

Announcement of the COFASP-MARINE Biotechnology Joint Transnational Call (JTC) 2016

(3rd Joint Transnational Call of the ERA-Net COFASP in collaboration with the
ERA-net MarineBiotech)

Call for applicants for transnational research in the
thematic areas **Aquaculture, Fishery and Seafood
Processing**

Updated on 11 April 2016

March 2016

The consortia of COFASP and Marine Biotechnology ERA-Net launch a Joint Transnational Call for projects on 21 March 2016.

The call is open until 20th of June 2016, with a **pre-registration** until 22nd of April 2016.

A joint effort in the ERA-Nets perspective

A joint call by COFASP and Marine biotechnology ERA-Net (MBT) brings COFASP and MBT themes closer and will contribute to a better alignment. This makes the networks better positioned to join forces in future activities within H2020 such as e. g. Cofund ERA-NETs and other EU-initiatives. The potential benefit of a joint call is to facilitate new biotechnological approaches and toolbox development, which have the potential to solve challenges and enable innovation within the thematic areas covered by COFASP. Applications are required to demonstrate a significant biotechnology component in the planned research, using elements of the marine biotechnology “toolbox” or research which contributes to the development of new generic tools and/or methods relevant to marine biotechnology within the topics described below.

List of topics

- Topic 1: Fisheries stock assessment and dynamic modelling using ‘omic’ methodologies and tools
- Topic 2: Genome based approach to genetic improvement of aquaculture species
- Topic 3: Explore opportunities for the use of biotechnological tools, including targeted enzymes to develop more efficient seafood processing methods and high value products

Description of topics

Topic 1: Fisheries stock assessment and dynamic modelling using ‘omic’ methodologies and tools

Sector: Fisheries

Challenges: A benchmark for secure and sustainable use of aquatic living resources is a strong methodology for identifying fish stocks. Such methodology supports ecological observations, monitoring and prediction, which are essential elements for fisheries policy-

and decision making at governance and industry level. Development of an advanced biotechnology toolbox can play a strong role for such ecosystem approach to achieve rational harvest of fish stocks and should preferably also serve as an authentication tool throughout the seafood value chain.

Scope: Development of new, high resolution and cost effective tools for genetic identification of stock (sub-) structure and associated geographical origin identification of fish of commercially important species. The tools developed should be based upon cutting edge 'omic' methodology, together with other approaches, and provide an opportunity for real-time assessment. Projects should deal with one or several of the following:

- Operational tools for fisheries management, control and enforcement and incorporation of information in regional stock assessment, spatially-explicit stock structure modelling and habitat use and functionality models.
- Tools that provide sufficient statistical power to make forensic inferences in relation to IUU¹ fisheries and/or for sea food integrity (species authentication).

Impact: More efficient and reliable use of fish resources at governance and industry level and robust tools to demonstrate seafood industry probity.

Topic 2: Genome based approach to genetic improvement of aquaculture species

Sector: Aquaculture

Challenges: There is a high demand to increase EU aquaculture competitiveness and sustainability on global scale. A key factor in this respect is genetic improvement of farmed organisms and in particularly through advanced selective breeding to reduce production cost and minimise production vulnerabilities and risk. A driver to meet this goal is further development of efficient biotechnological/genomic tools and methods to be used in genetic improvement programmes. Such tools and methods can help select for traits such as growth rate, feed efficiency robustness and resistance to environmental stressors and pathogens. Another important factor is the possibility to use sterile fish. Sterile farmed fish can both reduce genetic impact on wild fish and avoid early sexual maturation, which is often correlated with negative aspects such as reduced growth and product quality.

Scope:

1. Development of biotechnological tools and methods to understand and improve important traits for genetic improvement primarily through selective breeding. Such traits could be related to, but not restricted to; health and feed utilisation.
 - **health**

¹ IUU stands for Illegal, Unreported and Unregulated fishing

Improved robustness, increased resistance to diseases.

- **feed**

Efficient feed conversion and biochemical processing of feed ingredients, including processing of feeds based on new raw materials

2. Development and application of biotechnological tools to develop efficient methods in production of sterile fish.

Impact: Application of more advanced tools and methods to be used for genetic improvement particularly advanced selective breeding that will increase economic success of European aquaculture.

Topic 3: Explore opportunities for the use of biotechnological tools, including targeted enzymes to develop more efficient seafood processing methods and high value products

Sector: Seafood processing

Challenges: Industrial processing of marine biomass has an unrealized and large potential to increase the economic value by the development of more efficient processing methods and a better utilization of the different valuable fractions (proteins, fat, carbohydrates, minerals, pigments, polysaccharides, etc.). By new developments and application of biotechnological methods and knowledge, this potential can be realized.

Scope: With an aim to utilize material along the value chain, seafood processing and by products from marine activities like aquaculture, harvesting and fisheries should be targeted. More efficient processing methods can be developed by applying enzymes for more cost-effective and environmentally friendly processing solutions, enhanced processing conditions to give higher quality products or create innovative new processes for valorisation of seafood. Further, an aim is to utilise as much as possible of the biomass when processing seafood such that high value products can be produced from fractions today considered as by-products.

Impact: Boost marine production innovation through biotechnology

WHO CAN APPLY?

Project consortia are eligible if they consist of partners from at least three COFASP partner countries providing cash funding for the call.

Research institutions, public or private, and private companies may be eligible for funding by their national funding bodies. Applicants should consult their national regulations and contact their National Contact Points (see Guideline for Applicants).

The indicative funds provided by each funding partner are listed in Annex A of this document.

It is the intention of COFASP to fund more than one project per topic. This should be taken into consideration when applying.

Applicants from countries which are not partners in the COFASP ERA-Net or from countries which do not provide funding for a specific thematic area of the call are welcome to participate. However, their costs need to be covered from their own resources or by other sources; they cannot coordinate a project and their contribution to the project should not be vital. They are not taken into account in the minimum number of eligible partners and countries in the COFASP eligibility criteria.

Note that some funding partners will have sector specific funding.

PRE-REGISTRATION AND SUBMISSION OF PROPOSALS

The guideline for applicants, as well as the national regulations for each funding partner, is available at the COFASP website (www.COFASP.eu). Applications have to be filled in and submitted via the website's submission portal.

The pre-registration is mandatory and has to be concluded by 22 April 2015 at 13.00 CET.

The full proposal has to be submitted by 20 June 2015 at 13.00 CET.

Detailed information is provided within the guideline for applicants.

ANNEX A - INDICATIVE CALL BUDGET

FUNDER CONTRIBUTION TABLE OF THE COFASP CONSORTIUM PER COUNTRY AND SECTORIAL AREA

		Topics		
Country	Organization	Topic 1 Fisheries	Topic 2 Aquaculture	Topic 3 Seafood processing
France	ANR	1000 k€		
Germany	BMEL	500 k €		
Greece	GSRT	500 k€		
Iceland	RANNIS	500 k€		
Norway	RCN		2.200k€	
Romania	UEFISCDI	500 k€		
Turkey	GDAR	300 k€		
Estonia	MEM			100 k€
Canada	Genome BC		200 k €	
TOTAL	5800 k€			

The applicants are highly encouraged to revisit the website for updates of the call documents in beginning of April.

For contact & support, please refer to the [Guideline for applicants](#).

Call Secretariat :

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