



RITMARE ITALIAN RESEARCH AND INDUSTRY FOR THE SEA: IAMC CNR ACTIVITIES IN THE FIELD OF MARINE BIOTECHNOLOGY

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RITMARE is the principal National Projec about the Sea, 2012-2016 funded by the Ministry of Education, University and Research. is coordinated by the National Research Council and brings together an integrated effort in the Italian scientific community involved in research on marine and maritime issues, as well as a significant representation of the private sector

Objectives

To support integrated policies for the safeguard of the environment (the health of the sea);

To enable sustainable use of resources (the sea as a system of production);

To implement a strategy of prevention and mitigation of natural impacts (the sea as a risk factor)

To Increase synergies between those Research Bodies and University Consortia that are involved in marine research, facilitating the emergence of excellence and promoting cooperation

To strengthen cooperation between the world of research and Italian Industry in two complementary directions

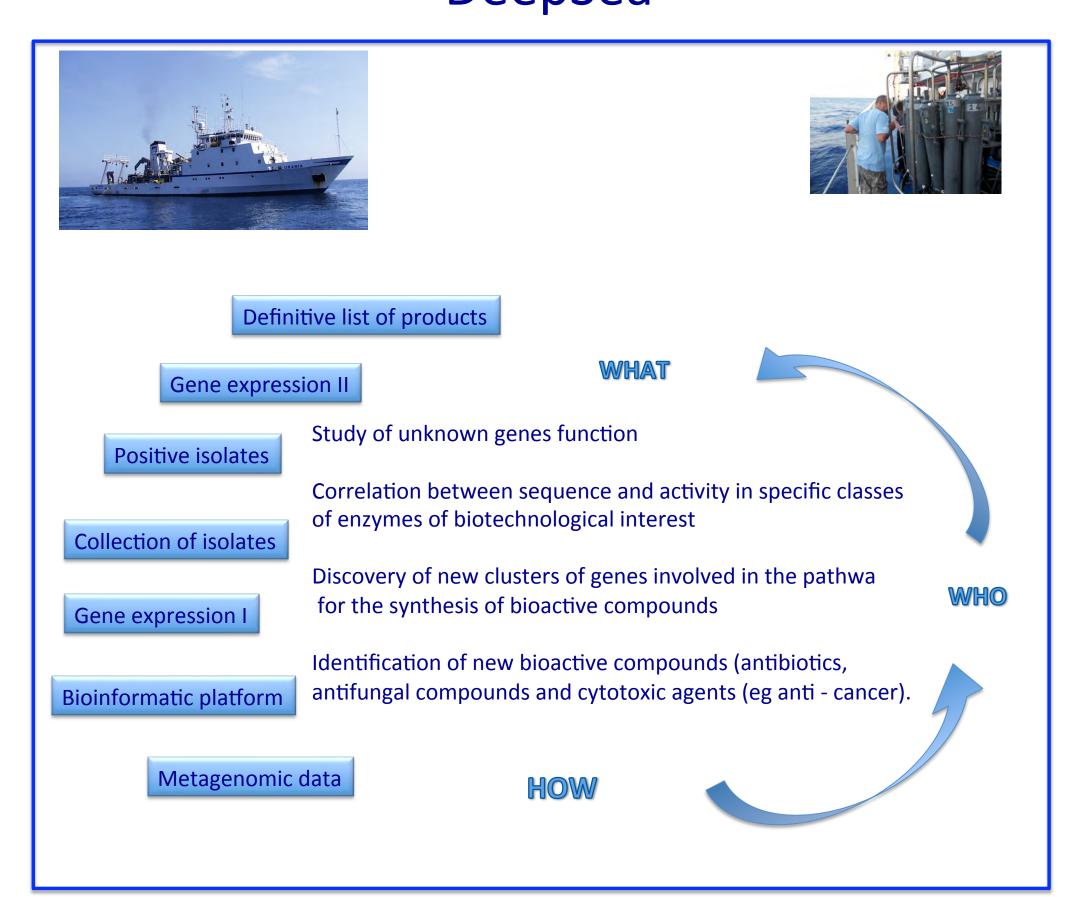
To enhance Italian participation in European projects and initiatives, increasing the number of Italian scientists appointed as project coordinators and promoting participation in joint programmes (e.g. JPIs) where the resources made available by the participants are matched by contributions from the EU.

Structure of the project: 7 sub-project



RITMARE provides a platform to strengthen and disseminate at national level outcome from other projects intensifying the occasions for the collaboration with industry and stakeholders. IAMC-CNR is implementing a multidisciplinary approach in the field of marine biotechnology. Moreover By means of its network, which includes researchers of various disciplines and industrial partners, RITMARE will facilitate new multi-sector partnerships (i.e. including those concerned by bio-medicals/pharmacology). More particularly, the transfer of knowledge and technology across the various collaborating sectors, relying on the National Research Council facilities, will be carried out by means of a targeted dedicated office.

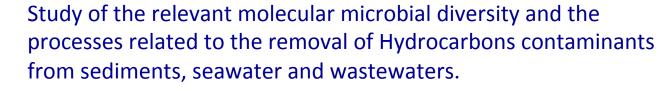




Sampling

A case study: Haven tanker (Genoa Italy 1991) 80.000 tons spilled into the sea Today the rest of the oil covers sediments at a depth of 83m near the shipwreck





Identification of in situ biodegradation pathways and isolation of key microrganisms

industrial biotechnology

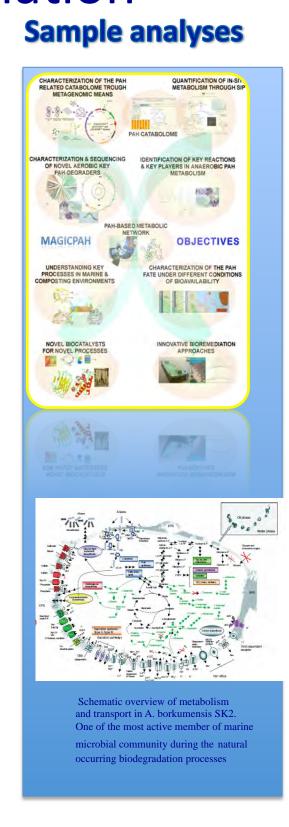
for industrial biotechnology

Understanding on systematics and new genes, pathways useful for

Design and validation of models and different types of clean-up strategies
Exploring the application fields in collaboration with industry and stakeholders.

Understanding on systematics, microrganisms, enzymes, new genes, pathways useful

Bioremediation Sample analyses



In situ application

