European project MetaFluidics launches four-year research on cutting-edge biotechnology

Coordinated by the Universidad Autónoma of Madrid, MetaFluidics includes the participation of 5 companies, 4 universities and 4 research organizations from Denmark, Spain, France, Norway, Portugal and the United Kingdom. This project is funded with more than € 8.8 million by Horizon 2020, the European Union’s Research and Innovation Programme.

The kick-off meeting of the MetaFluidics project was held in Brussels on June 16th, 2016, organized and moderated by the Project Coordinator, Dr. Aurelio Hidalgo, Principal Investigator at the Universidad Autónoma of Madrid (Spain). The EC funds this project under the Industrial Leadership call and the topic “Metagenomics as an innovation driver”. Dr. Ioannis Vouldis, Project Officer of the European Commission (EC), as well as the 13 partners of this medium-sized consortium attended the launch of the project, the first step in a very exciting four-year interdisciplinary and intersectoral cooperation.

The objective of this collaborative research is to integrate a range of technologies into a platform designed to beat the odds of identifying genes of biotechnological interest among all the microbial genomes present in an environmental sample (also known as metagenomes). As Dr. Aurelio Hidalgo stated, “the emphasis will be put on technologies that are straightforwardly implemented in non-specialist labs and have the potential to become a new standard”. This platform will be used for green bioenergy conversion, bioremediation, food chemistry and other industrial applications.

Within MetaFluidics, the CIMEs (Enzyme catalysis and molecular engineering) team of LISBP (Laboratoire d’Ingénierie des Systèmes Biologiques et des Procédés at INSA Toulouse) will exploit the latest advances in microfluidics to expand the catalog of enzymes available in nature, but still hidden in the uncultivated fraction of microbial ecosystems. In particular, fancy high-throughput screening strategies will be developed to speed up the rate of discovery of carbohydrate metabolism pathways of high potential for industrial biotechnologies and for controlling ecosystem functions. For more information: http://www.lisbp.fr/fr/la_recherche/equipe_ead1.html

Several MetaFluidics partners will be speaking during the coming Functional Metagenomics 2016 conference taking place in Inderøy, Norway, on September 25-28, 2016 (http://www.sintef.no/projectweb/fmg2016/)

For more information, please contact:

- Laure Fabre, MetaFluidics dissemination and communication manager: laure.fabre@insa-toulouse.fr
- Gabrielle Potocki-Veronese, MetaFluidics lead researcher at INSA Toulouse: gabrielle.veronese@insa-toulouse.fr