. Life Sci. & Tech., Tokyo Tech)
- PL-095 [Cancelled]
- PL-096 Response of root systems to non-uniform boron availability  
Naoyuki Sotta, Toru Fujiwara (Grad. Sch. Agri., Univ. Tokyo)
- PL-097 A multi-target regressor framework to predict Nutrient content values in Tomato Leaves  
Andres Aguilar Ariza, Takehiro Kamiya, Toru Fujiwara (Grad. Sch. Agri., Univ. Tokyo)

## ■ Plant-organism interaction A

- PL-098 Exploration of virulence factors required for the necrotrophic phase of a phytopathogenic fungus, *Colletotrichum orbiculare*  
Katsuma Yonehara<sup>1,2</sup>, Naoyoshi Kumakura<sup>1</sup>, Pamela Gan<sup>1</sup>, Ken Shirasu<sup>1,2</sup> (<sup>1</sup>Yokohama inst., Riken, <sup>2</sup>Grad. Sci., Univ. Tokyo)
- PL-099 Jasmonate-mediated systemic defense in rice leaf  
Taiga Kuwabara, Yuko Hojo, Tomonori Shinya, Ivan Galis (Inst. Plant Sci. & Res., Okayama Univ.)
- PL-100 Different roles of tobacco Dof type transcription factor BBF3 in resistance against bacterium and virus  
Mayu Fujita, Taiga Suzuki, Yasuhiko Matsushita, Nobumitsu Sasaki (Tokyo University of Agriculture and Technology)
- PL-101 Functional analysis of *PINK4* gene of *Lotus japonicus* in symbiont selection after the establishment of endosymbiosis  
Haruka Arashida<sup>1</sup>, Tomomi Nakagawa<sup>2</sup>, Hiroko Maita<sup>3</sup>, Shohei Kusakabe<sup>1</sup>, Shusei Sato<sup>1</sup> (<sup>1</sup>Grad. Lif. Sci., Univ. Tohoku, <sup>2</sup>Yokohama Science Frontier High School, <sup>3</sup>Kazusa DNA Research Institute)
- PL-102 *PUB25* and *PUB26* positively regulate MAMP-responsive MEK1 - MKK1/MKK2 - MPK4 pathway and disease resistance in *Arabidopsis*  
Suzuna Nagai<sup>1</sup>, Yuta Kubo<sup>1</sup>, Junpei Hio<sup>1</sup>, Takahiro Kobayashi<sup>1</sup>, Tsuyoshi Mizoguchi<sup>2</sup>, Fuminori Takahashi<sup>3,4</sup>, Kazuo Shinozaki<sup>4</sup>, Ken Shirasu<sup>4</sup>, Kazuya Ichimura<sup>1</sup> (<sup>1</sup>Fac. Agri., Kagawa Univ., <sup>2</sup>ICU. Grad. Sch. Arts Sci., <sup>3</sup>Fac. Adv. Eng., Tokyo Univ Sci., <sup>4</sup>RIKEN CSRS)

## ■ Plant-organism interaction B

- PL-103 Identification of the host range in *Bradyrhizobium ottawaense* SG09 strain  
Yasuyuki Kawaharada (Fac. of Agri., Iwate Uni.)
- PL-104 Regulation of symbiotic microflora through the symbiotic regulator *CCaMK* in rice  
Sumire Kirita<sup>1</sup>, Asahi Adachi<sup>1</sup>, Shota Kido<sup>1</sup>, Shunsuke Imai<sup>1</sup>, Yusa Aritoshi<sup>1</sup>, Masako Fuji<sup>1</sup>, Toru Fujiwara<sup>2</sup>, Takehiro Kamiya<sup>2</sup>, Yusuke Saijo<sup>1</sup> (<sup>1</sup>Grad. Sch. Sci. and Tech., NAIST, <sup>2</sup>Grad. Sch. Agri. Life Sci., Univ. Tokyo)
- PL-105 Study on the mutualistic relationship between cucumber mosaic virus and its natural host *Arabidopsis helleri*  
Midori Tabara<sup>1</sup>, Shimpei Uraguchi<sup>2</sup>, Hideki Takahashi<sup>3</sup>, Toshiyuki Fukuhara<sup>4,5</sup> (<sup>1</sup>R-GIRO, Ritsumeikan Univ., <sup>2</sup>Sch. Pharm., Kitasato Univ., <sup>3</sup>Dept. Agri., Tohoku Univ., <sup>4</sup>Dept. Agri., Tokyo Univ. Agri. Tech., <sup>5</sup>GIR, Tokyo Univ. Agri. Tech.)

- PL-106 Integrated network with root transcriptome and microbiome in *Brachypodium distachyon* grown under variable soil phosphorus and nitrogen conditions  
Tetsuto Sugai<sup>1,2</sup>, Hayato Maruyama<sup>2</sup>, Kohei Nagayama<sup>2</sup>, Takumi Satou<sup>3</sup>, Kie Kumaishi<sup>3</sup>, Yasunori Ichihashi<sup>3</sup> (<sup>1</sup>FFPRI, <sup>2</sup>Grad. Sch. Agr., Hokkaido Univ., <sup>3</sup>RIKEN BRC)
- PL-107 Exploration of genomic variation(s) among domestic rice cultivars that contributes to the enrichment of major diazotrophs in paddy soil  
Zhihang Feng, Yoshihiro Ohmori, Yoko Masuda, Keishi Senoo, Toru Fujiwara (Graduate School of Agricultural and Life Sciences, The University of Tokyo)

## ■ Epigenetic regulation

- PL-108 Analysis of the effect of LDL2 on shoot regeneration via callus formation  
Ayaka Horie<sup>1</sup>, Takuya Sakamoto<sup>2</sup>, Mariana Diaz<sup>3</sup>, Takamasa Suzuki<sup>4</sup>, Sachihiko Matsunaga<sup>1</sup> (<sup>1</sup>Dept. of Integr. Biosci., Grad. Sch. of Front. Sci., Univ. of Tokyo, <sup>2</sup>Dept. of Appl. Biol. Sci., Fac. of Sci. and Tech., Tokyo Univ. of Sci., <sup>3</sup>IPMB, Univ. of Zurich, <sup>4</sup>Dept. of Appl. Biol. Chem., Fac. of Appl. Biol., Chubu Univ.)

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

- PL-109 Profile Of Tissue-specific Promoters In *Glycine max*  
Masato Araragi, Yasuyuki Kawaharada (Faculty of Agriculture, Iwate university)
- PL-110 *AS11* regulates the alternative splicing efficiency of the chloroplastic APX by binding specifically to its pre-mRNA  
Masato Yamada<sup>1</sup>, Ayano Sawada<sup>2</sup>, Masaki Watanabe<sup>2</sup>, Noriaki Tanabe<sup>3</sup>, Takamasa Suzuki<sup>4</sup>, Ayako Nishizawa-Yokoi<sup>5,6</sup>, Shigeru Shigeoka<sup>7</sup>, Kazuya Yoshimura<sup>1,2</sup> (<sup>1</sup>Biosci. Biotech. Grad. Sch. Chubu Univ., <sup>2</sup>Dept. Food Nutr. Sci., Coll. Biosci. Biotech., Chubu Univ., <sup>3</sup>Dept. Adv. Biosci., Fac. Agr., Kindai Univ., <sup>4</sup>Dept. Biol. Chem., Coll. Biosci. Biotech., Chubu Univ., <sup>5</sup>NIAS, NARO, <sup>6</sup>JST, PRESTO, <sup>7</sup>Exp. Farm, Kindai Univ.)
- PL-111 Deadenylase AtCCR4a/b and the interacting RNA binding protein APUM2 are required for proper shoot regeneration  
Kosuke Kawai<sup>1</sup>, Sota Kurachi<sup>2</sup>, Riko Imahori<sup>2</sup>, Toshihiro Arae<sup>3</sup>, Misato Ohtani<sup>3</sup>, Yukako Chiba<sup>2,4</sup> (<sup>1</sup>Sch. Sci., Hokkaido Univ., <sup>2</sup>Grad. Sch. Life Sci., Hokkaido Univ., <sup>3</sup>Grad. Sch. Front Sci., Univ. Tokyo, <sup>4</sup>Fac. Sci., Hokkaido Univ.)
- PL-112 AtCCR4-NOT, an mRNA decay machinery, is important for shoot regeneration ability  
Toshihiro Arae<sup>1</sup>, Riko Imahori<sup>2</sup>, Yuya Suzuki<sup>2</sup>, Yukako Chiba<sup>2,3</sup>, Misato Ohtani<sup>1</sup> (<sup>1</sup>Grad. Sch. Frontier Sci., Univ. Tokyo, <sup>2</sup>Grad. Sch. Life Sci., Hokkaido Univ., <sup>3</sup>Fac. Sci., Hokkaido Univ.)
- PL-113 Kingdom specificity of eukaryotic ribosome stalling unveiled by unfolded protein response  
Tomoya Imamichi<sup>1</sup>, Nao Kusumoto<sup>2</sup>, Seidai Takamatsu<sup>2</sup>, Yugo Honda<sup>1</sup>, Shiori Muraoka<sup>1</sup>, Hitoshi Onouchi<sup>1</sup>, Satoshi Naito<sup>1,2</sup>, Yui Yamashita<sup>1</sup> (<sup>1</sup>Graduate School of Agriculture, Hokkaido University, Japan, <sup>2</sup>Graduate School of Life Science, Hokkaido University, Japan)
- PL-114 Phenotypic analysis of Arabidopsis mutants of genes encoding RPL13a, a ribosome protein  
Dichao Ma, Hirofumi Fukuda, Toru Fujiwara (Grad. Sch. Agric. Life Sci., Univ. Tokyo)
- PL-115 Involvement of cold shock protein in gene expression profile associated with growth promotion in *Breviolum minutum*  
Shizue Yoshihara<sup>1</sup>, Karin Fujimura<sup>1</sup>, Yohei Minakuchi<sup>2</sup>, Atsushi Toyoda<sup>2</sup>, Hayato Tokumoto<sup>1</sup> (<sup>1</sup>Grad. Sch. Sci., Osaka Pref. Univ., <sup>2</sup>Comparative Genomics Lab., National Institute of Genetics)

## ■ New technology

- PL-116 Construction of a CRISPR/Cas9-Induced One-Cell Bioluminescence Reporter System in Individual Plants  
Ryohei Ueno, Shogo Ito, Tokitaka Oyama (Biological Sciences, Grad. Sci., Univ. Kyoto)
- PL-117 Deep imaging of plant tissues using iTOMEI  
Yuki Sakamoto<sup>1</sup>, Yuuki Sakai<sup>2</sup>, Moeko Sato<sup>3</sup>, Hiroyuki Tsuji<sup>3</sup>, Ryuichi Nishihama<sup>4</sup>, Takayuki Kohchi<sup>5</sup>, Sachihiko Matsunaga<sup>6</sup> (<sup>1</sup>Dept. Biol. Sci., Grad. Sch. Sci., Osaka Univ., <sup>2</sup>Dept. Biol., Grad. Sch. Sci., Kobe Univ., <sup>3</sup>Kihara Institute for Biological Research, Yokohama City Univ., <sup>4</sup>Dept. App. Biol. Sci., Fac. Sci. Tech., Tokyo Univ. Sci., <sup>5</sup>Grad. Sch. Biostudies, Kyoto Univ., <sup>6</sup>Dept. Integr. Biosci., Grad. Sch. Front. Sci., Univ. Tokyo)

- PL-118 Development of single-cell metabolomics in *Arabidopsis* root using live single-cell mass spectrometry coupled with nanoflow-liquid chromatography  
Shunsuke Watanabe<sup>1,2</sup>, Hiromi Suzuki<sup>1</sup>, Yumiko Takebayashi<sup>1</sup>, Mitsunori Seo<sup>1</sup> (<sup>1</sup>RIKEN CSRS, <sup>2</sup>BPMP, INRAE)
- PL-119 Identification and analysis of 4-PBA analog causing plant growth promotion  
Soshi Isahaya<sup>1</sup>, Yuzuka Ikegame<sup>2</sup>, Wakako Ibuka<sup>2</sup>, Akito Kanei<sup>2</sup>, Kie Takahashi<sup>2</sup>, Tetsuya Sakurai<sup>3</sup>, Hirokazu Iida<sup>2</sup>, Youichi Kondou<sup>2</sup> (<sup>1</sup>Grad. Sch. Eng., Kanto-Gakuin Univ., <sup>2</sup>Kanto-Gakuin Univ. Coll. Sci. Eng., <sup>3</sup>Multi. Sci. Clu., Kochi Univ.)
- PL-120 Development of a novel modeling method to integrate various life phenomena in one model  
Ryoichi Sato, Masami Yokota Hirai (RIKEN CSRS)
- PL-121 Enhancement of accumulation of phenolic compounds in leaf lettuce by prohydrojasmon treatment  
Shinya Takahashi<sup>1,2,3</sup>, Yui Namioka<sup>3</sup>, Haidar Rafid Azis<sup>2</sup>, Tomoharu Sano<sup>4</sup>, Mitsuko Aono<sup>5</sup>, Masami Koshiyama<sup>6</sup>, Hiroshi Fujisawa<sup>6</sup>, Hiroko Isoda<sup>1,2,3</sup> (<sup>1</sup>Facul. Life Environ. Sci., Univ. Tsukuba, <sup>2</sup>ARENA, Univ. Tsukuba, <sup>3</sup>T-LSI, Univ. Tsukuba, <sup>4</sup>Health and Environ. Risk Div., NIES, <sup>5</sup>Biodiv. Div., NIES, <sup>6</sup>Zeon Corp.)

## ■ Others

- PL-122 Appropriate Information to Prevent Systematic Research Misconducts  
Emiko Harada (The Univ. of Shiga Pref.)
- PL-123 Analysis of centromeres distribution mechanism by the nuclear pore complex in *Arabidopsis thaliana*  
Nanami Ito<sup>1</sup>, Takuya Sakamoto<sup>1</sup>, Yuki Sakamoto<sup>2</sup>, Sachihiko Matsunaga<sup>3</sup> (<sup>1</sup>Dept. of Appl. Biol. Sci., Fac. of Sci. and Tech., Tokyo Univ. of Sci., <sup>2</sup>Dept. of Biol. Sci., Grad. Sch. of Sci., Osaka Univ., <sup>3</sup>Dept. of Integr. Biosci., Grad. Sch. of Front. Sci., Univ. of Tokyo)