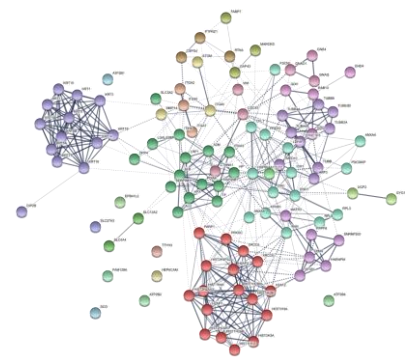


## SUS-MIRRI.IT Training Courses

Study of microbial communities in freshwater: from isolation to -omics

Organiser: CNR-IRSA Verbania

22-24 April 2024



**Where:** online, <https://l.cnr.it/mgu6o>

**Teachers:** Dr. Cristiana Callieri, Dr. Ester M. Eckert, Dr. Emanuele Ferrari, Dr. Laura Garzoli, Dr. Sven Iburg

### Program

#### Monday, April 22<sup>nd</sup>

*Module 1:* Aquatic microbial communities isolation and assessment methods.

- 10.00 – 12:00 Methods for isolating fungi and bacteria from aquatic ecosystems (Dr. Laura Garzoli, Dr. Sven Iburg)
- 15.00 – 16.00 Marine and freshwater picocyanobacteria: who they are and how to isolate and culture them (Dr. Cristiana Callieri)

#### Tuesday, April 23<sup>rd</sup>

*Module 2:* Protein identification through nLC-HRMS proteomics and bioinformatic analysis of large protein datasets. (Dr. Emanuele Ferrari)

- 10.00 – 12:00 Mass spectrometry applications in proteomics of microbial communities.



- 13.30 – 15.30 Bioinformatics analysis of proteomic data: proteins identification and functional analysis.

**Wednesday, April 24<sup>th</sup>**

*Module 3.* high throughput sequence analysis of amplicon sequencing data (metabarcoding) and analyses of the communities in terms of diversity and composition.

(Dr. Ester Eckert)

- 10.00 – 12:00 / 13.30 – 15.30 Analysis of metabarcoding data on bacteria, fungi, and meiofauna. R-based course with packages DADA2, vegan, ggplot2, phyloseq.

**For further information:** please write and email to [laura.garzoli@cnr.it](mailto:laura.garzoli@cnr.it)

**Registration to the course:**

[https://docs.google.com/forms/d/e/1FAIpQLSdjfAjsciT\\_t2qy0JdOUfbz\\_FdNZK-mZ19fSkLNaBlAMPn6DQ/viewform](https://docs.google.com/forms/d/e/1FAIpQLSdjfAjsciT_t2qy0JdOUfbz_FdNZK-mZ19fSkLNaBlAMPn6DQ/viewform)

**Maximum participants:** 500