



CONGRESS  
**Sustainable Management  
 of Aquaculture Bacterial  
 Diseases:  
 an Interdisciplinary Approach**



20<sup>th</sup> – 22<sup>nd</sup> of November · Hotel Cumbres, Puerto Varas, Chile

**Wednesday 20<sup>th</sup> November 2024**

<b>08.00 – 18.00</b>	<b>Accreditation</b>
<b>09.00 – 09.45</b>	<b>Welcoming Ceremony</b> <ul style="list-style-type: none"> <li>• <b>Wendy Norden, Director Global Program, Monterey Bay Aquarium.</b></li> <li>• <b>Tomás Garate, Major Puerto Varas.</b></li> <li>• <b>Mónica Roja N., Chilean National Fisheries and Aquaculture Service</b></li> <li>• <b>Arturo Clément, SalmonChile President</b></li> </ul>
<b>09.45 – 10.00</b>	<b>Introduction:</b> <b>Current situation and challenges of antibiotic use in global aquaculture</b> <b>Rolando Ibarra, Organizer Committee, Monterey Bay Aquarium.</b>
<b>10.00 – 10.30</b>	<b>Plenary lecture:</b> <b>Aquaculture in the Global Social-Ecological Climate Crisis: Pathways for Its Radical Transformation</b> <b>Dr. Barry A. Costa-Pierce, Nord University, Norway &amp; Emeritus Professor, Univ. Rhode Island and UNE (Maine, USA)</b>
<b>10.30 – 11.00</b>	<b>Coffee Break</b>
<b>Session 1: Policy and regulations</b>	
<b>Moderator: Rolando Ibarra – Javiera Cornejo</b>	
<b>11.00 – 11.15</b>	<b>Challenges for the evaluation of veterinary products intended to use in aquaculture</b> <b>Carolina Marambio, SAG, Chile.</b>
<b>11.15 – 11.30</b>	<b>Surveillance of antimicrobial residues in aquaculture products: where do we stand today?</b> <b>Javiera Cornejo, FARMAVET Laboratory, Universidad de Chile.</b>
<b>11.30 – 11.45</b>	<b>Controls on antibiotic use in shrimp aquaculture - Are they sufficient and effective</b> <b>Cormac O' Sullivan, Monterey Bay Aquarium Global Program, USA.</b>
<b>11.45 – 12.00</b>	<b>Regulatory Risk Assessment of veterinary medicinal products used in Aquaculture in Europe</b> <b>Andreu Rico, Cavanilles Institute of Biodiversity and Evolutive Biology, Universidad de Valencia, Spain.</b>
<b>12.00 – 12.15</b>	<b>Commitment: Yelcho, a commitment from the salmon industry to a new way of relating to the animal health sector</b> <b>Daniel Woywood, Aquabench, Chile.</b>
<b>12.15-12.30</b>	<b>Surveillance, Alert, and Response System (SVAR) Project for the reduction of antimicrobial use in salmon farming in Chile</b> <b>Oswaldo Sandoval del Valle, Chilean National Fisheries and Aquaculture Service, Chile.</b>





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12.30 – 13.00	<b>Plenary lecture:</b> <b>One health, one aquaculture. OMSA's tools to prevent RAM</b> <b>Alicia Gallardo Lagno, President of the World Organization of Animal Health (WOAH) Aquatic Animal Health Standards Commission.</b>
13.00 – 14.30	<b>Lunch (Included)</b>
14.30 – 15.00	<b>Plenary lecture:</b> <b>Antibiotic resistance in aquaculture: a reality check from an environmental perspective</b> <b>Gabriel G. Perron, Professor and Researcher of Bard College, Nueva York, USA.</b>
<b>Session 2: Antimicrobial Resistance</b> <b>Moderator: Rubén Avendaño – Paola Olmos</b>	
15.00 – 15.15	<b>The menace of antimicrobial resistance in Chilean salmon farming. The resistome under a One Health perspective</b> <b>Claudio Miranda, Universidad Católica del Norte, Chile.</b>
15.15 – 15.30	<b>Wild-Type and Non-Wild-Type vs Resistance and Susceptible—That Is the Question</b> <b>Ruben Avendaño-Herrera, Universidad Andrés Bello, Chile.</b>
15.30 – 15.45	<b>Disease spillovers in Chile's salmon aquaculture industry</b> <b>Thomas M. Anderson Jr., Universidad de Florida, USA</b>
15.45 – 16.00	<b>Low cost and effective antimicrobial resistance detection using NGS</b> <b>Alejandro Bisquertt, Codebreaker Bioscience, Chile</b>
16.00 – 16.30	<b>Coffee Break</b>
<b>Session 3: Prevention Strategies</b> <b>Moderator: Pablo Ibieta - Daniela Farías</b>	
16.30 – 16.45	<b>Piscirickettsiosis in vivo infection model, from basics to outcome prediction</b> <b>Marcos Mancilla, ADL Diagnostic Chile, Chile.</b>
16.45 – 17.00	<b>Breeding program for SRS resistance: A step towards a more sustainable Salmon farming industry</b> <b>Paulina López, AQUAGEN Chile, Chile.</b>
17.00 – 17.15	<b>Antibiotic use in salmon aquaculture can be successfully decreased by employing proper strategies and practices</b> <b>Pablo Ibieta, Proyecto PINCOY, Chile.</b>
17.15 – 17.30	<b>Infectious diseases prevention using nutritional tools</b> <b>Enzo Caravante, MOWI, Chile.</b>
17.30 – 17.45	<b>Towards cost-effective reductions of antibiotic use in salmon aquaculture</b> <b>Thomas M. Anderson, Universidad de Florida, USA.</b>
18.00 – 20.00	<b>Welcoming Cocktail</b>





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**Thursday 21<sup>st</sup> of November 2024**

<b>09.00 – 09.30</b>	<b>Plenary lecture:</b> <i>Turning Sustainability into Market Advantage</i> <b>Maisie Ganzler, Lecturer, writer, and consultant for Bon Appetit Management Company on Food Sustainability USA.</b>
<b>Session 4: Sustainability and Environment</b> <b>Moderator: Felipe Tucca - María Lorena González</b>	
<b>09.30 – 09.45</b>	<i>Towards sustainable antibiotics use in aquaculture and antimicrobial resistance, participatory experts overview and recommendations</i> <b>Daniela R. Farías, Monterey Bay Aquarium Global Program, USA.</b>
<b>09.45 – 10.00</b>	<i>Socio-economic sustainability What remains to be done on the use of antibiotics in salmon farming?</i> <b>Manuel Estay, INCAR, Universidad de Concepción, Chile.</b>
<b>10.00 – 10.15</b>	<i>Response of marine planktonic microbial metabolism to florfenicol used in salmon farming, a microcosm approach</i> <b>María Lorena González, INCAR, Universidad de Concepción, Chile.</b>
<b>10.15 – 10.30</b>	<i>Metagenomic analysis of microbial communities in marine sediment associated with salmon farms under antimicrobial treatments in the Los Lagos region</i> <b>Sergio Lynch, Universidad Santo Tomás, Chile.</b>
<b>10.30 – 10.45</b>	<i>Benefits of oxygen supply in fish <i>Salmo salar</i> and its contribution to the efficacy of antibiotics treatments</i> <b>Pedro Palacios, OXZO S.A., Chile.</b>
<b>11.00 – 11.30</b>	<b>Coffee Break</b>
<b>11.30 – 12.00</b>	<b>Plenary lecture:</b> <i>Antibiotics in aquaculture: environmental exposure and ecological risks</i> <b>Andreu Rico, Researcher at Cavanilles Institute of Biodiversity and Evolutionary Biology, Valencia University, Spain.</b>
<b>Session 5: Optimizing Antimicrobial Treatments</b> <b>Moderator: Claudio Miranda - Sergio A. Lynch</b>	
<b>12.00 – 12.15</b>	<i>In vitro release of microencapsulated oxytetracycline in formulations for oral administration in rainbow trout (<i>Oncorhynchus mykiss</i>)</i> <b>Vicente G. Sánchez – Universidad de Chile, Chile.</b>
<b>12.15 – 12.30</b>	<i>Evaluation of the effect of three florfenicol doses against SRS in Atlantic salmon challenged by IP-injection when administered at an early stage of infection</i> <b>Carlos Zarza, Skretting, Noruega.</b>
<b>12.30 – 12.45</b>	<i>Evaluation of the efficacy of timely florfenicol treatments against SRS (<i>Piscirickettsia salmonis</i>) in Atlantic salmon by an i.p challenge model</i> <b>Pablo Ibieta, TEKBIOS, Chile.</b>





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12.45 – 13.00	<i>Pharmacokinetic profile of microencapsulated oxytetracycline using aromatic-aromatic interactions and zinc-alginate Microparticles for potential oral use in salmonids</i> <i>Lina M. Trincado, Laboratorio FARMAVET, Universidad de Chile, Chile.</i>
13.00 – 14.30	Lunch (Included)
<b>Session 6: Therapeutic alternatives to antimicrobial use</b> <b>Moderator: Alin Casado – Alexander Jaramillo</b>	
14.30 – 14.45	<i>On-site validation of a probiotic to increment fish resilience against SRS</i> <i>Alin Casado, Biomar, Chile.</i>
14.45 – 15.00	<i>A natural formulation enhancing antimicrobial efficacy and improving animal welfare</i> <i>Marcela P. Delgado, Sudvet Corp, Chile.</i>
15.00 – 15.15	<i>Positive effect of marine symbiotics supplementation on fish intestinal microbiota dysbiosis induced by antibiotic treatment</i> <i>Fanny Giudicelli, Marine Akwa R&amp;D Center, Francia</i>
15.15 – 15.30	<i>New oral immunostimulant as an alternative to the use of antibiotics</i> <i>Pabla A. Barra, Laboratorio FAV, Chile.</i>
15.30 – 15.45	<i>Nanostructured proteins for disease control in aquaculture developing sustainable alternatives for the industry</i> <i>Débora Torrealba – Universidad de O’Higgins, Chile.</i>
15.45 – 16.00	<i>Efficacy of a natural additive; boosting sustainability and health in salmon aquaculture</i> <i>Marcela P. Delgado, Sudvet Corp, Chile.</i>
16.00 – 16.15	<i>Passive immunotherapy for Salmonids based on alpaca nanobodies</i> <i>Claudio Cappelli, Berking Biotechnology SpA</i>
16.15 – 16.45	Coffee Break
<b>Pitch session</b> <b>16.45 – 17.30</b> <b>Moderator: Felipe Tucca</b>	
<i>Development and evaluation of a novel quinone antibiotic for managing bacterial disease in aquaculture</i> <i>Benjamín Bustamante, Universidad San Sebastián, Chile.</i>	
<i>Evaluation of the in vitro antimicrobial effect of chitosan sulphated (CH-S) on the viability of <i>Piscirickettsia salmonis</i>.</i> <i>Darwin Arrieta, Universidad de Chile, Chile.</i>	
<i>Evaluation of an endemic plant extract from Chile for the prevention of bacterial infections in salmonids</i> <i>Benjamín Bustamante, Universidad San Sebastián, Chile.</i>	
<i>Retention of oxytetracycline in biocompatibles polyesters for use in aquaculture</i> <i>Begoña F. Barros, Universidad Austral de Chile, Chile.</i>	





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<b>AI-driven design of phytogenic additives for salmon health</b> <i>Francisco E. Arancibia, ISR-Bio, Chile.</i>	
<b>Study of the retention and controlled release of florfenicol (FF) from polymeric matrix</b> <i>Evelyn C. Binder, Universidad Austral de Chile, Chile.</i>	
<b>Innovative disease management comparative efficacy of florfenicol and C3COS as a powerful duo against P. salmonis in Atlantic salmon</b> <i>Marcela P. Delgado, Sudvet corp, Chile.</i>	
<b>Bibliographic evaluation of plant extracts as an alternative to the use of antibiotics in salmon farming</b> <i>Adanelys Serrano, Universidad de Concepción, Chile.</i>	
<b>Development of a bacteriocin-based feed additive for the control of AHPND in shrimp aquaculture</b> <i>Adam Charest, Organicin Scientific, USA</i>	
<b>17.30 – 20.00</b>	<b>Networking / Happy hour</b>

**Friday 22<sup>nd</sup> of November 2024**

<b>09.00 – 11.00</b>	<b>Workshop / Panel of experts</b> <b>Topics:</b> <ol style="list-style-type: none"> <li>1. <b>Environmental impacts.</b></li> <li>2. <b>Efficacy and Therapeutic alternatives.</b></li> <li>3. <b>AMR prevention.</b></li> <li>4. <b>Communication and Education on antibiotic use.</b></li> </ol>
<b>11.00 – 11.30</b>	<b>Coffee break</b>
<b>11.30 – 12.00</b>	<b>Plenary Lecture:</b> <b>The role of animal welfare in Antibiotic Stewardship: examples from broilers, laying hens and tilapia</b> <i>Oistein Thorsen, CEO Fai Farm</i>
<b>12.00 – 12.40</b>	<b>Workshop Conclusions (10 min per each workshop)</b>
<b>12.40 – 13.00</b>	<b>Alliance to collaborate and strengthen a global sustainable aquaculture</b>
<b>13.00 – 13.15</b>	<b>Closing Ceremony</b>
<b>13.30</b>	<b>Cocktail and awards</b>

