



MICROBES Symposium – June 12-13, 2025

AgroParisTech, 22 Place de l'Agronomie, Palaiseau

Auditorium Pal-B1.01

Generously supported by



Thursday June 12, 2025

Welcome - Coffee

8h30 - 9h00 Welcome - Coffee
9h00 - 9h05 Opening

Session 1 - Health and Disease (Chair Philippe Gerard)

9h05 - 9h30 **Sylvie Rabot (MICALIS)**
The microbiota-gut-brain axis: fecal microbiota from children with autism affect behavioral phenotype in mice

9h30 - 9h55 **Magali Berland (MGP)**
Consensus network inference from microbiome data: in silico consortia design from microbial interaction networks

9h55 - 10h20 **Pascale Serron (MICALIS)**
Enterococcus faecalis: from the gut to intracellular lifestyle

10h20 - 10h45 **Jean-François Eléouët (VIM)**
Respiratory syncytial virus: molecular mechanisms of viral replication

Coffee Break

10h45 - 11h15

Pitch Session (Chair Ariane Bize)

11h15 - 11h30 **Adriana Badilla Lobo, Lisa Bal, Nouari Kebaili**

Session 2 - Agriculture, Food and Environment (Chair Ariane Bize)

11h30 - 11h55 **Eric Raspaud (LPS) / Valérie Barbe (GM)**
Birefringence to understand the mystery of biodegradation of biobased polymers: the Polyhydroxyalkanoates (PHA)

11h55 - 12h20 **Jean-Felix Dallery (BIOGER)**
Fungal specialized metabolites : key players in plant-fungus interactions?

Lunch (Pal-A3-canopée)

12h20 - 14h00

Session 3 - Fundamental Microbiology (Chair Matthieu Jules)

14h00 - 14h25 **Rut Carballido-Lopez (MICALIS)**
Bacterial actin MreB: from single molecules to cell morphogenesis

14h25 - 14h50 **Frédéric Jamme (Soleil)**
Intracellular quantification of antibiotic in single cells

Pitch Session (Chair Matthieu Jules)

14h50 - 15h05 **Angéline Girard, Jean-Pierre Levraud, Sara Dendene**

Session 3 - Fundamental Microbiology cont. (Chair Matthieu Jules)

15h05 - 15h30 **Véronique Arluison (LLB)**
Investigating the Role of Hfq Protein in RNA Packaging and Translocation into Bacterial Outer Membrane Vesicles (Florian Turbant, Marisela Velez, Wafa Achouak, Frank Wien & Veronique Arluison)

15h30 - 15h55 **Johann Peltier (I2BC)**
*An unusual mechanism of action of β -lactam antibiotics in *Clostridioides difficile**

Poster Session- Drinks

15h55 - 18h30

Friday June 13, 2025

Welcome - Coffee

8h30 - 9h00 Breakfast coffee

Session 2 - Agriculture, Food and Environment cont. (Chair Ariane Bize)

9h00 - 9h25 **Sophie Sepulcre / Gaël Monvoisin (GEOPS)**

Analytical tools in geosciences for environmental case studies

9h25 - 9h50 **Olivier Chapleur (PROSE)**

Integrating omics data to unlock microbial potential in waste valorisation

Session 4 - Systems Biology and Engineering (Chair Harold Auradou)

9h50 - 10h15 **Gabriel Amselem (LADHYX)**

Propelling objects with microalgae

10h15 - 10h40 **Miguel Iniesto (ESE)**

Perspectives on Water Treatment and Management Using Microbial Mats

Coffee Break

10h40 - 11h10

Pitch Session (Chair Harold Auradou)

11h10-11h25 **Willy Bienvenut, Stéphanie Bury-Moné, Anne Genissel**

Session 4 - Systems Biology and Engineering cont. (Chair Harold Auradou)

11h25 - 11h50 **Olivier Borkowski (MICALIS)**

Cell-free genome-wide transcriptomics through machine learning optimization

11h50 - 12h15 **Chris Fage (I2BC)**

Molecular Basis for Short-Chain Thioester Hydrolysis by Acyl Hydrolases in trans-Acyltransferase Polyketide Synthases

Lunch (Pal-A3-canopée)

12h15 - 14h00

Session 5 - Ecology and Evolution (Chair Peter Mergaert)

14h00 - 14h25 **Puri Lopez-Garcia (ESE)**

The origin of the eukaryotic cell

14h25 - 14h50 **Yoshi Yamaichi (I2BC)**

Radical view on conjugation

Pitch Session . (Chair Peter Mergaert)

14h50-15h05 **Arthur Loup, Vincent Mariaule, Ombeline Rossier**

Session 5 - Ecology and Evolution cont. (Chair Peter Mergaert)

15h05 - 15h30 **Elodie Ramond (GM)**

Characterization of the molecular machinery involved in the synthesis of uracil-containing genomes in bacteriophages

15h30 - 15h55 **Eric Pelletier (LAGE-genoscope)**

Ocean-omics - Exploring marine plankton biology from sequences to communities within Tara Ocean

Poster Session- Drinks - Closing

15h55 - 18h30