



### MARPLAN: European integration of marine micro-plankton research

#### Objectives of the RMP

The study of microbial organisms (protists, bacteria, viruses) in the marine plankton has been revolutionized through integration of data from cytology, molecular biology, biogeography, ecology, eco-physiology and biochemistry, and through the use of novel DNA-based detection and identification techniques. As a result, considerable cryptic and hidden diversity has been discovered rendering the network of interactions in the plankton far more complex than previously believed. Multi-disciplinary research is needed to study this biodiversity but single institutes rarely have all the technical infrastructure and scientific expertise needed thereto. The RMP MARPLAN will foster the necessary links among researchers and research institutes. It will achieve this objective through spreading of expertise and integration of research efforts on a European level by means of a series of tasks.



#### MARPLAN partner Institutes

**NHM:** Natural History Museum, London  
**SZN:** Stazione Zoologica "Anton Dohrn", Naples  
**AWI:** Alfred-Wegener-Institute, Bremerhaven  
**UIO:** Universitet i Oslo, Oslo  
**NIOZ:** Nederlands Instituut voor Onderzoek der Zee, Texel  
**ICM:** Institut de Ciències del Mar-CMIMA, CSIC Barcelona  
**SBR:** Station Biologique de Roscoff, Roscoff  
**LOV:** Laboratoire d'Océanographie de Villefranche  
**MBS:** Nacionalni inštitut za biologijo, Piran  
**MPI-MM:** Max Planck Institut - Marine Microbiology, Bremen  
**MBA:** Marine Biological Association of the UK Plymouth  
**HCMR:** Hellenistic Center for Marine Research, Crete, Greece  
**LOBB:** Laboratoire d'Océanographie Biologique de Banyuls-sur-Mer, France



#### The main tasks set by MARPLAN



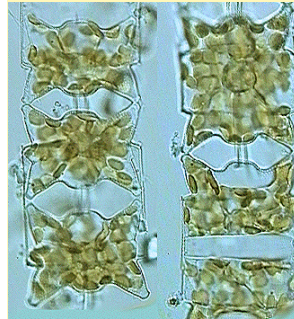
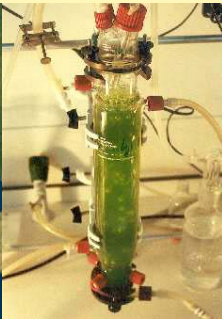
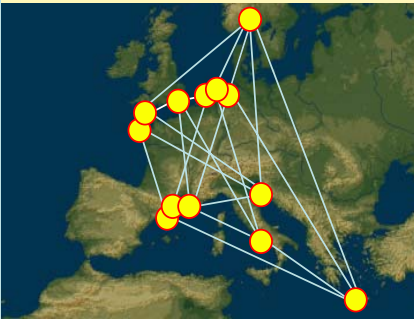
##### Training and mobility of researchers

Link supply and demand. MARPLAN supports researchers and PhD students to spend time at MARPLAN partner institutes to carry out collaborative research and exchange research skills.



##### Exchange of field samples and strains

The network covers a suite of marine habitats across Europe. Partners exchange material upon request, host colleagues to permit them to isolate strains, and donate strains to culture collections.



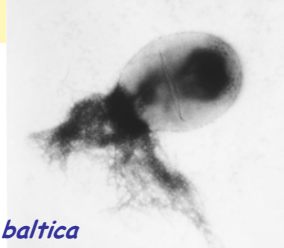
##### Integration and international collaboration

Biodiversity research on plankton organisms will be integrated by establishing and fostering collaborative research among the partners.

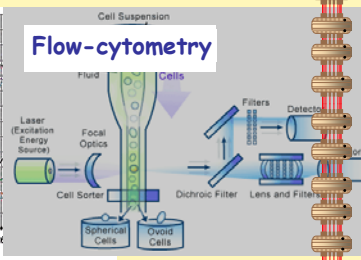
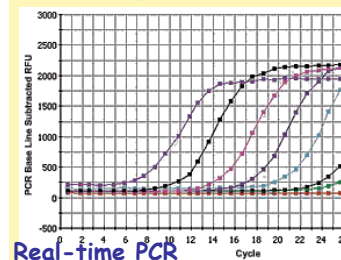


##### Daughter project on *Rhodospirellula baltica*

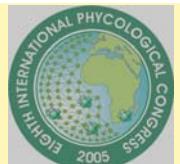
A high resolution study on the genetic biodiversity and biogeography of members of bacterial group Planctomycetes, in particular the genus *Rhodospirellula* in European coastal regions. MARPLAN partners will collect water samples; MPI-members will provide training on molecular biological methods, and obtain training in the use of EM. Contact person: Jens Harder, MPI-MM.



**Calibration of Instruments.** The performance of flow cytometry, FISH protocols and quantitative PCR need to be calibrated using shared strains and common procedures.



**Outreach.** Write papers and research proposals. Present results at meetings, workshops, conferences.



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