

# Programme



## Thématiques

- Evolution Virale
- Variabilité des virus & épidémiologie
- Résistance & silencing
- Interaction virus-cellule & mouvement
- Interaction virus-vecteur

## Dimanche 15 janvier 2017

Après-midi      Accueil

Mise en place des posters

19h30            *Apéritif de bienvenue*

20h15            *Dîner*

## Lundi 16 janvier 2017

8h15            Introduction au colloque

## Session 1

*Modérateur : David Gilmer*

8h45            I.01 **Damien Garcia**

*CNRS – Strasbourg*

Genetic approaches of viral compatibility and restriction in plant.

9h30            ■ O.01 **Alyssa Flobinus**

*CNRS – Strasbourg*

A viral noncoding RNA complements a weakened viral suppressor of RNA silencing and promotes efficient systemic host infection.

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- 9h45 ■ O.02 **François Lecorre**  
*CNRS – Montpellier*  
Atomic structure of the *Broad bean stain virus* by cryo-electron microscopy.
- 10h00 ■ O.03 **Romain Gallet**  
*Inra – Montpellier*  
Small bottleneck size in *Faba bean necrotic stunt virus* populations during aphid transmission.
- 10h15 *Pause*

## Session 2

*Modérateur : Emmanuel Jacquot*

- 10h45 I.02 **Christelle Lacroix**  
*Inra – Avignon*  
Effects of global changes on plant virus epidemiology and ecology.
- 11h30 ■ O.04 **Coralie Picard**  
*Inra – Montpellier*  
Influence of landscape characteristics on the optimal control of a plant virus.
- 11h45 ■ O.05 **Lucie Tamisier**  
*Inra – Montfavet*  
Impact of selection, genetic drift and viral accumulation on the evolution of a plant RNA virus.
- 12h00 ■ O.06 **Michaël Mulot**  
*Inra – Colmar*  
*In vivo* confirmation of the involvement of an aphid protein in polerovirus transmission.
- 12h15 ■ O.07 **Mattia Dall'Ara**  
*CNRS – Strasbourg*  
A specific heterologous RNA-RNA interaction is involved in the *Beet necrotic yellow vein virus* infectivity.

12h30 *Déjeuner - Après-midi libre*

## Session 3

*Modérateur : Véronique Brault*

- 17h15 I.03 **Kristiina Makinen**  
*Department of Food and Environmental Sciences – Finlande*  
Host-virus interactions on the way from potyvirus replication to translation.
- 18h00 ■ O.08 **Véronique Germain**  
*CNRS – Villenave d'Ornon*  
Making a functional link between plasma membrane nanodomain features, regulation of cell-to-cell connectivity and *Potato virus X* propagation.
- 18h15 ■ O.09 **Edwige Berthelot**  
*Inra – Montpellier*  
Transmission activation of potyviruses.
- 18h30 **Présentation des Posters (numéros impairs)**
- 20h00 *Dîner*

**Mardi 17 janvier 2017**

## Session 4

*Modérateur : Christophe Ritzenthaler*

- 8h15 I.04 **Christina Wege**  
*University of Stuttgart – Allemagne*  
RNA-enabled shaping of TMV-based multi-purpose architectures for smart materials and devices.
- 9h00 ■ O.10 **Ahmed Ghannam**  
*CNRS – Strasbourg*  
*Grapevine fanleaf virus-like particles*, a versatile platform for the display and encaging of whole proteins.
- 9h15 ■ O.11 **Anna Bastet**  
*Inra – Montfavet*  
A synthetic eIF4E1 allele allows resistance pyramiding and broad resistance spectrum to potyviruses in *Arabidopsis thaliana*.
- 9h30 ■ O.12 **David Halter**  
*Inra – Colmar*  
Deciphering virus manipulation of aphid-brassicaceae interactions by high resolution mass spectrometry.

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| 9h45  | ■ | O.13 <b>Thierry Candresse</b><br><i>Inra – Villenave d'Ornon</i><br>Contribution of NGS-based approaches to the analysis of French winter barley crops virological status.                                   |
| 10h00 | ■ | O.14 <b>Sylvie German-Retana</b><br><i>Inra – Villenave d'Ornon</i><br>Potato virus Y resistance in tobacco: tolerance to viral necrosis as an alternative strategy against PVY resistant-breaking variants. |
| 10h15 |   | <i>Pause</i>                                                                                                                                                                                                 |

## Session 5

*Modérateur : Michel Peterschmitt*

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| 10h45 | I.05 | <b>Gregory Resch</b><br><i>Université de Lausanne – Suisse</i><br>Phage-based therapies.                                                                                                                                                        |
| 11h30 | ■    | O.15 <b>Isabelle Martin</b><br><i>Inra – Colmar</i><br>Identification of a <i>Grapevine fanleaf virus</i> -encoded elicitor of hypersensitive reaction in <i>Nicotiana occidentalis</i> .                                                       |
| 11h45 | ■    | O.16 <b>Elodie Pirolles</b><br><i>Inra – Montpellier</i><br>A pluricellular way of life for a multipartite virus.                                                                                                                               |
| 12h00 | ■    | O.17 <b>Cécile Desbiez</b><br><i>Inra – Avignon</i><br>New species in the <i>Papaya ringspot virus</i> cluster: insights into the evolution of the PRSV lineage.                                                                                |
| 12h15 | ■    | O.18 <b>Jocelyne Walter</b><br><i>CNRS – Villenave d'Ornon</i><br>Mutational robustness of intrinsically disordered proteins: a comparative study between the potyvirus intrinsically disordered VPg and the plant susceptibility factor eIF4E. |
| 12h30 |      | <i>Déjeuner - Après-midi libre</i>                                                                                                                                                                                                              |

## Session 6

*Modérateur : Marilyne Uzest*

- 17h15      S.01 **Florence Videau et Benoit Sarazin**  
*PROTEIGENE, St Marcel*  
Solutions pour la caractérisation et l'étude des interactions: biologie moléculaire, SPR et peptides arrays.
- 17h45      ■ O.19 **Gaël Thébaud**  
*Inra – Montpellier*  
Identification and optimization of sharka management parameters through sensitivity analysis.
- 18h00      ■ O.20 **Geneviève Roudet-Tavert**  
*Inra – Villenave d'Ornon*  
eIF4E plant factor recruitment by the potyvirus particule: Involvement of the VPg covalently linked to the viral RNA.
- 18h15      ■ O.21 **Alassane Ouattara**  
*Cirad – La Réunion*  
Molecular epidemiology of emerging begomovirus diseases on vegetable crops in Burkina Faso.
- 18h30      **Présentation des Posters (numéros pairs)**
- 20h00      *Dîner*

**Mercredi 18 janvier 2017**

## Session 7

*Modérateur : Jean-Michel Lett*

- 8h15      I.06 **Marc Delêtre**  
*Plant & AgriBiosciences Research Centre – Irlande*  
A phylodynamics approach to the cassava mosaic disease pandemics unravelling the social dimension of plant epidemiology.
- 9h00      ■ O.22 **Nils Poulicard**  
*IRD – Montpellier*  
Effects of the cultural practices on the *Rice yellow mottle virus* populations in East Africa.
- 9h15      ■ O.23 **Vincent Michel**  
*Cirad – Villenave d'Ornon*  
Genetic and functional analysis of va resistance durability to *Potato virus Y* in tobacco.

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- 9h30 ■ O.24 **Sylvaine Boissinot**  
*Inra – Colmar*  
A fluorescent infectious clone of *Turnip yellows virus* capable of plant systemic invasion and aphid transmission.
- 9h45 ■ O.25 **Michel Yvon**  
*Inra – Montpellier*  
A new possible manipulation of aphid vectors by transmitted plant viruses.
- 10h00 ■ O.26 **Cica Urbino**  
*Cirad – Montpellier*  
Generation of non-canonical recombinants of *Tomato yellow leaf curl virus* in Ty-1 resistant tomato plants.
- 10h15 *Pause*

## Session 8

*Modérateur : Benoit Moury*

- 10h45 I.07 **Julien Papaix**  
*Inra – Avignon*  
Using eco-evolutionary principles to guide the sustainable deployment of crop resistances.
- 11h30 ■ O.27 **Frédéric Fabre**  
*Inra – Villenave d'Ornon*  
Pyramiding or mixing resistance genes: what is the best strategy to deploy virus resistant cultivar in agricultural landscape?
- 11h45 ■ O.28 **Bernadette Rubio**  
*Inra – Villenave d'Ornon*  
Are metabolic traits markers of the plant response to virus infection? A phenotype and genotype study in *Arabidopsis thaliana* in response to TuMV (*Turnip mosaic virus*) in a natural environment.
- 12h00 ■ O.29 **Craig Webster**  
*Inra – Montpellier*  
Stylin-1: a putative receptor of *Cauliflower mosaic virus*.
- 12h15 ■ O.30 **Eric Verdin**  
*Inra – Montfavet*  
Characterization of a complex of necroviruses involved in a necrotic disease of corn salad (*Valerianella locusta*).

12h30 *Déjeuner - Après-midi libre*

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## Session 9

*Modérateur : Véronique Ziegler-Graff*

- 17h15 ■ O.31 **Ezechiel Tibiri**  
*INERA – Burkina Faso*  
Inventory and partial characterization of major viruses infecting sweetpotato (*Ipomoea batatas* [L.] Lam) in Burkina Faso.
- 17h30 ■ O.32 **Jean-Michel Hily**  
*Inra – Colmar*  
No undesired impact of GM grapevines cultivation on viruses and its associated soil bacteria.
- 17h45 ■ O.33 **Philippe Roumagnac**  
*Cirad – Montpellier*  
Deciphering plant-associated viruses at the agroecosystem scale using geometagenomics.
- 18h00 ■ O.34 **Benoit Moury**  
*Inra – Montfavet*  
Genetic Determinism and Evolutionary Reconstruction of a Host Jump in a Plant Virus.
- 18h15 O.35 **David Gilmer**  
*Université de Strasbourg – Strasbourg*  
Virology as a tool to teach Biology: pearls, successes and also disappointments.
- 18h30 Présentation des Posters (pairs et impairs)
- 19h45 Dîner

Jeudi 19 janvier 2017

## Session 10

*Modérateur : Olivier Lemaire*

- 8h45 ■ O.36 **Eugénie Hébrard**  
*IRD – Montpellier*  
New emerging and recombinant strains of *Rice yellow mottle virus* in East Africa.

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- 9h00 ■ O.37 **Jean-Luc Gallois**  
*Inra – Montfavet*  
A new eIF4E1 allele characterized by RNAseq data mining is associated with resistance to PVY in tomato albeit with a low durability.
- 9h15 ■ O.38 **Jean-Sébastien Reynard**  
*Agroscope – Suisse*  
Identification and characterization of a novel hordeivirus associated with yellow mosaic of privet (*Ligustrum vulgare*) in Europe.
- 9h30 ■ O.39 **Laurent Glais**  
*FN3PT/RD3PT – Le Rheu*  
Does the inoculation date affect the *Potato virus Y* load in potato daughter tubers at harvest?
- 9h45 ■ O.40 **Anne Sophie Spilmont**  
*IFV – Le Grau du Roi*  
Occurrence of *Grapevine Pinot gris virus* in France: field monitoring in diverse viticulture areas.
- 10h00 *Pause*
- 10h30 ■ O.41 **Thierry Michon**  
*Inra – Villenave d'Ornon*  
Assessment of the viral protein VPg intrinsic disorder contribution to the *Potato virus Y* adaptation to eIF4E-mediated resistance of pepper (*Capsicum annuum*).
- 10h45 ■ O.42 **Marie-Line Caruana**  
*Cirad – Montpellier*  
From diagnostic tools to decision: how to secure germplasm exchanges when plants harbor infective *Banana streak virus* sequences in their genome.
- 11h00 ■ O.43 **Thierry Wetzel**  
*DLR Rheinpfalz – Allemagne*  
A framework for the evaluation of biosecurity, commercial, regulatory and scientific impacts of plant viruses and viroids identified by NGS technologies.
- 11h15 *Bilan du Colloque et Remise des Prix (SFP) aux étudiants pour la meilleure communication orale et le meilleur poster.*
- 12h00 *Déjeuner*