

Postdoctoral Fellowships

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CALL FOR APPLICATIONS 2025 - FELLOWS

Supervisor Julie Leloup

Supervisor page https://iees-paris.fr/annuaire/julie-leloup/

Host Institution Sorbonne Université

https://www.sorbonne-universite.fr/en

Research Lab Institute of ecology and environmental sciences of Paris

https://iees-paris.fr/en/

Research Team Community and Ecosystem Ecology

https://iees-paris.fr/departments/community-ecosystem-ecology/

Project Title

Synthetic reconstruction of phycosphere's community by coupling culturomic and bioinformatic approaches

Project Description

The phycosphere, defined as the association of photosynthetic and heterotrophic microorganisms, is an ephemeral ecosystem generating toxic bloom, for which mechanism are still poorly understood. Here, we will reconstruct assemblages at the Erlen scale, based on previous effort to isolate cultivable phycosphere. Thus, we will modulate taxonomic richness, identify the metabolic potential of each partner, and their cooperation by reconstructing metabolic networks with Metag2Metabo software.

Keywords

cyanobacterial phycosphere, synthetic communities, culturomic and bioinformatic

Description of the Host Research Lab

iEES-Paris develops generic theories on ecological and environmental systems in order to predict their dynamics in the context of global and local changes. It contributes to innovation in the sustainable management of biodiversity, ecosystems and agroecosystems and biological resources, to promote society's ecological transition.