

EU backs spreading marine genomic solutions

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Over the next three years, an EU-funded team of scientists and knowledge management specialists will align state-of-the-art "blue" biotechnology solutions with small-and-medium enterprises (SMEs), large corporations, and environmental regulators. The team also believes marine genomics has the potential to be used in everyday products such as medicine and food, and enrich marine biodiversity.

The MG4U ('Marine Genomics for Users') project has been funded EUR 1.12 million under the 'KBBE' Theme of the EU's Seventh Framework Programme (FP7).

France's Centre National de la Recherche Scientifique and its Station Biologique de Roscoff is collaborating with teams from Germany, Ireland, Portugal, Spain and Sweden to make marine genomic knowledge more accessible to a broad spectrum of end-users. The knowledge transfer process will involve mapping-out genomic hot-spots, raising awareness about potential applications, matching knowledge to commercial challenges, and documenting success stories.

As the project got underway in Paris last month, CNRS's Scientific Coordinator Professor Bernard Kloareg said the team is very excited about the potential of these new "blue" technologies, 'marine organisms have been the source of novel genes and novel compounds for anti-cancer and anti-viral applications, enzyme processing at high temperatures for animal feed, and anti-fouling processes in oceans and we think human health and biotechnology of the future could be drawing power from advances in gene mining.'

Researchers say that developments in marine genomics could help us to understand the impact of climate change on marine fauna and flora, appreciate how marine ecosystems function, and comprehend evolution. Advances in marine genomics could be at the origin of new applications in various industrial fields like aquaculture, fisheries, biomedicine and food processing where biotechnologies are used for sustainable production of healthy products such as vitamins, antioxidants, essential oils and medicines.

Under MG4U, the team will publish online maps, rollout training programmes, and poll industry representatives. The effort will sustain the excellent work of the Marine Genomics Europe Network of Excellence, and knowledge transfer techniques used will build on those piloted in related FP7 projects, such as MarineTT and AquaInnova.

These actions will altogether lead to an uptake of marine genomic techniques, an up-skilled scientific base for public research organizations, durable relationships between scientists and industrial companies, and synergies with other marine genomic projects in Europe.

'We're at the first stage of this project and there is a long way to go, but we think our knowledge transfer activities show real promise,' professor Kloareg added.

For more information, please visit:

Station Biologique de Roscoff (CNRS), <http://www3.sb-roscoff.fr>

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