



COST ACTION TRAINING SCHOOL 2025

IMAGING AND REPRODUCTION IN ARABIDOPSIS AS A MODEL FOR TRANSLATIONAL RESEARCH

July 8th-9th, 2025

Department of Biosciences and UNITECH NOLIMITS
microscopy facility

University of Milan, Milan, Italy

[Via Celoria 26, 20133 Milan](#)

Course in English

The training school in Imaging and Reproduction from Arabidopsis to Crop-like Species is specifically designed for PhD students with a basic knowledge of optical microscopy and plant reproduction. The course will consist of theoretical lessons in the morning, followed by practical exercises related to the topics covered during the morning sessions in the afternoon.

Participants will have the opportunity to present their PhD project with a poster during the coffee break on the first day.

Program

Tuesday, July 8th

- Introduction on optical microscopy and fluorescence
- Advanced 3D imaging in plant reproductive tissues
- Micromanipulation and live imaging of single cells in the embryo sac
- Imaging seed development under abiotic stress conditions
- Monitoring plant reproduction under the microscope

Wednesday, July 9th

- Overview on optical microscopes and potentiality
- Genetically Encoded Fluorescent Indicators (GEFIs)
- Advanced imaging techniques to study Calcium and ROS dynamics in plant tissues
- Translational research from Arabidopsis to economically relevant species
- Approach to novel high and low magnification systems

Instructors

Researcher *Daphné Autran*, daphne.autran@ird.fr, IRD Research Institute Montpellier, France

Post Doc. *Manuel Buendía Monreal*, manuel.buendia@unimi.it, University of Milan, Italy

Assist. Prof. *Ignacio Ezquer*, juan.ezquer@unimi.it, University of Milan, Italy

Post Doc. *Alex Cavalleri*, alex.cavalleri@unimi.it, University of Milan, Italy

Assist. Prof. *Alessia Candeo*, alessia.candeo@polimi.it, Politecnico di Milano, Italy

Full Prof. *Alex Costa*, alex.costa@unimi.it, University of Milan, Italy

Assist. Prof. *Stephan Wagner*, swagner@uni-bonn.de, University of Bonn, Germany

Post Doc. *Stefano Buratti*, stefano.buratti@unimi.it, University of Milan, Italy

Registration

Registration is free. Deadline is May 8th, 2025

There are 15 participant spots. Travel grants are available for selected participants. Selection of awardees is handled directly by the organizers based on the quality of the submitted abstract.

Note

Attendees are expected to bring a poster in which they present their PhD project to the training school.

Accommodation

We are pleased to inform participants that Hotel Città Studi is offering special discounted rates for attendees of the PhD Training School.

The hotel is conveniently located near the university and provides comfortable accommodation within walking distance of the event venue.

We encourage participants to book early to take advantage of these rates.

Detailed Program

Tuesday, July 8th

09.00-09.20_ Registration

09.20-09.30_ Welcome

9.30-10.30_ Dr. Daphne Autran

10.30-11.00_ Dr. Manuel Buendía Monreal

11.00-11.45_ coffee break + poster session

11.45-12.30_ Prof. Ignacio Ezquer

12.30-13.00_ Dr. Alex Cavalleri

13.00-14.00_ Lunch + poster session

14.00-18.00_ Practical session UNITECH NOLIMITS

20.00_ Social dinner

Wednesday, July 9th

09.00-09.45_ Prof. Alessia Candeco

9.45-10.45_ Prof. Alex Costa

10.45-11.15_ coffee break + poster session

11.15-12.15_ Prof. Stephan Wagner

12.15-12.45_ Dr. Stefano Buratti

12.45-13.00_ Concluding Remarks

13.00-14.00_ Lunch + poster session

14.00-18.00_ Practical session UNITECH NOLIMITS