Unlocking the potential for a microbiome-based blue economy along and across the Atlantic

The Side Event on Marine Microbiome at AllAtlantic2021
Wednesday 2nd of June at 16:00 UTC (ref. time zone go to Time table I)

This Side-Event is supported by the <u>Atlantic Ocean Research Alliance Marine Microbiome</u> <u>Working Group</u>, <u>AtlantECO project</u>, the <u>BlueBio CoFund</u>, the <u>European Commission Joint Research Centre</u>, the All-Atlantic Joint Action on Marine Biotechnology, and the <u>AANChOR Coordination and Support Action</u>.

The side event will revolve around interactive talks based on a series of predetermined questions that encompass the objectives of the All-Atlantic Forum. Three panels on crosscutting challenges will work interactively to plan/pledge collaborations in marine microbiome research, development, and innovation in the All-Atlantic. Panel members will be made up of people with a special interest in these areas: Youth Ambassadors, researchers, policymakers, and business leaders, and will span the Atlantic from pole to pole and coast to coast.

The main purpose of the event is to actively build alliances and collaborations to foster marine microbiome research, development, innovation along and across the Atlantic.

The Event will last for two hours until 18:00 UTC.

The Agenda (draft)

16:00 Setting the scene

16:15 Panel 1: Sharing best practices, infrastructures and benefits

16:45 Panel 2: Socio-economic value, ethics, and transfer of technology

17:15 Panel 3: Spark Fascination about marine microbiomes!

17:45 Discussions and Pledges

18:00 Close

The full agenda with names of panellists and moderators will be published shortly

Panel 1: Sharing best practices, infrastructures, and benefits

Over the last decade, a growing number of research infrastructures have emerged to address important challenges involving microbiomes. This panel will discuss 1) international collaborations that required sharing large biobanks, data infrastructures and bioinformatic resources, and 2) how lessons learned from these efforts can be transposed to the study of marine microbiomes.

Questions posed to be addressed by the panel includes:

"What can we learn from successful efforts that relied on large-scale biobanks, data infrastructures, bioinformatics and international collaboration?"

Possible tracks for the discussion:

- data services, including ontologies, long-term preservation, and interoperability
- cloud computing services that allow big data assembly and shared analysis pipelines
- discovery services such as text mining, linked publications and bibliometrics
- benefits to academia, industry, and policy makers

Panel 2: Socio-economic value, ethics, and transfer of technology

Our ability to observe the marine microbiome and generate new knowledge from those observations has expanded rapidly over the last decade. Activities that leverage this knowledge for improved equity, human outcomes, and socio-economic value have, however, lagged. This panel will 1) articulate some of the barriers that have slowed application of knowledge of the marine microbiome, 2) discuss successful strategies for leveraging knowledge of marine microbes for socioeconomic development and ecosystem management purposes, and 3) identify ethical issues arising from potential efforts to leverage marine microbiomes for improved outcomes for humans.

Questions to be addressed include:

- 1. How do we convey the value of marine microbiomes to stakeholders and rightsholders?
- 2. What are the most effective mechanisms for bridging industry, academia, and government interests to optimize the development of microbiome applications?
- 3. What are effective strategies for developing microbiome applications that can be used to improve outcomes for humanity in the Global South?
- 4. What are the risks and uncertainties involved in developing and implementing microbiome-based technologies?

Panel 3: Spark Fascination about marine microbiomes!

Public knowledge on microbiomes is generally low and even less is known about marine microbiomes. Communication about oceans science tends to focus on large-size, charismatic organisms such as whales, sharks, octopuses, lobsters, or starfish. It is time to learn about the "unseen" majority, the marine microbiomes.

This panel will discuss ways that we can 1) build on all the science diplomacy and Atlantic cooperation agreements made over the last decade to spark fascination on marine microbiomes, 2) work with artists, philosophers, social scientists, marine and science visitor centres to develop concepts for charismatic marine microbes, and 2) work with schools, citizen science programmes and others to promote a public fascination with marine microbes and microbiomes.

Questions to be addressed include:

- 1. How can we apply all the science diplomacy and Atlantic cooperation agreements made over the last decade to spark fascination on marine microbiomes?
- 2. How can Atlantic Youth Ambassadors become involved?
- 3. Why should we/you care about marine microbiomes?
- 4. What is missing? What are the obstacles or stumbling blocks that need to be overcome to achieve popular fascination on marine microbiomes?
- 5. What needs to be done to empower Atlantic communities on this topic?

For the time in difference across the Atlantic:

 $\frac{\text{https://www.timeanddate.com/worldclock/converter.html?iso=20210602T160000\&p1=133\&p2=48}}{\text{\&p3=263\&p4=188\&p5=233\&p6=51\&p7=111\&p8=685\&p9=206}}$

Time table I

Corresponding UTC	Wed, 2 Jun 2021 at 16:00
Lisbon, Portugal	Wed, 2 Jun 2021 at 17:00 WEST
Brussels, Belgium	Wed, 2 Jun 2021 at 18:00 CEST
Washington DC, USA	Wed, 2 Jun 2021 at 12:00 EDT
Ottawa, Canada	Wed, 2 Jun 2021 at 12:00 EDT
São Paulo, Brazil	Wed, 2 Jun 2021 at 13:00 BRT
Buenos Aires, Argentina	Wed, 2 Jun 2021 at 13:00 ART
Johannesburg, South Africa	Wed, 2 Jun 2021 at 18:00 SAST
Praia, Cabo Verde	Wed, 2 Jun 2021 at 15:00 CVT
Rabat, Morocco	Wed, 2 Jun 2021 at 17:00 WEST