**DATE:** June 15th – 17th, 2022

**Venue:** Online!

**Host:** Fondazione Edmurch Mach, San Michele all’Adige, Italy

**BRIEF PROGRAM:**

After the success of the first METABO-OPEN Training School, which was followed by more than 100 people with 30 trainees for the hands-on sessions, we now propose a revised second edition of the school, full of new content, in order to implement best practices in managing data and metadata in metabolomics.

On Day 1 there will be plenary lectures concerning tools for data phenotyping and experimental design, workflow for untargeted metabolomics including preprocessing and quality assessment, spectral libraries, metabolite annotation, and identification; lectures on the role and the use of MetaboLights in hosting metabolomics studies, and applied examples of metabolomic studies in grapevine.

During the hands-on Days 2 and 3, reserved for a maximum of 30 trainees, there will be special classes on R and XCMS, MS-Dial, Metabo Analyst, MetaboLights, and metabolite annotations.

The work will be disseminated through the website (http://www.integrape.eu), social media (Facebook, Twitter), as well as through webinars.
DAY 1: 15 June 2022

Introductory part I. This part is open to a wider public.
Morning session 9:00 to 12:00 (Central European Time)
- Fulvio Mattivi [9.00 – 9.30] Introduction to FAIR data management in metabolomics and actual viticulture and wine science situations. PDF
- Éric Duchêne [9.30 – 10.10] How to describe a grapevine experiment and sample metadata. PDF
BREAK 30 min
- Pietro Franceschi [10.40 – 11.10] Experimental Design

Afternoon session 14:30–16:30 (Central European Time)
BREAK 20 min
- Pietro Franceschi [15.50 – 16.10] Introduction to Data Fusion.

DAY 2: 16 June 2022

Morning session 9:00 to 12:00 (Central European Time)
Hands-on activity: A guided walkthrough: a real data analysis task
- Group 1: R and XCMS (Pietro Franceschi, Mar García-Aloy)
- Group 2: GUI/web-based analysis (Panagiotis Arapitsas, Marynka Ulaszewska, Christina Virgillou)

Afternoon session 15:00–17:00 (Central European Time)
- continuous from the morning session

DAY 3: 17 June 2022

Morning session 9:00 to 12:00 (Central European Time)
Hands-on activity: A guided walkthrough: a real data analysis task
- Group 1: Day-life lab activities coaching (Panagiotis Arapitsas) PDF
- Group 2: Annotation and structure elucidation coaching (Marynka Ulaszewska) PDF

Afternoon session 14:30–17:00 (Central European Time)
- Group all: Metabolights uploading (Thomas Payne, Felix Amaladoss, Stefania Savoi)
- Final remarks

SELECTION CRITERIA OF TRAINEES

Evaluation of applications will be based on the following criteria:

- Postdocs, PhD students, PIs, and bioinformaticsians working in metabolomics related to grapevine with a high motivation to spread these good practices learned during the training school.
- A maximum of 30 trainees will be selected for the practical parts (day 2 and 3) based on a motivation letter or reason to participate

The training school is free to attend, but travel expenses will not be reimbursed as the training school will be online.

CONTACTS

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