

WORKSHOP REPORT

FIRST Sustainable Management of Aquaculture Bacterial Diseases: An interdisciplinary approach Congress

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The first “Sustainable Management of Aquaculture Bacterial Diseases: An Interdisciplinary Approach” Congress took place in Puerto Varas, Chile, from November 20 to 22, 2024. Organized by Monterey Bay Aquarium and the Technological Salmon Institute (Intesal) in collaboration with several universities and research centers, the event gathered national and international aquaculture experts. Over three days, participants discussed sustainable strategies for managing bacterial diseases in aquaculture, including sessions on policies and regulations, antimicrobial resistance, prevention, sustainability, optimizing treatments, and therapeutic alternatives. The congress featured 37 oral presentations from key speakers from Portugal, Spain, the USA, Chile, and the UK. Additionally, workshops were held on environmental impacts, alternative uses, antimicrobial resistance prevention, and communication strategies. The goal was to develop a “Road Map” for the responsible use of antimicrobials in aquaculture. More than 200 attendees highlighted the importance of collaboration between industry, public sectors, and academia. The next edition will take place in 2026.

From the 20th to the 22nd of November 2024, the first “Sustainable Management of Aquaculture Bacterial Diseases: An interdisciplinary approach” Congress was held in the city of Puerto Varas, Chile. This was an unprecedented event organized by the Monterey Bay Aquarium and the Technologic Salmon Institute (Intesal). The conference featured a distinguished scientific committee that collaborates with the Faculty of Veterinary and Animal Science (FAVET – Universidad de Chile), the Pontificia Universidad Católica de Chile (UNA SALUD UC), the Pincoy Project, the Universidad Andrés Bello, and the Interdisciplinary Center for Aquaculture Research (INCAR).

For three days, leading national and international experts in global aquaculture gathered to discuss sustainable approaches to the management of bacterial diseases in aquaculture. The event included six thematic sessions,

including Policy and Regulations, Antimicrobial Resistance, Prevention Strategies, Sustainability and Environment, Optimizing Antimicrobial Treatments, and Therapeutic Alternatives to Antimicrobial Use. Thirty-seven oral presentations were given, with attendees from Chile, the United States, Spain, Norway, and France.

Six keynote speakers were part of this first edition. These were Dr. Barry Antonio Costa- Pierce (Portugal) from Nord Universitet (Norway) – Sustainable management from the inter- discipline; Andreu Rico (Spain), Universidad de Valencia – Environmental Assessment; Gabriel G. Perron (USA), Bard College New York – Antimicrobial Resistance; Alicia Gallardo (Chile) from the World Organization for Animal Health (WOAH) - Policies and regulation; Maisie Ganzler (USA) Independent consultant – Sustainable seafood; and Oisten Thorsen (UK) from Fai Farm – Animal welfare. The EAFP journal collaborated with the Congress in a special issue.

On the third day, discussion workshops were held for four main areas: environmental impacts, alternative uses, prevention of antimicrobial resistance, and communications and education of antimicrobial use. The objective of these round tables was to develop a “Road Map” on the prudent use of antimicrobials in aquaculture. Among the most relevant topics addressed were the importance of education, human-capital formation, and the shortage of professionals in the aquaculture area. Once again, the need for collaborative work between the industrial, public, and academic sectors was highlighted; a key alliance for the proper flow of information, which allows recognition of the needs of the industry.

The event has made it clear that the future of aquaculture depends on our ability to find sustainable and effective solutions to tackle bacterial diseases from a comprehensive perspective. The adoption of an interdisciplinary approach, the search for alternatives to antibiotics, and the implementation of responsible aquaculture practices are fundamental to ensure the health of our oceans and the food security of future generations.

This innovative event was attended by more than 200 people, representing all key stakeholders for the successful and sustainable development of aquaculture, including government entities, producers, laboratories, pharmaceutical companies, nutrition companies, representatives of academia, and non-governmental organizations. Working together and collaborating marked a milestone to carry out concrete actions and advance in the reduction of antimicrobial use, which was demonstrated by the number of projects and amount of research being developed and that were presented during the Congress.

The organizing committee considers that this type of event is crucial for the sustainable development of global aquaculture. With a focus of fostering ongoing dialogue and international collaboration, as well as reviewing the progress and fulfillment of the commitments made in the main conclusions of the first event, the second edition of the congress is planned for 2026.



Organizing Committee: Monterey Bay Aquarium (USA) and the Salmon Technological Institute – INTESAL (Chile)

Scientific Committee: Faculty of Veterinary and Livestock Sciences of the Universidad de Chile (FAVET), the Pontificia Universidad Católica de Chile (UNA SALUD UC), the Proyecto Pincoy, the Universidad Andrés Bello, and the Interdisciplinary Center for Aquaculture Research (INCAR).

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