

International Research Network Frontiers in Plant Biology

Meeting Program, Kyoto

October 22-25, 2023



Sunday, October 22

18:00-20:00 Reception

Monday, October 23

8:30-8:50 Registration


Opening of the symposium

8:50-9:00 Takayuki KOHCHI (Kyoto University ) / François ROUDIER (RDP, Lyon )

Work package 1: Cell biology and signal transduction

9:00-9:25 **Zigiang Patrick LI** (LBM, Villenave d'Ornon )

How do plants form Plasmodesmata

9:25-9:50 **Yoko ITO** (Ochanomizu University )

Plants as the key for exploring the universality and diversity of the ER-Golgi interface

9:50-10:15 **Minoru NAGANO** (Ritsumeikan University )

Dynamics of plasma membrane nanodomains in Arabidopsis thaliana

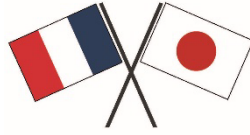
10:15-10:40 **Alexandre MARTINIERE** (BPMP, Montpellier )

Rho of plant nanodomains and plant membrane organization during cell signaling processes

10:40-11:00 Coffee break / Posters

11:00-11:25 **Yuki NAKAMURA** (RIKEN CSRS )

An ER-chloroplast contact in glycerolipid biosynthesis mediated by a pair of differentially localized lipid phosphate phosphatase



11:25-11:50 **Florian FRUGIER** (IPS2, Gif-sur-Yvette^{FR})

*Local and systemic regulation of nodulation in *Medicago truncatula**

11:50-12:15 **Miyo Terao MORITA** (NIBB^{JP})

Polar localization of LZ1 linked to gravity sensing

12:15-13:30 Lunch / Posters

13:30-14:00 Poster flash talks

Work package 2: Genome dynamics and epigenetics

14:00-14:25 **François ROUDIER** (RDP, Lyon^{FR})

Epigenetic regulation of cell fate decisions in moss

14:25-14:50 **Yoko IKEDA** (Okayama University^{JP})

*DNA de-methylation control in *Marchantia polymorpha**

14:50-15:15 **Hiroshi KUDOH** (Kyoto University^{JP})

Seasonality of H3K27me3 and H3K4me3 in a natural plant population

15:15-15:40 **Aline PROBST** (GReD, Clermont-Ferrand^{FR})

Distinct clades of TELOMERE REPEAT BINDING transcriptional regulators interplay to regulate plant development

15:40-16:00 Coffee break / Posters

16:00-16:25 **Laurent NUSSAUME** (BIAM, Saint-Paul-lez-Durance^{FR})

Live transcription imaging of plant Pi starvation response

16:25-16:50 **Keiko SUGIMOTO** (RIKEN CSRS^{JP})

Epigenetic control of cellular reprogramming in plant regeneration

16:50-17:15 **Mizuki TAKENAKA** (Kyoto University^{JP})

C-to-U RNA editing enzymes in plant organelles and their regulatory mechanisms

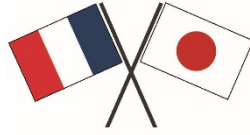
Selected short talks (10+5 min)

17:30-17:45 **Samuel BOSQ** (LBI2M, Roscoff^{FR})

*Quantitative study of the role of the maternal tissue in body shape and tissue patterning in the early embryo of the brown alga *Saccharina latissima**

17:45-18:00 **Laetitia FOUILLEN** (LBM, Villenave d'Ornon^{FR})

A global LC-MS2-based methodology to identify and quantify anionic lipids in plant samples



18:00-18:15 **Louise FUGERE** (LBM, Villenave d'Ornon^{FR})

A revised model of the ER/pre-Golgi interface: towards the identification of the intermediate compartment in Arabidopsis

18:15-18:30 **Magali GRISON** (LBM, Villenave d'Ornon^{FR})

Super-resolution Life Time STED and expansion microscopy applied at tissue scale in plants

18:30-20:00 Poster session

Dinner on your own

Tuesday, October 24

Work package 3: Development and adaptation

9:00-9:25 **Bénédicte CHARRIER** (LBI2M, Roscoff/IGFL, Lyon^{FR})

Modelling the change in orientation of cell division in brown algae

9:25-9:50 **Chikako NAGASATO** (Hokkaido University^{JP})

Plasmodesmata formation in the development of brown algae

9:50-10:15 **Akane KUBOTA** (NAIST, NARA^{JP})

Changes in daily temperature regulate flowering with time-dependent mechanisms in Arabidopsis

10:15-10:40 **Bertrand DUBREUCQ** (IJPB, Versailles^{FR})

Functional characterization of LEC2 sheds new light on the regulation of seed development

10:40-11:00 Coffee break /Posters

11:00-11:25 **Maria Victoria GOMEZ ROLDAN** (IBPS, Paris^{FR})

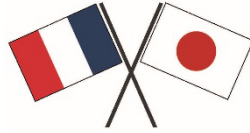
Molecular and Cellular control of Seed Dormancy and Germination by MOTHER-OF-FT-AND-TFL1

11:25-11:50 **Shinichiro SAWA** (Kumamoto University^{JP})

Root-knot nematode modulates plant CLE3-CLV1 signaling as a long-distance signal for successful infection

11:50-12:15 **Keitaro TANOI** (The University of Tokyo^{JP})

Imaging analysis of sodium ion transport in plants using the radioisotope, Na-22



12:15-14:00 Lunch / Posters

Work package 4: Photosynthesis and metabolism

14:00-14:25 **Juliette JOUHET** (IRIG, Grenoble^{FR})

Evolutionary significance of the bilayer properties for the disappearance of betaine lipids in seed plants

14:25-14:50 **Koichi KOBAYASHI** (Osaka Metropolitan University^{JP})

Interplay of lipid classes in thylakoid membrane biogenesis and photosynthetic functioning

14:50-15:15 **Ryosuke MUNAKATA** (Kyoto University^{JP})

Biosynthesis of furanocoumarins causing grapefruit-drug interactions

15:15-15:40 **Helen NORTH** (IJPB, Versailles^{FR})

Exploring RRT1 glycosyltransferase function in the synthesis of Arabidopsis seed mucilage

15:40-16:00 Coffee break / Posters

16:00-16:25 **Hugues RENAULT** (IBMP, Strasbourg^{FR})

A glimpse of plant adaptation to land through the biopolymer lens

16:25-16:50 **Mitsunori SEO** (University of the Ryukyus^{JP})

Diverse functions of Arabidopsis NPF proteins

16:50-17:15 **Hubert SCHALLER** (IBMP, Strasbourg^{FR})

Phytosterol metabolism and homeostasis

General Discussion

17:15-17:30 Takayuki KOHCHI (Kyoto University^{JP}) / François ROUDIER (RDP, Lyon^{FR})

18:30-21:00 Banquet

Wednesday, October 25

Group discussion, Excursion, Farewell dinner

