FP7 MARINE METAGENOMICS FOR NEW BIOTECHNOLOGICAL APPLICATIONS (MAMBA) - LESSONS FROM SUCCESSFUL PANEUROPEAN COLLABORATION

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Marine Metagenomics for new biotechnological applications (MAMBA) is a Collaborative Project, funded by EU within the FP7 program [1]. The MAMBA consortium is built on the expertise of biochemists, geneticists, microbiologists, pharmaceutical chemists and process engineers from the academia. It also involves three companies dealing with synthesis of fine chemicals and biocatalysis and bioprospecting for anti-cancer and anti-ageing agents. The project is focused on a search and use of new microorganisms-derived activities from marine environments that are difficult to access, populated by complex microbial consortia with culturable and unculturable bacterial and archaeal members and characterized by extreme values of hypersalinities, high/low temperatures, high pressure and other parameters. A number of different samples from various sites of Mediterranean Sea and other marine environments have been conducted for the preparation of small, medium and large-insert metagenomic libraries, furthermore more 1.1 thousand positive fosmids and phagemids have been selected after enzymatic screenings of interest with a number of most interesting items fully characterized. The presentation will summarize the major achievements, point at the bottlenecks and show possible pathways of impact of this multinational collaboration beyond the end of the Project.

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[1] http://mamba.bangor.ac.uk/