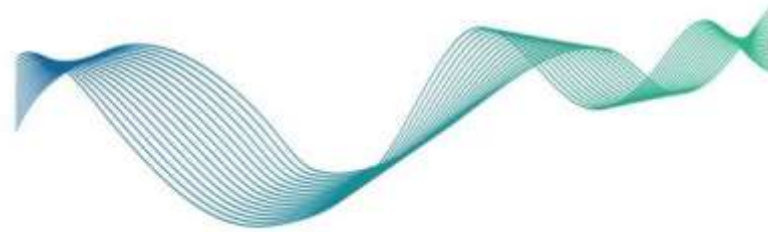


MarineBiotech



Blue sector: Internationalisation and sustainability of P2Ps Experience from ERA-MBT

Marta Norton

FCT

PLATFORM Annual Event

Rome, October, 5-6



Marine Biotechnology ERA-NET (ERA-MBT) is funded under the European Commission's Seventh Framework Programme. Grant Agreement Number 604814
December 2013 - November 2017

Marine Biotechnology ERA-NET



- The ERA-MBT is a consortium of 19 national funding bodies from 14 countries.
- The cooperation between the funding bodies was initiated during the FP7 CSA MarineBiotech
- The **ERA-MBT vision** is to support Europe's marine biotechnology community to participate in a lasting, enterprise-driven network that adds value to marine biological resources in ways that nurture and sustain the lives of European Citizens
- The ERA-MBT started in December 2013 and will be over in November 2017

Marine Biotechnology ERA-NET Partner Organizations



ERA-MBT joint transnational calls for collaborative research projects



First call: *The development of biorefinery processes from marine bioresources (8 M EUR);*

- 6 Projects funded starting early 2016



Second call: *Bioactive molecules from the marine environment - Biodiscovery (8.5 M EUR)*
- 5 Projects funded starting early 2017

Third call: *Metagenomic approaches for valorization from the marine environment - (6 M EUR)*
- 4 (to 6) projects funded starting end 2017/early 2018



Stakeholder events

- To improve the dialogue between academic, industry and policymakers and to identify the requirements for successful developments in marine biotechnology.



WAVES OF INNOVATION
*Integrating National Efforts to Build the Future
of Marine Biotechnology*

28th - 29th October 2014, Lisbon, Portugal

<http://www.marinebiotech.eu/stakeholder-meeting>



Second ERA-MBT Stakeholder meeting
**MARINE BIOTECHNOLOGY –ENABLING FUTURE
INNOVATIONS**

13th - 14th October 2016, Brussels, Belgium

<http://www.marinebiotech.eu/stakeholder-meeting-2>

A Roadmap for European MBT

ERA-MBT has published a Marine Biotechnology Strategic & Innovation Research Roadmap (Hurst *et al*, 2016) identifying five key thematic areas:

1. Exploration of the Marine environment;
2. Biomass production & Processing;
3. Product innovation & Differentiation;
4. Enabling technologies and Infrastructures
- and 5. Policy support & Stimulation

The cover of the "Marine Biotechnology Strategic Research and Innovation Roadmap" document. It features a dark blue background with white text. The title "MARINE BIOTECHNOLOGY STRATEGIC RESEARCH AND INNOVATION ROADMAP" is prominently displayed. Below the title, it says "INSIGHTS TO THE FUTURE DIRECTION OF EUROPEAN MARINE BIOTECHNOLOGY". At the bottom, there is the MarineBiotech logo and a small European Union flag with text indicating funding from the European Commission's Horizon 2020 program.

MARINE
BIOTECHNOLOGY
STRATEGIC
RESEARCH AND
INNOVATION
ROADMAP

INSIGHTS TO THE FUTURE DIRECTION
OF EUROPEAN MARINE BIOTECHNOLOGY



This project has received funding from the European
Commission's Horizon 2020 Programme for
research and technological development under
grant agreement no. 804414.



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The recently published EMB policy brief, assesses the latest developments in these 5 thematic areas and presents examples of commercial applications of marine biotechnology

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EDITORIAL

How to make industry profit on marine biotechnology

The ambition of the Marine Biotechnology ERA-NET (ERA-MBT) is to establish a lasting network of stakeholders within marine biotechnology. Such a network will not be successful if the research and innovation provided cannot be turned into profitable results that can add benefit to the society. So it is important to build a viable environment where there are strong connections between research, innovation and a productive industry.

In an article last year, the CEO of BioBridge, Meredith Lloyd-Evans, asked the question: *Who's investing in marine biotech?* A range of good examples were given on specific business cases where profits have already been made, and the great untapped potential was highlighted. However, the main question raised by Lloyd-Evans remains unanswered.

... continued on page 2



ERA-MBT Consortium at the kick-off meeting in Lillehammer, Norway on 29-30 January 2014.

The *Marine Biotechnology ERA-NET* (ERA-MBT) is a consortium of 19 national funding agencies seeking complementarities between national activities by pooling resources to undertake joint funding of transnational projects in the area of Marine Biotechnology.

During the lifetime of the project the following activities will be carried out, European Bioeconomy:

- Launching three the generate joint Eurog development activit
- Arranging a number events to promote di science, industry an identify requirement developments withi
- Performing **outreach** complementarities a with other activities interest with ERA-M
- Establishing a **Strate** the support of the **In Advisory Group**, an reflecting views and scientific, policy an
- Developing a **persu** of marine biotechno development and its
- Providing informati biotechnology in an **access portal** with a



Newsletters

<http://www.marinebiotech.eu/era-mbt-newsletters>



WP4 - Interactions with external activities

The general aim of work package 4 is to **link the ERA-NET Marine Biotech with European and international activities** and to reduce fragmentation of research efforts in the area of MBT via better coordination and cooperation between relevant players **within and from outside Europe**. This should be achieved by:

Measures:

- *Establishing contact* with national, European and global initiatives
- *Developing common activities* together with these initiatives in close cooperation with the other WPs.

WP4: Interactions with external activities

Task 4.1: Explore the potential for joint activities with European networks/initiatives

- Complete the list inventory of research initiatives and projects
- National/regional MBT Information
- Updating the online Marine Information tool
- Opportunities for collaboration – joining to sister initiatives' joint calls (joining ERA-IB-2, 7th call in 2015 and 3rd COFASP in 2016)

Task 4.2: International MBT landscape



Objectives/Actions:

- **Obtain a deeper insight into Marine Biotech activities in non-European countries:**
- As a first step a **desk study in the inventory from CSA-MBT, complemented with additional search**, intended to identify the most interesting countries with the potential to contribute to MBT
- In a second step **promising contacts** were established and a **fact finding mission** was to be accomplished

CSA-MBT International Inventory

- The CSA-MBT international inventory, by Meredith Lloyd-Evans, is an extensive report which brings together as much information as could initially be found on marine biotechnology **national strategies, programmes, major research centres, infrastructures, research areas, industry development**, etc.
- It is intended to provide an overview and analysis of **international activities and trends** in MBT
- It was completed in 2013 and is available on ERA-MBT website

CSA-MBT International Inventory

The information is structured into 6 main geographical areas of our planet:

- Africa
- Central & South America
- Asia
- Middle East
- South-East Asia and the Indian ocean islands
- Australia-Pacific

And is clustered in 4 sections:

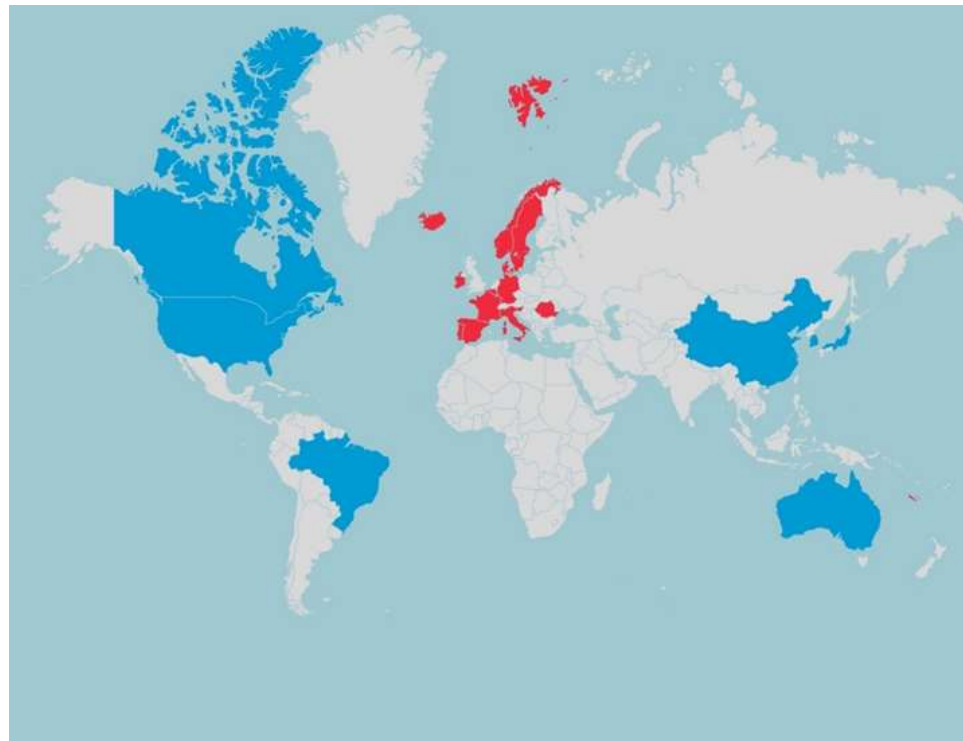
- Overarching science strategies, plans and policies
- Research funding schemes and programmes
- Research priorities
- Infrastructures, coordination and support capacities/initiatives

CSA-MBT

International Inventory

From the analysis of this inventory complemented with an updated desk based study, seven countries were considered **highly active in MBT**: **USA, Brazil, Canada, China, Japan, Republic of Korea and Australia**

Other countries were **considered moderately active**, where MBT activities are growing from a smaller base but show an increasing importance as a research priority: **India, Chile, Argentina, Mexico and South Africa**



In red, countries members of ERA-MBT
In Blue, countries highly active in MBT

Highly active in Marine Biotechnology

- All seven countries have national strategies, plans or programmes that cover the topic of marine biotechnology even if indirectly. Only the republic of Korea has an MBT specific strategy (BLUE-BIO2016).
- All seven countries have an extensive research infrastructure for MBT in form of research centres, university, institutes, networks, databases and/or type culture collections.
- All seven countries have a number of companies which are dealing with MBT related products or services

Recommended limitation: Canada and USA

Arguments:

- Geographically “closer” than the other countries
 - Connection to Europe by the Atlantic ocean
 - Synergies with the AORA project (Trans-Atlantic EU collaboration)
 - Culturally closer than Asian countries
 - Already existing contacts
 - First expressions of interest
- ✓ Contacts and plans have started to organize a mission in USA but there was not enough support to proceed with this mission

East Canada Mission

Finally the mission happened to Canada in the context of a delegation trip of the CLIB2021 - Biotech Industry Cluster, of Germany.

Provinces/regions:

- Ontario (Sarnia)
- Québec (Montreal, St. Hyacinthe)



Additional activities to the delegation program: Meet funders and present them cooperation opportunities (Montreal, Ottawa, Quebec City)

East coast of Canada

Contacts:

- Véronique Baril (Fonds de recherche du Québec)
- Rosalie Readman (Ministère de l'Économie, de l'Innovation et des Exportations)
- Francois Santerre (Natural Sciences and Engineering Research Council of Canada)
- Murray McLaughlin (Bioindustrial Innovation Canada)
- Rachael Ritchie (GenomeBC)

Deliver a lasting network to support marine biotechnology



- ✓ Intention to build a self-sustained network where partners would contribute with an annual fee to guarantee the minimum required activities to launch joint calls; One annual meeting and rotation of responsibilities.
- ✓ However, with the advent and later realisation of the **Blue Bioeconomy Cofund**, this idea lost momentum and was abandoned.



The Scope

The cofund will address:

1. New aquatic bioresources (marine & freshwater)
 2. New uses of traditional blue bioresources
 3. Improvement of existing value chains incl. Circular economy
 4. Cross-cutting and supportive issues
- ✓ 18 Countries that have made initial funding commitment: Belgium, Croatia, Estonia, Finland, France, Germany, Greece, Iceland, Denmark, Ireland, Italy, Malta, Norway, Portugal, Romania, Spain, Sweden, Turkey - Total approx. €20 M;
 - ✓ *Missing:* Bulgaria, Netherlands, Poland, UK, Latvia, Lithuania, Hungary

- The Blue Bioeconomy Cofund will allow to leverage the individual efforts of these three initiatives, into a larger joint collaboration where the experiences and knowledge outputs of the 3 initiatives will merge.
- In particular the international contacts established within the three initiatives will be used to promote new international collaborations
- The Blue Bioeconomy Cofund should ensure it is linked to other initiatives in the Blue Bioeconomy at European level and international level (e.g. AORAC, EURASTIP etc) and the participation of international partners in the calls will be welcomed

- So far, there are a number of international countries having expressed interest to participate in the cofund: Argentina, Brazil, Canada, Indonesia, New Zealand, South Africa and USA



The end

Thanks
for your attention