

12TH INTERNATIONAL CONGRESS OF PLANT PATHOLOGY

20 - 25 August 2023, Lyon, France



SATELLITE EVENT:

Understanding the ecology and evolution of bacterial wilt disease in the plant microbiomes



Organisers (left to right)

Prof. Ville-Petri Friman (Professor in Microbiology, ville-petri.friman@helsinki.fi.)¹

Dr. Andrea Harper (Lecturer in Plant Biology, andrea.harper@york.ac.uk)²

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Event details: 1 day (**Sunday 20th August 2023**), 50-100 people

Summary: *Ralstonia solanacearum* is one of the most destructive bacterial plant pathogens worldwide, causing bacterial wilt and major crop losses, especially in the solanaceous plant family. While a solid understanding of the molecular interactions between the pathogen and crop plants have been established, these interactions are poorly understood in more complex rhizosphere microbiomes. Moreover, while increasing evidence suggests that plant-pathogen interactions can evolve rapidly, this

is seldom recognised in the context of plant pathogen control. In this session, we will bring together experts from microbiome research, systems biology, plant pathology, experimental evolution and plant pathogen biocontrol to build a multidisciplinary view of the ecology and evolution of *R. solanacearum* in rhizosphere microbiomes. We aim to produce a holistic summary of how ecological and evolutionary information could be harnessed for bacterial wilt biocontrol and to identify key environmental drivers associated with disease outbreaks. We also welcome researchers interested in *R. solanacearum* pangenome to better understand its genetic diversity in space and time. **We kindly ask early career researchers (ECRs) that want to submit a short talk for the satellite event to contact one of the organisers.**

AGENDA

- 9-9:15 Welcome
- 9:15 am-10:45 am Session 1. *Ralstonia solanacearum* evolution
 - 9:15-9:35 - Invited speaker:** Dr. Alice Guidot (LIPME, Université de Toulouse, INRAE, CNRS)
 - 9:35-9:55 - Invited speaker:** Dr. Tiffany Lowe-Power (UC Davis)
 - 9:55-10:15 - Invited speaker:** Prof. Ville Friman (University of Helsinki/University of York)
 - 10:15-10:30 - Two-three short talks 5 min/each (PhDs/Postdocs/ECRs)**
 - 10:30-10:45 - Panel discussion and Q&A for speakers:** Dr. Alice Guidot, Dr. Tiffany Lowe-Power, Prof. Ville Friman, +2/3 ECRs.
Moderator: Andrea Harper
- 10:50am -11:15am Coffee break
- 11:15am-12:30pm Session 2. Interactions between *Ralstonia solanacearum* and the plant microbiome
 - 11:15-11:35 - Invited speaker:** Prof. Wei Zhong (Nanjing University)
 - 11:35-11:55 - Invited speaker:** Dr. Clara Torres-Barcelo (INRAE)
 - 11:55-12:10 - Two-three short talks 5 min/each (PhDs/Postdocs/ECRs).**
 - 12:10-12:30 - Panel discussion and Q&A for speakers:** Dr. Wei Zhong, Dr. Clara Torres-Barcelo, +2/3 ECRs.
Moderator: Ville Friman
- 12:30pm -1:45pm Lunch break/Networking session
- 1:45pm-3pm Session 3. Plant responses to *Ralstonia solanacearum*
 - 1:45-2:05 - Invited speaker:** Prof. Marc Valls (CRAG)
 - 2:05-2:25 - Invited speaker:** Dr. Andrea Harper (University of York)
 - 2:25-2:40 - Two-three short talks 5 min/each (PhDs/Postdocs/ECRs)**
 - 2:40-3:00 - Panel discussion and Q&A for speakers:** Prof. Marc Valls, Dr. Andrea Harper, +2/3 ECRs.
Moderator: Sara Franco Ortega
- 3-3:30pm Coffee break
- 3:30pm-4:45pm Session 4. The era of the big data – New technologies to analyse and understand bacterial wilt disease
 - 3:30-3:50 - Invited speaker:** Dr. Remi Peyraud (iMEAN)
 - 3:50-4:10 - Invited speaker:** Dr. Stephane Genin (Toulouse)
 - 4:10-4:25 - Two-three short talks 5 min/each (PhDs/Postdocs/ECRs)**

4:25-4:45 - Panel discussion and Q&A for speakers: Dr. Remi Peyraud, Dr. Stephane Genin +2/3 ECRs.

Moderator: Ville Friman

- 4:45pm -5:00pm **Closing session with highlights and presentation awards for ECRs**
- ICPP Welcome Reception starts at 6 pm