

1st Meta_Microbial Workshop

Metagenomic and bioinformatic insights into microbial communities

July 4 – 5, 2023

Porto, Portugal

Workshop Report – ISME Ambassadors Program

September, 12th, 2023

Event webpage: <https://www2.ciimar.up.pt/events.php?id=423>

Organizing institutions:

- Interdisciplinary Centre of Marine and Environmental Research (CIIMAR)
- Faculty of Sciences, University of Porto (FCUP)

REPORT

The Meta_Microbial workshop was organized by Miguel Semedo (junior researcher at CIIMAR), Catarina Magalhães (senior researcher at CIIMAR and assistant professor at FCUP), and the CIIMAR PhD Students Committee (represented by Rúben Pereira and Rafaela Mendes).

The workshop was held in-person, at FCUP, during two days (July 4-5, 2023), and aimed at providing academic researchers, students, and fellows with an overview of current tools to analyze next-generation sequence data and to make insightful interpretation towards the fields of microbial ecology and environmental microbiology.

A total of 48 people attended the workshop, affiliated with 13 institutions. Around 42% were PhD students, 19% postdocs, 13% MSc students, among others. Around 90% of the attendants had no previous experience or only occasionally performed next-generation sequencing (NGS) analysis of microbial communities, representing an opportunity for introducing and discussing the associated methodologies with a new audience of emerging researchers.

With the ISME sponsorship of 600 € we were able to cover important operational expenses (see reimbursement form), which allowed us to offer 14 registration fee

waivers (in a total value of 420€) to participating students and early-career researchers without project funds to independently support participation. This support was highlighted during the opening session, through a presentation of the Portuguese ISME Ambassador (Rodrigo Costa), in which the ISME Symposium, the ISME Journal and the ambassadors' program were introduced to the audience. The ISME logo was shared through multiple dissemination channels (e.g. CIIMAR's website, Twitter and Facebook accounts) before, during and after the workshop.

The workshop covered diverse topics, such as introduction to sequencing technologies, introduction to R in the context of microbial ecology and metagenomics, metabarcoding analysis, phylogenetic trees, functional inference, shotgun metagenomics, and online resources. The format of the workshop consisted of a series of lectures, paper discussions, and practical examples, given by the instructors Adriana Rego (PhD student), Francisco Pascoal (PhD student), and Miguel Semedo (junior researcher).

Around 89% of the participants rated the overall satisfaction of the workshop as “very-good” or “excellent” and all sessions had positive feedback. Most participants, however, recommended that the workshop should have one or a few more days of duration and more “hands-on” sessions. We collected this information through a post-workshop anonymous survey, and will incorporate in the planning of future similar workshops.

Please do not hesitate to contact us if you need further details.

Best regards,



Miguel Semedo (workshop coordinator)



Rodrigo Costa (ISME Ambassador)