## Thu., March 29, 16:45–18:30 Room A

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

16:45		Reports on election processes	Chairpersons of Award Committees
17:00		JSPP Award, JSPP Young Investigator Awards	and PCP Award JSPP President
17:10		Honorary Membership Award Yoshinori Ohsumi (Tokyo Institute of Techn	JSPP President ology, Honorary Professor)
		Award Lecture	S
		Language: Japanese	-
17:25	A01	JSPP Award "Biochemical and molecular physiological stuc transduction in plants" Masayoshi Maeshima (Grad. Sch. Bioagr. Sc	ies on the membrane transport system and signal
17:45	A02	JSPP Young Investigator Award "Regulation of sugar transporter activity as a p Kohji Yamada (Grad. Sch. Technol. Industr.	
18:00	A03	JSPP Young Investigator Award "Redox-based regulatory network for controllin Keisuke Yoshida (Lab. Chem. Life Sci., Tok	• •
18:15	A04	PCP Award Akira Yoshinari, Masaru Fujimoto, Takashi Ud Junpei Takano (2016) "DRP1-Dependent Endocytosis is Essential for Degradation of the Borate Transporter BOR1 i <i>Plant Cell Physiol.</i> , 57(9): 1985–2000 Akira Yoshinari (Grad. Sch. Life Environ	Polar Localization and Boron-Induced n <i>Arabidopsis thaliana</i> "

Symposium 01

Day 1, AM

Wed., March 28, 9:30-12:30 Room A

## **RNA-mediated Plant Behaviors**

### Language: English

## Organizers: Yukio Kurihara (RIKEN CSRS) Misato Ohtani (Grad. Sch. Biol. Sci., NAIST)

### Chairperson: Misato Ohtani

09:30		Opening remarks Yukio Kurihara
09:32	S01-1	Transcripts derived from downstream TSSs evade uORF-mediated mRNA decay and translation inhibition <u>Yukio Kurihara</u> (RIKEN CSRS)
09:50	S01-2	Functions of noncoding RNAs in biotic and abiotic stress adaptation Bong Soo Park <sup>2</sup> , Jun Sung Seo <sup>1,2</sup> , Maria Helena Cruz de Carvalho <sup>1</sup> , Yao Tao <sup>2</sup> , <u>Nam-Hai Chua</u> <sup>1,2</sup> ( <sup>1</sup> Laboratory of Plant Molecular Biology, Rockefeller University, <sup>2</sup> Temasek Life Sciences Laboratory, National University of Singapore)
10:30	S01-3	Biogenesis mechanism and function of stress-inducible non-coding antisense RNAs <u>Motoaki Seki</u> <sup>1,2,3</sup> , Akihiro Matsui <sup>1</sup> ( <sup>1</sup> RIKEN CSRS, <sup>2</sup> Yokohama City Univ., KIBR, <sup>3</sup> JST CREST)
<ul> <li>Chairp</li> </ul>	erson: Yu	kio Kurihara
10:55	S01-4	Regulation of plant salt tolerance by 14-3-3 proteins and their interacting protein kinases <u>Yan Guo</u> (China Agricultural University)
11:35	S01-5	<ul> <li>Physiological events regulated by AtCCR4a/b deadenylases, components of the CCR4-NOT complex in Arabidopsis</li> <li>Yuya Suzuki<sup>1</sup>, Toshihiro Arae<sup>1</sup>, Akiko Nagumo<sup>1</sup>, Kotone Morita<sup>2</sup>, Masami Y. Hirai<sup>3</sup>, C.</li> <li>Robertson McClung<sup>4</sup>, Pamela J. Green<sup>5</sup>, Junji Yamaguchi<sup>1,6</sup>, <u>Yukako Chiba</u><sup>1,6,7</sup> (<sup>1</sup>Grad. Sch. Life Sci., Hokkaido Univ., <sup>2</sup>Sch. Sci., Hokkaido Univ., <sup>3</sup>RIKEN CSRS, <sup>4</sup>Dept. Biol. Sci., Dartmouth Coll., <sup>5</sup>Delaware Biotech. Inst., Univ. Delaware, <sup>6</sup>Fac. Sci., Hokkaido Univ., <sup>7</sup>JST PRESTO)</li> </ul>
12:00	S01-6	snRNA cap hypermethylation: a new key regulatory step of gene expression for plant development and environmental response Ryoko Hiroyama <sup>2</sup> , Yuka Hatanaka <sup>1</sup> , Taku Demura <sup>1,2</sup> , <u>Misato Ohtani</u> <sup>1,2</sup> ( <sup>1</sup> Grad. Sch. Biol. Sci., NAIST, <sup>2</sup> RIKEN CSRS)
12:25		Closing remarks Misato Ohtani
		Supported by JSPP and Plant and Cell Physiology

Day 1, AM

Symposium 02

## Wed., March 28, 9:30-12:30 Room B

# Optimum Photosynthetic Evolution: Lessons from the Evolution of C4 Photosynthesis and the Response to $CO_2/O_2$ in Plants

## Language: English

		Organizers: Hiroshi Fukayama (Kobe University) Kentaro Ifuku (Kyoto University) Chikahiro Miyake (Kobe University)
<ul> <li>Chairp</li> </ul>	person: Ke	entaro Ifuku
09:30		Opening remarks Hiroshi Fukayama, Chikahiro Miyake
09:40	S02-1	Natural evolution of C <sub>4</sub> photosynthesis as a guide for improving C <sub>4</sub> plant performance <u>Rowan F. Sage<sup>1</sup></u> , Shunsuke Adachi <sup>2</sup> ( <sup>1</sup> Dep Ecol Evol Biol, Toronto Univ, <sup>2</sup> Grad Sch Agri, Tokyo Univ of Agri Tech)
10:05	S02-2	Introduction of C4-like enzymic properties and nitrogen distribution of Rubisco into C3 plant, rice <u>Hiroshi Fukayama</u> <sup>1</sup> , Akito Yamamoto <sup>1</sup> , Keita Shiomi <sup>1</sup> , Noriyuki Kobayashi <sup>1</sup> , Hiroki Yoshikawa <sup>2</sup> , Yojiro Taniguchi <sup>3</sup> , Hiroyoshi Matsumura <sup>2</sup> ( <sup>1</sup> Grad Sch Agri Sci, Kobe Univ, <sup>2</sup> Coll Life Sci, Ritsumeikan Univ, <sup>3</sup> Inst Crop Sci, NARO)
<ul> <li>Chairp</li> </ul>	person: Ch	nikahiro Miyake
10:30	S02-3	The role of PSI-cyclic electron flow mediated by NAD(P)H dehydrogenase in C4 photosynthesis <u>Tsuyoshi Endo</u> , Noriko Ishikawa (Grad Sch Biostudies, Kyoto Univ.)
10:55	<b>S02-4</b>	Overexpression of <i>PROTON GRADIENT REGULATION 5</i> in a C <sub>4</sub> plant, <i>Flaveria bidentis</i> <u>Youshi Tazoe</u> (Grad. Sch. Agri. Sci, Tohoku Univ)
<ul> <li>Chairp</li> </ul>	person: Hi	roshi Fukayama
11:20	S02-5	Strategies to alleviate the potential risk of photosynthesis: P700 oxidation is regulated by the redox state of plastoquinone pool in C <sub>3</sub> and C <sub>4</sub> plant leaves <u>Ginga Shimakawa</u> , Chikahiro Miyake (Grad Sch Agri Sci, Kobe Univ)
11:45	S02-6	<ul> <li>PSI-NPQ in higher plants</li> <li><u>Makio Yokono<sup>1</sup></u>, Atsushi Takabayashi<sup>2,3</sup>, Junko Kishimoto<sup>2,3</sup>, Tomomichi Fujita<sup>4</sup>, Masakazu Iwai<sup>5</sup>, Akio Murakami<sup>6</sup>, Seiji Akimoto<sup>7</sup>, Ayumi Tanaka<sup>2,3</sup> (<sup>1</sup>Nippon Flour Mills Co., Ltd., Innovation Center, <sup>2</sup>Inst. Low Temp. Sci., Univ. Hokkaido, <sup>3</sup>CREST, JST, <sup>4</sup>Dept. Biol. Sci., Fac. Sci., Univ. Hokkaido, <sup>5</sup>Dept. Plant Microb. Biol., Univ. California, <sup>6</sup>Res. Ctr. Inland Seas, Univ. Kobe <sup>7</sup>Grad. Sch. Sci., Univ. Kobe)</li> </ul>
12:10		Closing remarks Kentaro Ifuku
		See http://www.knt.co.jp/ec/2018/jspp2018/symposia.html for the aim of this symposium

Symposium 03

Day 1, PM

## Wed., March 28, 14:00-17:00 Room A

# Amazing Development – Unrevealing Unusual Developmental Phenomena in Plants –

Language: English

**Organizers:** Taiyo Toriba (Tohoku University) Seisuke Kimura (Kyoto Sangyo University)

Chairperson: Taiyo Toriba

14:00		Opening remarks Taiyo Toriba
14:05	<b>S03-1</b>	Development Ab-GALFA method, a novel assay method for analyzing molecular mechanisms underlying the gall formation process using a model plant, <i>Arabidopsis thaliana</i> <u>Masa H. Sato<sup>1</sup></u> , Ayaka Okamoto <sup>1</sup> , Issei Ohshima <sup>1</sup> , Seisuke Kimura <sup>2</sup> , Tomoko Hirano <sup>1</sup> ( <sup>1</sup> Kyoto Prefectural University, <sup>2</sup> Kyoto Sangyo University)
14:30	S03-2	An aquatic plant <i>Callitriche palustris</i> : its dimorphic nature of leaf development, and potentials as a modern experimental plant <u>Hiroyuki Koga</u> <sup>1</sup> , Hirokazu Tsukaya <sup>1,2</sup> ( <sup>1</sup> The University of Tokyo, <sup>2</sup> NINS)
14:55	S03-3	Adaptation of plants to aquatic environments: Studies on vegetative propagation in semi-aquatic plant, <i>Rorippa aquatica</i> <u>Seisuke Kimura</u> (Kyoto Sangyo University)
15:20		Coffee break
<ul> <li>Chairp</li> </ul>	erson: Se	isuke Kimura
15:30	S03-4	Insight into strategies for plant-plant parasitism in <i>Cuscuta campestris</i> based on genome sequencing Hideki Narukawa, Ryusuke Yokoyama, Takeshi Obayashi, Yuki Kaga, Moegi Kato, Takeshi Kuroha, <u>Kazuhiko Nishitani</u> (Tohoku University)
15:55	S03-5	Recent progress in one-leaf plant studies; searching for meristem regulatory factors in their genomes <u>Kanae Nishii</u> , Michael Moeller (Royal Botanic Garden Edinburgh)
16:20	S03-6	Shoot branching and development under the ground — Studies on rhizome formation in a wild rice species, <i>Oryza longistaminata</i> — <u>Taiyo Toriba<sup>1</sup></u> , Hiroki Tokunaga <sup>2</sup> , Toshihide Shiga <sup>1</sup> , Junko Kyozuka <sup>1</sup> ( <sup>1</sup> Tohoku University, <sup>2</sup> RIKEN CSRS)
16:45		Closing remarks Seisuke Kimura
		Supported by JSPP

Day 1, PM

Chairperson: Daisuke Maruyama

Symposium 04

## Wed., March 28, 14:00-17:00 Room B

# New Trends of Plant Reproduction Emerging from Cell Biological Approaches

Language: English

Organizers: Daisuke Maruyama (Yokohama City Univ.) Kazuo Ebine (NIBB)

14:00		Opening remarks	
14:05	S04-1	Membrane trafficking mechanism regulating plant gametogenesis <u>Kazuo Ebine</u> <sup>1,2</sup> , Keiko Shoda <sup>3</sup> , Naoki Minamino <sup>1,4</sup> , Tomohiro Uemura <sup>4</sup> , Chieko Saito <sup>5</sup> , Akihiko Nakano <sup>4,6</sup> , Takashi Ueda <sup>1,2</sup> ( <sup>1</sup> Div. Cellular Dynamics, NIBB, <sup>2</sup> Sch. Life Sci., SOKENDAI, <sup>3</sup> RIKEN Brain Science Institute, <sup>4</sup> Grad. Sch. Sci, The Univ. Tokyo, <sup>5</sup> CRDS, JST, <sup>6</sup> RIKEN Center for Advanced Photonics)	
14:25	S04-2	Cytoskeletons in spermatogenesis of bryophytes <u>Masaki Shimamura (</u> Grad. Sch. Sci., Hiroshima Univ.)	
14:50	S04-3	Reactive oxygen species, autophagy and programmed cell death in plant reproduction <u>Kazuyuki Kuchitsu</u> <sup>1,2</sup> , Jumpei Sawada <sup>1</sup> , Togo Fukunaga <sup>1</sup> , Shigeru Hanamata <sup>2</sup> , Seijiro Ono <sup>3</sup> , Ken-ichi Nonomura <sup>3</sup> , Takamitsu Kurusu <sup>1</sup> ( <sup>1</sup> Dept. Appl. Biol. Sci., Tokyo Univ. of Science, <sup>2</sup> Imaging Frontier Center, Tokyo Univ. of Science, <sup>3</sup> Natl. Inst. of Genetics)	
15:15		Coffee break	
<ul> <li>Chairp</li> </ul>	erson: Ka	zuo Ebine	
15:25	S04-4	Analysis of the structure surrounding the egg cell in <i>Arabidopsis thaliana</i> <u>Daichi Susaki</u> <sup>1</sup> , Takao Oi <sup>2</sup> , Shun Tomomi <sup>1</sup> , Rie Izumi <sup>1</sup> , Sakiko Enomoto <sup>3</sup> , Shigeo Arai <sup>3</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> IMaSS, Nagoya Univ.)	
15:45	S04-5	Study on molecular players regulating male and female gamete interaction during double fertilization Taro Takahashi <sup>1</sup> , Toshiyuki Mori <sup>2</sup> , Lixy Yamada <sup>3</sup> , Hitoshi Sawada <sup>3</sup> , Kenji Ueda <sup>4</sup> , Shiori Nagahara <sup>3</sup> , Tetsuya Higashiyama <sup>3</sup> , <u>Tomoko Igawa</u> <sup>1</sup> ( <sup>1</sup> Grad. Sch. Hort., Chiba Univ., <sup>2</sup> Dept. Trop. Med. Parasitol., Juntendo Univ., <sup>3</sup> Grad. Sch. Sci., Nagoya Univ., <sup>4</sup> Dept. Biol. Prod., Akita Prefectural Univ.)	
16:10	S04-6	Intracellular dynamics controlling Arabidopsis zygote polarization <u>Yusuke Kimata</u> <sup>1</sup> , Takehide Kato <sup>2</sup> , Takumi Higaki <sup>3,4</sup> , Daisuke Kurihara <sup>1,5</sup> , Tomomi Yamada <sup>1,6</sup> , Shoji Segami <sup>7</sup> , Miyo T. Morita <sup>2,7</sup> , Masayoshi Maeshima <sup>7</sup> , Seiichiro Hasezawa <sup>3</sup> , Tetsuya Higashiyama <sup>1,5,6</sup> , Masao Tasaka <sup>2</sup> , Minako Ueda <sup>1,6</sup> ( <sup>1</sup> Grad. Sch. Sci., Nagoya Univ., <sup>2</sup> Grad. Sch. Biol. Sci., NAIST, <sup>3</sup> Grad. Sch. Frontier Sci., Univ. of Tokyo, <sup>4</sup> IROAST, Kumamoto Univ., <sup>5</sup> JST, ERATO Higashiyama Live-Holonics Project, Nagoya Univ., <sup>6</sup> ITbM, Nagoya Univ., <sup>7</sup> Grad. Sch. Bioagric. Sci., Nagoya Univ.)	
16:30	<b>S04-7</b>	Cellular dynamics in Arabidopsis fertilization <u>Tomokazu Kawashima</u> (Univ. of Kentucky)	
16:55		Closing remarks	
		Coorganized by KAKENHI Innovative Areas, "The Birth of New Plant Species"	

Day 2, AM

Symposium 05

## Thu., March 29, 9:00–12:00 Room A

# Maintenance of Stem-ness and Cell Fate Determination in Plants and Animals

Language: English

Organizers: Tomomi Tsubouchi (NIBB) Makoto Hayashi (RIKEN)

09:00 S05-1 Genome maintenance mechanisms in mammalian pluripotent stem cells Yasunao Kamikawa, Taisei Kumazaki, Tomomi Tsubouchi (National Institute for Basic Biology) 09:25 S05-2 Single-cell DNA replication timing profiling and the 3D genome organization dynamics during stem cell differentiation Ichiro Hiratani (RIKEN) 09:50 S05-3 Induction of regeneration callus (blastema) in ANIMALS Akira Satoh (Okayama University) 10:15 S05-4 Control of chromatin structure along differentiation trajectories Hirotomo Takatsuka<sup>1</sup>, Masaaki Umeda<sup>1,2</sup> (<sup>1</sup>Nara Institute of Science and Technology, <sup>2</sup>JST, CREST) S05-5 The formation of tuberous roots by activation of stem cell proliferation in Arabidopsis thaliana Takuya Sakamoto, Matsunaga Sachihiro (Tokyo University of Science) 11:05 S05-6 The seasonal measurement mechanism that regulates the floral transition in Arabidopsis Takato Imaizumi (University of Washington) S05-7 Florigen distribution in the shoot apical meristem during the early phase of reproductive transition Hiroyuki Tsuji (Yokohama City University) General discussion Co-sponsored by KAKENHI Innovative Areas,

See http://www.knt.co.jp/ec/2018/jspp2018/symposia.html for the aim of this symposium

"Principles of Pluripotent Stem Cells underlying Plant Vitality"

Chairperson: Makoto Hayashi

Day 2, AM

Symposium 06

Thu., March 29, 9:00–12:00 Room B

# Stories of Oxygen and Active Molecular Species in Photosynthetic Organisms

Language: English

Organizers: Yuichi Fujita (Nagoya University) Kazuyuki Kuchitsu (Tokyo University of Science)

Chairperson: Shinji Masuda

09:00		Opening remarks Kazuyuki Kuchitsu
09:10	S06-1	Mechanisms to control the Oxygen Paradox between photosynthesis and nitrogen fixation <u>Yuichi Fujita</u> (Nagoya University)
09:35	S06-2	Multiple roles of ROS-generating enzymes, MpRbohA and MpRbohB, in growth, development and stress responses in <i>Marchantia polymorpha</i> <u>Kenji Hashimoto<sup>1</sup></u> , Kazuyuki Kuchitsu <sup>1,2</sup> ( <sup>1</sup> Department of Applied Biological Science, Tokyo University of Science, <sup>2</sup> Imaging Frontier Center, Tokyo University of Science)
10:00	S06-3	Plant immune MAPK-WRKY phosphorylation pathway regulates NADPH oxidase and chloroplast-mediated ROS bursts <u>Hirofumi Yoshioka<sup>1</sup></u> , Hiroaki Adachi <sup>2</sup> , Miki Yoshioka <sup>1</sup> ( <sup>1</sup> Nagoya University, <sup>2</sup> Sainsbury Laboratory)
<ul> <li>Chairp</li> </ul>	erson: Hi	rofumi Yoshioka
10:25	S06-4	Cellular precision for cell surface integrity and plant fitness <u>Yuree Lee<sup>1</sup></u> , Taek Han Yoon <sup>1</sup> , Jiyoun Lee <sup>1</sup> , Mi Kyoung Lee <sup>1</sup> , Jae Ho Lee <sup>1</sup> , Se Yun Oh <sup>1</sup> , Huize Chen <sup>1</sup> , So Yeon Jeon <sup>1</sup> , Huikyung Cho <sup>1</sup> , Hyunggon Mang <sup>1</sup> , June M. Kwak <sup>1,2</sup> ( <sup>1</sup> Center for Plant Aging Research, Institute for Basic Science, <sup>2</sup> Deagu Gyeongbuk Institute of Science and Technology)
10:50	S06-5	The role of reactive oxygen species in receptor-like kinase signaling <u>Michael Wrzaczek</u> (University of Helsinki)
11:15	S06-6	Mechanism for H <sub>2</sub> S and reactive-sulfur-species recognition in cells <u>Shinji Masuda</u> <sup>1</sup> , Takayuki Shimizu <sup>2</sup> ( <sup>1</sup> Center Biol. Sci. Inform., Tokyo Inst. Tech., <sup>2</sup> Grad. Sch Arts Sci., Univ. Tokyo)
11:40		Closing remarks Yuichi Fujita
		Co-sponsored by KAKENHI Innovative Areas, "Oxygen Biology: A New Criterion of Integrated Understanding of Life"

Day 2, PM

Symposium 07

Thu., March 29, 13:30–16:30 Room A

# Cellular Survival Strategy by Autophagy and Ubiquitin Systems

Language: Japanese

Organizers: Takeo Sato (Hokkaido University) Kohki Yoshimoto (Meiji University)

Chairperson: Takeo Sato

13:30		Opening remarks Kohki Yoshimoto
13:35	S07-1	Quality control of leaf peroxisomes via selective autophagy in plants <u>Kohki Yoshimoto</u> (Dept. Life Sci., Sch. Agri., Meiji Univ.)
14:00	S07-2	Chlorophagy: Selective elimination of damaged chloroplasts <u>Masanori Izumi</u> <sup>1,2,3</sup> , Sakuya Nakamura <sup>3</sup> , Yuta Kikuchi <sup>3</sup> ( <sup>1</sup> FRIS, Tohoku Univ., <sup>2</sup> PRESTO, JST, <sup>3</sup> Grad. Sch. Life Sci., Tohoku Univ.)
<ul> <li>Chairp</li> </ul>	erson: Ko	hki Yoshimoto
14:25	S07-3	Modulation of membrane trafficking by ubiquitin signal in plant response to environmental stresses <u>Takeo Sato</u> , Yoko Hasegawa, Junji Yamaguchi (Fac. Sci. and Grad. Sch. Life Sci., Hokkaido Univ.)
14:50	<b>S07-4</b>	Ubiquitination and degradation of a borate transporter AtBOR1 dependent on the transport activity Akira Yoshinari <sup>1,2</sup> , Junpei Takano <sup>1</sup> ( <sup>1</sup> Grad. Life Env. Sci., Osaka Pref. Univ., <sup>2</sup> ITbM, Nagoya Univ.)
15:15	807-5	Ubiquitin phosphorylation as a signal for mitophagy Noriyuki Matsuda (Ubiquitin project, Tokyo Metropolitan Institute of Medical Science)
15:45		Coffee break
15:50	<b>S07-6</b>	Lessons from Yeast — a Cellular Recycling System Yoshinori Ohsumi (Inst. Innov. Res., Tokyo Tech.)
16:25		Discussion

Symposium 08

Day 3, AM

## Fri., March 30, 9:00–12:00 Room A

## **Plant Chemical Biology**

#### Language: Japanese

#### Organizers: Naoyuki Uchida (Nagoya Univ., ITbM) Norihito Nakamichi (Nagoya Univ., ITbM)

Chairperson: Norihito Nakamichi

09:00		Opening remarks Naoyuki Uchida
09:03	S08-1	A bump-and-hole strategy toward freehand manipulation of plant hormone signaling <u>Naoyuki Uchida</u> <sup>1</sup> , Koji Takahashi <sup>2</sup> , Shinya Hagihara <sup>1</sup> , Keiko Torii <sup>1,3</sup> ( <sup>1</sup> Nagoya Univ., ITbM, <sup>2</sup> Nagoya Univ., Grad. Sch. Sci., <sup>3</sup> Washington Univ., HHMI)
09:30	S08-2	Development and utilization of small molecules that control abscisic acid action <u>Masanori Okamoto</u> (Utsunomiya Univ., Cent. for Bio. Res. & Educ.)
10:00	S08-3	Chemical regulation of strigolactone functions by targeting its receptors <u>Hidemitsu Nakamura</u> , Tadao Asami (Univ. Tokyo, Grad. Sch. Agri. Life Sci.)
<ul> <li>Chairp</li> </ul>	erson: Na	oyuki Uchida
10:30	S08-4	To understand complexity of rubber biosynthesis by chemical genetics <u>Emiko Okubo-Kurihara</u> (RIKEN, CSRS)
11:00	S08-5	Chemical biology approach without chemical application <u>Yoshiteru Noutoshi</u> (Okayama Univ., Grad. Sch. Env. Life Sci.)
11:30	S08-6	Transformative bio-molecules for controlling biological time <u>Norihito Nakamichi</u> <sup>1,2</sup> , Junichiro Yamaguchi <sup>3</sup> , Ayato Sato <sup>1</sup> , Keiko Kuwata <sup>1</sup> , Katsuhiro Shiratake <sup>4</sup> , Michitaka Notaguchi <sup>4</sup> , Kenichiro Itami <sup>1,2</sup> , Toshinori Kinoshita <sup>1,2</sup> ( <sup>1</sup> Nagoya Univ., ITbM, <sup>2</sup> Nagoya Univ., Grad. Sch. Sci., <sup>3</sup> Waseda Univ., Dept. Appl. Chem., <sup>4</sup> Nagoya Univ., Grad. Sch. Agr.)
11:57		Closing remarks Norihito Nakamichi

Day 3, AM

Symposium 09

## Fri., March 30, 9:00–12:00 Room B

# New Development of Ribosome and Translational Regulation Research in Plants

Language: English

Organizers: Toru Fujiwara (Univ. Tokyo) Munetaka Sugiyama (Univ. Tokyo)

• Chairperson: Toru Fujiwara

09:00		Opening remarks Toru Fujiwara
09:01	S09-1	A critical role of the NAC transcription factor ANAC082 in ribosomal stress signaling of plant cells <u>Iwai Ohbayashi</u> <sup>1</sup> , Shun Sasaki <sup>2</sup> , Chung-yi Lin <sup>3</sup> , Naoki Shinohara <sup>3</sup> , Yoko Matsumura <sup>4</sup> , Yasunori Machida <sup>4</sup> , Gorou Horiguchi <sup>5,6</sup> , Hirokazu Tsukaya <sup>7,8</sup> , Masahiko Furutani <sup>1</sup> , Hitoshi Onouchi <sup>2</sup> , Munetaka Sugiyama <sup>3</sup> ( <sup>1</sup> HIST, Fujian Agric. Forest. Univ., <sup>2</sup> Div. Fund. Agrisci. Res., Hokkaido Univ., <sup>3</sup> Bot Gardens, Univ. Tokyo, <sup>4</sup> Div. Biol. Sci., Nagoya Univ., <sup>5</sup> Dept. Life Sci. <sup>6</sup> Res Cent. Life Sci., Rikkyo Univ., <sup>7</sup> Dept Biol.Sci., Univ. Tokyo, <sup>8</sup> Okazaki Inst. Integr. Biosci.)
09:25	S09-2	A quartet of NAC transcription factor genes is upregulated in response to abnormal ribosomal proteins and enhances leaf abaxialization in <i>asymmetric leaves2</i> <u>Gorou Horiguchi<sup>1,2</sup></u> , Iwai Ohbayashi <sup>3</sup> , Munetaka Sugiyama <sup>4</sup> , Hirokazu Tsukaya <sup>5,6</sup> ( <sup>1</sup> Dept. Life Sci., <sup>2</sup> Res Cent. Life Sci., Rikkyo Univ., <sup>3</sup> HIST, Fujian Agric. Forest. Univ., <sup>4</sup> Bot Gardens, Univ. Tokyo, <sup>5</sup> Dept Biol.Sci., Univ. Tokyo, <sup>6</sup> Okazaki Inst. Integr. Biosci.)
09:49	809-3	Sucrose sensing through nascent peptide-meditated ribosome stalling in Arabidopsis bZIP11 uORF2 <u>Yui Yamashita</u> <sup>1</sup> , Seidai Takamatsu <sup>1</sup> , Michael Glasbrenner <sup>2</sup> , Thomas Becker <sup>2</sup> , Satoshi Naito <sup>1</sup> , Roland Beckmann <sup>2</sup> ( <sup>1</sup> Hokkaido Univ., <sup>2</sup> LMU Munich)
<ul> <li>Chairp</li> </ul>	erson: Mu	inetaka Sugiyama
10:13	<b>S09-4</b>	Roles of translational regulation in nutrient-response in plants <u>Toru Fujiwara</u> <sup>1</sup> , Izumi Aibara <sup>2</sup> , Mayuki Tanaka <sup>1</sup> , Naoyuki Sotta <sup>1</sup> , Hirofumi Fukuda <sup>1</sup> , Noriya Hayashi <sup>2</sup> , Yukako Chiba <sup>2</sup> , Yui Yamashita <sup>2</sup> , Hitoshi Onouchi <sup>2</sup> , Kyoko Miwa <sup>2</sup> , Satoshi Naito <sup>2</sup> ( <sup>1</sup> Univ. Tokyo, <sup>2</sup> Hokkaido Univ.)
10:37	S09-5	MicroRNA-mediated ribosome stalling <u>Hiro-oki Iwakawa</u> (Univ. Tokyo)
11:01	S09-6	Structure and resistance of an mRNA-selective natural translation inhibitor from Aglaia plant <u>Shintaro Iwasaki</u> (RIKEN)
11:25	S09-7	Translational regulation of plant hormone responses Jose M. Alonso (North Carolina State Univ.)
11:59		Closing remarks Munetaka Sugiyama
		Supported by JSPP

Workshop

Day 2, AM

Thu., March 29, 9:00–12:00 Room J

## The 14th Database Workshop

#### Language: Japanese

Organizers: Kentaro Yano (Bioinformatics, Meiji Univ.) Yasukazu Nakamura (DDBJ Center, Natl. Inst. of Genet.)

Chairperson: Yasukazu Nakamura

09:00	D01-1	The utilization of National BioResouece Project (NBRP) plant databases <u>Shoko Kawamoto</u> , Gaku Kimura (National Institute of Genetics, Genetic Resource Center, Database Division)
09:20	D01-2	<ul> <li>Development of "Melonet-DB" gene expression database for functional genomics research of muskmelon (<i>Cucumis melo</i>)</li> <li><u>Ryoichi Yano<sup>1,2</sup></u>, Satoko Nonaka<sup>1</sup>, Hiroshi Ezura<sup>1,3</sup> (<sup>1</sup>Faculty of Life and Environmental Sciences, University of Tsukuba, <sup>2</sup>JST PRESTO, <sup>3</sup>Tsukuba-Plant Innovation Research Center, University of Tsukuba)</li> </ul>
<ul> <li>Chairp</li> </ul>	erson: Ke	ntaro Yano
09:40	D01-3	Very basics of deep neural networks <u>Seiichi Uchida</u> (Faculty of Information Science and Electrical Engineering, Kyushu University)
10:30	D01-4	A deep learning coding exercise using Oxford Flower Image Dataset <u>Eli Kaminuma</u> (Center for Information Biology, National Institute of Genetics)

In this workshop, we will introduce plant resource information of the National BioResource Project (NBRP) and a omics database of melon. We believe that databases providing information obtained from machine learning will be increased. Also, the chances that users mine useful information from large-scale data sets by machine learning themselves will be increased. Therefore, the principle of deep neural network, model learning, and calculation of classification accuracy will be practiced in this workshop. Participants are requested to bring their own PC and make necessary setups in advanced to this workshop. We will announce necessary softwares shortly. Of course, listening to the lectures only is also welcomed.

Co-sponsored by KAKENHI Innovative Areas, "Principles of Pluripotent Stem Cells underlying Plant Vitality" Day 1, Lunch time

## Wed., March 28, 12:45–13:45 Room E

# PCP Luncheon Seminar "Why choose PCP? Different author, editor, reviewer perspectives"

#### Language: Japanese

*Plant & Cell Physiology (PCP)* is the official journal of the JSPP and ranked in the top 8% (16/211) Plant Science journals worldwide (latest Impact Factor 4.760). In this luncheon seminar, *PCP* author, editor, and reviewer will discuss reasons why they choose *PCP*.

1. *PCP*'s latest developments Hitoshi Sakakibara (Nagoya University, Editor-in-Chief of *PCP*)

2. An Editor's perspective Rowan Sage (University of Toronto)

3. A Reviewer's perspective Yusuke Saijo (Nara Institute of Science and Technology)

- 4. Author perspectives Panel discussion with a selection of *PCP* authors
- 5. Q & A session

Invited speakers plus other *PCP* Editors, including Yan Guo (China Agricultural University), Takato Imaizumi (University of Washington)

Speakers' line-up may be subject to change without notice.

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

Luncheon Seminar

Day 2, Lunch time

## Thu., March 29, 12:15–13:15 Room E

# Leave a Nest Luncheon Seminar Contest to Social Challenges by Plant Scientists

#### Language: Japanese

**Sponsor:** Leave a Nest, Co., Ltd.

In agricultural and environmental problems, there are many big worldwide tasks that plant scientists can make chances to solve. However, there are still a few cases where enormous research results lead to resolution of social issues. Meanwhile, Leave a Nest has seen that there are increasing cases in which scientists established an agri-tech venture company with some members and challenge to solve agricultural or environmental problems in Japan. In this seminar, we would like to discuss whether transdisciplinary collaboration can make scientists more active to challenge social tasks, with a story of efforts in the last few years.

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



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

Leave a Nest thrives to achieve global happiness by enhancing everyday life through science and education for future generation.

We have overseas branches in Singapore, Malaysia, America and UK.

#### **\diamond Education Support Project**

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

#### **O Human Resource Encouragement Project**

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

#### **Orease Researcher Encouragement Project**

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

#### **Operation Support Project**

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

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

Day 3, Lunch time

Fri., March 30, 12:15–13:15 Room E

# Carrier Path Seminar on Gender Equality Appointment of Female-limited Faculty Positions at Universities: What We Learned from the Case of Kyushu University

## Language: Japanese

Speaker: Prof. Eriko Jotaki (Office for the Promotion of Gender Equality, Kyushu University)

Prof. Eriko Jotaki (Kyushu University) will speak on the adoption of the female-limited faculty positions to raise the ratio of female researchers at Kyushu University. Following the lecture, there will be a discussion with Prof. Jotaki as well as among the audience on the merit and potential problems of the female-limited recruitment.

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

The day before the meeting, PM

**Satellite Meeting** 

Tue., March 27, 13:30–18:40 Auditorium at the Institute of Low Temperature Science, Hokkaido University

# The 20th Plant Organelle Workshop — Biochemical Aspects of Plant Organelle Biology —

#### Language: Japanese

Organizers (in alphabetical order):

Nobuaki Hayashida (Shinshu University), Yusuke Kato (Okayama University), Shigeyuki Kawano (University of Tokyo), Hirokazu Kobayashi (University of Shizuoka), Kensuke Kusumi (Kyushu University), Yutaka Miyazawa (Yamagata University), Yoshiki Nishimura (Kyoto University), Junichi Obokata (Kyoto Prefectural University), Atsushi Takabayashi (Hokkaido University)

13:30	Opening remarks
Session 1	
13:35	Exploring physiological roles of the ABC transporters on the chloroplast envelope Kenji Nishimura <sup>1</sup> , Takamasa Sekiya <sup>1</sup> , Motoyuki Ishimori <sup>2</sup> , Samuel Watson <sup>1</sup> , Tsuneaki Takami <sup>1</sup> , Yusuke Kato <sup>1</sup> , Takaaki Miyaji <sup>1</sup> , Wataru Sakamoto <sup>1</sup> ( <sup>1</sup> Okayama University, <sup>2</sup> University of Tokyo)
14:10	Identification of Holliday junction resolvases in chloroplasts Yusuke Kobayashi (National Institute of Genetics)
14:45	Contemplate the chloroplast generation from bacteriological point of view Seiji Kojima (Tohoku University)
15:20	Break
Session 2	
15:35	Phytochrome induces genome-wide changes in alternative promoter selection Tomokazu Ushijima (Kyushu University)
16:10	Analysis of the role of <i>N</i> -glycosylation of the S-locus receptors kinase in the self-incompatibility of the Brassicaceae Masaya Yamamoto <sup>1</sup> , June B. Nasrallah <sup>2</sup> ( <sup>1</sup> Tohoku University, <sup>2</sup> Cornell University)
16:45	Cell biological analysis of plant cell polarity establishment Satoshi Naramoto (Tohoku University)
17:20	Break
Keynote lecture	
17:30	Evolution and function of chlorophyll metabolism Ayumi Tanaka (Hokkaido University)
18:30	General discussion
18:40	Closing remarks
19:00	Mixer Western Cuisine "ConoYoshi" (Kita 18-Jo)

This workshop is open to all interested participants, but online registration in advance is encouraged. (http://dfns.u-shizuoka-ken.ac.jp/labs/pctech/workshop). Contact addresses: Atsushi Takabayashi: takabayashi@pop.lowtem.hokudai.ac.jp

Kensuke Kusumi: kusumi.k.239@m.kyushu-u.ac.jp

30 Abstract Book Annual Meeting of JSPP Mar. 2018 Sapporo

## Tue., March 27, 13:30–17:00 Room H

# The 3rd Workshop on Photosynthetic Bacteria

Language: Japanese

**Organizers:** Jiro Harada (Kurume University), E-mail: jiro\_harada@med.kurume-u.ac.jp Yusuke Tsukatani (Tokyo Institute of Technology), E-mail: tsukatani@elsi.jp Chihiro Azai (Ritsumeikan University), E-mail:cazai@fc.ritsumei.ac.jp

13:00	Registration
13:30	Opening remarks Jiro Harada
13:35	A role of anoxygenic photosynthetic bacteria in the ancient Earth Satoshi Hanada (Department of Biological Sciences, Graduate School of Science and Engineering Tokyo Metropolitan University)
14:05	Considering from examples of bacteria possessing rhodopsin, advantages and disadvantages of photoheterotrophic lifestyle Susumu Yoshizawa (Atmosphere and Ocean Research Institute, The University of Tokyo)
14:35	Microbial sulfur cycle in aquatic environments Manabu Fukui (Institute of Low Temperature Science, Hokkaido University)
15:05	Coffee break
15:20	X-ray structure of the type-I reaction center from <i>Heliobacterium modesticaldum</i> Kokoro Fushimi (Institute for Protein Research, Osaka Univerdity, Graduate School of Science, Osaka University)
15:40	Biopolymer production by marine purple photosynthetic bacteria Mieko Higuchi-Takeuchi (RIKEN CSRS, Enzyme Research Team)
16:10	Construction of chlorosomal models and their application to artificial photosynthesis Hitoshi Tamiaki, Yosuke Nomura, Sunao Shoji (Graduate School of Life Sciences, Ritsumeikan University)
16:40	Discussion
18:30	Banquet

Registration is free. After the workshop, we will have a banquet (fee: about 4,500 yen). To register the workshop and/or banquet, please contact one of the organizers by e-mail (deadline: Wednesday, March 14). On-site registration is also welcomed.

Day 1, Evening

## Wed., March 28, 19:00-20:30 Room D

# The 36<sup>th</sup> Meeting of the Japanese Society for Young Plant Physiologists How to Survive in Academia ~Notes to be a Pl~

#### Language: Japanese

Organizers: Naoyoshi Kumakura (CSRS, RIKEN) Shunsuke Watanabe (CSRS, RIKEN)

19:00	Opening remarks by Organizers	
19:05	Not to be an Iku-men, to be a father Nakano Thomas Ryohei (Max Planck Institute for Plant Breeding Research)	
19:40	Surviving in Science (happily) Shintaro Iwasaki (RIKEN, RNA Systems Biochemistry Laboratory)	
20:15	Discussion	

In order to facilitate the exchange of useful information for the career development of young scientists, two prominent young researchers are invited to this workshop. Dr. Ryohei Thomas Nakano, who moved to Germany after obtaining his PhD, studies plant microbiota and balances science with child-raising. Dr. Shintaro Iwasaki, who switched his research field from plants to animals, became a PI in RIKEN while in his thirties. They will discuss their decision making processes, thoughts about studying abroad, career development, and the paths to their major publications which we hope can be useful for your own career development. Admission is free. Feel free to join this meeting.

#### Box meal and banquet

A box meal will be provided in the meeting upon request. A banquet will be held after the meeting to meet the speakers. If you want a box meal and/or to join the banquet, please register through the web site below.

Box meal and bottled tea: 1,000 yen.

Banquet: 3,000 yen for students, 4,000 yen for PDs and others.

Website: https://goo.gl/forms/iDErMkQUALDe5xza2

Deadline: Friday, March 23.

#### The Japanese Society for Young Plant Physiologists

E-mail: jsyppmeeting@yahoo.co.jp URL: http://www.yokohama.riken.jp/phytohormone/jsypp2018/