



## ***PROGRAM***

# **INTERNATIONAL SYMPOSIUM ON FIRE BLIGHT OF ROSACEOUS PLANTS- ISFB2016**

**July 5 to 8, 2016**

**Science and Technology Park (STP)  
(Auditorium, Narcís Monturiol building)  
University of Girona  
Girona (Spain)**

## **PROGRAM**

### **Tuesday, July 5<sup>th</sup>**

- 10:45** Bus from Girona to the Park  
(meeting point in front of the Correus building)
- 11:00-12:30** **Registration** (Hall Monturiol building)
- 12:30-13:00** **Official opening** (Auditorium)
- 13:00-15:00** **Lunch** (Giroemprèn building, ground floor)
- 15:00-17:30** **Overview on fire blight and *Erwinia amylovora***  
(Auditorium, Narcís Monturiol building) Chair: Emilio Montesinos.
- 15:00-15:30 **Comparative genomics of *Erwinia* species.**  
Theo Smits. Zurich University of Applied Sciences, Switzerland.
- 15:30-16:00 **Breeding for host resistance to fire blight.**  
Markus Kellerhals. Agroscope, Institute for Plant Production Sciences,  
Wädenswil, Switzerland.
- 16:00-16:30 Coffee break
- 16:30-17:00 **Use of decision support systems for fire blight management.**  
Dani Shtienberg. ARO theVolcani Center, Israel.
- 17:00-17:30 **Improving fire blight control by knowing *Erwinia amylovora* epidemiology  
in the European Union countries.**  
Maria M. López. Instituto Valenciano de Investigacions Agrarias-IVIA, Spain.

- 17:30-18:30**     **Beer tasting (Narcís Monturiol building entrance)**  
**18:30**           **Bus from STP to Girona**  
**20:45**           **Bus from Girona to Social dinner**  
**21.00-24:00**    **Social Dinner (Siloc restaurant, La Creueta)**  
**24:00**           **Bus from restaurant to Girona**

## **Wednesday, July 6<sup>th</sup>**

- 8:30**            **Bus from Girona to STP**
- 9:00-11:30**    **Genetics and Genomics**  
Chairs: Brion Duffy and George Sundin
- 9:00-9:30**     **Keynote: Transcriptional and post-transcriptional regulation of the T3SS in *Erwinia amylovora*.** Youfu (Frank) Zhao. University of Illinois, USA.
- 9:30-10:30**    Oral presentations
- Towards the understanding of iron uptake and siderophore biosynthesis in *Erwinia amylovora*. Ivan Polsinelli, Marco Salomone-Stagni, Joseph Dale Bartho, and Stefano Benini.
- The structural biology of *Erwinia amylovora* desferoxamine biosynthetic pathway at a glance. Marco Salomone-Stagni, Joseph Dale Bartho, and Stefano Benini.
- Polymorphism of the VNTR F region of *Erwinia amylovora* and comparison between some VNTR F and CRISPR-groups. Nataliya Drenova, Galina Matiashova, Denis Belkin, Maxim Kondratyev.
- 10:30-11:00**   **Coffee break**

11:00-11:30 Oral presentations

Regulation of flagellar motility by the small RNA ArcZ in *Erwinia amylovora*.  
Jeffrey Schachterle, Quan Zeng, and George W. Sundin.

**11:30-12:00 Poster viewing**

**12:00-13:00 Round table:** The genome of *E. amylovora*. An update.

**13:00-15:00 Lunch** (Giroemprèn building, ground floor)

**15:00-18:00 Session-Pathogen/Microbe/Plant Interactions and plant breeding** Chairs:  
Joanna Pulawska and Andreas Peil

**15:00-15:30 Keynote: Role of cyclic di-GMP in *Erwinia amylovora* – apple interactions.**  
George Sundin. Michigan State University, USA.

15:30-16:30 Oral presentations

The *Malus fusca* fire blight resistance locus: validation of *Mfu10* and genetic resolution of the region containing the locus. Ofere Francis Emeriewen, Klaus Richter, Mickael Malnoy, Magda-Viola Hanke, and Andreas Peil.

Functional roles of *Erwinia amylovora* catalases during plant-pathogen interactions and exposure to starvation. Ricardo D. Santander, Àngela Figàs-Segura, and Elena G. Biosca.

Comparative analysis of transcriptomes of *Erwinia amylovora* in planta, on two apple cultivars of different susceptibility to fire blight. Joanna Pulawska, Monika Kalużna, Wojciech Warabieda, and Artur Mikiciński.

16:30-17:00 Coffee break

17:00-18:00 Oral presentations

Testing of resistance of pome fruit cultivars after artificial inoculation with *Erwinia amylovora* in field conditions. Jana Sillerova, Josef Korba, Jiri Sedlak, Frantisek Paprstein, Ales Matejcek, and Tomas Necas.

Modulating the plant-pathogen interaction using antimicrobial peptides to control fire blight. Esther Badosa, Laura Montesinos, Lidia Ruz, Jordi Cabrefiga, Jesús Francés, Beatriz Gascón, Cristina Camó, Marta Planas, Lidia Feliu, and Emilio Montesinos.

Functional analysis of the fire blight effector protein AvrRpt2<sub>EA</sub> in apple. Susan Schröpfer, Thomas Wöhner, Dieter Treutter, Magda-Viola Hanke, Andreas Peil, and Henryk Flachowsky.

18:00-18:30 Poster viewing

18:30 Bus to Girona

19:30-21:00 Girona Downtown Visit (meeting point at Vicens Vives square)

## Thursday, July 7<sup>th</sup>

8:30 Bus from Girona to the STP

9:00-12:30 **Epidemiology and Decision Support Systems**  
(Chairs: Fabio Rezzonico and Maria M. López)

9:00-9:30 **Keynote: Perspectives on streptomycin-resistant *Erwinia amylovora* in New York.** Kerik Cox. Cornell University, USA.

9:30-10:30 Oral presentations

Tracking of *Erwinia amylovora* dissemination in Eastern Europe and central Asia using CRISPRs. Fabio Rezzonico, Nataliya Drenova, Inga Morocko-Bicevska, Laima Baranauskaite, Anita Végh, Aboubakr Moradi, Hatice Ozaktan, Zhansaya Umiraliyeva, and Galiya Zharmuhamedova.



Epidemiology of fire blight (caused by *Erwinia amylovora*) in the Pink Lady® apple cultivar in Israel. Mery Dafny Yelin, Orly Mairesse, Judit Moy, Miriam Silberstein, Shulamit Manulis-Sasson, and Dani Shtienberg.

New host for *Erwinia amylovora* in wild plants: first detection in *Pyrus bourgaeana* (Iberian wild pear). E. Marco-Noales, J. Peñalver, I. Navarro, M.T. Gorris, C. Morente, C. Balguerías, J.A. Ramírez, C. Recio, T. Ruiz de la Hermosa, R. Sancho, C. Aedo, and M.M. López.

Monitoring *Erwinia amylovora* in Southern Germany, Switzerland and Austria during the blossoming periods since 2010. Stefan Kunz, David Szalatnay, Klaus Altherr, Eduard Holliger, Béatrice Schoch, Dennis Mernke, Urs Müller-Widmer, Richard Hollenstein, Nina Thomas, Markus Hunkeler, Daniel Schnegg, Louis Suter, Hans-Jakob Schärer, Ulrich Höfert, Klemens Böck, Karin Wudler, Christian Scheer, Sonja Weißhaupt, Malin Hinze, and Peter Triloff.

10:30-11:00 Coffee break

11:00-12:30 Oral presentations

Ocurrence of fire blight disease on Asian pear caused by *Erwinia amylovora* in Korea. Duck Hwan Park, Ji-Gang Yu, Kyu-Suk Han, Eom-Ji Oh, Mi Chi Yea, Seong Jin Lee, and Chang-Sik Oh.

The incidence and prevalence of fire blight in apple trees in Lake Van Basin, Turkey. Ahmet Akköprü and Cevdet Kipçak.

Effect of low temperatures on *Erwinia amylovora* virulence and starvation responses. Ricardo D. Santander, and Elena G. Biosca.

A microbiological examination of *Erwinia amylovora* exopolysaccharide ooze. Suzanne M. Slack, Quan Zeng, Cory A. Outwater, and George W. Sundin.

Differential fitness of *Erwinia amylovora* isolates carrying different variants of the *rpsL* gene leading to high level of streptomycin resistance. Mireia Marcé Escursell, Virginia O. Stockwell, Theo H.M. Smits, and Fabio Rezzonico.

Shifts in the prevalence of streptomycin-resistant *Erwinia amylovora* on pear in Oregon, USA. Virginia O. Stockwell

- 12:30-13:00**      **Poster viewing**
- 13:00-15:00**      **Lunch** (Giroemprèn building, ground floor)
- 15:00-18:00**      **Control Strategies**  
Chairs: Virginia Stockwell and Stefan Kunz
- 15:00-15:30      **Keynote: Non-antibiotic strategies for fire blight control in the USA.**  
Kenneth Johnson. Oregon State University, USA.
- 15:30-16:30      Oral presentations
- Integration of biological control agents and plant defense activators against fire blight in Morocco. Ait Bahadou Smail, Oujja Abderrahmane, Boukhari Mohammed Amine, and Tahiri Abdessalem.
- Field trials for fire blight control in the experimental orchard “Kirschgartshausen”. Arno Fried, Annette Wensing, Dennis Mernke, and Wilhelm Jelkmann.
- Experiences with Kasumin for fire blight control in Michigan. Cory A. Outwater and George W. Sundin.
- Contribution of native plasmids of *Pantoea vagans* strain C9-1 to fitness and biocontrol efficacy in apple and pear orchard trials. Jeannie M. Klein, Joyce E. Loper, Kenneth B. Johnson, and Virginia O. Stockwell.
- 16:30-17:00      Coffee break
- 17:00-18:00      Oral presentations
- Further results on SAR-inducing tree paints as a therapy to aid restoration of tree health after fire blight infection. Todd N. Temple and Kenneth B. Johnson.
- Osmoadaptation increases the performance of *Bacillus amyloliquefaciens* EPS2017 for biological control of fire blight . Jordi Cabrefiga , Isabel Mora, and Emilio Montesinos.

*Lactobacillus plantarum* strains as efficient biocontrol agents of fire blight. Núria Daranas, Gemma Roselló, Esther Badosa, Jordi Cabrefiga, Jesús Francés, Emilio Montesinos, and Anna Bonaterra.

Control of fire blight in Norway 1986-2015. P. Sletten, V. Talgø, T. Rafoss, and N.S. Melbøe.

- 18:15-19:00**      **Overview** (chairs of the sessions)
- 19:00-19:15**      **Next meeting and official closure**
- 19:15-20:15**      **Human towers exhibition**  
(green area between Giropemprèn and Casademont buildings)
- 20:15**              **Bus from STP to the restaurant BBQ**
- 21:00-01:00**      **BBQ and Show** (Mas Bes restaurant and farmers house)
- 01:00**              **Bus from restaurant to Girona**

## Friday, July 8<sup>th</sup>

- 8:15**                Bus departure from Girona
- 9:00-11:20**      **Visit to Mas Badia Agricultural Experimental Station (IRTA), La Tallada d'Empordà (Girona)**
- 11:20-11:40**      Coffee break
- 11:40-12:45**      **Visit to a Fruit-tree Cooperative, Torroella de Montgri (Girona)**
- 13:00-15:00**      **Lunch** (back to Girona)
- 15:00**              Return to Girona (estimated arrival at 15:45)