

# 11<sup>th</sup> Plant Peptides and Receptors Meeting 2023

Lyon October 2nd-4th 2023

## **Monday October 2<sup>nd</sup>**

8:00-9:45 Registration  
9:45-10:00 Opening remarks

**Session: REPRODUCTION**      *Chair: Stefanie SPRUNCK*

10:00-10:30 Tetsuya HIGASHIYAMA. Imaging Approaches for Peptide Signaling in Pollen Tube Guidance

10:30-10:45 Daphne GORING. Arabidopsis LRR VIII-2 Receptor-Like Kinases regulate intra- and inter-species pollen-pistil interactions.

10:45-11:00 Leon KUTZNER. From a Proteomic Dataset to Characterization of a Novel Plant Peptide

11:00-11:15 Patricia SEITZ. The Pollen Tube Highway – Functional characterization of novel CRPs during fertilization in *Zea mays*

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**Session: IMMUNITY 1**      *Chair: Stefanie RANF*

11:15-11:30 Lin-Jie SHU. Capturing 3-hydroxy fatty acid: Characterization of the immune receptor LORE in Brassicaceae

11:30-11:45 Jakub RZEMIENIEWSKI. CEP signaling coordinates cell surface immunity with nitrogen limitation

11:45-12:00 Flash talks, 90 seconds each

12:00-13:45 Lunch

13:45-14:15 Jack RHODES. Phyto cytokine signalling at the plant-environment interface

14:15-14:30 Xu WANG. Characterization of a small family of systemin-like peptides in *Solanum lycopersicum*

14:30-14:45 Lei WANG. CLE peptide signaling regulates induced volatile emissions in maize

14:45-15:00 Francisco Manuel GORDILLO CANTON. Evolution of SERK-mediated specificity in plant development and immunity

15:00-15h15 Maurice KÖNIG. From an ancestral viral infection of *Zea* to the release of Zip1 – a maize specific phyto cytokine

15h:15-15:30 Markus DRAEGER. Growing Strong or Fighting Back: One MAPK Kinase Kinase to Balance It All

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15:30-16:00 Coffee break

**Session: IMMUNITY 2**      *Chair: Yan MA*

16:00-16:30 Christine FAULKNER. Immune receptor signaling at plasmodesmata: similar but different

16:30-16:45 Julian MAROSCHEK. MIK2 RLKs generally act as *Fusarium* elicitor receptors in diverse plant families

- 16:45-17:00 Louis-Philippe MAIER. Peptides derived from insect egg-shells are perceived as signals of imminent herbivore attack
- 17:00-17h15 Vahid FALLAHZADEH. The Arabidopsis TNL CONSTITUTIVE SHADE AVOIDANCE 1 (CSA1) reveals activation of PTI and ETI responses downstream of the pattern recognition co-receptor BAK1
- 17:15-17:30 Keran ZHAI. The receptor kinase MIK2 links cell wall integrity sensing to pattern-triggered immunity
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17:30-20:00 Poster session 1 with Dinatory Cocktail – Odd numbers

## **Tuesday October 3<sup>rd</sup>**

Session: ABIOTIC INTERACTIONS

Chair: Santosh SATBHAI

- 9:00-9:30 Yoshikatsu MATSUBAYASHI. Plant adaptation to fluctuating nitrogen environments by long-range mobile peptide signals
- 9:30-9:45 Rebecca JOHN. (Receptor) Kinase signaling modules involved in regulation of nitrate transporters
- 9:45-10:00 Peter DOERNER. The RGF1-PLT2 regulatory network maintains primary root meristem activity in low phosphate environments.
- 10:00-10:15 Iván HERRERO GARCÍA. Deciphering the mechanism for brassinosteroid receptor kinase protein BRL3 in plant adaption to drought stress
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Session: Symbiosis

Chair: Franck MENKE

- 10:15-10:30 Lea PEDINOTTI. Functional study of CLE peptides regulating arbuscular mycorrhizal symbiosis
- 10:30-10:45 Flash talks 90 seconds each
- 10:45-12:30 Poster session 2 with coffee – Even numbers
- 12:30-14:00 Lunch
- 14:00-14:30 Clare GOUGH. Medicago truncatula SOBIR1 controls specificity in the Rhizobium-legume symbiosis
- 14:30-14:45 Katarzyna PARYS. Genetic and functional diversity of Lotus malectin-like domain leucine-rich repeat receptor kinases in root endosymbiosis
- 14:45-15:00 Juliette TEYSENDIER DE LA SERVE. Signaling peptides regulating root endosymbioses in the model legume Medicago truncatula
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Session: Development 1

Chair: Zach NIMCHUK

- 15:00-15:15 Kaltra XHELILAJ. Towards an atlas of REMORIN-nanodomains associated functions
- 15:15-15:30 Jingyi HAN. Balancing cell proliferation and differentiation in the vascular cambium
- 15:30-15:45 Liam ELLIOTT. A self-regulatory receptor module involved in edge-based control of plant growth

15:45-19:00 Free time

19:00-23:00 Gala dinner

### **Wednesday October 4<sup>th</sup>**

9:00-9:30 Jaimie VAN NORMAN. Which side are you on? Linking polarized receptor kinases to root cell division control

9:30-10:45 Alberto CAREGNATO. Molecular basis for differential CIF peptide sensing by the receptor kinase GSO1 and GSO2/SGN3

9:45-10:00 Irene GUZMÁN-BENITO. Uncovering the role of PBLs in signalling specificity in the endodermis

10:00-10:15 David MOLINA. The SCHENGEN Pathway Orchestrates the Protective Barrier of the Periderm

10:15-10:30 Penelope LINDSAY. Regulation of maize ear development by a CLAVATA-related receptor complex

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10:30-11:00 Coffee break

**Session: Development 2**      *Chair: Christine MIEGE*

11:00-11:30 Melinka BUTENKO. The IDA signaling pathway: cell separation and biotic stress responses

11:30-11:45 Zengxiang GE. Mutual regulation of canalization by CLE peptides and auxin in Arabidopsis

11:45-12:00 Esther IZQUIERDO ALEGRE. Role of hormone peptides in the systemic regulation of white lupin cluster roots development

12:00-12:15 Nelson SERRE. Dynamic remodeling of the anionic lipid landscape by RALF peptides

12:15-12:30 Rebecca BURKART. Optogenetic approach to study stem cell fate regulation via Calcium-fluxes within the root of Arabidopsis thaliana

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12:30-13:00 Closing remarks  
Poster and talk prizes