



The Marine Microbiome – A treasure trove of scientific and industrial potential

Press Release: July 2016

The worlds of science and industry gathered in Berlin, Germany, from 27-30 June 2016 to discuss the untapped biotechnological potential of the ocean's microorganisms at the 'Marine Microbiome – Discovery & Innovation' conference.

Hosted by the EC FP7-funded **MaCuMBA** project, this joint industry conference and open science meeting brought together experts from across the globe to discuss how novel research discoveries in the field of marine biotechnology can greatly improve Europe's capacity to generate new commercial opportunities.

The event was held at the Science and Technology Park Berlin-Adlershof and consisted of a one-day industry conference followed by a two-day open science meeting. Most attendees participated in both events, taking advantage of the excellent opportunity for industry and science stakeholders to exchange experiences and generate new ideas to drive this important area forward.

'Marine Microbiome – Discovery & Innovation' represented the culmination of the four-year **MaCuMBA** project, which has focused on increasing the rate of isolation of marine microorganisms using novel high throughput techniques for improved isolation efficiency and cultivation of marine microorganisms, and screening for bioactive compounds and biotechnological applications.

With a diverse and comprehensive three-day programme, the event brought together more than 30 high-level experts and over 120 attendees from 17 nations, including numerous European countries, the USA, Israel, South Africa, Mexico and Ecuador. The conference activities included round table and moderated panel discussions; an interactive industry exhibition; one-to-one meetings; a plenary programme with key speakers presenting the latest trends and main issues; and relaxed informal networking opportunities. All activities were designed to provide a platform for research and industry alike to diversify their cross-sectorial knowledge, strengthen their existing partnerships and build new opportunities.

MaCuMBA Project Coordinator, Lucas Stal said: "All invited speakers at the industry conference and open science meeting gave wonderful contributions, and the expert panel members discussed their topics enthusiastically. Each of the four round tables were bustling with lively discussions. The contributions of all those who attended, both oral and poster presenters, exhibitors and delegates, all culminated in making this conference such an excellent event! It is my hope that all participants enjoyed the conference as much as I did."

In addition to the numerous presentations and discussions of novel research results and applications, several interactive round tables were organised, which provided a more focused atmosphere for

researchers to engage in detailed conversations about important questions relevant to their line of work.

The exhibition hall in particular showcased key outputs and ‘hardware’ of the **MaCuMBA** project that have high potential industrial relevance, and are prime candidates for practical commercial development and applications. Researchers were on hand to demonstrate and explain how the European marine biotech industry could benefit from the latest research results in the area. One example is the ‘optical tweezers’ developed by **MaCuMBA** partners Heriot-Watt University (Edinburgh, UK). This state of the art instrument is capable of isolating single cells out of a mixture of cells. They have also developed an integrated optical-microfluidic device to rapidly isolate a large number of cells based on electrokinetic approaches. Start-up companies were also present, among them CellDeg, who showcased their novel high density cultivators, demonstrating live how photoautotrophic cultures can rapidly grow in a membrane based cultivation system.

One of the highlights of the plenary session was the screening of the **MaCuMBA** short film. “Revealing the Secrets of Marine Microbes” was produced by the creative team at eCOAST Marine Research who shadowed the work of **MaCuMBA** researchers in Texel, The Netherlands. This video is ideal for educational use and is available to view and download on the **MaCuMBA** project website: <http://macumbaproject.eu/macumba-disclaimer/macumba-news/1639-new-video-revealing-the-secrets-of-marine-microbes>

For more information about **MaCuMBA** and its final conference, please visit: www.macumbaproject.eu, or contact Marieke Reuver, email: marieke@aquatt.ie.

For all the latest updates from the project please follow **MaCuMBA** on Twitter ([@MaCuMBAProject](https://twitter.com/MaCuMBAProject)) and like it on Facebook (www.facebook.com/MaCuMBAProject).



Photo caption: Dr Lynn Paterson (Heriot-Watt University) demonstrates hardware developed by MaCuMBA researchers including a Laser tweezer, optical pressure-based cell sorter, and MicroDish at the Industry exhibition. Credit: AquaTT

Note for Editors

MaCuMBA is coordinated by the Royal Netherlands Institute for Sea Research (NIOZ) and is a joint venture of 22 partner institutions from 11 EU countries. **MaCuMBA** aims to improve the isolation rate and growth efficiency of marine microorganisms from conventional and extreme habitats by applying innovative methods and using automated high-throughput procedures. AquaTT is the communication and dissemination partner for the project.

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Detailed partner profiles are available on request.