

# Hybrid Training School in Gene Annotation & Manual Curation of the Grape Reference Genome



## Annot' Training School

28th June to 1st July 2022

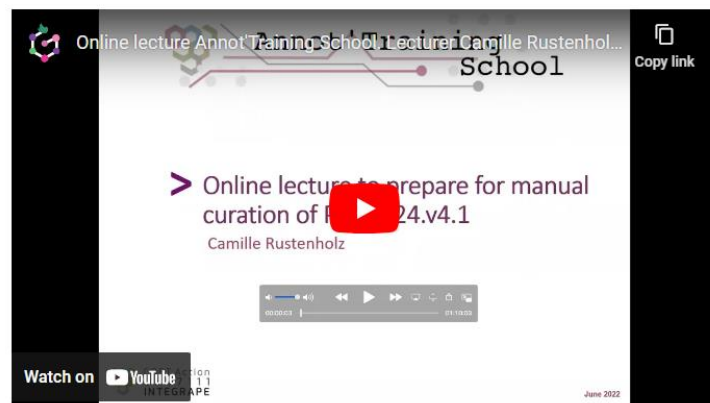
Photographic Testimonials



Trainers & Expert Trainees



Pre-start Lecture



OVERVIEW

**TITLE:** Annot' Training – Hybrid Training School in Gene Annotation & Manual Curation of the PN40024 Grape Reference Genome

**DATE:**  
June 28<sup>th</sup> – July 1<sup>st</sup> 2022

**VENUE:** CITA Aragón and CIHEAM, Zaragoza, Spain

**BRIEF PROGRAM:**

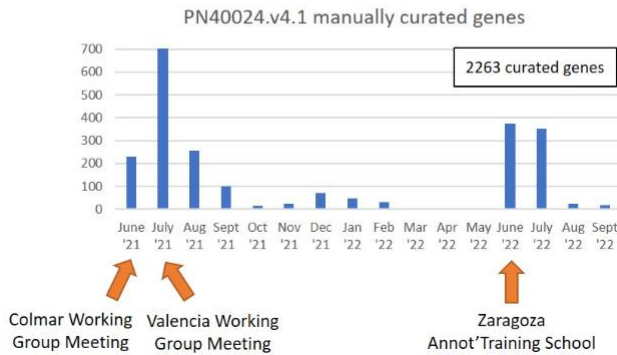
The Annot' Training School will teach a group of Expert Trainees how to perform manual annotation of grapevine genes from the reference genome using the Apollo Genome Annotation Viewer and Editor, following guidelines developed during the INTEGRAPE workshop held at Colmar in 2021. These Expert Trainees will also be trained in the dissemination of the annotation procedure, which will be practiced with a group of Online Trainees from around the world in an online format during the second half of the Training School.

The Training School will be used for in situ application of the set of best practices for grapevine genome annotation. The two-part sessions will work in a "train-the-trainer" approach to provide researchers from the grapevine community with the opportunity to replicate the outcomes of the Training School in their own environment. The work will be disseminated through the website (<http://www.integrape.eu>), social media (Facebook, Twitter), as well as through webinars and at the XIII International Symposium on Grapevine Breeding and Genetics in Landau, Germany in 2022.

## OUTPUT

GREAT was introduced to the grapevine community during the METHADA eHandsOn Training School and since then, the interface counts 37 users from 13 different countries.

The Working Group Meeting in Colmar was organized in June 2021 and the Apollo interface used for manual curation of the PN40024.v4.1 genes was set up. During this event, the group of experts in manual curation drafted dedicated guidelines. These guidelines were tested during the Working Group Meeting in Valencia in July 2021 and then disseminated and applied to teach 50 trainees during the AnnotTraining School in Zaragoza.



## PROGRAM

AnnotTraining School - Draft Program					
** All times are in Central European Time (GMT+2)					
Time	Monday June 27th	Tuesday June 28th	Wednesday June 29th	Thursday June 30th	Friday July 1st
9am		Introduction	Train 3 EU	Train 1 Australasia	Train 2 Australasia
12:30pm		Lunch	Lunch	Lunch	Lunch
2pm		Train 2 EU	Train the trainers EU	Train 1 Americas	Train 2 Americas
5:15pm					

Module 1

Module 2

**Objective:** Using the "Train-the-trainer" approach, Trainers will train the Expert Trainees who will in turn train the Online Trainees.

A pre-recorded Introductory Lecture will be provided before the Training School takes place and will be mandatory for Expert Trainees and Online Trainees to attend this beforehand.

The manual curation guidelines will also need to be read before the Training School takes place, at: <https://integrape.eu/resources/data-management/>

The training sessions of Module 1 will be conducted for the 10 Expert Trainees only in the presence of Trainers. Module 2 will involve Trainers, Expert trainees and Online Trainees

### Module 1: Train the Expert Trainee

#### Session 1 (June 28<sup>th</sup>)

- Introduction summarising the main points of the lecture regarding PN40024.v4 assembly, PN40024.v4.1 gene annotation, the goals of performing manual curation and the manual curation guidelines.
- Getting familiar with the JBrowse/Apollo interface, the different tracks and the various tools to perform accurate manual curation.
- Assign a set of genes to each Expert Trainee to perform manual curation under the supervision of the Trainers.

#### Session 2 (June 29<sup>th</sup>)

- Ongoing manual curation for the Expert Trainees to gain expertise (under the supervision of Trainers).
- Share and work collectively on difficult cases that the Expert Trainees may find.
- *Train-the-trainer* section: share the slides that were used by the Trainers during Session 1 with the Expert Trainees and discuss the essential steps of annotation training.

### Module 2: Train the Online Trainee

#### Session 1 (June 30<sup>th</sup>)

- Each Expert Trainee will be in charge of teaching manual curation to one Online Trainee in the morning and one in the afternoon (Trainers will supervise 2 Expert Trainees each).
- Assign a set of genes to each Online Trainee to perform manual curation under the supervision of an Expert Trainee (who is in turn under Trainer guidance).

#### Session 2 (July 1<sup>st</sup>)

- Expert Trainees will help and supervise Online Trainees to gain expertise with manual curation (under Trainer supervision).

CONTACTS



Camille Rustenholz  
INRAE



Jérôme Grimplet  
CITA-Aragon

**Camille Rustenholz**  
INRAE Colmar- University of Strasbourg  
28 Rue de Herrlisheim, 68000 Colmar, France,  
[camille.rustenholz@inrae.fr](mailto:camille.rustenholz@inrae.fr)

**Jérôme Grimplet**  
Centro de Investigación y Tecnología Agroalimentaria de Aragón  
Avda. Montañana 930  
50059 – Zaragoza, Spain  
Phone: +34 976 71 3635  
[jgrimplet@cita-aragon.es](mailto:jgrimplet@cita-aragon.es)

**Other Trainers in Gene Annotation & Manual Curation**

David Navarro-Payà  
José Tomás Matus  
Luis Orduña  
Institute for Integrative Systems Biology, Valencia, Spain