Research line: Discovery and characterization of new bioactive compounds produced by cyanobacteria and planctomycetes with ecological, pharmaceutical or other industrial application

Research group: CIIMAR - Interdisciplinary Centre of Marine and Environmental Research. (BBE) Blue Biotechnology and Ecotoxicology group.

Discovery and characterization of new bioactive compounds produced by cyanobacteria and planctomycetes with ecological, pharmaceutical or other industrial applications

i) Ecological impact of bioactive substances produced by cyanobacteria. Potential use of cyanobacteria metabolites on the evolution of phytoplankton communities. Search of substances to be used to prevent phytoplankton blooms and the development of noxious organisms such as invasive species. Mapping of the planctomycetes diversity.

ii) Pharmacological and nutraceutical applications of bioactive substances produced by marine microorganisms – Isolation and elucidation of the chemical structure of the active compounds with properties such as antimicrobial, antiviral and anticancerigenous properties in extracts of cyanobacteria and planktomycetes. Study of their potential antiobesity and antinflamatory action.

iii) Antifouling activity of cyanobacteria bioactive substances – Development of new antifouling assays; selection of the most promising secondary metabolites with antifouling properties against biofilm, macroalgae, mussels and barnacles.

PROGRAMA COOPERACIÓN TRANSFRONTERIZA ESPAÑA – PORTUGAL COOPERAÇÃO TRANSFRONTEIRIÇA 2007 – 2013

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