



# MARINE MICROBIOME AND BLUE BIOTECHNOLOGY NEWSLETTER DESEMBER 2024

Welcome to the latest edition of the Marine Microbiome and Blue Biotechnology Forum newsletter. This newsletter spotlights recent activities and achievements within our community to emphasise the critical role of marine microbes in our ecosystem and to encourage active participation in achieving our collective goals.

## Spotlight on the All-Atlantic Ocean Research and Innovation Forum

The recent All-Atlantic Forum in Ottawa (October 8-10) was a significant milestone for fostering international collaboration. Leaders in marine science, policymakers, and innovators came together to discuss pressing issues such as marine conservation, food security, and the role of microbiomes in mitigating climate change. With over 252 participants from North and South America, Europe, and Africa, the forum emphasized new partnerships that will shape future projects across the Atlantic Ocean.



We look forward to sharing upcoming joint projects and expanded marine microbiome observations facilitated through collaborations with USA, Canada, EU and other partners along the coasts of the Atlantic

OKEANO is a support action to coordinate activities of the All-Atlantic R&I Alliance.

## Highlighting Outcomes from the All-Atlantic Forum in Canada

- *[The All-Atlantic Forum posters are here](#)*
- Iceland and Senegal were introduced as new Partners in [AAORIA](#) with the Intergovernmental Oceanographic Commission of UNESCO as an official Supporter
- Some of the key priorities of [AAORIA](#) are the inclusion of Early Career Ocean Professionals (ECOPs) and increasing the diversity of ocean researchers. A session at the end of day one enabled participants to explore topics associated with diversity, equity and inclusion in small break out groups. These conversations built on ideas and experiences from all participants, providing a diversity of perspectives on how to achieve desired outcomes.

- Throughout the meeting, sessions focused on successes of collaborative research programs and the different ways they are addressing the two Areas of Action prioritised by AAORIA. The range of projects and initiatives highlight that there is no one way to address these large areas of Coastal Resilience and Ocean Observing. The discussions also highlighted the large gaps in our understanding of the ocean.



Dr. Mona Nemer, Canada's Chief Science Advisor

In particular, gaps in our understanding of how changes to the Atlantic Meridional Overturning Circulation (AMOC) will affect ocean productivity and fisheries was highlighted. Addressing these gaps will require collaboration across the whole Atlantic Ocean.

- One particular speaker, at the beginning of the meeting who made a large impact was Jerry Komaksiutiksak, an Inuit Cultural Knowledge Holder. He had brought an Amauti that his wife had used for one of their children. Mothers carry their children for about three years, growing the bond between them and developing a unique relationship. He spoke of how the Inuit see the ocean as a living creature and that by studying it and understanding it, we develop a bond with the ocean. Jerry encouraged us to see the ocean not as something to exploit, but to work with.



He also emphasized that decisions made through AAORIA will have long lasting impacts on people globally.

## OBON Annual meeting 2024

The OBON Annual Meeting took place from 6-8 Nov 2024 at Plymouth Marine Laboratory in the UK. Prior to the meeting, a series of webinars were held to allow the many projects within OBON to introduce themselves and provide updates. These webinars are all available on YouTube (*OBON Webinar Series*), including one for the MMWG's project "Observing and Promoting Atlantic Microbiomes". During the meeting, participants discussed a range of issues facing ocean omics projects including appropriate reference databases, data management and sharing, scaling DNA technologies and incorporation of autonomous sampling. We also discussed capacity building in terms of both people and infrastructure. An interesting session focused on some of the successes (and failures) different projects have had in obtaining funding and support.

One of the key experiences in the meeting was a series of breakout sessions focused on working groups topics of policy, technology development, data, capacity building, protocols and reference libraries. During these sessions we applied a Theory of Change exercise, which helped us to identify clear objectives associated with our overarching goals and the specific actions that are needed to achieve those objectives. It was a different way of looking at challenges that helped us see what impacts OBON could achieve.

Overall, the workshop was a chance for omics researchers to connect and share challenges, but also to share solutions. Throughout the workshop, participants were able to present different perspectives. Although most of the projects are focused on eDNA of larger species, as microbiome researchers, we can provide some of these different perspectives and ideas that can help move omics research forward and support the inclusion of genomics within ocean observing programs.



# Upcoming Marine Science and Microbiome Events

<p>17 - 21 March</p>		<p><b>AquaEcOmics</b> March 17, 2025 - March 21, 2025 All Day Event Palais Lumière in Evian-les-Bains</p>	<p>More Info</p>
<p>04 - 06 June</p>		<p><b>One Ocean Science Congress</b> June 4, 2025 - June 6, 2025 All Day Event NiceFrance,</p>	<p>More Info</p>
<p>09 - 13 June</p>		<p><b>2025 UN Ocean Conference</b> June 9, 2025 - June 13, 2025 All Day Event NiceFrance,</p>	<p>More Info</p>

At the One Ocean Science Congress the Mission Microbiomes AtlantECO (MMA) will present an international study of the most fundamental fabric of the ocean — the ocean microbiome — aiming to understand its structure, functioning and connectivity in the South Atlantic Ocean. It is an initiative of the European Union’s research and innovation project AtlantECO, and an initiative of the All Atlantic Ocean Research and Innovation Alliance (AAORIA), which aims at sharing capacity along and across the Atlantic, and providing knowledge-based resources to help design policies for the management and protection of Atlantic Ecosystem Services.

## Discover the fascinating world of marine microbiomes.

Listen to the latest AI podcast generated from our website content.



**PODCAST**  
What is marine microbiome?



**PODCAST**  
Why is marine microbiome important?

## Join the Conversation!



We encourage you to follow us on our social media platforms to stay updated on marine microbiome research and participate in discussions. Don't forget to use our hashtags: #MarineMicrobiome #Atlantic

All to share your work and connect with the community.



*Happy Holidays*  
&  
PROSPEROUS NEW YEAR!

