

3月18日(金) 9:30 ~ 12:30 X会場

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

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

09:30 Opening Remarks
Shintaro Munemasa¹ (¹Okayama Univ.)

● Chairperson: Shintaro Munemasa

09:35 S01-1 A complex ABA signaling network mediated by PP2Cs
Noriyuki Nishimura¹, James Moresco², Nobutaka Mitsuda³, Patricia Tu², Hideki Nishimura⁴, Yuki Hayashi⁵, Tomoko Irida¹, Takashi Hirayama⁴, Toshinori Kinoshita⁵, Julian Schroeder⁶, John Yates², Kouji Satoh¹ (¹IRB, NIAS, ²TSRI, ³AIST, ⁴IPSR, Okayama Univ., ⁵Grad. Sch. Sci., Nagoya Univ., ⁶UCSD)

10:00 S01-2 Investigations of abscisic acid responses using genetically-encoded fluorescent reporters
Rainer Waadt¹, Karin Schumacher¹ (¹University 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 Honda¹, Naoyuki Sugiyama³, Anderson Jeffrey⁴, Peck Scott⁵, Daisuke Takezawa⁶, Yoichi Sakata⁷, Kazuo Shinozaki⁸ (¹BASE, Tokyo Univ. Agric. Tech., ²PRESTO, JST, ³Dep. Pharmac., Kyoto Univ., ⁴Dep. Bot., Oregon State Univ., ⁵Dep. Biochem., Univ. Missouri, ⁶Dep. Sci., Saitama Univ., ⁷Dep. Biosci., Tokyo Agric. Univ., ⁸RIKEN 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 Sakata¹ (¹Dept. Biosci, Tokyo Univ. Agric.)

11:25 S01-5 Ca²⁺ signaling specificity mechanisms in guard cell ABA signal transduction
Shintaro Munemasa¹, Benjamin Brandt², Yoshiyuki Murata¹, Julian Schroeder² (¹Okayama Univ., ²UC San Diego)

11:50 S01-6 Toward the understanding of ABA transport within plants
Mitsunori Seo¹ (¹RIKEN Center for Sustainable Resource Science)

12:15 Discussion

3月18日(金) 9:30 ~ 12:30 Y会場

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 Paszkowski¹ (¹University of Cambridge)

10:00 S02-2 Importance of cooperative relations between endosymbiotic microorganisms and legumes
Haruko Imaizumi-Anraku¹ (¹NIAS)

● Chairperson: Akifumi Sugiyama

10:25 S02-3 Genetic mechanism underlying rhizobial invasion system in *Lotus japonicus*
Takuya Suzaki¹ (¹Graduate School of Life and Environmental Sciences, University of Tsukuba)

10:50 S02-4 How do host plants establish secure symbioses with microbial partners?
Tomomi Nakagawa¹ (¹NIBB/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 Sugiyama¹ (¹RISH, Kyoto University)

11:40 S02-6 Phosphate dependent plant growth promotion by the root endophyte *Colletotrichum tofieldiae*
Kei Hiruma^{1,2}, Nina Gerlach³, Soledad Sacristan⁴, Ryohei Nakano², Yukari Oida¹,
Stephane Hacquard², Barbara Kracher², Marcel Bucher³, Yusuke Saijo^{1,6}, Richard
O'Connell⁵, Paul Schulze-Lefert² (¹NAIST, ²Max Planck institute for Plant breeding
research, ³University of Cologne, ⁴CBGP, ⁵INRA-AgroParisTech, ⁶PRESTO, JST)

12:05 S02-7 Phosphate inhibition in arbuscular mycorrhizal symbiosis
Yoshihiro Kobae¹ (¹NARO)

12:25 Discussion

3月18日(金) 9:30 ~ 12:30 Z会場

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 Watanabe¹ (¹Grad. Sch. Art. Sci., Univ. Tokyo)

● Chairperson: Yuichiro Watanabe

09:35

S03-1

Control of chromatin structure by long non-coding RNA

M. Jordan Rowley¹, Gudrun Boehmdorfer¹, Yongyou Zhu¹, Andrzej Wierzbicki¹

(¹University 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 Komatsuda¹ (¹National 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} (¹Grad. Sch. Biol. Sci., NAIST, ²RIKEN, CSRS)

● Chairperson: Misato Ohtani

11:00

S03-4

NTR1 is Required for Transcription Elongation Checkpoints at Alternative Exons in *Arabidopsis thaliana*

Jakub Dolata¹, Yanwu Guo², Agnieszka Kolowerzo^{3,4}, Dariusz Smolinski^{3,4}, Grzegorz Brzyzek², Szymon Swiezewski², Artur Jarmolowski¹ (¹Department of Gene Expression, Institute of Molecular Biology and Biotechnology, Adam Mickiewicz University, Poznan, Poland, ²Department of Protein Biosynthesis, Institute of Biochemistry and Biophysics, Polish Academy of Sciences, Warsaw, Poland, ³Department of Cell Biology, Faculty of Biology and Environment Protection, Nicolaus Copernicus University, Torun, Poland, ⁴Centre for Modern Interdisciplinary Technologies, Nicolaus Copernicus University, Torun, Poland)

11:35

S03-5

Communication between nucleus and cytoplasm through RNA-interacting factors

Yuichiro Watanabe¹, Takahiro Hamada¹ (¹Grad. Sch. Art. Sci., Univ. Tokyo)

12:00

S03-6

Nuclear Movement and Shape Are Controlled by Nuclear Membrane Myosin XI-i

Kentaro Tamura¹, Ikuko Hara-Nishimura¹ (¹Grad. Sch. Sci., Kyoto Univ.)

12:25

Closing Remarks

Misato Ohtani¹ (¹Grad. Sch. Biol. Sci., NAIST)

3月18日(金) 13:45 ~ 16:45 X会場

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 <u>Masaharu Mizutani</u> ¹ (¹ Grad. Sch. Agri. Sci, Kobe Univ.)
14:15	S04-2	Structure, function and diversity of plant glycosyltransferases <u>Keiko Yonekura-Sakakibara</u> ¹ (¹ RIKEN CSRS)
14:40	S04-3	Metabolomics-assisted functional genomics on plant phenolic secondary metabolism <u>Takayuki Tohge</u> 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 <u>Kosuke Hanada</u> 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 <u>Hiroshi Maeda</u> ¹ (¹ Univ. Wisconsin-Madison)
16:10	S04-6	Engineering Plant Specialized Metabolism: Can We Break the Multiple Feedback Loops? <u>Alain Goossens</u> ¹ (¹ VIB, Plant Systems Biology, Ghent University)
16:40		Closing Remarks

千葉大学戦略的重点研究プログラム「ファイトケミカル植物分子科学」

3月18日(金) 13:45 ~ 16:45 Y会場

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 <u>Hiroshi Kudoh</u> ¹ (Center for Ecological Research, Kyoto University)
14:10	S05-2	The First Step to Understanding Light-Responses <i>in natura</i> . <u>Akira Nagatani</u> 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 <u>Rishi Bhalerao</u> ^{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 <u>Ikuko Hara-Nishimura</u> ¹ , Kenji Yamada ¹ , Makoto Shirakawa ^{1,2} , Thomas Ryohei 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 <u>Christina Richards</u> 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} , <u>Matsuo Uemura</u> ^{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 <u>Atsushi J. Nagano</u> ^{1,2,3} (¹ Fac. Agr., Ryukoku Univ., ² JST CREST, ³ Cent. Ecol., Kyoto Univ.)
16:35		Discussion

3月18日(金) 13:45 ~ 16:45 Z会場

“Metabolic Biochemistry” meets “Cell Biology”

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

13:45		Opening remarks <u>Takahiro Hamada</u> ¹ (¹ Univ. of Tokyo)
● Chairperson: Nobukazu Shitan		
13:47	S06-1	Microtubules mediate cytoplasmic metabolisms in Arabidopsis <u>Takahiro Hamada</u> ¹ (¹ Grad. Sch. of Arts and Sci., Univ. of Tokyo)
14:03	S06-2	Natural rubber biosynthetic machinery on rubber particles in <i>Hevea brasiliensis</i> <u>Seiji Takahashi</u> ¹ (¹ Graduate School of Engineering, Tohoku University)
14:21	S06-3	Flavonoid accumulation in Arabidopsis seeds affected by GFS9-mediated membrane trafficking <u>Takuji Ichino</u> ^{1,2} , <u>Kentaro Fuji</u> ² , <u>Haruko Ueda</u> ² , <u>Hideyuki Takahashi</u> ² , <u>Yasuko Koumoto</u> ² , <u>Junpei Takagi</u> ² , <u>Kentaro Tamura</u> ² , <u>Ryosuke Sasaki</u> ³ , <u>Koh Aoki</u> ³ , <u>Karin Schumacher</u> ¹ , <u>Tomoo Shimada</u> ² , <u>Ikuko Hara-Nishimura</u> 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 — <u>Kazufumi Yazaki</u> ¹ (¹ RISH, Kyoto University)
14:57	S06-5	Dynamic Aspects of plant mitochondria and their genome <u>Kenta Katayama</u> ¹ , <u>Narumi Kawai</u> ¹ , <u>Akihiro Yamashita</u> ¹ , <u>Yuta Watari</u> ¹ , <u>Nobuhiro Tsutsumi</u> ¹ , <u>Shin-ichi Arimura</u> ^{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 <u>Mami Yamazaki</u> 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 <u>Shoji Mano</u> ^{1,2} , <u>Kazusato Oikawa</u> ³ , <u>Shino Goto-Yamada</u> ⁴ , <u>Michitaro Shibata</u> ⁵ , <u>Songkui Cui</u> ⁵ , <u>Makoto Hayashi</u> ⁶ , <u>Mikio Nishimura</u> 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 <u>Akira Oikawa</u> ^{1,2} (¹ Fac. Agr., Yamagata Univ., ² CSRS, RIKEN)
16:09	S06-9	Adaptation of metabolism in autophagy-defective plants during environmental stresses <u>Kohki Yoshimoto</u> ¹ (¹ INRA Versailles)
16:27	S06-10	Intracellular movement of monolignol glucoside via membrane transport <u>Nobukazu Shitan</u> ¹ , <u>Taku Tsuyama</u> ² , <u>Keiji Takabe</u> ² , <u>Kazufumi Yazaki</u> ³ (¹ Kobe Pharm. Univ., ² Grad. Sch. of Agric., Kyoto Univ., ³ RISH, Kyoto Univ.)
16:43		Closing remarks <u>Nobukazu Shitan</u> ¹ (¹ Kobe Pharm. Univ.)

3月19日(土) 9:00 ~ 12:00 X会場

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 Uchida¹ (¹Nagoya 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 Tasaka³, Keiko Torii^{1,4,5}, Naoyuki Uchida¹ (¹WPI-ITbM, Nagoya Univ., ²Grad. Sch. Sci., Nagoya Univ., ³NAIST, ⁴Univ. Washington, ⁵HHMI)

09:25 S07-2 A molecular mechanism for AGAMOUS-mediated termination of floral meristem.
Nobutoshi Yamaguchi¹, Toshiro Ito¹ (¹Nara Institute of Science and Technology)

09:50 S07-3 Maintenance of genome integrity in root stem cells under DNA stress
Naoki Takahashi¹, Keisuke Fujimoto¹, Masaaki Umeda^{1,2} (¹Graduate School of Biological Sciences, Nara Institute of Science and Technology, ²JST, CREST)

10:15 S07-4 Chemically induced multi-directional differentiation via vascular stem cells
Yuki Kondo¹, Alif Meem Nurani¹, Masato Saito¹, Hiroo Fukuda¹ (¹Department 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 Ikeuchi¹, Akira Iwase¹, Keiko Sugimoto¹ (¹RIKEN CSRS)

11:05 S07-6 Conserved mechanism for secondary meristem formation in land plants
Kimitsune Ishizaki¹ (¹Grad. Sch. Science, Kobe Univ.)

11:30 S07-7 Roles of microtubule cytoskeleton during asymmetric cell division
Gohta Goshima¹ (¹Nagoya Univ)

11:55 Closing remarks
Yoshihisa Oda¹ (¹National Inst. Genetics)

3月19日(土) 9:00 ~ 12:00 Y会場

ROS, Ca²⁺ and plant sensory systemsOrganizers 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 <u>Miki Matoba</u> ¹ (¹ Oxford Univ. Press)
09:02		Opening remarks from the managing editor of Plant and Cell Physiology <u>Liliana Costa</u> ¹ (¹ Oxford Univ. Press)
09:04		Introduction <u>Kazuyuki Kuchitsu</u> ¹ (¹ Dept. Appl. Biol. Sci., Tokyo Univ. Sci.)
09:10	S08-1	Ca ²⁺ channels and signaling in plants <u>June M. Kwak</u> ¹ (¹ DGIST, Inst. Basic Sci.)
09:40	S08-2	Mechanosensitive channels generating Ca ²⁺ signals <u>Hidetoshi Iida</u> 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 , <u>Zhen-Ming Pei</u> 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 <u>Hideyuki Takahashi</u> 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 <u>Kazuyuki Kuchitsu</u> ^{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 <i>Arabidopsis thaliana</i> <u>Alex Webb</u> ¹ (¹ Univ. Cambridge, UK)
● Chairperson: Kazuyuki Kuchitsu		
11:55		General discussion

3月19日(土) 9:00 ~ 12:00 Z会場

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 <u>Abidur Rahman</u> ¹ (¹ Faculty of Agriculture, Iwate University)
09:05	S09-1	Translational Regulation of Ethylene Signaling Wenyang Li ¹ , Mengdi Ma ¹ , <u>Hongwei Guo</u> ¹ (¹ Guo Lab, College of Life Sciences, Peking University)
09:45	S09-2	Roles of ethylene and transcription factors during leaf senescence <u>Tomotsugu Koyama</u> 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 (<i>Solanum lycopersicum</i>). <u>Tohru Ariizumi</u> 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 <u>Motoyuki Ashikari</u> ¹ (¹ Nagoya University)
11:20	S09-5	Phosphorylation-mediated Regulation of Ethylene Biosynthesis and Signaling in Tomato Fruit <u>Yusuke Kamiyoshihara</u> ¹ (¹ Coll. of Bioresource Sci., Nihon Univ.)
11:50		Free discussion and closing remarks

3月19日(土) 13:00 ~ 15:40 X会場

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 Pitaksaringkarn¹, Keita Matsuoka³, Masashi Asahina³, Ryusuke Yokoyama²,
Kazuhiko Nishitani², Hiroaki Iwai¹, Shinobu Satoh¹ (¹University of Tsukuba, Faculty of
Life and Environmental Sciences, ²Tohoku University, Graduate School of Life Sciences,
³Teikyo University, Department of Biosciences)

13:30 S10-2 Analysis of Arabidopsis attractant of plant parasitic nematode, *M. incognita*.
Shinichiro Sawa¹ (¹Kumamoto University)

13:55 S10-3 Intimate plant-plant interactions between parasitic plants and their hosts
Satoko Yoshida¹, Songkui Cui¹, Takanori Wakatake^{1,2}, Thomas Spallek¹, Yasunori
Ichihashi¹, Simon Saucet¹, Ken Shirasu^{1,2} (¹RIKEN CSRS, ²Grad. 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 Kawasaki¹, Koji Yamaguchi¹ (¹Dept. Adv. Biosci. Kindai Univ.)

14:45 S10-5 Auxin-mediated dual-step termination of floral stem cells
Toshiro Ito¹ (¹Nara Inst. of Sci. and Tech., Singapore Temasek Life Sci. Lab.)

15:10 S10-6 Regulation of pollen tube guidance by secreted molecules.
Masahiro Kanaoka¹, Tetsuya Higashiyama^{1,2,3} (¹Grad. Sch. Sci., Nagoya Univ., ²ERATO
Higashiyama Live-Holonics Project, ³ITbM, Nagoya Univ.)

15:35 Discussion

共 催

新学術領域「植物細胞壁機能」

3月20日(日) 9:00～11:50 X会場

光合成生物の多様な呼吸の世界～O₂利用戦略をとらえる～

オーガナイザー 三宅 親弘 (神戸大学大学院)
野口 航 (東京薬科大)

09:00

はじめに

三宅親弘¹ (1神戸大学大学院)

●座長：三宅 親弘

9:05

S11-1

裸子植物は被子植物よりもチラコイド膜における酸素依存電子伝達の能力が高い
津山孝人¹, Radka Vladkova² (1九州大学農学部, 2Bulgarian Acad. Sci.)

9:30

S11-2

光合成している葉におけるミトコンドリア呼吸の役割
野口航¹, 渡辺千尋² (1東京薬科大学生命科学部, 2東京大学大学院理学系研究科)

9:55

S11-3

C₄光合成における葉緑体NDH複合体の役割
宗景ゆり¹ (1関西学院大・理工学)

10:20

休憩

●座長：野口 航

10:25

S11-4

光呼吸がもたらす光化学系I酸化メカニズム—光合成電子伝達鎖の酸化還元状態はエレクトロンシンクにおけるATP消費速度により制御される—
高木大輔¹, 橋口真貴¹, 牧野周², 三宅親弘¹ (1神戸大学農学研究科植物栄養学研究室, 2東北大学農学研究科植物栄養生理学研究室)

10:50

S11-5

Rubiscoと光呼吸
鈴木雄二¹, 牧野周¹ (1東北大学大学院農学研究科)

11:15

S11-6

シアノバクテリアと藻類における呼吸と光合成の相互作用
園池公毅¹, 三角将洋¹, 鈴木健太¹, 小川敬子¹加藤浩², 鞆達也³ (1早稲田大教育・総合科学, 2三重大生命科学研究支援センター, 3東京理科大学理学部)

11:40

おわりに

野口航¹ (1東京薬科大)

CREST 研究領域

“環境変動に対する植物の頑健性の解明と応用に向けた基盤技術の創出”

3月20日(日) 9:00 ~ 12:00 Y会場

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 Hirai¹ (¹RIKEN CSRS)

09:45 S12-2 Co-option of *FAMA*, the Master Regulator for the Development of Myrosin Cells and Guard Cells
Makoto Shirakawa¹ (¹The 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-Nishimura³, Pawel Bednarek⁴ (¹Dept. of Plant Microbe Interactions, Max Planck Institute for Plant Breeding Research, Germany, ²Cluster of Excellence on Plant Science (CEPLAS), Germany, ³Dept. of Botany, Graduate School of Science, Kyoto University, Japan, ⁴Institute 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-Bednarek¹, Paul Schulze-Lefert², Pawel Bednarek¹ (¹Institute of Bioorganic Chemistry PAS, Poznan, ²Max Planck Institute for Plant Breeding Research, Cologne)

11:30 Discussions

● Chairperson: Ryohei Thomas Nakano

11:50 Closing remarks



3月19日(土) 13:00～16:00 Z会場

データベース講習会

オーガナイザー 矢野 健太郎 (明治大・バイオインフォマティクス)
 工藤 徹 (明治大・バイオインフォマティクス)
 小林 正明 (明治大・バイオインフォマティクス)

●座長：矢野 健太郎

13:00 D01-1 はじめに

矢野健太郎¹ (1明治大・農・バイオインフォマティクス)

●座長：工藤 徹

13:05 D01-2 Plant-PrAS：タンパク質の物理化学的、構造的性質、翻訳後修飾注釈と植物種間における比較

黒谷篤之¹, トクマコフアレクサンダー², 山田豊¹, 黒田裕³, 篠崎一雄¹, 櫻井哲也^{1,4}
 (1理研CSRS, 2神戸大・自然, 3東京農工大・工, 4高知大学・複合)

13:45 D01-3 TENOR：12種類のストレス・植物ホルモン処理条件下におけるイネのトランスクリプトームデータベース

川原善造¹, 大野陽子¹, 脇本泰暢², 緒方洵¹, 金森裕之¹, 佐々木晴美¹, 森聡美¹,
 松本隆¹, 伊藤剛¹ (1生物研・農業生物先端ゲノム研究センター, 2ピッツ(株))

14:25 休憩

●座長：小林 正明

14:35 D01-4 変異体データベース 'TOMATOMA' のアップデート：果実代謝情報の公開

星川健¹, 有泉亨¹, 江面浩¹ (1筑波大学)

15:15 D01-5 OryzaGenome and its Future Perspectives

大柳一^{1,2,8}, Matthew Shenton¹, 江端俊伸³, 山崎由紀子^{4,8}, 藤田雅丈¹, 望月孝子⁵,
 Xuehui Huang⁶, Hao Gong⁶, 神沼英里^{5,8}, 中村保一^{5,8}, 豊田敦⁷, 藤山秋佐夫^{7,8},
 Qi Feng⁶, Zi-Xuan Wang^{1,6}, Bin Han⁶, 倉田のり^{1,8} (1国立遺伝学研究所 植物遺伝研
 究室, 2明治大学農学部生命学科バイオインフォマティクス研究室, 3株式会社ダイ
 ナコム, 4国立遺伝学研究所系統情報研究室, 5国立遺伝学研究所大量遺伝情報研
 究室, 6National Center for Gene Research, Chinese Academy of Sciences, Shanghai,
 PRC, 7国立遺伝学研究所比較ゲノム解析研究室, 8総合研究大学院大学生命科学研
 究科遺伝学専攻, 9Computational Bioscience Research Center, King Abdullah
 University of Science and Technology, Thuwal 23955-6900, Kingdom of Saudi Arabia)

●座長：矢野 健太郎

15:55 総合討論

共 催

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