

A Major European Research Infrastructure

Rapid progress in the field of genomics has transformed the nature of European marine laboratories over the last 10 years by opening up new opportunities and model organisms for basic and applied research. Institutes founded in the 19th century are now developing and applying new technologies and facilities. This process is enabling the delivery of services to the marine community and increasing numbers of scientists who have turned to marine model organisms to investigate fundamental questions in biology.

Objectives

The plan aims to provide access and technological support to explore in-depth the biology of marine model organisms using the latest technologies. The research infrastructure will accelerate the trend to bring genomics, molecular methods and systems biology into marine biology, and at the same time provide access to marine model organisms for all European researchers working in research institutes and universities where such resources are not available.

Partners



'Mining' organismal diversity

The sea provides amazing diversity, of 34 fundamental phyla, 17 occur on land, whereas 32 occur in the sea and 13 are exclusively marine. The sea is an important new source of biotechnology materials, chemicals and processes.

Marine organisms often possess unique structures, metabolic pathways, reproductive systems, and sensory and defense mechanisms because they have adapted to extreme environments ranging from the cold polar seas to the great pressures of the ocean floor.

