



BlueHuman capitalisation results and next steps

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European Grouping for Territorial Cooperation
Galicia-North of Portugal (GNP-AECT)







What's GNP, EGTC?

The objective of an European Grouping of Territorial Cooperation (EGTC)/Agrupación Europea de Cooperación Territorial (AECT) is to "facilitate and promote, in particular, territorial cooperation, including one or more of the cross-border, transnational and interregional strands of cooperation, between its members".

The European Grouping of Territorial Cooperation Galicia Norte de Portugal provides a meeting point for institutions, companies and citizens on both sides of the border. Its aim is to dinamise and interconnect the Galicia North of Portugal Euroregion, comprising a population of six million people.

Both Xunta de Galicia and Comissão de Coordenação e Desenvolvimento Regional da Região Norte de Portugal (CCDR-N) signed the statutes in 2008 and the EGTC started working on 2010.

It was the third European EGTC and first in the Iberian Peninsula.









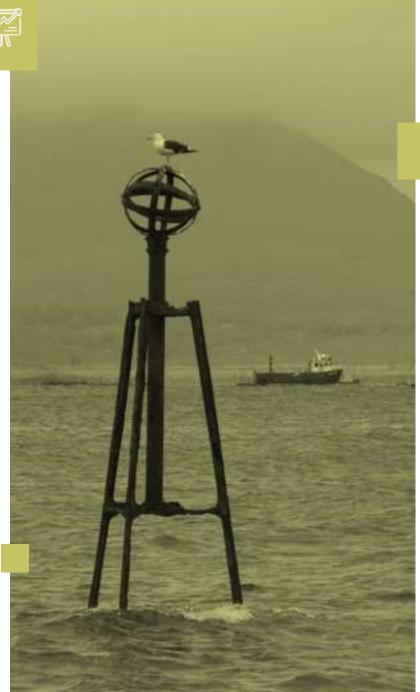
Facilitate and encourage territorial and institutional cooperation between its members, to help break down physical and bureaucratic barriers, helping to mitigate the border effect and enabling the creation of an effective Galicia North of Portugal Euroregion.

Consolidation of the cooperation processes established by the Euroregion agents, continuing and reinforcing successful **cross-border** actions.

Promote the creation of new procedures to **optimise administrative** management at all levels, encouraging cross-border synergies and simplifying regional and local public management systems on both sides of the border.

Contribution to the improvement of the quality of life (social, economic, cultural) and the creation of value (R+D+i, crossborder business cooperation) in the Euroregion through the promotion of investments and efficient public services.







What is Capitalisation?

Even though it is compulsory to include a Capitalisation work package in Interreg Atlantic Area projects, there is no clear definition of what it is expected from it.

We have had to figure out what is for us Capitalisation, define our objectives, and plan what actions and tools we will use to achieve those objectives.

The wanted to Capitalise both the scientific results of the project and the know how accumulated by the partners and the previous projects that brought them to BLUEHUMAN.

But we also wanted to make the partners aware of some tendencies that were surging.

How can we widen the commercial potential of the Atlantic Ocean and on the European Economy?







Changing and challenging context

BLUEHUMAN has been developed between 2018 to 2021:

- New policies: Green deal, Sustainable blue economy, open science...
- COVID19...
- New EU Financial framework 21-27: Horizon 2020-Horizon Europe; Next Generation Europe, Recovery and Resilience Facility





Capitalisation actions

- Capitalisation Strategy
- Advisory Board ANI, AEI, GAIN
- Collaborative Innovation Network (CIN)
- Roadmap for Research and Innovation
- Events Final event, B2S, Job Days, Communication event
- Capitalisation publication









The survey

196

A survey has been carried out among researchers and managers of companies in the field of blue biotechnology focused on cooperation between both groups.

The survey has been carried out in collaboration with CETMAR and has focused on the five countries that are part of the Interreg Atlantic Area program.

45

196 personalized surveys were sent to company managers and 543 to researchers. As of February 28, 2020, 45 responses had been received from companies and 124 from researchers from Spain, Portugal, Ireland, France and the United Kingdom.

The responses from Spain and Portugal predominate because, in many cases, there was a previous relationship on the part of CETMAR team, which significantly increased the perthecentage of surveys answered.

124



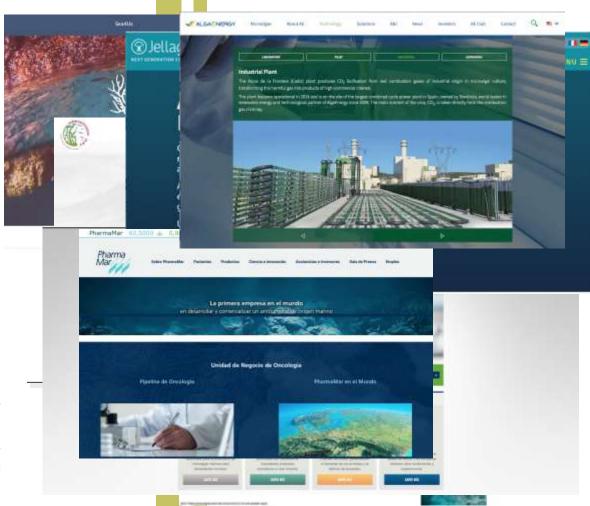


Who are we looking for?

To develop a survey we needed a database with personal contact details from people working in the blue biotechnology business or researching topics related to it. So the first step was to decide the limits for this sector; we needed a definition.

Marine biotechnology is defined by the OECD as 'the application of science and technology to living organisms from marine resources, as well as parts, products and models thereof, to alter living or non-living materials for the production of knowledge, goods and services'.

Sometimes, it is hard to know if a company uses marine resources as raw materials/ingredients/models, etc. The range of companies included in the marine biotechnology sector is quite wide; sometimes, you know immediately that you can classify a company within blue biotech, sometimes, it is not so clear.









Information about the "blue biotech" sector is very scattered. We couldn't find a comprehensive, reliable, database, even the most specialized projects (like Marine Biotechnology Era-Net) were incomplete, specially, regarding to companies.

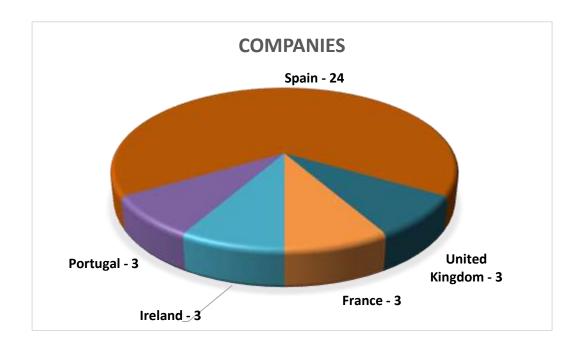
Another problem was to find the e-mails to send the survey... In the case of researchers, this was easier than in the case of companies. First, you have to identify the person you want to contact (CSO, R+D Director, Projects responsible...), then, you have to find the contact details. This is not so easy as in the case of researchers, that usually have quite complete contact details in the web pages of their institution.

In the case of people working for companies, another problem was quite common, smaller companies sometimes close, merge or change their name. And people move, so, the database must be periodically updated.

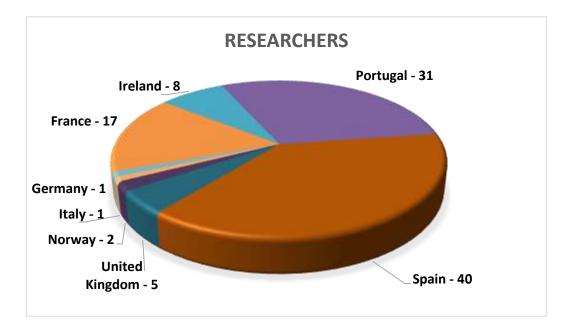
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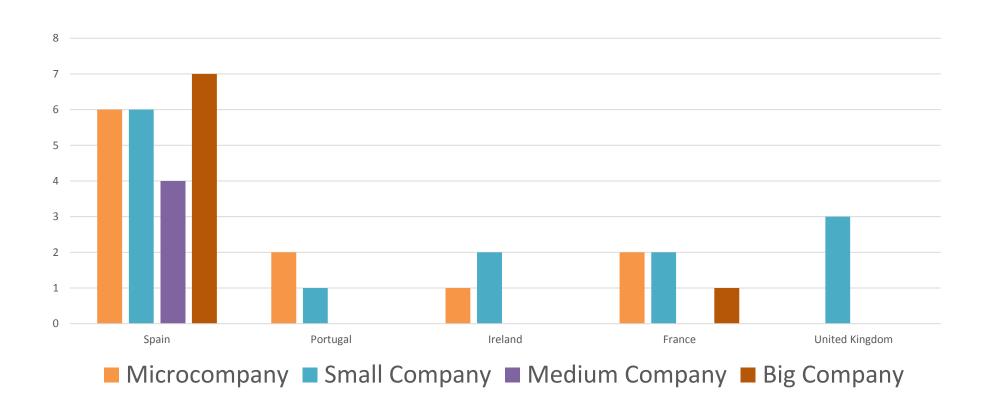
Where did the answers came from?







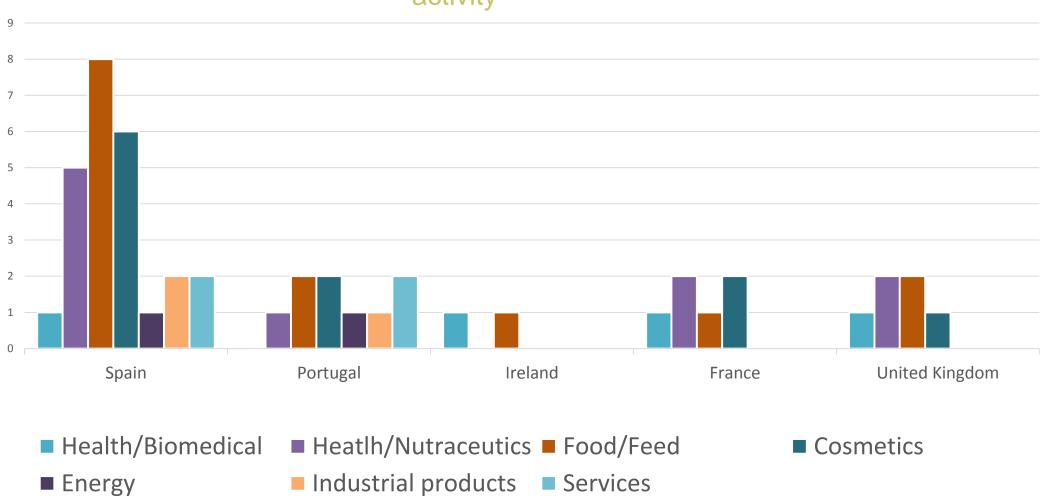
Company size







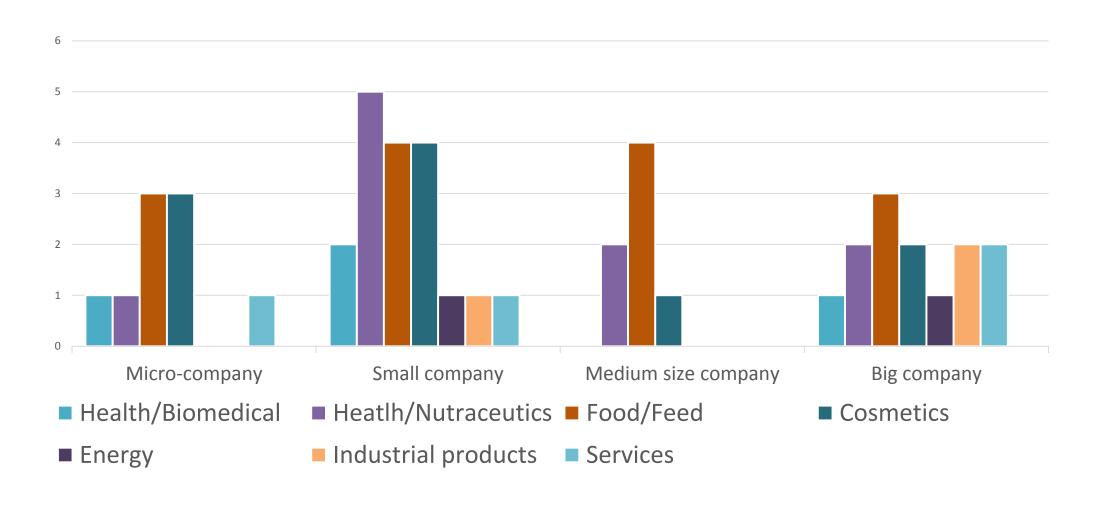
Company activity







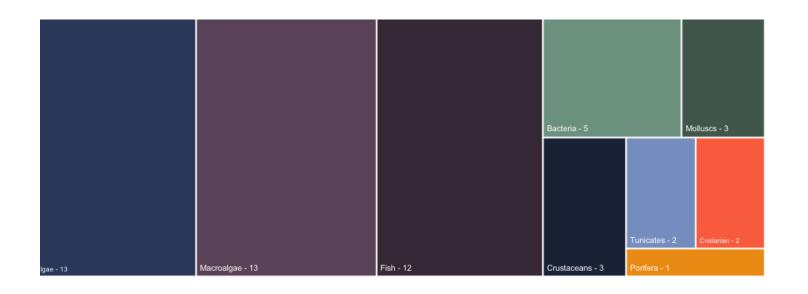
Company activity







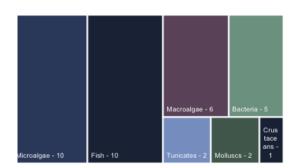
Raw material







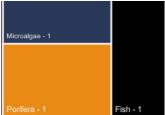
Raw material



Molluscs - 1

Fish - 1









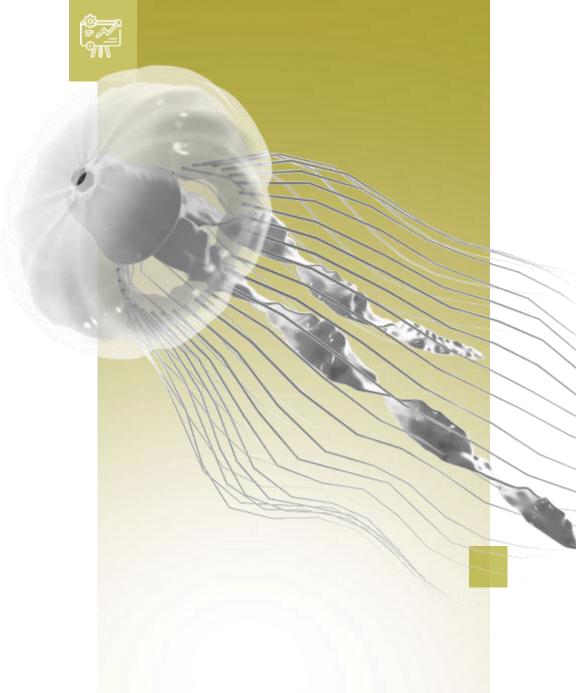






Why do we ask for financing?

SMEs have a fundamental role in blue biotechnology; they face similar challenges to other companies when seeking external financing to develop their products, but there are two factors that must be taking into account: the increased risk of opérate in a less mature sector, and the inherent risk of the relation with the sea.





Lessons learnt

There is still room for improvement in the case of private external funding for companies operating in the blue biotech sector. More information would be needed to address the root cause of this reduced percentage of companies using private funding. In any case, an effort to increase the information about the different opportunities to access this source of founding and to improve the visibility of the sector would be helpful.





Most cited keywords to describe the research done by the group

Bioactive compounds	20
Aquaculture	19
Biotechnology	13
Microalgae	10
Natural products	9
Biomaterials	8
Algae	6
Seaweeds	6
Nutraceutics	5
Nanoparticles	4
Probiotics	4
Macroalgae	4
Antioxidants	4
Marine	4
Nutrition	4
Antifouling	4
Microbiology	4
Ecology	4
Food security	4

Bioremediation	3
Biomass	3
Bone regeneration	3
Cyanobacteria	3
Bioprocesses	3
Stress	3
Anti-cancer	3
Feed	3
Biofilms	3
Pheromones	3 2 2 2 2
Biochemistry	2
Nanomaterials	2
Secondary Metabolites	
Proteins	2
Food /Food	
technology	2
Microorganisms	2
Sustainability	2
Drug delivery	2

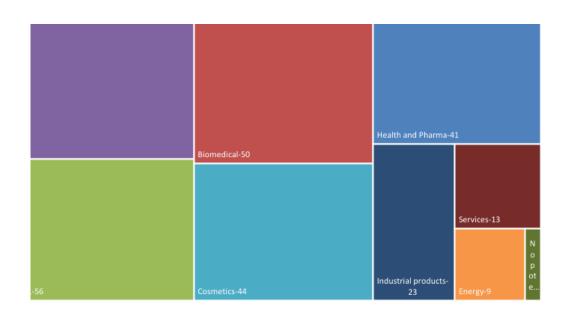
Tissue Engineering	
Pathogens	2
Transferce	2 2 2 2
Coatings	2
Valorisation	2
Antimicrobials	2
Biochemical Engineering	2
Mathematical Modeling	2
Innovation	2
Biopolymers	2 2 2 2 2
Laser	2
Biorefinery	2
Ecotoxicology	2
Packaging	2
Cosmetics	2
Fermentation	2
Marine Biotechnology	2
Quality	2
Marine Natural Products	2

Regenerative Medicine	2
Marine resources	2
Enzymes	2
Biofouling	2
Gene delivery	2





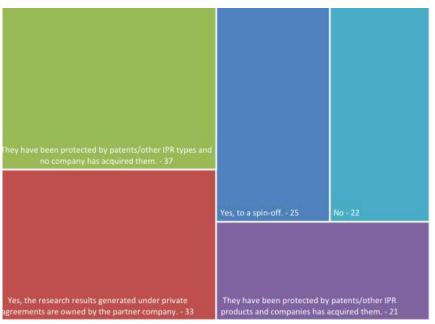
In case of transference, it would be to the sector...

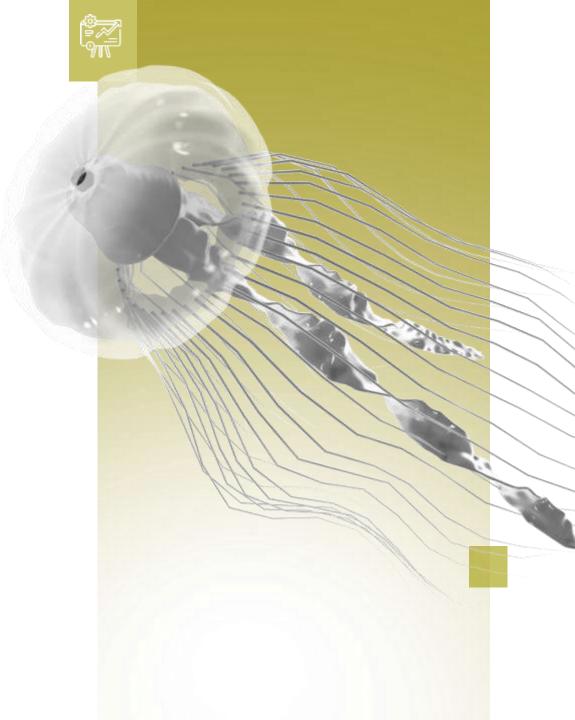






Have you transfered your research results



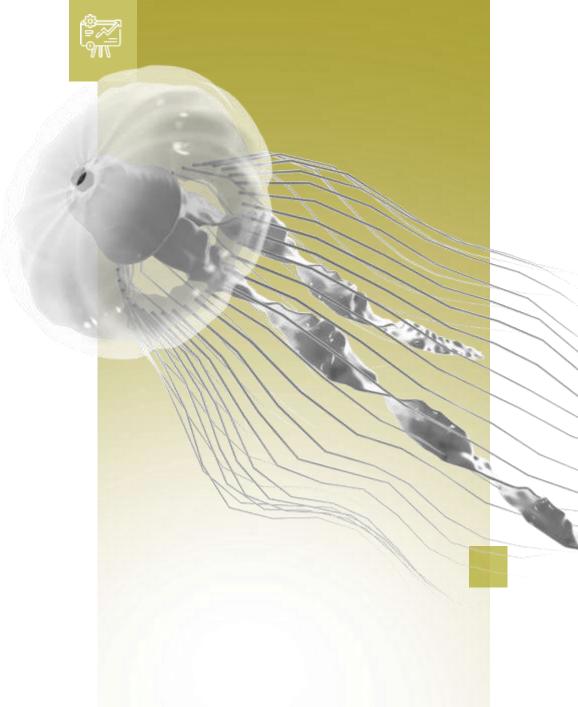




Lessons learnt

A comprehensive, personalised, updated, user friendly catalogue would be very useful in order to facilitate the contact between researchers and companies, helping to increase the mutual knowledge and facilitating the interchange of information and the search for partners in future financing calls. CVMar+i is a good example of this. With the work done for the CIN and the Inquiry, we have prepared a catalogue with a very interesting number of companies and research groups; we have shared it with CETMAR, in order to feed the CVMar+i database

This catalogue is included in the publication.





Lessons learnt

SMEs working on biotech/biomedical sector are more vulnerable to changes in the legislative framework and have more difficulties to afford the investment needed to put a new product in the market; it would be useful to reinforce the public support or introduce instruments to achieve a more levelled playing field.

Bureaucracy can still be a barrier for some companies to participate in public funded projects. Simplifying the procedures would probably encourage more cooperation.





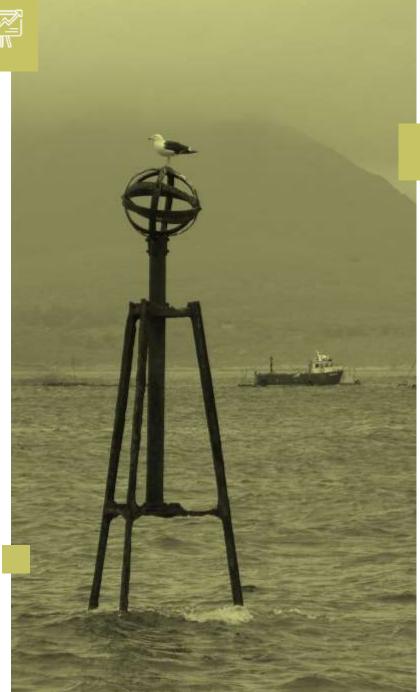


Some conclusions

Marine biotechnology has the potential to create jobs in the Atlantic area with a high qualification; producing compounds and bio-sanitary, cosmetic, and nutritional products with great value for society, and contributing to moving towards a circular economy.

Research is key for this potential to be realised. This activity demands intensive and prolonged investments to discover/design/characterise/test to industrially produce the new compounds or products.







Some conclusions

The role of start-ups and SMEs is key to closing the circuit from research to market and/or the large biosanitary and pharmaceutical companies. Due to their characteristics and dimensions, these companies need access to external, public or private, funding sources. Also, in many cases, they lack the resources to effectively communicate the demands to the policymakers that would make easier their activity.

Also, it may sound as a cliché, but it is true: the sea knows no borders... Thus, cooperation in blue economy is paramount if we want to achieve a sustainable, fair and cohesive development in our Atlantic Region, and communication and capitalisation is fundamental to promote this cooperation.



Capitalization and Results of the BLUEHUMAN Project





