



FORTHEM Winter School

'Cellular Signaling - Dynamic Processes in Living Cells'

October 12-13, 2026 at Unipa in Palermo

Program

Sunday 11th October 2026

Arrival day for on-site speakers/attendants

Welcome dinner at 19:30 onwards

Monday 12th October 2026

Venue: Sala delle Capriate at Complesso Monumentale Steri

Piazza Marina, 60, 90133 Palermo PA

9:00: *Welcome*

• Session 1

9:30-10:20: **Dirk Schneider:** Shedding Light on Cyanobacterial Membrane Dynamics + **Dhana Süss:** One family, multiple assemblies? Exploring the role of SPFH proteins in cyanobacterial membrane organization + **Dennis Unte:** Thylakoid membrane-localized ion channels involved in modulating the transmembrane ΔpH

10:20-10:50: **Clara Laubenstein:** Molecular Mechanisms of Fungal Signaling + **Milena Runge:** One MAPK, Many Signals: Signal Transduction in the HOG Pathway of *Magnaporthe oryzae*

10:50-11:10: *Coffee Break*

11:10-11:40: **Varpu Marjomäki:** The discovery and testing of antivirals

11:40-12:10: **Janis Liepins (online):** Purine depletion activated cell arrest, lessons learned from yeast

12:10-13:30: *Lunch break*

• Session 2

13:30-14:15: **Gerard Manière:** How Food shapes the nervous system in *Drosophila* + **Adrien Franchet:** Brain plasticity under food restriction in *Drosophila* + **Julie Ebert:** How amino acids control brain development in *Drosophila*.

14:15-15:00 **Benoit Poinssot**: VvLYKs: Functional characterization of LysM Receptor-Like Kinases in *Vitis vinifera* and their role in grapevine immunity + **Tania Marzari**: The Unfolded Protein Response in *Vitis vinifera*: a conserved yet distinct signalling network activated by multiple stresses

15:00-15:20: *Coffee Break*

15:20-16:10: **Heikki Takala**: Bacterial two-component signaling systems and their application to optogenetics

16:10: *Students Quiz Day 1*

Dinner for invited speakers at 19:00 – 22:00

Tuesday 13th October 2026

• Session 3

9:30-10:15: **Fabio Platz**: Understanding bacterial communication for biotechnological breakthroughs + **Jessica Bohler**: First insights into the ability of *Porphyromonas gingivalis* to reshape oral biofilms by extracellular vesicles

10:15-11:00: **Nazzareno Dominelli**: Exploring Cutaneous T-Cell Lymphoma Progression Through Its Association with *Staphylococcus aureus* + **Alina Breunig**: Understanding and Targeting *Staphylococcus aureus* in CTCL - A Closer Look at Protein A-IgG Binding and Antibiotic Synergies

11:00-11:20: *Coffee Break*

11:20-11:35: **Sarra Rafai**: Fermented Dietary Fibers as Modulators of mycotoxins Aflatoxin B1 and Ochratoxin A Toxicity in vitro

11:35-12:05: **Ethan Reece**: Introduction to Cilia and possible non ciliary functions, + **India Huß**: Why is the Cilia protein BBS6 so special

12:05-13:30: *Lunch break*

• Session 4

13:30-14:00: **Helen May-Simera** (online): Ciliary Signaling via Extracellular Vesicle

14:00-14:45: **Isamel Mingarro**: Designing membrane protein interactions to modulate apoptosis + **Marina Rius** (online): Interaction and Permeabilization: Two faces of Harakiri's transmembrane domain in apoptosis

14:45-15:15: **Valeria Alduina & Viviana Barra**: From Cell signaling to new collaborations

15:15: *Students Quiz Day 2*

Greetings and Closing Remarks with Coffee