

WG2 meeting of the COST FA1306

Diving into integrative cell phenotyping through “omics”

February 1-2 2016, Jean-Pierre Bourgin Institute, Versailles, France

Meeting Program

February 1, 2016

08:30 Arrival and Check-in

09:30 Welcome / Introductory Comments

Topic 1 - Transcriptomics, networks and modeling

Discussion Leaders: Sylvie Coursol (France) and Loïc Rajjou (France)

09:40 **Keynote Lecture - Marie-Laure Martin-Magniette (France)**

“From gene expression modeling to gene network to investigate *Arabidopsis thaliana* genes involved in stress response”

10:20 **Vesselin Baev (Bulgaria)**

“Phenotyping at the cell level - Tool for characterization of abiotic- and biotic-related small RNAomes in plant NGS datasets”

10:40 **Anyela Camargo (UK)**

“A data driven approach to model the senescence pathway in wheat”

11:00 Coffee Break

11:30 **Olivier Martin (France)**

“Auxin signaling pathways: modeling how the Aux/IAA regulatory feedback ensures dynamical sensitivity”

11:50 **Johannes Fahrentropp (Switzerland)**

“Do susceptible plants recognize their enemy?”

12:10 **Hansjörg Stampfl (Austria)**

“The GSK3 kinase ASK α contributes to early immune signaling and acclimation to environmental stress”

12:30 **STSM talk - André Folgado (Portugal)**

“Transcriptome profiling of cells involved in lenticels formation in cork oak (*Quercus suber* L.)”

12:50 Poster hanging

13:00 Lunch

Topic 2 - Metabolism and enzyme activities

Discussion leaders: Thierry Chardot (France) and Michel Zivy (France)

14:00 **Keynote Lecture - Emmanuel Gaquerel (Germany)**

“Navigating structural and regulatory diversity in plant defense metabolism”

14:40 **Vasileios Fotopoulos (Cyprus)**

“Global metabolic profiling of Arabidopsis Polyamine Oxidase 4 (AtPAO4) loss-of-function mutants exhibiting delayed dark-induced senescence”

15:00 **Giles N Johnson (UK)**

“Metabolomics identifies a novel cold sensor underlying photosynthetic acclimation in Arabidopsis”

15:20 **Camille Bénard (France)**

“Hit-Me: high throughput metabolic phenotyping in PHENOME”

15:40 Coffee Break

- 16:10 **Marine Poret (France)**
 “ABPP: a relevant proteomic method to characterize protease activities involved in the genotypic variability of protein remobilization during leaf senescence of winter oilseed rape”
- 16:30 **Anne Hofmann (Germany)**
 “How does maize (*Zea mays* L.) respond to flooding? Phenomics, histological, physiological and proteomic approaches”
- 16:50 **Estelle Goulas (France)**
 “Proteomics and transcriptomics techniques for phenotyping flax drought-induced modifications”
- 17:10 Poster Session
- 18:40 Transport to Elancourt
- 19:30 Dinner at Les Templiers
- 22:30 Transport to Versailles

February 2, 2016

- 09:00 Arrival and Check-in
- Topic 3 – From the genotype to the phenotype**
 Discussion Leaders: Julie Fievet (France) and Carla Pinheiro (Portugal)
- 09:20 **Keynote Lecture - Nicolas Langlade (France)**
 “From the field to the lab and back: combined genomic and phenomics approaches to understand drought responses of sunflower”
- 10:00 **Menachem Moshelion (Israel)**
 “Can functional phenotyping bridge the genotype-phenotype gap in breeding for abiotic stress tolerance?”
- 10:20 **Dmitry Yarmolinsky (Estonia)**
 “Large-scale screening for *Arabidopsis* mutants with impaired stomatal regulation in response to environmental factors”
- 10:40 Group Photo and Coffee Break
- 11:00 Poster Session
- 11:40 **Mélisande Blein-Nicolas (France)**
 “Proteomics analysis of the genetic diversity of drought tolerance in maize”
- 12:00 **Jelle van Wesemael (Belgium)**
 “Allele mining for drought tolerance via proteomics: a proof of principle of allele discovery for the banana biodiversity”
- 12:20 **Harold Duruflé (France)**
 “Analyse and integration of heterogeneous data from low temperature compensation response in two ecotypes of *Arabidopsis thaliana*”
- 12:40 **Gilberto Igrejas (Portugal)**
 “Valorisation of chickpea’s varieties by proteomic tools: from phenotype to nutrigenomics”
- 13:00 Lunch
- 14:00 Coffee Break
- 14:15 **Discussion/brainstorming about the future**
 Discussion Leaders: Sebastien Carpentier (Belgium) and Estelle Goulas (France)
- 15:15 Guided tour through selected platforms of the Plant Observatory
- 17:30 Departure