

SOCIAL SCIENCE INFORMED SUPPORT SYSTEMS TO BETTER UNDERSTAND THE EUROPEAN MARINE BIOTECHNOLOGY LANDSCAPE AND INNOVATION LINKS

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Interest in Marine Biotechnology is increasing, and the potential fruits that could be harvested from a well-organised Marine Biotechnology community means that support tools that can inform coordination are necessary (a key driver for a Marine Biotechnology ERA-NET).

Such coordination would benefit from social sciences-based support systems, and we propose three ways that such a support system could be put to work:

Mapping the present landscape: social sciences could help better understand the current marine biotechnology landscape by tracing the Marine Biotechnology community, its activities and degree of collaboration, the central hubs and those on the periphery, the existing industry academia collaborations. This knowledge will help identifying emerging 'Innovation Pathways' between research and industry.

Charting futures: qualitative forward-looking exercises can assess the growth potential for the main applications of marine biotechnology (e.g. seafood, drugs, biofuels and other marine biotechnology output that can foster the bioeconomy).

Revealing societal implications: recent developments of technology have shown how critical has become the social acceptability of new technological knowledge, as seen from recent experiences in green biotech, nanotechnology and more recently synthetic biology. At the crossroad of genomics, nanotechnology and synthetic biology, marine biotechnology will face an important challenge in convincing a large array of stakeholders that, on the one hand, it does not build on irresponsible knowledge, and, on the other hand, it can fulfill the numerous promises it has announced. Such a perspective could help identifying the main bottlenecks that could impede the development of this technology and could therefore provide guidance in dealing with the corresponding policy issues with a view to the recent European move to Responsible Research and Innovation.

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