

3月16日(木) 09:30 ~ 12:30 X会場

Production mechanisms of reactive oxygen species and
molecular mechanisms of PSI photoinhibition in higher plants

Organizers Chikahiro Miyake (Kobe University)
Kentaro Ifuku (Kyoto University)

● Chairperson: Kentaro Ifuku

09:30		Opening Remarks Chikahiro Miyake
09:45	S01-1	Photoprotection of photosystems in fluctuating light intensities <u>Marjaana Suorsa</u> ¹ , Arjun Tiwari ¹ , Sari Jarvi ¹ , Mikko Tikkanen ¹ , Eva-Mari Aro ¹ (¹ Department of Biochemistry, University of Turku, Finland)
10:15	S01-2	PGR5-Dependent PSI Cyclic Electron Transport Alleviates PSI Photoinhibition via Balancing Regulation of PSI-Acceptor and -Donor Side Limitations in Fluctuating Light <u>Hiroshi Yamamoto</u> ^{1,2} , Toshiharu Shikanai ^{1,2} (¹ Grad. Sch. Sci., Kyoto Univ., ² CREST)
● Chairperson: Chikahiro Miyake		
10:45	S01-3	Molecular Mechanism for the regulation of reactive oxygen species production within photosystem I in vivo <u>Daisuke Takagi</u> ¹ , Chikahiro Miyake ¹ (¹ Graduate School of Agricultural Science, Kobe University)
11:15	S01-4	Management of PSII photoinhibition to suppress ROS production in thylakoid membranes <u>Kentaro Ifuku</u> ¹ (¹ Grad. Sch. Biostudies, Kyoto Univ.)
11:45	S01-5	Biochemical characterization and physiological role of the plastid terminal oxidase PTOX <u>Anja Krieger-Liszkay</u> ¹ (¹ T ² BC, CEA Saclay, CNRS, Université Paris-Saclay)
12:15		Closing Remarks Kentaro Ifuku

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16日(木) 09:30 ~ 12:30 Y会場

Augmented Symplasm:
supracellular structure associated with the secondary organogenesis.

Organizers Michitaka Notaguchi (Nagoya Univ., PRESTO)
Koh Aoki (Grad. Sch. Life Environ. Sci., Osaka Pref. Univ.)

● Chairperson: Michitaka Notaguchi

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- 09:30 S02-1 Introduction to “Augmented Symplasm”
Koh Aoki¹, Akitaka Hozumi¹, Kohki Shimizu¹, Minako Ekawa¹ (¹Grad. Sch. of Life Environ. Sci., Osaka Pref. Univ.)
-
- 09:50 S02-2 Plasmodesmata as intercellular signaling coordinators and their regulators
Jae-Yean Kim¹, Arya Bagus Boedi Iswanto¹, Shuwei Wu¹, Lee Jinsu¹ (¹Gyeongsang National University)
-
- 10:20 S02-3 Cell-to-cell connectivity and wound response in the multicellularity of filamentous fungi
Jun-ichi Maruyama¹ (¹Department of Biotechnology, The University of Tokyo)
-
- 10:40 S02-4 Molecular mechanisms regulating tissue reunion in incised plant tissues
Masashi Asahina¹, Miyuki Nakanowatari¹, Keita Matsuoka¹, Weerasak Pitaksaringkarn², Shinobu Satoh² (¹Dept. Biosci, Teikyo Univ., ²Life & Environ Sci., Univ. Tsukuba.)

● Chairperson: Koh Aoki

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- 11:00 S02-5 Carpel Closure by Protodermal Tissue Adhesion in *Arabidopsis thaliana*
Mitsuhiro Aida¹ (¹Graduate School of Biological Sciences, Nara Institute of Science and Technology)
-
- 11:20 S02-6 How do phytoparasitic nematodes induce feeding cells in plant roots?
Yasuka Yamaguchi¹, Reira Suzuki¹, Tomomi Sagara¹, Chika Ejima¹, Satoru Nakagami¹, Hiroshi Sato¹, Takashi Ishida², Shinichiro Sawa¹ (¹Kumamoto University, Graduate School of Science and Technology, ²Kumamoto University, International Research Organization for Advanced Science and Technology (IROAST))
-
- 11:40 S02-7 Genome structure and gene transfer in parasitic plants
Satoko Yoshida^{1,2}, Ken Shirasu^{2,3} (¹NAIST, Grad. Schol. Bioscience, ²RIKEN, CSRS, ³Univ. Tokyo, Grad. Schol. Bioscience)
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- 12:00 S02-8 iPAG, interfamily grafting, and Closing Remarks
Michitaka Notaguchi^{1,2} (¹Nagoya University, ²PRESTO)

3月16日(木) 09:30 ~ 12:30 Z会場

New insights into the phospholipid signaling in plants

Organizers Masa H. Sato (Kyoto Pref. Univ.)
Takashi Aoyama (Kyoto Univ.)

● Chairperson: Masa H. Sato

09:30		Opening Remarks Masa H. Sato
09:35	S03-1	Biological Functions of Type-B Phosphatidylinositol Phosphate 5-kinase genes of <i>Arabidopsis thaliana</i> <u>Takashi Aoyama</u> ¹ , Mariko Kato ¹ , Yukika Wada ¹ , Machiko Watari ¹ , Tomohiko Tsuge ¹ , Blanc-Mathieu Romain ¹ , Hiroyuki Ogata ¹ , Hiroaki Kusano ^{2,3} (¹ ICR, Kyoto Univ., ² RISH, Kyoto Univ., ³ NEDO)
10:00	S03-2	Diurnal oscillation of membrane glycerolipid in <i>Arabidopsis</i> : dynamic profiles and function in flowering <u>Yuki Nakamura</u> ¹ , Fernando Andrés ² , Kazue Kanehara ¹ , Yu-chi Liu ¹ , Peter Dörmann ³ , George Coupland ² (¹ Institute of Plant and Microbial Biology, Academia Sinica, 128 sec.2 Academia Rd., Nankang, Taipei 11529, Taiwan, ² Max-Planck-Institute for Plant Breeding Research, Carl-von-Linne-Weg 10, Cologne 50829, Germany, ³ Institute of Molecular Physiology and Biotechnology of Plants, University of Bonn, Karlrobert-Kreiten-Str. 13, Bonn 53115, Germany)
10:25	S03-3	Distinct roles of phosphatidylinositol 3-kinase and 4-kinase in intracellular trafficking of cellulose synthase complexes in <i>Arabidopsis thaliana</i> <u>Masaru Fujimoto</u> ¹ , Yasuyuki Suda ^{2,3} , Nobuhiro Tsutsumi ¹ , Akihiko Nakano ^{3,4} , Takashi Ueda ^{5,6,7} (¹ Grad. Sch. Agri. Life Sci., Univ. Tokyo, ² Lab. Mol. Cell Biol., Faculty Med., Univ. Tsukuba, ³ RIKEN RAP, ⁴ Grad. Sch. Sci., Univ. Tokyo, ⁵ Natl. Inst. Basic Biol., ⁶ Grad. Univ. Advanced Studies, ⁷ PRESTO, JST)
10:50		Coffee break
		● Chairperson: Takashi Aoyama
11:00	S03-4	Role of anionic phospholipids in signal transduction from the plant plasma membrane Matthieu Platre ¹ , Vincent Bayle ¹ , <u>Yvon Jaillais</u> ¹ (¹ Plant Development and Reproduction lab, ENS Lyon, France)
11:25	S03-5	Regulation of chloroplast division by phosphatidylinositol 4-phosphate <u>Kumiko Okazaki</u> ¹ , Shin-ya Miyagishima ² , Hajime Wada ³ (¹ Grad. Sch. Sci., Hiroshima Univ., ² Dept. Cell Genetics, Natl. Inst. of Genet., ³ Grad. Sch. Arts and Sci., Univ. of Tokyo)
11:50	S03-6	Distinct localization of phosphatidylinositol 4, 5-bisphosphate and phosphatidylinositol 3, 5-bisphosphate controls root hair morphogenesis in <i>Arabidopsis</i> <u>Tomoko Hirano</u> ¹ , Mariko Kato ² , Seiji Takeda ¹ , Takashi Aoyama ² , Yalovsky Shaul ³ , Masa H. Sato ¹ (¹ Grad. Schl. Life and Envir., Kyoto Pref. Univ., ² Inst. Chem. Res., Kyoto Univ., ³ Dept. of Mol. Biol. Eco. Tel Aviv Univ.)
12:15		Closing Remarks Takashi Aoyama

3月16日(木) 14:00～17:00 X会場

植物栄養研究の新局面

オーガナイザー 柳澤 修一 (東京大学生物生産工学研究センター)

● 座長：柳澤 修一

14:00 はじめに
柳澤修一

14:02 S04-1 窒素栄養不足環境での生存戦略—吸収の効率化と制御のメカニズム
木羽隆敏¹ (理化学研究所 CSRS 生産機能研究グループ)

14:27 S04-2 イネの窒素転流と栄養成長におけるオートファジーの役割
石田宏幸¹ (東北大学農学研究科植物栄養生理学研究室)

● 座長：神谷 岳洋

14:52 S04-3 硝酸応答における NLP 転写因子の中心的機能
小西美穂子¹ (東京大学生物生産工学研究センター植物機能工学部門)

15:17 S04-4 炭素栄養シグナルとしての CO₂ による気孔制御
衿冨淳太郎¹ (九州大・院・理)

15:42 S04-5 無機栄養の獲得と利用機構における赤色光シグナルの役割
櫻庭康仁¹ (東京大学生物生産工学研究センター)

● 座長：石田 宏幸

16:07 S04-6 根における拡散障壁の形成と機能
神谷岳洋¹ (東大院・農)

16:32 S04-7 ホウ酸輸送体の土壌側/中心柱側細胞膜への偏在メカニズム
高野順平¹ (大阪府立大学 生命環境科学研究科)

16:57 おわりに
石田宏幸

後 援

国立研究開発法人 科学技術振興機構 (JST)

3月16日(木) 14:00 ~ 17:00 Y会場

A new horizon in photosynthesis research:
Regulation via Proton Motive Force

Organizers Jun Minagawa (NIBB)
Yuichiro Takahashi (Okayama University)
Toshiharu Shikanai (Kyoto University)

● Chairperson: Yuichiro Takahashi

14:00	S05-1	Regulation of photosynthesis by the power of proton <u>Jun Minagawa</u> ¹ (¹ National Institute for Basic Biology)
14:20	S05-2	The Molecular Machinery of Photosynthesis in its Working Environment <u>David M. Kramer</u> ¹ (¹ Biochemistry and Molecular Biology, DOE-Plant Research Laboratory, Michigan State University)
14:50	S05-3	Plastid thylakoid architecture optimizes photosynthesis in diatoms by regulating the pmf Serena Flori ¹ , Pierre-Henri Jouveau ² , Benjamin Bailleu ³ , Benoit Gallet ⁴ , Leandro F. Estrozi ⁴ , Christine Moriscot ⁴ , Olivier Bastien ¹ , Simona Eicke ⁵ , Alexander Schober ⁶ , Carolina Rio Bartulos ⁶ , Eric Marechal ¹ , Peter G. Kroth ⁶ , Dimitris Petroustos ¹ , Samuel Zeeman ⁵ , Cecile Breyton ⁴ , Guy Schoehn ⁴ , Denis Falconet ¹ , <u>Giovanni Finazzi</u> ¹ (¹ Universite Grenoble Alpes (UGA), Laboratoire de Physiologie Cellulaire et Vegetale, UMR 5168, Centre National de la Recherche Scientifique (CNRS), Commissariat a l'Energie Atomique et aux Energies Alternatives (CEA), Institut National Recherche Agronomique (INRA), Institut de Biosciences et Biotechnologie de Grenoble (BIG), ² UGA, Laboratoire d'Etudes des Materiaux par Microscopie Avancee; Institut Nanosciences et Cryogenie; Service de Physique des Materiaux et Microstructures. Grenoble, France, ³ UMR 7141 CNRS, Universite Pierre et Marie Curie, Institut de Biologie Physico-Chimique (IBPC), Paris, France, ⁴ CNRS, UMR 5075 CNRS, CEA, UGA, Institut de Biologie Structurale, Grenoble, France, ⁵ Plant Biochemistry, Department of Biology, ETH Zurich, CH-8092, Zurich, Switzerland, ⁶ Department of Biology, University of Konstanz, 78457 Konstanz, Germany)
15:20		Break
● Chairperson: Toru Hisabori		
15:40	S05-4	Ion channels affecting bioenergetic efficiency in chloroplasts and mitochondria <u>Luca Carraretto</u> ¹ , <u>Ildiko Szabo</u> ¹ (¹ Department of Biology, University of Padova)
16:10	S05-5	H ⁺ /K ⁺ antiporter KEA3 optimizes induction of photosynthesis by regulating the partitioning of proton motive force <u>Toshiharu Shikanai</u> ¹ , Caijuan Wang ¹ (¹ Graduate School of Science, Kyoto University)
16:40		General discussion

3月17日(金) 09:00～12:00 W会場

植物機能の解明を目指すゲノム編集技術

オーガナイザー 刑部 敬史 (徳島大学, 生物資源産業学部)

●座長: 刑部 敬史

09:00		はじめに
09:05	S06-1	CRISPR/Cas9による植物ゲノム編集技術の開発 刑部祐里子 ^{1,2} (1徳島大学生物資源産業学部, 2理化学研究所RInC)
09:30	S06-2	半数体生物のゲノム編集—ゼニゴケとウシグソヒトヨタケを例に— 萱野茂夫 ^{1,2} (1京都大学大学院理学研究科, 2JST さきがけ)
09:55	S06-3	ペプチドを用いたゲノム編集周辺技術の開発 吉積毅 ¹ , KiawKiaw Ng ¹ , 沼田圭司 ^{1,2} (1理化学研究所環境資源科学研究センター酵素研究チーム, 2JST・ERATO)
10:20		休憩
10:30	S06-4	CRISPR/Cas9による高効率なシロイヌナズナ遺伝子破壊株作出と多重変異体の解析 筒井大貴 ^{1,2} , 東山哲也 ^{1,2,3} (1名大・理, 2JST・ERATO・東山ライブホロニクス, 3名大・WPI-ITbM)
10:55	S06-5	ゲノム編集技術で紐解くホンモンジゴケの銅耐性機構 野村俊尚 ¹ , 櫻井哲也 ^{1,2} , 刑部祐里子 ³ , 刑部敬史 ³ , 馳澤盛一郎 ⁴ , 榊原均 ^{1,5} (1理研・環境資源科学研究センター, 2高知大・複合, 3徳島大・生物資源産業学部, 4東大・院・新領域, 5名大・生命農)
11:20	S06-6	耐熱性制限酵素により大規模ゲノム再編を誘発するTAQingシステムの開発 田中秀典 ¹ , 村本伸彦 ¹ , 小田有沙 ² , 中村隆宏 ² , 久郷和人 ² , 太田邦史 ² , 光川典宏 ¹ (1(株)豊田中央研究所, 2東京大学大学院総合文化研究科)
11:45		総合討論

3月17日(金) 09:00 ~ 11:40 X会場

Frontier of Plant Epigenome Regulation in
Environmental Stress Adaptation and Development

Organizers Motoaki Seki (RIKEN CSRS, JST CREST, Yokohama City Univ)
Tetsu Kinoshita (Yokohama City Univ)

09:00 Opening Remark
Motoaki Seki

● Chairperson: Tetsu Kinoshita

09:05 S07-1 A new survival strategy in plants: Acetate-Jasmonate network for plant drought tolerance
Jong-Myong Kim^{1,2}, Taiko To³, Motoaki Seki^{1,2,4} (¹RIKEN CSRS, ²JST CREST, ³Dept. of Biol. Sci., Univ. of Tokyo, ⁴Kihara Biol. Inst., Yokohama City Univ.)

09:30 S07-2 Histone deacetylases act as the regulatory hub in gene silencing and plant development
Keqiang Wu¹ (¹Institute of Plant Biology, National Taiwan University)

09:55 S07-3 Transposons create environmental stress tolerant plants.
Hidetaka Ito¹ (¹Hokkaido University)

● Chairperson: Motoaki Seki

10:20 S07-4 Unique cell-type-specific patterns of DNA methylation in the root meristem
Taiji Kawakatsu^{1,2} (¹NIAS, ²Salk Institute for Biological Studies)

10:45 S07-5 Florigen function and epigenomic regulation during floral transition
Hiroyuki Tsuji¹ (¹Kihara Institute for Biological Research, Yokohama City University)

11:10 S07-6 FACT histone chaperon contributes to genome-wide DNA demethylation in Arabidopsis endosperm
Tetsu Kinoshita¹ (¹Yokohama City University, Kihara Institute for Biological Research)

11:35 Closing Remark
Tetsu Kinoshita

後 援

科学技術振興機構

共 催

新学術領域研究「植物新種誕生の原理」

3月17日(金) 09:00 ~ 12:00 Y会場

Molecular Basis for “Extended Phenotypes” in Plant/Animal-Microbe Interactions

Organizer Yusuke Saijo (Grad. Sch. Biol. Sci. NAIST)

09:00 Opening Remarks
Ryohei Terauchi

● Chairperson: Yusuke Saijo

09:03 S08-1 Co-evolutionary dynamics of pathogen and host: a case study of Magnaporthe-rice interactions
Ryohei Terauchi^{1,2} (¹Laboratory of Crop Evolution, Graduate School of Agriculture, Kyoto University, ²Iwate Biotechnology Research Center)

09:30 S08-2 The long reach of the effectors of plant associated organisms
Sophien Kamoun¹ (¹The Sainsbury Laboratory, Norwich Research Park, Norwich, United Kingdom)

10:05 S08-3 Battle between rice immune system and *Xanthomonas oryzae* effectors
Koji Yamaguchi¹, Tsutomu Kawasaki¹ (¹Dept. Adv. Biosci. Kindai Univ.)

10:25 S08-4 Profiling Plant and Bacterial Transcriptome during Interaction
Akira Mine^{1,2}, Tatsuya Nobori¹, Carolin Seyfferth¹, Sajjad Khani¹, Kenichi Tsuda¹
(¹Max Planck Inst. for Plant Breeding Res., ²Centr. Gene Res., Nagoya Univ.)

● Chairperson: Kenichi Tsuda

10:50 S08-5 Recognition of PAMPs and DAMPs by mammalian innate immunity
Taro Kawai¹ (¹Lab. Molecular Immunobiology, Nara Institute of Science and Technology)

11:15 S08-6 Viral infection and anti-viral innate immune responses in animal cells
Mitsutoshi Yoneyama¹ (¹Medical Mycology Research Center, Chiba University)

11:35 S08-7 Phosphate status-dependent control of interactions with pathogenic and endophytic fungi in *Arabidopsis thaliana*
Kei Hiruma^{1,2}, Tae-Hong Lee¹, Kentaro Okada¹, Taishi Hirase¹, Midori Tanaka¹,
Nozomi Kitagawa¹, Paul Schulze-Lefert³, Yusuke Saijo^{1,2} (¹Grad Sch Biol Sci, NAIST,
²JST PRESTO, ³Max Planck Institute for Plant Breeding Research)

11:55 Closing Remarks
Yusuke Saijo

3月17日(金) 09:00 ~ 12:00 Z会場

New aspects in plant endomembrane research

Organizers Tomohiro Uemura (Grad. Sch. Sci., Univ. Tokyo)
Massahiko Furutani (Grad. Sch. Bioagr. Sci., Nagoya Univ.)

● Chairperson: Tomohiro Uemura

09:00		Opening remarks Tomohiro Uemura
09:05	S09-1	Dynamics of the Golgi apparatus in plant cells during regeneration after BFA treatment revealed by live imaging <u>Yoko Ito</u> ¹ , Tomohiro Uemura ² , Takashi Ueda ^{3,4,5} , Akihiko Nakano ^{1,2} (¹ RIKEN RAP, ² Grad. Sch. Sci., Univ. Tokyo, ³ Division of Cellular Dynamics, NIBB, ⁴ Dep. Basic Biol., SOKENDAI, ⁵ PRESTO, JST)
09:25	S09-2	Lipid-dependent sorting mechanisms at trans-Golgi Network <u>Yohann Boutte</u> ¹ , Nicolas Esnay ¹ , Yoko Ito ² , Tomohiro Uemura ² (¹ CNRS, Membrane Biogenesis Laboratory, ² Department of Biological Sciences, Graduate School of Science, University of Tokyo)
09:55	S09-3	Morphological analysis of clathrin-mediated endocytotic process by fast-scanning atomic force microscope Aiko Yoshida ¹ , Yanshu Zhan ¹ , Yoshitsuna Itagaki ¹ , Masahiro Kumeta ¹ , Yuki Suzuki ² , Nobuaki Sakai ³ , Yoshitsugu Uekusa ³ , <u>Shige H. Yoshimura</u> ¹ (¹ Grad. Sch. Biostudies, Kyoto Univ., ² Frontier Res. Inst., Tohoku Univ., ³ R&D Group, Olympus, Co.)
10:20	S09-4	The formation and maintenance of PIN polarity by NPH3-like proteins and PID kinases <u>Masahiko Furutani</u> ¹ , Satoshi Naramoto ² , Miyo Terao Morita ^{1,3} , Masao Tasaka ⁴ (¹ Graduate School of Bioagricultural Sciences, Nagoya University, ² Graduate School of Life Sciences, Tohoku University, ³ CREST, Japan Science and Technology Agency, ⁴ Graduate School of Biological Sciences, Nara Institute of Science and Technology)
10:40		Coffee break
● Chairperson: Masahiko Furutani		
10:50	S09-5	Genetic screen to identify endosomal trafficking components involved in localization of plasma membrane proteins in <i>Arabidopsis thaliana</i> <u>Hirokazu Tanaka</u> ¹ (¹ Grad. Sch. Sci., Osaka Univ.)
11:10	S09-6	Ubiquitin signal involved in membrane trafficking for plant environmental stress responses <u>Takeo Sato</u> ¹ , Yoko Hasegawa ¹ , Shigetaka Yasuda ¹ , Junji Yamaguchi ¹ (¹ Faculty of Science, Hokkaido University)
11:30	S09-7	Molecular mechanisms of vacuolar membrane fusion regulated by SNARE proteins in plant cells <u>Kazuo Ebine</u> ^{1,2} , Kodai Takemoto ^{1,3} , Chieko Saito ³ , Tomohiro Uemura ³ , Akihiko Nakano ^{3,4} , Takashi Ueda ^{1,2,5} (¹ Div. Cellular Dynamics, NIBB, ² Sch. Life Sci., SOKENDAI, ³ Grad. Sch. Sci., The Univ. Tokyo, ⁴ RIKEN Center for Advanced Photonics, ⁵ PRESTO, JST)
11:50		Discussion Masahiko Furutani

3月17日（金） 13:30～16:00 X会場

植物細胞壁の情報処理
—発生, 免疫から栄養, 寄生, 運動まで—

オーガナイザー 西谷 和彦（東北大院 生命科学）

●座長：澤 進一郎

13:30 S10-1 陸上植物における膜交通経路の多様化のメカニズムを探る
上田貴志^{1,2,3}（¹基礎生物学研究所, ²総研大, ³さきがけ）

13:55 S10-2 XTHの新規機能に基づく新しい植物細胞壁像
篠原直貴¹, 砂川直輝², 田村理³, 横山隆亮¹, 上田実³, 五十嵐圭日子^{2,4}, 西谷和彦¹
（¹東北大学大学院生命科学研究科, ²東京大学大学院農学生命科学研究科, ³東北大学大学院理学研究科, ⁴フィンランド技術研究センター）

●座長：上田 貴志

14:20 S10-3 植物細胞壁形成を支配する遺伝子発現制御ネットワークの進化
出村拓¹（¹奈良先端科学技術大学院大学 バイオサイエンス研究科）

14:45 S10-4 植物の器官屈曲を抑制する復元機構
上田晴子¹, 西村いくこ¹（¹甲南大学 理工学部）

●座長：出村 拓

15:10 S10-5 カルシウム輸送と栄養依存的成長における細胞壁の役割
鹿内勇佑¹, Baohai Li¹, 神谷岳洋¹, 藤原徹¹（¹東京大学大学院農学生命科学研究科
応用生命化学専攻植物栄養・肥料学研究室）

15:35 S10-6 植物感染性線虫の感染過程における細胞壁成分の機能と役割
大田守浩¹, Allen Yi-Lun Tsai¹, 鈴木れいら¹, 島岡知恵¹, 石田喬志¹, 澤進一郎¹
（¹熊本大学大学院先端科学研究部）

共 催

「植物細胞壁の情報処理システム」

3月17日(金) 13:00 ~ 16:00 Y会場

Signaling pathways and growth regulation in response to environmental signals

Organizers Toshinori Kinoshita (WPI-ITbM, Nagoya Univ.)
Yoshikatsu Matsubayashi (Grad. Sch. Sci., Nagoya Univ.)

13:00		Opening remarks Toshinori Kinoshita
● Chairperson: Yoshikatsu Matsubayashi		
13:05	S11-1	Regulation of stomatal movements in response to environmental signals <u>Toshinori Kinoshita</u> ¹ (WPI-ITbM, Nagoya Univ.)
13:25	S11-2	A peptide-receptor system shaping leaf margins Toshiaki Tameshige ¹ , Satoshi Okamoto ² , Jun Suk Lee ³ , Mitsuhiro Aida ² , Masao Tasaka ² , Keiko Torii ^{1,3,4} , <u>Naoyuki Uchida</u> ¹ (WPI-ITbM, Nagoya Univ., ² NAIST, ³ Univ. Washington, ⁴ HHMI)
13:50	S11-3	Phytochrome globally modulates protein subcellular localization in Arabidopsis <u>Tomonao Matsushita</u> ¹ (Laboratory of Plant Photophysiology, Faculty of Agriculture, Kyushu University)
14:15	S11-4	Genetic framework for nitrogen-mediated control of root nodule symbiosis Hanna Nishida ^{1,2,3} , Masayoshi Kawaguchi ^{2,3} , <u>Takuya Suzaki</u> ¹ (Graduate School of Life and Environmental Sciences, University of Tsukuba, ² National Institute for Basic Biology, ³ SOKENDAI)
● Chairperson: Toshinori Kinoshita		
14:40	S11-5	Identification of Novel Peptide Ligand-Receptor Pairs in Plants <u>Yoshikatsu Matsubayashi</u> ¹ (Grad. Sch. Sci., Nagoya Univ.)
15:05	S11-6	Characterization of <i>FYF</i> regulatory network that regulates floral organ senescence and abscission in Arabidopsis Wei-Han Chen ¹ , Pei-Fang Li ¹ , Pei-Tzu Lin ¹ , <u>Chang-Hsien Yang</u> ¹ (Institute of Biotechnology, National Chung Hsing University,)
15:30	S11-7	Shoot meristem control by signals from differentiating primordia. <u>David Jackson</u> ¹ (Cold Spring Harbor Lab)
15:55		Closing remarks Yoshikatsu Matsubayashi

共 催

新学術領域研究

「植物の成長可塑性を支える環境認識と記憶の自律分散型統御システム(環境記憶統合)」

3月18日(土) 09:00 ~ 12:00 X会場

Dynamic Vacuoles in Plants 2017

Organizer Katsuhiko Shiratake (Nagoya Univ.)

● Chairperson: Katsuhiko Shiratake

09:00		Opening remarks Hitoshi Sakakibara (Editor-in-Chief of PCP, Nagoya Univ., RIKEN CSRS)
09:01		Opening remarks Miki Matoba (Oxford Univ. Press)
09:04	S12-1	Dynamic vacuoles in plants <u>Katsuhiko Shiratake</u> ¹ (¹ Grad. Sch. Bioagricultural Sci., Nagoya Univ.)
09:10	S12-2	The role of vacuolar malate/chloride channels in stomatal movement <u>Enrico Martinoia</u> ¹ , Cornelia Eisenach ¹ , Ulrike Baetz ¹ , Jingbo Zhang ¹ , Alexis De Angeli ^{1,2} (¹ University Zurich, ² CNRS Gif-sur-Yvette)
09:50	S12-3	Transporters for vacuolar sequestration of toxic metals and arsenic <u>Youngsook Lee</u> ¹ , Jian Feng Ma ² , Enrico Martinoia ^{1,3} , Won-Yong Song ¹ (¹ Department of Integrative Bioscience and Biotechnology, Pohang University of Science and Technology, ² Institute of Plant Science and Resources, Okayama University, ³ Institute of Plant Biology, University Zurich)
10:30		Break
● Chairperson: Tetsuro Mimura		
10:40	S12-4	Plants use vacuoles for defense in multiple ways <u>Ikuko Hara-Nishimura</u> ¹ (¹ Faculty of Sci and Eng, Konan Univ.)
11:05	S12-5	Multiple facets of vacuolar H ⁺ -pyrophosphatase and vacuolar functions: visible and invisible parts <u>Masayoshi Maeshima</u> ¹ (¹ Grad. Sch. Bioagricultural Sci., Nagoya Univ.)
11:30	S12-6	Molecular components of vacuoles and their possible functions in plant cells <u>Tetsuro Mimura</u> ¹ , Miwa Ohnishi ¹ , Aya Anegawa ^{1,2} , Kotaro Yamamoto ¹ , Yuko Kurita ¹ , Katsuhisa Yoshida ^{1,3} (¹ Dept. Biol., Grad. Sch. Sci., Kobe. Univ., ² Agilent Technologies, ³ Res. Inst. Biol. Sci., Okayama)
11:55		Closing remarks Tetsuro Mimura (Kobe Univ.)

農林水産業・食品産業科学技術研究推進事業
「画期的機能を持つ野菜の接ぎ木システムの実用化と接ぎ木効率を向上させる接ぎ木接着剤の開発」

3月18日(土) 09:00 ~ 11:40 Y会場

Venturing into the world of single cell analysis

Organizers Yuki Kondo (Univ. of Tokyo)
Aki Minoda (RIKEN)

● Chairperson: Yuki Kondo

09:00		Opening Remarks Aki Minoda
09:05	S13-1	Identifying cell types and subpopulations by single cell RNA-seq Kosuke Hashimoto ¹ , Satoshi Kojo ² , Ichiro Taniuchi ² , <u>Aki Minoda</u> ¹ (¹ CLST-DGT, RIKEN, ² IMS, RIKEN)
09:25	S13-2	Current situation of quantitative single cell plant hormone analysis by mass spectrometry <u>Takafumi Shimizu</u> ¹ , Tomokazu Koshiba ² , Mitsunori Seo ^{1,2} (¹ RIKEN CSRS, ² Department of Biological Sciences, Tokyo Metropolitan Univ.)
09:45	S13-3	Triggering single-cell response for understanding intercellular signaling in plant immunity <u>Shigeyuki Betsuyaku</u> ¹ (¹ Univ. Tsukuba, Fac. Life & Env. Sci.)
10:05	S13-4	Translational control by G-quadruplex recognition via REPRESSOR OF PHLOEM DEVELOPMENT determines differentiation of energy transducing vascular tissue in plants Hyunwoo Cho ¹ , Hyunseob Cho ¹ , <u>Ildoo Hwang</u> ¹ (¹ Department of Life Sciences, Pohang University of Science and Technology)
● Chairperson: Aki Minoda		
10:35	S13-5	Finding out cellular states in plants by single cell transcriptome analysis <u>Minoru Kubo</u> ¹ (¹ Inst. Research Initiative, NAIST)
10:55	S13-6	Live imaging and optical manipulation of plant reproduction at a single cell level <u>Daisuke Kurihara</u> ^{1,2} (¹ Grad. Sch. Sci., Nagoya Univ., ² JST, ERATO)
11:15	S13-7	Time-lapse cell fate imaging during vascular cell differentiation <u>Yuki Kondo</u> ¹ (¹ Department of Biological Sciences, Graduate School of Science, The University of Tokyo)
11:35		Closing Remarks Yuki Kondo
