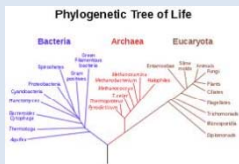


5.3.9 MARINE BIOTECHNOLOGY

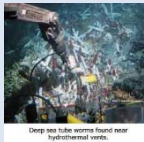
5.3 Applied Research: Science supporting Society and Economy

5.2 Basic Research & New Knowledge

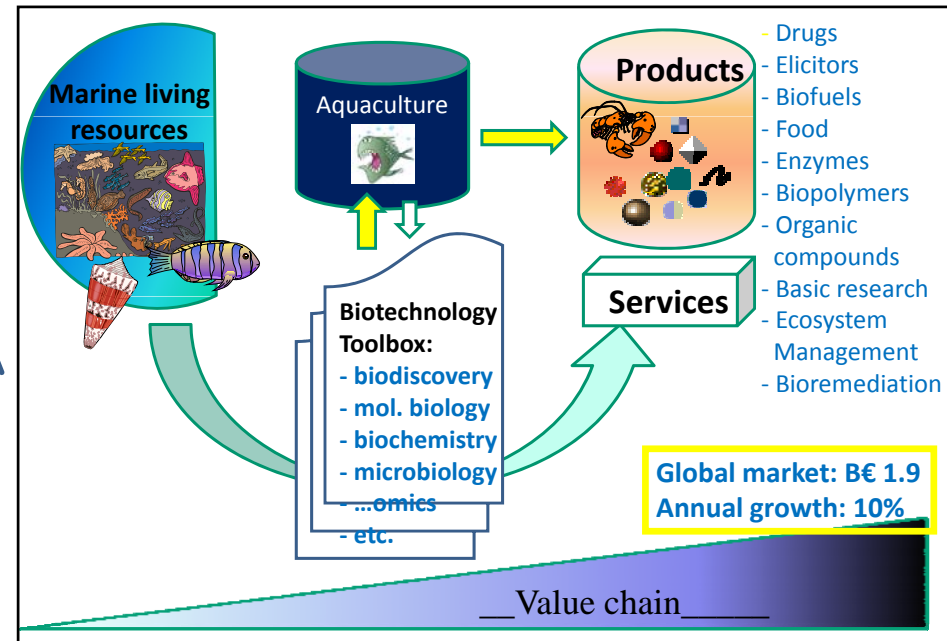
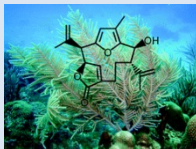
5.2.4 Marine Biodiversity



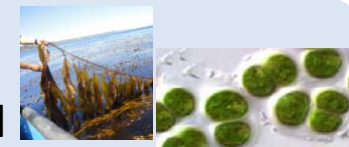
5.2.3 Deep-Sea Frontier



5.2.1 Ecosystem functioning and Processes



5.3.3 Marine Renewable Energy/ BioMass -> Biofuel



5.3.4 Shipping and Maritime Transport/Anti-fouling



5.3.7 Marine Bio-resources/Aquaculture

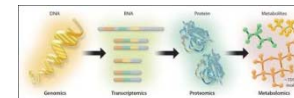


Bioremediation/Biosensors



INDICATIVE RESEARCH ISSUES

- ✓ Develop OMICs (*Molecular Biology*) investigation in marine life science
Foster and develop Metagenomics studies of a large range of marine biomes
System biology/integrative biology in marine life



- ✓ Marine Model organisms – Identify and prioritize new marine organisms that are still not investigated in the tree of life (Eukaryotes, Archaea, Bacteria) to increase life science knowledge (and continue to develop knowledge on already investigated marine models)



- ✓ Develop knowledge and methods for Cultivation of marine organisms and cell lines (Vertebrates & Invertebrates)
Ensure sustainable access to biomass
Allow to modulate metabolisms



- ✓ Optimize Bio-mass production and transformation
bio-reactors, cultivation systems
biorefinery approach, green chemistry



- An Inventory of Marine Biotechnology Research Programmes
- Facilitate access to Marine resources, to Screening and biodiscovery platforms and facilities
- Promote the networking of research activities conducted at national or regional level, and the mutual opening of national and regional research programmes (ERA-NET)
 - From Basic to Applied Knowledge
 - Proof of concept (feasibility)
 - Project Maturation

[Link to other Enabling actions \(Marine Biodiversity, Aquaculture, Biomass...\)](#)