Abscisic acid signaling: Beyond the discovery of PYR/PYL/RCAR

Organizers Shintaro Munemasa (Okayama Univ.)
Noriyuki Nishimura (NIAS)

09:30 Opening Remarks
Shintaro Munemasa[1] ([1]Okayama Univ.)

● Chairperson: Shintaro Munemasa

09:35 **S01-1** A complex ABA signaling network mediated by PP2Cs
Noriyuki Nishimura[1], James Moresco[2], Nobutaka Mitsuda[3], Patricia Tu[2], Hideki Nishimura[4], Yuki Hayashi[5], Tomoko Irisa[1], Takashi Hirayama[4], Toshinori Kinoshita[5], Julian Schroeder[6], John Yates[2], Kouji Satoh[1] ([1]IRB, NIAS, [2]TSRI, [3]AIST, [4]IPSR, Okayama Univ., [5]Grad. Sch. Sci., Nagoya Univ., [6]UCSD)

10:00 **S01-2** Investigations of abscisic acid responses using genetically-encoded fluorescent reporters
Rainer Waadt[1], Karin Schumacher[1] ([1]University of Heidelberg, Centre for Organismal Studies, Plant Developmental Biology)

10:25 **S01-3** Screening of ABA-responsive SnRK2 substrates using a phosphoproteomic approach
Taishi Umezawa[1,2], Yoshimasa Honda[1], Naoyuki Sugiyama[3], Anderson Jeffrey[4], Peck Scott[5], Daisuke Takezawa[6], Yoichi Sakata[7], Kazuo Shinozaki[8] ([1]BASE, Tokyo Univ. Agric. Tech., [2]PRESTO, JST, [3]Dep. Pharmac., Kyoto Univ., [4]Dep. Bot., Oregon State Univ., [5]Dep. Biochem., Univ. Missouri, [6]Dep. Sci., Saitama Univ., [7]Dep. Biosci., Tokyo Agric. Univ., [8]RIKEN CSRS)

10:50 Coffee break

● Chairperson: Noriyuki Nishimura

11:00 **S01-4** Insights into the evolution of ABA signaling in plants from the study of bryophytes
Yoichi Sakata[1] ([1]Dept. Biosci, Tokyo Univ. Agric.)

11:25 **S01-5** Ca^{2+} signaling specificity mechanisms in guard cell ABA signal transduction
Shintaro Munemasa[1], Benjamin Brandt[2], Yoshiyuki Murata[1], Julian Schroeder[2] ([1]Okayama Univ, [2]UC San Diego)

11:50 **S01-6** Toward the understanding of ABA transport within plants
Mitsunori Seo[1] ([1]RIKEN Center for Sustainable Resource Science)

12:15 Discussion

Multifaceted functions of plant-soil microbe symbioses and the molecular mechanisms

Organizer Yoshihiro Kobae (NARO)

09:30 Opening remarks

● Chairperson: Yoshihiro Kobae

09:35 **S02-1** Rhizosphere Communication in Fungal Symbioses of Cereals
Uta Paszkowski[1] ([1]University of Cambridge)

10:00 **S02-2** Importance of cooperative relations between endosymbiotic microorganisms and legumes
Haruko Imaizumi-Anraku[1] ([1]NIAS)

● Chairperson: Akifumi Sugiyama

10:25 **S02-3** Genetic mechanism underlying rhizobial invasion system in *Lotus japonicus*
Takuya Suzaki[1] ([1]Graduate School of Life and Environmental Sciences, University of Tsukuba)

10:50 **S02-4** How do host plants establish secure symbioses with microbial partners?
Tomomi Nakagawa[1] ([1]NIBB/Nagoya Univ.)

● Chairperson: Tomomi Nakagawa

11:15 **S02-5** Assessment of soybean rhizosphere microbiome in various fields and their possible effects on soybean growth
Akifumi Sugiyama[1] ([1]RISH, Kyoto University)

11:40 **S02-6** Phosphate dependent plant growth promotion by the root endophyte *Colletotrichum tofieldiae*
Kei Hiruma[1,2], Nina Gerlach[3], Soledad Sacristan[4], Ryohei Nakano[2], Yukari Oida[1], Stephane Hacquard[2], Barbara Kracher[2], Marcel Bucher[3], Yusuke Saijo[1,6], Richard O'Connell[5], Paul Schulze-Lefert[2] ([1]NAIST, [2]Max Planck institute for Plant breeding research, [3]University of Cologne, [4]CBGP, [5]INRA-AgroParisTech, [6]PRESTO, JST)

12:05 **S02-7** Phosphate inhibition in arbuscular mycorrhizal symbiosis
Yoshihiro Kobae[1] ([1]NARO)

12:25 Discussion

A variety of negative brakes on information encoded in nuclei

Organizers Yuichiro Watanabe (Grad. Sch. Art. Sci., Univ. Tokyo)
Misato Ohtani (Grad. Sch. Biol. Sci., NAIST)

09:30 Welcome Address
Yuichiro Watanabe[1] ([1]Gra. Sch. Art. Sci., Univ. Tokyo)

● Chairperson: Yuichiro Watanabe

09:35 **S03-1** Control of chromatin structure by long non-coding RNA
M. Jordan Rowley[1], Gudrun Boehmdorfer[1], Yongyou Zhu[1], Andrzej Wierzbicki[1] ([1]University of Michigan, Department of Molecular, Cellular and Developmental Biology)

10:10 **S03-2** An *cly1* epiallele affects the expression of floret closing (cleistogamy) in barley
Takao Komatsuda[1] ([1]National Institute of Agrobiological Sciences)

10:35 **S03-3** Feedback of RNA metabolism quality to gene expression in plant cells; crosstalk between pre-mRNA splicing and transcriptional regulation?
Misato Ohtani[1,2] ([1]Grad. Sch. Biol. Sci., NAIST, [2]RIKEN, CSRS)

● Chairperson: Misato Ohtani

11:00 **S03-4** NTR1 is Required for Transcription Elongation Checkpoints at Alternative Exons in *Arabidopsis thaliana*
Jakub Dolata[1], Yanwu Guo[2], Agnieszka Kolowerzo[3,4], Dariusz Smolinski[3,4], Grzegorz Brzyzek[2], Szymon Swiezewski[2], Artur Jarmolowski[1] ([1]Department of Gene Expression, Institute of Molecular Biology and Biotechnology, Adam Mickiewicz University, Poznan, Poland, [2]Department of Protein Biosynthesis, Institute of Biochemistry and Biophysics, Polish Academy of Sciences, Warsaw, Poland, [3]Deparment of Cell Biology, Faculty of Biology and Environment Protection, Nicolaus Copernicus University, Torun, Poland, [4]Centre for Modern Interdisciplinary Technologies, Nicolaus Copernicus University, Torun, Poland)

11:35 **S03-5** Communication between nucleus and cytoplasm through RNA-interacting factors
Yuichiro Watanabe[1], Takahiro Hamada[1] ([1]Grad. Sch. Art. Sci., Univ. Tokyo)

12:00 **S03-6** Nuclear Movement and Shape Are Controlled by Nuclear Membrane Myosin XI-i
Kentaro Tamura[1], Ikuko Hara-Nishimura[1] ([1]Grad. Sch. Sci., Kyoto Univ.)

12:25 Closing Remarks
Misato Ohtani[1] ([1]Grad. Sch. Biol. Sci., NAIST)

Harnessing Catalytic and Regulatory Diversity of Plant Metabolism

Organizers Hiroshi Maeda (Univ Wisconsin-Madison)
Kazuki Saito (Chiba Univ. / RIKEN CSRS)

● Chairperson: Hiroshi Maeda

13:45 Opening Remarks

13:50 **S04-1** Evolutionary diversification of oxygenases in steroidal saponin biosynthesis in plants
Masaharu Mizutani[1] ([1]Grad. Sch. Agri. Sci, Kobe Univ.)

14:15 **S04-2** Structure, function and diversity of plant glycosyltransferases
Keiko Yonekura-Sakakibara[1] ([1]RIKEN CSRS)

14:40 **S04-3** Metabolomics-assisted functional genomics on plant phenolic secondary metabolism
Takayuki Tohge[1] ([1]Max Planck Institute of Molecular Plant Physiology)

15:10 Break

● Chairperson: Kazuki Saito

15:20 **S04-4** Diversified evolution of secondary metabolites throughout tandemly duplicated genes in Arabidopsis
Kosuke Hanada[1] ([1]Kyushu Institute of Technology Frontier Research Academy for Young Researchers)

15:45 **S04-5** Evolutionary diversification of the tyrosine biosynthetic pathways in different plant lineages
Hiroshi Maeda[1] ([1]Univ. Wisconsin-Madison)

16:10 **S04-6** Engineering Plant Specialized Metabolism: Can We Break the Multiple Feedback Loops?
Alain Goossens[1] ([1]VIB, Plant Systems Biology, Ghent University)

16:40 Closing Remarks

Chiba University, Strategic Priority Research Promotion Program
"Phytochemical Plant Molecular Sciences"

Challenge to the outdoor environment by the experimental plant physiology

Organizers Tetsuro Mimura (Dept. Biol., Grad.Sch.Sci., Kobe Univ.)
Hiroshi Kudoh (Center Eco.Res., Kyoto Univ.)
Atsushi J. Nagano (Fac. Agri., Ryukoku Univ.)
Hideyuki Takahashi (Grad.Sch., Life Sci., Tohoku Univ.)

● Chairperson: Hideyuki Takahashi

13:45 Opening remarks

13:50 **S05-1** Molecular phenology: Plant seasonality captured by gene expression
Hiroshi Kudoh[1] ([1]Center for Ecological Research, Kyoto University)

14:10 **S05-2** The First Step to Understanding Light-Responses *in natura*.
Akira Nagatani[1], Ryota Otsuki[1], Yuko Sakurai[1], Nobuyoshi Mochizuki[1], Tomomi Suzuki[1]
([1]Dept. Bot., Grad. School Sci., Kyoto Univ.)

14:30 **S05-3** (AoB lecture) ABA and polycomb mediated photoperiodic and temperature control of annual growth cycle in perennial plants
Rishi Bhalerao[1,2] ([1]Dept. Forest Genet. Plant Physiol., Swed. Univ. Agri. Sci., Sweden, [2]KSU, Saudi Arabia)

15:00 Break

● Chairperson: Tetsuro Mimura

15:05 **S05-4** Chemical defense systems in Brassicaceae plants
Ikuko Hara-Nishimura[1], Kenji Yamada[1], Makoto Shirakawa[1,2], Ryohei Thomas Nakano[3], Haruko Ueda[1], Tomoo Shimada[1] ([1]Grad. Sch. Sci., Univ. Kyoto, [2]Dept. Botany, Univ. British Columbia, [3]Dept.Plant Microbe Interact., Max Planck Inst. Plant Breed. Res.)

15:25 **S05-5** Exploring implications of genome function in complex environments using model and non-model plants
Christina Richards[1] ([1]University of South Florida, Integrative Biology)

15:55 **S05-6** An Approach to Understand How the Process of Plant Cold Acclimation Proceeds in Nature
Yoko Tominaga[1], Hayato Hiraki[1], Hiroyuki Imai[2], Maki Kanaya[1], Yukio Kawamura[1,2], Matsuo Uemura[1,2] ([1]Cryobiofrontier Res. Ctr., Iwate Univ., [2]United Grad. Sch. Agr. Sci., Iwate Univ.)

16:15 **S05-7** Novel challenges raised by field transcriptomics
Atsushi J. Nagano[1,2,3] ([1]Fac. Agr., Ryukoku Univ., [2]JST CREST, [3]Cent. Ecol., Kyoto Univ.)

16:35 Discussion

"Metabolic Biochemistry" meets "Cell Biology"

Organizers Takahiro Hamada (Univ. of Tokyo)
Nobukazu Shitan (Kobe Pharm. Univ.)

13:45 Opening remarks
Takahiro Hamada[1] ([1]Univ. of Tokyo)

● Chairperson: Nobukazu Shitan

13:47 **S06-1** Microtubules mediate cytoplasmic metabolisms in Arabidopsis
Takahiro Hamada[1] ([1]Grad. Sch. of Arts and Sci., Univ. of Tokyo)

14:03 **S06-2** Natural rubber biosynthetic machinery on rubber particles in *Hevea brasiliensis*
Seiji Takahashi[1] ([1]Graduate School of Engineering, Tohoku University)

14:21 **S06-3** Flavonoid accumulation in Arabidopsis seeds affected by GFS9-mediated membrane trafficking
Takuji Ichino[1,2], Kentaro Fuji[2], Haruko Ueda[2], Hideyuki Takahashi[2], Yasuko Koumoto[2], Junpei Takagi[2], Kentaro Tamura[2], Ryosuke Sasaki[3], Koh Aoki[3], Karin Schumacher[1], Tomoo Shimada[2], Ikuko Hara-Nishimura[2] ([1]Centre for Organismal Studies, Univ. of Heidelberg, [2]Grad. Sch. Sci., Kyoto Univ., [3]Kazusa DNA Research Institute)

14:39 **S06-4** Lipid bulk transport involved in pigment secretion — Shikonin secretion as a model system —
Kazufumi Yazaki[1] ([1]RISH, Kyoto University)

14:57 **S06-5** Dynamic Aspects of plant mitochondria and their genome
Kenta Katayama[1], Narumi Kawai[1], Akihiro Yamashita[1], Yuta Watari[1], Nobuhiro Tsutsumi[1], Shin-ichi Arimura[1,2] ([1]Graduate School of Agricultural and Life Sciences, The University of Tokyo, [2]PRESTO, JST)

● Chairperson: Takahiro Hamada

15:15 **S06-6** Cellular dynamics of lysine derived alkaloids in plants
Mami Yamazaki[1] ([1]Grad. Sch. Pharm. Sci., Chiba Univ.)

15:33 **S06-7** Dynamics of peroxisomes and oil bodies based on imaging approach: Molecular players, mechanisms, and roles in metabolisms
Shoji Mano[1,2], Kazusato Oikawa[3], Shino Goto-Yamada[4], Michitaro Shibata[5], Songkui Cui[5], Makoto Hayashi[6], Mikio Nishimura[7] ([1]Dept. Evol. Biol. Biodivers., Natl. Inst. Basic Biol., [2]Dept. Basic Biol., Grad. Univ. Advanced Studies, [3]Dept. Appl. Biol. Chem. Niigata Univ., [4]Dept. Bot., Grad. Sch. Sci., Kyoto Univ., [5]CSRS, RIKEN, [6]Dept. Biosci., Nagahama Inst. Biosci. Technol., [7]Dept. Cell Biol., Natl. Inst. Basic Biol.)

15:51 **S06-8** Clarification of metabolite dynamics in a cell
Akira Oikawa[1,2] ([1]Fac. Agr., Yamagata Univ., [2]CSRS, RIKEN)

16:09 **S06-9** Adaptation of metabolism in autophagy-defective plants during environmental stresses
Kohki Yoshimoto[1] ([1]INRA Versailles)

16:27 **S06-10** Intracellular movement of monolignol glucoside via membrane transport
Nobukazu Shitan[1], Taku Tsuyama[2], Keiji Takabe[2], Kazufumi Yazaki[3] ([1]Kobe Pharm. Univ., [2]Grad. Sch. of Agric., Kyoto Univ., [3]RISH, Kyoto Univ.)

16:43 Closing remarks
Nobukazu Shitan[1] ([1]Kobe Pharm. Univ.)

Multi-angle views of plant pluripotent stem cells

Organizers Naoyuki Uchida (Nagoya Univ. WPI-ITbM)
Yoshihisa Oda (National Inst. Genetics)

09:00 Opening remarks
Naoyuki Uchida[1] ([1]Nagoya Univ. WPI-ITbM)

● Chairperson: Yoshihisa Oda

09:05 **S07-1** A framework for cell layer-specific stem cell maintenance in the shoot apical meristem
Yuka Kimura[1,2], Masao Tasaka[3], Keiko Torii[1,4,5], Naoyuki Uchida[1] ([1]WPI-ITbM, Nagoya Univ., [2]Grad. Sch. Sci., Nagoya Univ., [3]NAIST, [4]Univ. Washington, [5]HHMI)

09:25 **S07-2** A molecular mechanism for AGAMOUS-mediated termination of floral meristem.
Nobutoshi Yamaguchi[1], Toshiro Ito[1] ([1]Nara Institute of Science and Technology)

09:50 **S07-3** Maintenance of genome integrity in root stem cells under DNA stress
Naoki Takahashi[1], Keisuke Fujimoto[1], Masaaki Umeda[1,2] ([1]Graduate School of Biological Sciences, Nara Institute of Science and Technology, [2]JST, CREST)

10:15 **S07-4** Chemically induced multi-directional differentiation via vascular stem cells
Yuki Kondo[1], Alif Meem Nurani[1], Masato Saito[1], Hiroo Fukuda[1] ([1]Department of Biological Sciences, Graduate School of Science, The University of Tokyo)

● Chairperson: Naoyuki Uchida

10:40 **S07-5** Epigenetic control of plant regeneration and stem cell formation
Momoko Ikeuchi[1], Akira Iwase[1], Keiko Sugimoto[1] ([1]RIKEN CSRS)

11:05 **S07-6** Conserved mechanism for secondary meristem formation in land plants
Kimitsune Ishizaki[1] ([1]Grad. Sch. Science, Kobe Univ.)

11:30 **S07-7** Roles of microtubule cytoskeleton during asymmetric cell division
Gohta Goshima[1] ([1]Nagoya Univ)

11:55 Closing remarks
Yoshihisa Oda[1] ([1]National Inst. Genetics)

OXFORD UNIVERSITY PRESS PCP PLANT & CELL PHYSIOLOGY

ROS, Ca^{2+} and plant sensory systems

Organizers Kazuyuki Kuchitsu (Dept. Appl. Biol. Sci., Tokyo Univ. Sci.)
Hidetoshi Iida (Dept. Biol., Tokyo Gakugei Univ.)

● Chairperson: Kazuyuki Kuchitsu

09:00 Opening remarks from the editorial office of Plant and Cell Physiology
Miki Matoba[1] ([1]Oxford Univ. Press)

09:02 Opening remarks from the managing editor of Plant and Cell Physiology
Liliana Costa[1] ([1]Oxford Univ. Press)

09:04 Introduction
Kazuyuki Kuchitsu[1] ([1]Dept. Appl. Biol. Sci., Tokyo Univ. Sci.)

09:10 **S08-1** Ca^{2+} channels and signaling in plants
June M. Kwak[1] ([1]DGIST, Inst. Basic Sci.)

09:40 **S08-2** Mechanosensitive channels generating Ca^{2+} signals
Hidetoshi Iida[1] ([1]Dept. Biol., Tokyo Gakugei Univ.)

10:05 **S08-3** Osmotic and ionic sensors
Fang Yuan[1], Zhonghao Jiang[1,2], Yan Xue[1], Yue Niu[1], Yun Xiang[1], Xiaomei Wu[2], Lulu Liu[1,2], James N. Siedow[1], Zhen-Ming Pei[1] ([1]Dept. Biol., Duke Univ., USA, [2]Cent. Plant Environmental Sensing, Hangzhou Normal Univ., China)

● Chairperson: Hidetoshi Iida

10:35 **S08-4** Importance of Ca^{2+} for the glutamate-enhanced hydrotropism in Arabidopsis roots
Hideyuki Takahashi[1], Satoru Iwata[1], Nobuharu Fujii[1], Akie Kobayashi[1] ([1]Grad. Sch. Life Sci., Tohoku Univ.)

11:00 **S08-5** Regulation of plant development and stress responses by the ROS-Ca^{2+} signaling network
Kazuyuki Kuchitsu[1,2], Kenji Hashimoto[1], Hidetaka Kaya[1], Nobutaka Kitahata[1,2] ([1]Dept. Appl. Biol. Sci., Tokyo Univ. of Science, [2]Imaging Frontier Center, Tokyo Univ. of Science)

11:25 **S08-6** Regulation of circadian oscillations of cytosolic-free calcium in *Arabidopsis thaliana*
Alex Webb[1] ([1]Univ. Cambridge, UK)

● Chairperson: Kazuyuki Kuchitsu

11:55 General discussion

Ethylene on plant growth and development: from signaling to physiological responses

Organizers Abidur Rahman (Faculty of Agriculture, Iwate University)
Tomotsugu Koyama (Suntory Foundation for Life Sciences)

● Chairperson: Abidur Rahman

09:00 Opening Remarks
Abidur Rahman[1] ([1]Faculty of Agriculture, Iwate University)

09:05 **S09-1** Translational Regulation of Ethylene Signaling
Wenyang Li[1], Mengdi Ma[1], Hongwei Guo[1] ([1]Guo Lab, College of Life Sciences, Peking University)

09:45 **S09-2** Roles of ethylene and transcription factors during leaf senescence
Tomotsugu Koyama[1] ([1]Suntory Foundation for Life Sciences)

10:15 **S09-3** Discovery of the role of ethylene in the regulation of fruit set initiation in tomato (Solanum lycopersicum).
Tohru Ariizumi[1] ([1]The University of Tsukuba)

10:45 Break

● Chairperson: Tomotsugu Koyama

10:50 **S09-4** Ethylene to GA relay regulates stem elongation in rice
Motoyuki Ashikari[1] ([1]Nagoya Universisty)

11:20 **S09-5** Phosphorylation-mediated Regulation of Ethylene Biosynthesis and Signaling in Tomato Fruit
Yusuke Kamiyoshihara[1] ([1]Coll. of Bioresource Sci., Nihon Univ.)

11:50 Free discussion and closing remarks

Learning the Functions of the Plant Cell Wall

Organizers Shinjiro Yamaguchi (Grad. Sch. Life Sci., Tohoku Univ.)

13:00 Opening remarks

● Chairperson: Shinjiro Yamaguchi

13:05 **S10-1** Maintenance of stem integrity induced by tissue incision
Weerasak Pitaksaringkarn[1], Keita Matsuoka[3], Masashi Asahina[3], Ryusuke Yokoyama[2], Kazuhiko Nishitani[2], Hiroaki Iwai[1], Shinobu Satoh[1] ([1]University of Tsukuba, Faculty of Life and Environmental Sciences, [2]Tohoku University, Graduate School of Life Sciences, [3]Teikyo University, Department of Biosciences)

13:30 **S10-2** Analysis of Arabidopsis attractant of plant parasitic nematode, M. incognita.
Shinichiro Sawa[1] ([1]Kumamoto University)

13:55 **S10-3** Intimate plant-plant interactions between parasitic plants and their hosts
Satoko Yoshida[1], Songkui Cui[1], Takanori Wakatake[1,2], Thomas Spallek[1], Yasunori Ichihashi[1], Simon Saucet[1], Ken Shirasu[1,2] ([1]RIKEN CSRS, [2]Grad. Sch. Sci, Univ. Tokyo)

● Chairperson: Shinichiro Sawa

14:20 **S10-4** Molecular basis of the intracellular MAPK activation induced by perception of fungal chitin in Arabidopsis
Tsutomu Kawasaki[1], Koji Yamaguchi[1] ([1]Dept. Adv. Biosci. Kindai Univ.)

14:45 **S10-5** Auxin-mediated dual-step termination of floral stem cells
Toshiro Ito[1] ([1]Nara Inst. of Sci. and Tech., Singapore Temasek Life Sci. Lab.)

15:10 **S10-6** Regulation of pollen tube guidance by secreted molecules.
Masahiro Kanaoka[1], Tetsuya Higashiyama[1,2,3] ([1]Grad. Sch. Sci., Nagoya Univ., [2]ERATO Higashiyama Live-Holonics Project, [3]ITbM, Nagoya Univ.)

15:35 Discussion

Cosponsorship

Grant-in-Aid for Scientific Research on Innovative Areas
"The Plant Cell Wall as Information Processing System"

Diversity of Respiration in Photosynthesis Organisms: Strategy for O_2-usages in photosynthesis

Organizers Chikahiro Miyake (Grad.Sch.Agr., Kobe Univ.)
Ko Noguchi (Sch. Life Sci., Tokyo Univ. Pharm.Life Sci.)

09:00 Introduction
Chikahiro Miyake[1] ([1]Grad.Sch.Agr., Kobe Univ.)

● Chairperson: Chikahiro Miyake

09:05 **S11-1** The capacity of O_2-dependent electron flow in the thylakoid membranes is higher in gymnosperms than in angiosperms
Michito Tsuyama[1], Radka Vladkova[2] ([1]Depart. Agri., Kyushu Univ., [2]Bulgarian Acad. Sci.)

09:30 **S11-2** Roles of the mitochondrial respiratory chain in illuminated leaves
Ko Noguchi[1], Chihiro K. Watanabe[2] ([1]School of Life Sciences, Tokyo University of Pharmacy and Life Sciences, [2]Graduate School of Science, The University of Tokyo)

09:55 **S11-3** The roles of chloroplast NADH dehydoprgenase-like complex in C_4 photosynthesis
Yuri N Munekage[1] ([1]School of science and Technology, Kwansei Gakuin University)

10:20 Break

● Chairperson: Ko Noguchi

10:25 **S11-4** Photorespiration, instead of Cyclic Electron Flow around Photosystem I, Determines the Oxidized State of P700 at low CO2 Concentration in Sunflower Leaves
Daisuke Takagi[1], Masaki Hashiguchi[1], Amane Makino[2], Chikahiro Miyake[1] ([1]Department of Biological and Environmental Science, Faculty of Agriculture, Graduate School of Agricultural Science, Kobe University, [2]Department of Applied Plant Science, Graduate School of Agricultural Science, Tohoku University)

10:50 **S11-5** Rubisco and photorespiration
Yuji Suzuki[1], Amane Makino[1] ([1]Grad. Sch. Agr. Sci. Tohoku Univ.)

11:15 **S11-6** Interaction of respiration and photosynthesis in cyanobacteria and algae
Kintake Sonoike[1], Masahiro Misumi[1], Kenta Suzuki[1], Takako Ogawa[1], Hiroshi Katoh[2], Tatsuya Tomo[3] ([1]Fac. Edu. and Integreated Arts and Sci., Waseda Univ., [2]Life Sci. Research Center, Mie Univ., [3]Fac. Sci., Tokyo Univ. of Science)

11:40 Closing remarks
Ko Noguchi[1] ([1]Sch. Life Sci., Tokyo Univ. Pharm.Life Sci.)

Creation of fundamental technologies contribute to the elucidation and application for the robustness in plants against environmental changes

Evolution and diversity of glucosinolate/myrosinase systems

Organizers Ryohei Thomas Nakano (MPI for Plant Breeding Res.)
Makoto Shirakawa (Univ. British Columbia)

● Chairperson: Ryohei Thomas Nakano

09:00 Opening remarks

09:10 **S12-1** Regulatory mechanisms of glucosinolate biosynthesis
Masami Yokota Hirai[1] ([1]RIKEN CSRS)

09:45 **S12-2** Co-option of *FAMA*, the Master Regulator for the Development of Myrosin Cells and Guard Cells
Makoto Shirakawa[1] ([1]The University of British Columbia)

● Chairperson: Makoto Shirakawa

10:20 **S12-3** ER bodies and indole glucosinolates: a functional coordination through a transcriptional network
Ryohei Thomas Nakano[1,2], Paul Schulze-Lefert[1,2], Ikuko Hara-Nishimura[3], Pawel Bednarek[4] ([1]Dept. of Plant Microbe Interactions, Max Planck Institute for Plant Breeding Research, Germany, [2]Cluster of Excellence on Plant Science (CEPLAS), Germany, [3]Dept. of Botany, Graduate School of Science, Kyoto University, Japan, [4]Institute of Bioorganic Chemistry, Polish Academy of Sciences, Poland)

10:55 **S12-4** Function of indole glucosinolates in the immunity of model Brassicaceae plant species.
Mariola Pislewska-Bednarek[1], Paul Schulze-Lefert[2], Pawel Bednarek[1] ([1]Institute of Bioorgnaic Chemistry PAS, Poznan, [2]Max Planck Institute for Plant Breeding Research, Cologne)

11:30 Discussions

● Chairperson: Ryohei Thomas Nakano

11:50 Closing remarks

新学術領域研究
ゲノム・遺伝子相関
—新しい遺伝学分野の創成—

The 12th Database Workshop

Organizers Kentaro Yano (Bioinformatics., Meiji Univ.)
Toru Kudo (Bioinformatics., Meiji Univ.)
Masaaki Kobayashi (Bioinformatics., Meiji Univ.)

●Chairperson: Kentaro Yano

13:00 **D01-1** Introduction
Kentaro Yano[1] ([1]Bioinformatics Lab., Sch. of Agri., Meiji Univ.)

●Chairperson: Toru Kudo

13:05 **D01-2** Plant-PrAS: a database of physicochemical and structural properties and the comparative analysis in plant proteomes
Atsushi Kurotani[1], Alexander Tokmakov[2], Yutaka Yamada[1], Yutaka Kuroda[3], Kazuo Shinozaki[1], Tetsuya Sakurai[1,4] ([1]RIKEN CSRS, [2]Res. Cent. for Env. Gen., Kobe Univ., [3]Fac. of Tech., Tokyo Univ. of Agri. and Tech., [4]Kochi Univ.)

13:45 **D01-3** TENOR: Database for Comprehensive mRNA-Seq Experiments in Rice
Yoshihiro Kawahara[1], Youko Oono[1], Hironobu Wakimoto[2], Jun Ogata[1], Hiroyuki Kanamori[1], Harumi Sasaki[1], Satomi Mori[1], Takashi Matsumoto[1], Takeshi Itoh[1] ([1]Agrogenomics Res. Center, NIAS, [2]BITS. Co., Ltd.)

14:25 Break

●Chairperson: Masaaki Kobayashi

14:35 **D01-4** Mutant database TOMATOMA update: Disclosure of metabolite information in the Micro-Tom mutant resource.
Ken Hoshikawa[1], Tohru Ariizumi[1], Hiroshi Ezura[1] ([1]Fac. Life Environ. Sci., Univ. Tsukuba)

15:15 **D01-5** OryzaGenome and its Future Perspectives
Hajime Ohyanagi[1,2,8], Matthew Shenton[1], Toshinobu Ebata[3], Yukiko Yamazaki[4,8], Masahiro Fujita[1], Takako Mochizuki[5], Xuehui Huang[6], Hao Gong[6], Eli Kaminuma[5,8], Yasukazu Nakamura[5,8], Atsushi Toyoda[7], Asao Fujiyama[7,8], Qi Feng[6], Zi-Xuan Wang[1,6], Bin Han[6], Nori Kurata[1,8] ([1]Plant Genetics Laboratory, National Institute of Genetics, Mishima, Japan, [2]Bioinformatics Laboratory, Meiji University, Kawasaki, Japan, [3]DYNACOM Co., Ltd., Chiba, Japan, [4]Genetic Informatics Laboratory, National Institute of Genetics, Mishima, Japan, [5]Genome Informatics Laboratory, National Institute of Genetics, Mishima, Japan, [6]National Center for Gene Research, Chinese Academy of Sciences, Shanghai, PRC, [7]Comparative Genomics Laboratory, National Institute of Genetics, Mishima, Japan, [8]Department of Genetics, School of Life Science, Graduate University for Advanced Studies, Mishima, Japan, [9]Computational Bioscience Research Center, King Abdullah University of Science and Technology, Thuwal 23955-6900, Kingdom of Saudi Arabia)

●Chairperson: Kentaro Yano

15:55 General Discussion

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