

# *Effectome meeting IX, November 16-18 2016, Lauret, FR*

# Wednesday November 16<sup>th</sup>

**14h00-14h15** Welcome and Introductory Remarks by the Organizers

# **Insects & Nematodes**

Chair: Akiko Sugio & Bruno Favery

**14h15-15h00** Isgouhi Kaloshian (University of California Riverside – Department of Nematology, USA) Deciphering the role of effectors of aphids and associated microbes in modulating plant immunity and metabolism

**15h00-15h20** Endrick Guy (INRA Rennes, FR) Optimization of agroinfiltration in *Pisum sativum* provides a new tool to perform functional analysis of salivary genes involved in the host plant adaptation of the pea aphid

15h20-15h40 Hélène Boulain (INRA Rennes, FR) Functional analyses of candidate aphid effectors

15h40-16h00 Maira Grossi De Sa (IRD Montpellier, FR). Characterization of Meloidogyne spp. effectors involved in ricenematode interactions.

# 16h00-16h25: Break

16h30-17h15 Geert Smant (Wageningen University-Laboratory of Nematology, NL) Damage control by plant-parasitic nematodes.

17h15-17h35 Bruno Favery (INRA-UNS-CNRS Sophia Antipolis, FR) Update on the characterization of root-knot nematode effectors

17h35-17h50 Joffrey MEJIAS (INRA-UNS-CNRS Sophia Antipolis, FR) Characterization of root-knot nematode effectors targeting host nuclear functions, and identification of their plant targets.

# Session 3: Bacteria & Viruses

Chair: Boris Szurek & Nemo Peeters

17h50-18h35 Vicente PALLAS (University of Valencia, ES) Viral coat proteins as inducers and/or targets of the plant cell defences.

19h00-20h00: Aperitif

20h15: Dinner

# Thursday November 17<sup>th</sup>

8h45-9h30 Niklas SCHANDRY (University of Tübingen, DE) Elucidating the diversity and host target genes of Ralstonia solanacearum TALE-likes.

9h30-9h50 Christophe GARCION (INRA, Bordeaux, FR) Towards a functional characterization of flavescence doree phytoplasma effectors

**9h50-10h10 Fabien LONJON (INRA, Toulouse, FR)** How do type 3-associated proteins control Ralstonia solanacearum pathogenicity?

**10h10-10h25** Alice Morel (INRA, Toulouse, FR) Tomato targets of the RipH1, 2, 3 type III effectors from *Ralstonia* solanacearum, towards the understanding of contribution to disease.

10h50-11h10 Alvaro Perez-Quintero (IRD, Montpellier, FR) Code-cracking TAL effector function and evolution.

# Fungi & Oomycetes

### Chair : Thomas Kroj & Sebastien Duplessis

11h10-11h55 Francine GOVERS (Wageningen University, NL) Phytophthora infestans RXLR effector AVR1 and its host target Sec5.

**11h55-12h15** *Isabelle FUDAL (INRA, Grignon, FR) Transcriptional and chromatin-based control of effector gene expression in the plant pathogenic fungus Leptosphaeria maculans* 

**12h15-12h30** Colin CLAIRET (INRA, Grignon, FR) Investigating the involvement of the heterochromatic-associated histone modification, H3K27me3, in the control of effector gene expression in *Leptospharia maculans* 

LUNCH 12h30 - 13h45

14h00-16h30: Walk

### 16h30-17h00: Refreshments

17h00-17h45 Ralf DEAN (North Carolina State University, USA) Identification and Characterization of Suppressors of Plant Cell Death (SPD) Genes from Magnaporthe oryzae

17h45-18h00 Maira de FREITAS PEREIRA (INRA, Nancy, FR) The role of Small Secreted Proteins (SSPs) in the interaction of the ectomycorrhizal fungus Cenococcum geophilum with its host plants

18h00-18h20 Jean Baptiste LOPEZ (Aarhus University, DK) High throughput investigation of Ramullaria effectors in Barley

**18h20-18h40**. *Cecile LORRAIN (INRA, Nancy, FR)* Poplar rust candidate effectors: challenges of functional characterization in a non-model pathosystem

# 20h00: Dinner

### Friday November 18th

**9h00-9h45** Bart THOMMA (Wageningen University, NL) The two-speed genome of Verticillium dahliae mediates emergence of potent virulence factors

**9h45-10h00 Fanny HARTMANN (ETH Zürich, CH)** A segregating gene deletion polymorphism is linked to pathogenicity in natural populations of the fungal wheat pathogen *Zymoseptoria tritici.* 

**10h00-10h20 Emmanuel SZADKOWSKI (INRA, Avignon, FR)** Screening *a priori* durable resistance in tomato to *Phytophthora infestans* using its pathogenicity effectors

**10h20-10h35** Marc-Henri LEBRUN (INRA, Grignon, FR) Are there avirulence genes among Zymoseptoria tritici effectors displaying presence/absence polymorphisms?

### 10h35-11h00: Break

**11h05-11h25 Clemence PLISSONNEAU (ETH Zürich, CH)** The evolution of orphan regions in genomes of a fungal pathogen of wheat

11h25-11h40 Claire-Line MARAIS (INRA, Grignon, FR) In planta localization of Leptosphaeria maculans effectors and identification of their plant targets

**11h40-12h00** Annegret KOHLER (INRA, Nancy, FR) Exploring the role of Mycorrhiza-induced Small Secreted Proteins **12h00-12h20** Thomas KROJ (INRA, Montpellier, FR) Frequent and widespread integration of decoy domains derived from protein targets of pathogen effectors into plant NLR immune receptors

### Concluding Remarks by the Organizers

Lunch at Auberge du Cèdre or Lunch packages