Postdoctoral Position in Marine Ecology and Bioinformatics: European Project BiOcean5D (18 months)

Postdoctoral Position in Marine Ecology and Bioinformatics: Join the European Project BiOcean5D as a postdoctoral researcher to contribute to determine spatio-temporal patterns and drivers of planktonic prokaryotic/microeukaryotic and benthic macrofauna community assembly across a river-to-sea transect on the west coast of France.
We have collected soft sediments and planktonic communities seasonally (4 times) for 2 years at seven sites along the Penzé river to coastal waters of the Morlaix Bay (Western English Channel). A unique, ecosystemic dataset with DNA/RNA sequences (including metabarcodes, metagenomes and metatranscriptomes from sediment and water) in combination with data on metabolic rates, and water and sediment biogeochemistry will form the basis of the work.
This 18 month position offers the opportunity to work with a collaborative team with a strong emphasis on bioinformatics and biostatistics ecological analyses.

Location: Station Biologique de Roscoff, France

Job Description : Key tasks will consist in:

- Performing bioinformatic analysis of environmental molecular data (metabarcoding, metagenomes, metatranscriptomes) and evaluating the results regarding the taxonomic and functional diversity (e.g., community composition and structure, encoded and expressed metabolic pathways) of microbial communities
- Performing bioinformatic analysis of metabarcoding data for macrobenthic communities and comparing the results with morphologically-based data on species diversity
- Applying ecological statistics to integrate molecular information into contextual data and existing environmental knowledge
- Publishing and presenting results in a peer-reviewed journal and at a scientific conference
- Contributing to integrated, multidisciplinary analyses in the project consortium and to joint publications and reports
- Contributing to general project tasks (e.g., annual meetings, reporting, data management)

Your Profile :

- PhD in marine microbial ecology with a focus on molecular ecology and/or ecological genomics or closely related topics
- Proven experience in scientific publishing
- Comprehensive knowledge in bioinformatic analysis of taxonomic and functional biodiversity of marine communities and encoded/expressed metabolic pathways of marine microbial communities (based on metabarcoding, metagenomes, metatranscriptomes)
- Profound understanding of the relevant metrics and statistical methods to analyze marine microbial communities and functions across space, time, and environmental context (e.g., alpha/beta diversity, gene expression, phylogenetics, comparative/pangenomics, and metabolic pathway reconstruction). In-depth knowledge of public molecular databases for both taxonomic and functional annotation

- Expertise in bioinformatic tools and pipelines for data processing, Amplicon Sequence Variant (ASV) table generation, OTUs production, and gene/genome reconstruction. Skills in R, Python, Unix/Linux command-line tools, and workflow automation
- Ability to work independently and in collaboration with project partners. Management of research activities including sharing and joint analysis of results
- Strong communication and teamwork skills
- Excellent command of the English language, both written and spoken

How to Apply: Interested candidates should send their CV, cover letter, and contact information to:

- Eric Thiébaut (thiebaut@sb-roscoff.fr)
- Christian Jeanthon (jeanthon@sb-roscoff.fr)

Last Date for Apply: Applications should be submitted by 31 August 2025.

This position offers a competitive salary and the opportunity to work in a collaborative and dynamic research environment. The contract is expected to start in January 2026 at the latest. Join us in contributing to cutting-edge research in marine ecology and biostatistics.