

Following a roundtable organised during its 3d General Assembly in Heraklion (Greece) on 19th September 2018, led by Anne Emmanuelle KERVELLA, ABS Officer, EMBRC-France, with Dr Dimitra MANOU, Faculty of law, Aristotle University of Thessaloniki (Greece), Dr Arianna BROGGIATO, Senior legal adviser at ABS-INT (Belgium), Prof Arul Georges SCARIA, Co-Director of the Centre for Innovation, Intellectual Property and Competition (CIIPC), National Law University, Delhi (India), Dr Guy COCHRANE, Head of European Nucleotide Archive, EMBL-EBI, Dr David SMITH, Director Biological Resources, CABI, and Prof Ibon CANCIO, Plentzia Marine Station, University of the Basque Country (Spain),

***EMBRIC adopts principles
for preserving, accessing, exploring and sharing marine genetic resources.***

The European Marine Biological Research Infrastructure Cluster (EMBRIC) is a cluster of European Research Infrastructures designed to accelerate the pace of scientific discovery and innovation from marine bio-resources. EMBRIC aims to promote new applications and commercial products derived from marine organisms in fields such as drug discovery, novel foods and food ingredients, selective breeding for aquaculture, bioremediation, cosmetics and nutraceuticals.

- By conducting a comprehensive survey of available resources and techniques, EMBRIC has developed new experimental pipelines for aquaculture and biodiscovery.
- By interconnecting science, industry, policy and society, EMBRIC brings together science, development and innovation policies among regions.
- By implementing joint academia-industry development activities, EMBRIC allows industry to directly integrate science results and protocols in innovative commercial processes.
- By developing best practices and integrated training programs, EMBRIC is accelerating the pace of scientific discovery and innovation across Europe.
- By connecting 6 existing European Research Infrastructures and 30 partners from academia, research institutes, non-for-profit research organizations and industry, EMBRIC facilitates knowledge and technology transfer and access to pan-European Research Infrastructures.

EMBRIC is designed to enable long-term cooperation between European Research Infrastructures to promote excellence in science and innovation and contribute to the European bio-economy and to the sustainable use of the marine environment.

EMBRIC combines the most advanced European science technologies with the expertise and know-how to study and exploit marine biodiversity. By being strongly embedded in the innovation ecosystems of the maritime regions of Europe, EMBRIC is an accelerator for commercial exploitation of marine bio-resources. It will offer countries not part of the consortium partnerships for training and capacity building in marine science and a platform to secure novel bio-resources and data. Moreover, EMBRIC contributes to bringing benefits to the territories where bio-resources originate from, including the European peripheral maritime regions, by adding value and enabling long-term utilization of their unique bio-resources.



As a service provider to research and development on marine bio-resources, EMBRIC supports the following principles:

- Sustainable and equitable international cooperation, nurturing diplomacy and cooperation in marine scientific research;
- Open and collaborative innovation, based on the Blue Economy approach and principles of equity and fairness;
- Open, discoverable and reusable scientific data according to the FAIR principles¹;
- Effective governance of marine genetic resources within national jurisdiction, taking into account the interest of all stakeholders, especially the territories of origin of the resources;
- Sustainable and sound governance of the oceans recognizing the integrity of all ecosystems including areas beyond national jurisdiction;
- Preventing the misuse of the intellectual property system, including patents or the misappropriation of genetic resources;
- Within the political process at the United Nations to negotiate an International Legally Binding Instrument under the UN Convention on the Law of the Sea on the Conservation and Sustainable Use of Marine Biodiversity of Areas Beyond National Jurisdiction, the enabling of practical mechanisms that both support Access and Benefit Sharing and nurture scientific progress².
- The open disclosure of resource value chains.

The cluster endorses:

- The Sustainable Development Goals and particularly no 14: Conserve and sustainably use the oceans, seas and marine resources;
- The Aichi Biodiversity Targets and particularly Target 16 (Nagoya Protocol in force and operational) and Target 19 (Knowledge improved, shared and applied);
- The core values adopted by the CIESM Charter on Access and Benefit Sharing in the context of the Ocean Sampling Day, particularly the fair and equitable sharing of benefits arising from any utilization of genetic resources from the providing countries, through different means including capacity building;
- Systems that enable access to Marine Genetic Resources in Areas Beyond National Jurisdiction in the context of the Biodiversity Beyond National Jurisdiction negotiation.

EMBRIC encourages its members to adopt Access and Benefit Sharing best practices, standards and compliance measures to help its users, and supports any means that would facilitate the exercise of their “due diligence” in compliance with the EU ABS Regulation No 511/2014 of the European

¹ Wilkinson MD, Dumontier M, Aalbersberg IJ, Appleton G, Axton M, Baak A, Blomberg N, Boiten JW, da Silva Santos LB, Bourne PE, Bouwman J, Brookes AJ, Clark T, Crosas M, Dillo I, Dumon O, Edmunds S, Evelo CT, Finkers R, Gonzalez-Beltran A, Gray AJ, Groth P, Goble C, Grethe JS, Heringa J, 't Hoen PA, Hooft R, Kuhn T, Kok R, Kok J, Lusher SJ, Martone ME, Mons A, Packer AL, Persson B, Rocca-Serra P, Roos M, van Schaik R, Sansone SA, Schultes E, Sengstag T, Slater T, Strawn G, Swertz MA, Thompson M, van der Lei J, van Mulligen E, Velterop J, Waagmeester A, Wittenburg P, Wolstencroft K, Zhao J, Mons B. The FAIR Guiding Principles for scientific data management and stewardship. *Sci Data*. 2016 Mar;3 160018. doi:10.1038/sdata.2016.18. PMID: 26978244; PMCID: PMC4792175.

² <https://www.ebi.ac.uk/about/news/feature-story/access-benefits-sharing>

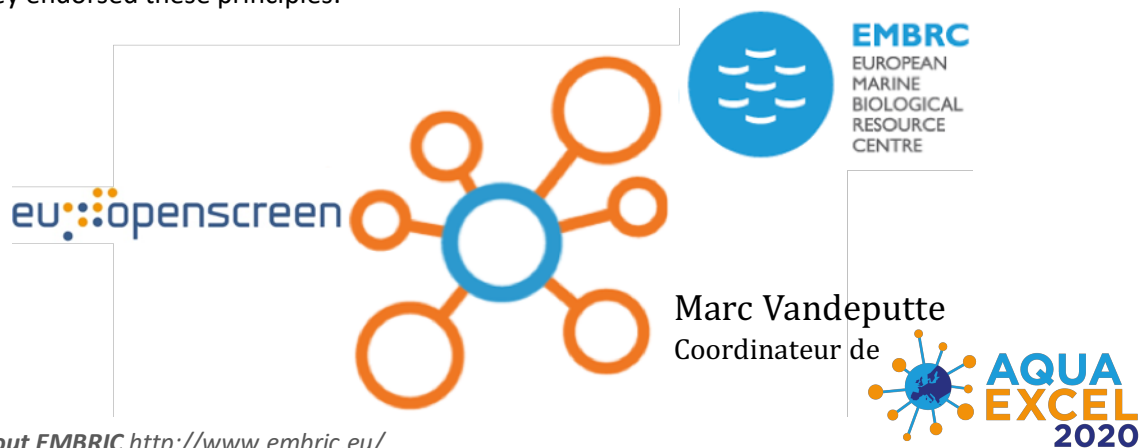


Parliament and of the Council on compliance measures for users from the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization in the Union and its implementing Regulation.

The EMBRIC community is convinced that the principles of open access for data, international exchange and the availability of biological materials for basic research is highly beneficial to economic and social development for all countries. Stressing that global cooperation is essential as is a unifying strategy to avoid double efforts by European players, European nations should endeavour to implement practical solutions that do not impede access to genetic resources, by involving European Research Infrastructures in their pursuit of equitable sharing of benefits.

Supporting the initiative by the COOP+ cluster to establish a Forum on International Cooperation among Environmental RIs, EMBRIC calls for European Research Infrastructures to advocate the above principles in international fora in a coordinated way.

They endorsed these principles:



About EMBRIC <http://www.embric.eu/>

Chapter 10 “The European Marine Biological Research Infrastructure Cluster: An Alliance of European Research Infrastructures to Promote the Blue Bioeconomy” Mery Pina (et al.):

[http://www.embric.eu/sites/default/files/Book%20Chapter%20EMBRIC Marine%20Biotech 0.pdf](http://www.embric.eu/sites/default/files/Book%20Chapter%20EMBRIC%20Marine%20Biotech%200.pdf)

in *Grand Challenges in Marine Biotechnology* (SPRINGER – 2018)

<https://www.springer.com/gp/book/9783319690742>

Regional event - Sept. 2018 - Driving blue bioeconomy forward on a pan-European level

Maritime regions and Research Infrastructures from across Europe join forces on blue bio-economy by mapping regional expertise, sharing best-practice examples and exploring late-stage financing instruments on a pan-European level: <http://www.embric.eu/node/1750>

EMBRIC Paper “A Collaborative European Approach to Accelerating Translational Marine Science” Philip Brennecke (et al.): <https://www.mdpi.com/2077-1312/6/3/81>

European Parliament - March 2018 - Blue economy: Releasing the economic potential of marine biotechnology

At the initiative of the Intergroup Sea, Rivers, Islands and Coastal Areas with the support of the Conference on Peripheral Maritime Regions (CPMR) and the European Marine Biological Research Infrastructure Cluster (EMBRIC), around 70 experts, company representatives and policy makers met at the European Parliament on March 21 to discuss what is needed for a successful European blue bioeconomy: <http://www.embric.eu/node/1737>

