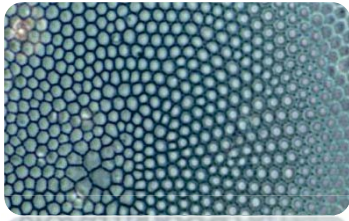




Biodiversity, Bioinformatics, Biotechnology



Overview

In Micro B3 32 partners from 14 countries work together in nine interdisciplinary teams of experts in bioinformatics, computer science, biology, ecology, oceanography, biotechnology, ethics and law for a better understanding of the marine ecosystem and to pave the way for novel biotechnological applications. Micro B3's primary objective is to integrate biodiversity, genomic, and oceanographic data into one Information System (IS), the Micro B3-IS, which is based on global standards for sampling and data processing.

Key Products and Results

1. Best-practice guidelines and standards for collecting marine water samples, environmental data, logistics and bioinformatics for long-term ecological research sites and cruises
2. Integrated biodiversity, genomic, and oceanographic data via the Micro B3-IS
3. An annotation pipeline to identify viral, bacterial, archaeal and eukaryotic sequences in metagenomic reads
4. Computational workflows for predicting substrate selectivity of genes with known activities
5. Co-occurrence networks for "unknown" genes using known data to improve functional predictions
6. Innovative model agreements on Access to marine microorganisms and Benefit Sharing (ABS) distinguishing between research and development for the public domain and for proprietary purposes
7. Propagation of standards and data flows to facilitate free and open sharing of data and metadata
8. Dissemination of the project outputs:
 - 57 peer-reviewed publications to date
 - Three workshops and five training courses
 - Participation in more than 70 international workshops, conferences, business meetings, and EU-wide events
 - OSD movie and Micro B3 documentary
 - Organisation of global Ocean Sampling Days (OSD): a world wide community network of scientists and citizens for orchestrated sampling

OSD

Ocean Sampling Day

Title: Marine Microbial Biodiversity, Bioinformatics and Biotechnology (Micro B3)

Funding Scheme: FP7-OCEAN

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Duration: January 2012 – December 2015

Coordinator: Jacobs University Bremen gGmbH, Bremen (Germany)

www.microb3.eu



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