

COST Action CA18111 "Genome Editing in Plants"

## 2<sup>nd</sup> WG1 PlantEd Training School

**Date:** 7 – 8 September 2022

**Place:** Heinrich Heine University, Dusseldorf, Germany

### Objectives

The 2<sup>nd</sup> WG1 Training School will focus on tools for successful CRISPR design, *in silico* cloning, vector construction, screening of DNA mutations and data analysis. The main objective is to equip participants with a complete set of experimental considerations and best practices to enable them to set-up targeted mutagenesis experiments in their own labs. Existing data of targeted mutagenesis approaches will be used to get a deeper understanding of the toolbox available to date. During the course, several online platforms and software applications useful for the individual steps will be introduced.

### Expected outputs

Participants will gain basic theoretical and practical experience in targeted mutagenesis using CRISPR-Cas technology in plants. They will be trained by experts in the field having multiple years of experience performing genome editing in a variety of plant species.

### Venue and Dates

The Training School will take place at Heinrich Heine University, Dusseldorf, Germany. It will follow immediately after the 3<sup>rd</sup> PlantEd Conference. Therefore, only conference attendees can apply to participate in this training school.

Call launched: 20 June 2022

Application deadline: 15 July 2022

Expected decision: 30 July 2022

Training School: 7-8 September 2022

This call is open to all Action participants, but priority will be given to students/postdocs. The number of trainees attending the Training School is limited to 13. The number of trainers eligible for reimbursement is limited to 6.

**Note:** Only PlantEd participants are eligible for reimbursement for a PlantEd activity. Therefore, if you are not a PlantEd participant but would like to apply for this Training School, you will first have to log in at e-COST and register as a PlantEd participant.

## Financial support

Only attendees for the 3<sup>rd</sup> PlantEd Conference can apply for funding. As this will include the financial support of the attendees to cover travel costs, including airfare, accommodation, local transport and meals. Therefore, just the daily allowance fee will be extended by one day.

There is no course fee applied to this Training School.

Following the COST rules, the grant is paid after the Training School has been completed and the participant has submitted a Travel Reimbursement Request (TRR) via e-COST. The grant will be paid directly to the bank account entered into the e-Cost system.

## How to apply

Applications are submitted via e-mail to the organizer, Dr Götz Hensel [goetz.hensel@hhu.de](mailto:goetz.hensel@hhu.de).

The application should contain the following parts:

- CV (maximum two pages)
- Short description of the applicant's field of work, the motivation for participating in this Training School, and how the knowledge learned will be applied by the applicant (maximum one page).

## Evaluation of applications

The evaluation of the applications is performed jointly by the Training School organizer, the WG1 leaders, the Action Chair and the ECI Coordinator. The following evaluation criteria will be considered in order of importance: 1) how the Training School will contribute to the

professional development of the applicant, 2) geographical balance, and 3) gender balance. The Training School's local organizer will inform every applicant of the evaluation outcome by email. Selected trainees will receive further information on the programme and logistical arrangements.

## Contact

For more information and enquiries, please do not hesitate to contact Dr Götz Hensel (goetz.hensel@hhu.de).

## Tentative program

### **Wednesday, 7 September 2022, afternoon session**

General introduction on how a typical CRISPR-Cas experiment looks like (Goetz Hensel)

Introduction and training on efficient gRNA design (Mark Smedley/Thomas Jacobs)

### **Thursday, 8 September 2022**

Introduction and exercise on *in silico* cloning and vector construction (Mark Smedley/Thomas Jacobs)

Typical transformation protocols used for targeted mutagenesis experiments (Lecture by Sadiye Hayta)

Challenges in gene editing of woody plants (Lecture by Vladislava Galovic)

Analysis and screening methods to detect edits and identify mutants (Katrijn van Laere/Evelien Waegneer)

Training school end – 17.00