4th International Symposium
MUCOSAL HEALTH in AQUACULTURE
MHA 2026
September 7–10, 2026
Barcelona, Spain

4th International Symposium Mucosal Health in Aquaculture

September 7-10, 2026 I Barcelona, Spain

IRTA Institute of Agrifood Research and Technology

Generalitat de Catalunya
Government of Catalonia

ORGANIZED BY

IRTA Institute of Agrifood Research and Technology

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WELCOME MESSAGE

Barcelona is among the most important cities showcasing Modernism, and Antoni Gaudi is its main representative. Just as Antoni Gaudí drew profound inspiration from nature's intricate designs to create Barcelona's most extraordinary architectural masterpieces, researchers addressing studies on immunity must turn to nature's own blueprints to find sustainable solutions for fish farming.

Gaudí understood that nature holds the keys to both beauty and functionality, whereas the immune system of fish, particularly their mucosal-associated lymphoid tissues, has evolved over millions of years, representing nature's most sophisticated defence mechanisms. Like Gaudí, who saw in a leaf's structure the perfect design for a column, we must observe how fish immunity functions to design better farming practices. The delicate balance of immune responses, the elegant communication between cells, tissues, organs and the whole body, and the remarkable adaptability of aquatic organisms offer a blueprint for healthier and more resilient aquaculture systems.

The Organising Committee of the 4th International Symposium on Mucosal Health in Aquaculture (MHA2026) is delighted to invite you to be part of this outstanding event, which will be held at one of Barcelona's architectural masterpieces, the Recinte Modernista de Sant Pau in Barcelona (Spain), from September 7th to 10th, 2026.

Thus, the MHA 2026, a biennial event, serves as a leading platform for presenting and discussing the most recent advances in mucosal health research across a wide range of farmed aquatic species. By fostering dialogue and collaboration, MHA2026 aims to open up new directions for research and reinforce the current scientific knowledge on the role of mucosal health in advancing sustainable aquaculture practices.

MHA2026 will bring together an international scientific community, from early career researchers to leading experts, along with representatives from the aquaculture industry. The symposium promotes knowledge exchange and collaboration, bridging fundamental research with practical applications that strengthen aquaculture resilience and sustainability.

Would you like to join us and share with the scientific community your advances and research on mucosal health? Do not miss the opportunity to visit one of the most beautiful Mediterranean cities and be part of the MHA2006. We look forward to seeing you in Barcelona.

The MHA2026 Organization Committee

SPECIAL ISSUE

4th International Symposium
Mucosal Health in Aquaculture

Publication Opportunity
Special Issue – Advances in Mucosal Health for Resilient Aquaculture

As part of the scientific programme of **MHA 2026**, we are pleased to share a publication opportunity for researchers working in the field of mucosal health and aquaculture.

A new Special Issue in the journal Aquaculture, entitled **"Advances in Mucosal Health for Resilient Aquaculture"**, aims to bring together the latest research and advances in understanding and improving mucosal health in aquatic species. The Special Issue will explore the role of mucosal health in promoting animal health, resilience, disease prevention and the sustainability of aquaculture production.

The scope of the Special Issue closely aligns with several of the scientific themes addressed during **MHA 2026**, including **mucosal immunity, host–microbiota interactions, mucosal barriers, nutrition and functional feeds, biomarkers and diagnostics, vaccination strategies and mucosal protection.**

Researchers and participants interested in contributing are invited to consult the full scope of the Special Issue, submission requirements and editorial information through the link below.

Submission deadline: 28 February 2027
Guest Editors: Jorge Galindo-Villegas & Silvia Torrecillas

Discover the Special Issue and submission guidelines →

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Recinte Modernista de Sant Pau
C/ Sant Antoni Maria Claret, 167
Barcelona

Monday, September 7th

17:00 h	**Registration** Main Hall
19:00 h	**Welcome cocktail reception - Sala Domenech i Muntaner** Guided Tour - Sant Pau Modernist Complex

Tuesday, September 8th

08:00 h	**Registration** Main Hall
09:00 - 09:10 h	**Welcome - Silvia Torrecillas**, *IRTA, Aquaculture, Centre La Ràpita, Spain.* Sala Pau Gil: main auditorium
09:15 - 13:15 h	**SESSION: FUNCTIONAL FEEDS AND NUTRITIONAL MODULATION OF MUCOSAL HEALTH**

Sala Pau Gil: main auditorium

Chairs:

Enric Gisbert. *IRTA, Aquaculture, Centre La Ràpita, Catalonia, Spain.*

Daniel Montero. *Grupo de Investigación en Acuicultura (GIA), IU-ECOAQUA, Universidad de Las Palmas de Gran Canaria, Las Palmas, Spain*

09:15 - 10:00 h	**KEYNOTE 1 - MUCOSAL HEALTH – FROM BIOLOGICAL COMPLEXITY TO INDUSTRIAL RESILIENCE**

Keynote Speaker: Linda B. Jensen. Skretting Aquaculture Innovation, R&D Health, Stavenger, Norway

10:00 - 11:00 h	**ORAL PRESENTATIONS 1 - Functional Feeds and Nutritional Modulation of Mucosal Health**
10:00-10:15 h	**OP-01 (1).** THE ROLE OF ZINC IN MUCOSAL INTEGRITY AND WOUND HEALING IN SALMONIDS: IMPLICATIONS FOR AQUACULTURE HEALTH MANAGEMENT Claudia Figueiredo-Silva, Joana Silva
10:15-10:30 h	**OP-02 (39).** MUSHROOM STEM MEALS FROM *Agaricus bisporus and Pleurotus ostreatus* BY-PRODUCTS DIFFERENTIALLY MODULATE INTESTINAL MUCOSAL HEALTH, BARRIER INTEGRITY AND IMMUNE RESPONSES IN RAINBOW TROUT Carl John Saromines, Enric Gisbert, Karl Blyth Andree, Yanis Cruz-Quintana, Silvia Torrecillas.

10:30-10:45 h	**OP-03 (26).** DIETARY VITAMIN A REDUCES SALMON LOUSE *(Lepeophtheirus salmonis)* INFESTATION IN ATLANTIC SALMON *(Salmo salar)* IN A DOSE-DEPENDENT MANNER Ingeborg Kjønnø Schaanning, Koestan Gadan, Øystein Evensen, Elin C. Valen, Aliaksandr Hubin, Katerina Kousoulaki, Pauline Wischhusen, Åshild Krogdahl, Guro Løkka, Trond M. Kortner.
10:45-11:00 h	**OP-04 (75).** Dietary EPA and DHA Modulate Skin Wound Healing Dynamics in Atlantic Salmon *(Salmo salar)* Jinni Gu, Torunn Forberg, Elisabeth Aasum.
11:00-11:30 h	**Coffee break** Espacio 1902 (Level -1)
11:30-13:15 h	**ORAL PRESENTATIONS 2 - Functional Feeds and Nutritional Modulation of Mucosal Health**
11:30-11:45 h	**OP-05 (92).** FUNCTIONAL EFFECTS OF KRILL MEAL ON SKIN HEALTH AND BARRIER FUNCTION IN ATLANTIC SALMON Kiranpreet Kaur, Karin Pittman, Mark Fast.
11:45-12:00 h	**OP-06 (96).** COLD STRESS RESHAPES THE SKIN-MUCUS BARRIER IN GILTHEAD SEABREAM: CAN PROTEIN HYDROLYSATES MITIGATE THE IMPACT? Bia Pinho, Ana Claro, André Almeida, Sara Magalhães, Marta Monteiro, Luisa Maria Pinheiro Valente.
12:00-12:15 h	**OP-07 (52).** DIETS CONTAINING MICROBIAL INGREDIENTS MODULATED IMMUNE RESPONSES AND INCREASED ROBUSTNESS OF ATLANTIC SALMON *(Salmon salar)* CHALLENGED WITH Moritella viscosa. Sérgio Rocha, Marte Røsvik, Byron Morales-Lange, Dominic Mensah, Veronica Blihovde, Henning Sørum, Liv Torunn Mydland, Margareth Øverland.
12:15-12:30 h	**OP-08 (15).** A PHYTOBIOTIC-BASED ADDITIVE SUPPORTS FISH SKIN HEALTH BEYOND DISEASE CONTROL I-Tung Chen, Alex Makol, Waldo Nuez-Ortín.
12:30-12:45 h	**OP-09 (76).** FROM *Hermetia illucens*-BASED AQUAFEEDS TO FUNCTIONAL BIOACTIVES: A MULTIDISCIPLINARY APPROACH TO INVESTIGATING THE EFFECTS OF CHITIN AND LAURIC ACID ON RAINBOW TROUT GUT MUCOSAL HEALTH Simona Picchietti, Valeria Pianese, Roselida Opere, Nicole Verdile, Giulia Pascon, Enrico Daniso, A Kosakyan, Gloriana Cardinaletti, Fulvio Gandolfi.

12:45-13:00 h	**OP-10 (67).** DIETARY AUREOCIN A53 AND ENTEROCIN P MODULATE GUT HEALTH RESPONSES IN NILE TILAPIA *(Oreochromis niloticus)* EXPOSED TO CLIMATE-RELATED STRESS Samira Sarih, Dolors Furones, Karl Blyth Andree, Enric Gisbert, Samira Reinoso, Yanis Cruz, Anna Arís, Elena Garcia-Fruitós, Eva Balan, Mahmoud Eltholth, Jennifer Cole, Ismail Ayoade Odetokum, Silvia Torrecillas.
13:00-13:15 h	**OP-11(59).** DATA INTEGRATION AND BIOMARKER DISCOVERY TO CHARACTERIZE THE IMMUNE-MODULATING EFFECTS OF FUCOIDAN FROM SUGAR KELP IN ATLANTIC SALMON Byron Morales Lange, Dominic Mensah, Sérgio Rocha, Liv Torunn Mydland, Margareth Øverland.

13:15-14:30 h	**Lunch** Espacio 1902 (Level -1)
14:30-18:00 h	**SESSION: MUCOSAL BARRIERS: STRUCTURE, CROSSTALK, AND FUNCTION**

Sala Pau Gil: main auditorium

Chairs:

Carolina Tafalla. *Biotechnology Department, INIA-CSIC, Madrid, Spain.*

Carlo Lazado. *Senior Scientist. Fish Health Department, Nofima, Norway.*

14:30-15:15 h	**KEYNOTE 2 - WATER OR LAND? REMODELING OF MUCOSAL BARRIERS BY THE IMMUNE SYSTEM IN AFRICAN LUNGFISH**

Keynote Speaker: : Irene Salinas. Center for Evolutionary and Theoretical Immunology, Department of Biology - University of New Mexico - New Mexico - USA

15:15-16:15 h	**ORAL PRESENTATIONS 3 - Mucosal Barriers: Structure, Crosstalk, and Function**
15:15-15:30 h	**OP-12 (63).** A NOVEL PAN-T CELL ANTIBODY ENABLES THE CHARACTERIZATION OF T CELL POPULATIONS IN RAINBOW TROUT MUCOSAL TISSUES Angela Etayo, Xu-Jie Zang, Jing-Yi Zhuang, Ting Wang, Diana Fagundez, Beatriz Abos, Samuel Vicente-Gil, Esther Morel, Carolina Tafalla.

15:30-15:45 h	**OP-13 (18).** MUCOSAL REMODELING IN FARMED ATLANTIC SALMON *(Salmo salar)* DURING SEAWATER TRANSFER (SWT): INTEGRATING SKIN AND GILL MUCOUS CELL DYNAMICS WITH SKIN MUCUS Neu5Gc Karin Pittman, Bjørn Barlaup, Mearge Okubamichael, Trond-Inge Kvernevik, Anette Sauve, Grigory Merkin.
15:45-16:00 h	**OP-14 (37).** AN ACTIVE MUCOSAL IMMUNE LANDSCAPE IN THE ATLANTIC SALMON TONGUE Carlo Lazado, Miroslava Hansen, Erik Burgerhout, Hanne Brenne, Marianne Vaadal, Torstein Tengs, Lene Sveen, Marianne Iversen, Lill-Heidi Johansen, Elisabeth Ytteborg, Arvind Sundaram, Aleksei Krasnov.
16:00-16:15 h	**OP-15 (54).** ULTRA-LONG TUNNELING NANOTUBES MEDIATE INTERCELLULAR ORGANELLE TRANSFER IN ATLANTIC SALMON (SALMO SALAR) KERATOCYTES Marie Mikkelborg, Bilal Muhammad Afzal, Balpreet Singh Ahluwalia, Deanna Wolfson, Roy Dalmo, Dhivya Borra Thiyagarajan.
16:15-16:45 h	**Coffee break** Espacio 1902 (Level -1)
16:45-18:00 h	**ORAL PRESENTATIONS 4 - Mucosal Barriers: Structure, Crosstalk, and Function**
16:45-17:00 h	**OP-16 (35).** HIGH-RESOLUTION SPATIAL TRANSCRIPTOMICS IDENTIFIES DISTINCT MUCOSAL IMMUNE NICHES IN ATLANTIC SALMON LARVAE Lene Sveen, Marianne Vaadal, Torstein Tengs, Carlo Lazado.
17:00-17:15 h	**OP-17 (47).** MIGRATORY KERATOCYTES IN SALMON EXPRESS MHC II AND RECRUIT IMMUNE CELLS IN RESPONSE TO VARIOUS STIMULI Dhivya Borra Thiyagarajan, Marie K Mikkelborg, Bilal M Afzal, Balpreet S Ahluwalia, Deanna L Wolfson, Roy A Dalmo.
17:15-17:30 h	**OP-18 (45).** GILTHEAD SEABREAM (SPARUS AURATA) RESPONSE TO ANOXIA AND CROWDING: A COMPARISON BETWEEN MUCOSAE Nuria Ruiz, Manuel Blonç, Lluís Tort.
17:30-17:45 h	**OP-19 (10).** EFFECTS OF DIFFERENT TEMPERATURE REGIMES ON ATLANTIC COD *(Gadus morhua L.)* SKIN MUCUS GLYCOME AND PATHOGEN BINDING ABILITY Sara Lindén, Kyung Min Lee, John Benktander, Carlos Lazado, Elisabeth Ytterborg.

17:45-18:00	**OP-20 (87).** PRIMING THE BARRIER: EVALUATING ALGAE-BASED FEEDS AGAINST SEA LICE AND CHEMICAL INSULTS USING AN EX VIVO SALMON SKIN MODEL Ana Teresa Gonçalves, André Barreto, Rute Félix, Daniel Jerónimo, Claudia Magalhães, Jorge Dias.
18:00-18:45 h	**POSTERS SESSION** Rooms 1 & 2 (Level -1)

Wednesday, September 9th

09:00-13:15 h	**SESSION: MUCOSAL IMMUNITY: MECHANISMS, BIOMARKERS, AND DIAGNOSTICS**

Sala Pau Gil: main auditorium

Chairs:

Steve Bird. *Aquaculture Program, Institut de Recerca i Tecnologia Agroalimentàries (IRTA), La Ràpita, Spain*

Felipe Reyes. *Associate Professor, Department of Animal Pathology, Faculty of Veterinary and Animal Sciences, University of Chile*

09:00-09:45 h	**KEYNOTE 3 - INTERPRETING MUCOSAL HEALTH THOUGH TRANS-CRIPTOMIC APPROACHES**

Keynote Speaker: Samuel Martin. Director Scottish Fish Immunology Research Centre. Aberdeen, United Kingdom

09:45-11:00 h	**ORAL PRESENTATIONS 5 - Mucosal Immunity: Mechanisms, Biomarkers, and Diagnostics**
09:45-10:00 h	**OP-21 (40).** B CELL DYNAMICS IN RAINBOW TROUT GILLS FOLLOWING PRIMARY AND SECONDARY CHALLENGE WITH *Lactococcus petauri* Carolina Tafalla, Aitor Arrogante, Beatriz Abós, Samuel Vicente-Gil, Pablo Jiménez-Barrios, Patricia Díaz-Rosales, Pedro Perdiguero, Juan-Germán Herranz-Jusdado, Esther Morel.
10:00-10:15 h	**OP-22 (68).** ANTIGEN-SAMPLING AND INDUCTION OF LOCAL IMMUNE RESPONSES IN THE INTESTINE OF RAINBOW TROUT AFTER ANAL INTUBATION OF BACTERIAL ANTIGENS Goshi Kato, Toi Kaneko, Riko Ishida, Aika Guruge, Megumi Matsumoto, Esther Bárcena, Patricia Diaz-Rosales, Carolina Tafalla, Motohiko Sano.

10:15-10:30 h	**OP-23 (101).** IMPACT OF SEASONAL TEMPERATURE ON THE SKIN TRANSCRIPTOMIC RESPONSE OF ATLANTIC SALMON *(Salmo salar)* TO *Caligus rogercresseyi* INFESTATION Felipe E. Reyes-López, Mabel Vidal, Kevin Aguilar-Valdés, María Jesús Santillán-Araneda, Daniela Vargas, Gabriel Jerez, Eva Vallejos-Vidal.
10:30-10:45 h	**OP-24 (9).** DIVERGENT HOST RESPONSES TO SALMON LOUSE INFESTATION AND EXPERIMENTAL WOUNDING IN COHO AND ATLANTIC SALMON Renate Kvingedal, Stanko Skugor, Cynthia Valenzuela, Aleksei Krasnov, Torstein Tengs, Marianne Hansen, Siri Helene Helland-Riise, Marianne Vaadal, Lene Sveen.
10:45-11:00 h	**OP-25 (7).** FISH SKIN MUCUS AS A SENSITIVE NON-LETHAL MATRIX FOR ASSESSING BENZO[A]PYRENE EXPOSURE IN *SALMO TRUTTA* Coline Louvet, Patrice Noury, Laura Garnero, Léa Gobillot, Valérie Hamelet, Lucía Viñas, Emilie Réalis-Doyelle, Carmen Gonzàlez-Fernàndez.
11:00-11:30 h	**Coffee break** Espacio 1902 (Level -1)
11:30-13:15 h	**ORAL PRESENTATIONS 6 - Mucosal Immunity: Mechanisms, Biomarkers, and Diagnostics**
11:30-11:45 h	**OP-26 (69).** FROM TRANSPORT STRESS TO RECOVERY: THE UNDERLYING RESPONSES OF THE SKIN-MUCUS INTERFACE IN ATLANTIC SALMON *(Salmo salar)* André Barreto, Cláudia Raposo De Magalhães, Bruno Reis, Paulo Rema, Rui J.M. Rocha, Benjamin Costas, Ana Teresa Gonçalves.
11:45-12:00 h	**OP-27 (30).** DISTINCT CELL STATES IN GILL EPITHELIAL ANTIGEN SAMPLING CELLS REVEALED BY SINGLE-CELL RNA SEQUENCING Nagisa Saito, Masachika Harada, Hiroki Kusaka, Hajime Yuasa, Kayo Konishi, Megumi Matsumoto, Motohiko Sano, Keiichiro Koiwai, Goshi Kato.
12:00-12:15 h	**OP-28 (44).** SKIN MUCUS SAA AS A NON-LETHAL BIOMARKER OF SOYBEAN MEAL–INDUCED ENTERITIS IN ATLANTIC SALMON J. German Herranz-Jusdado, Beatriz Abós, David Peggs, Tommy B. Eriksen, Linda B. Jensen, Carolina Tafalla.
12:15-12:30 h	**OP-29 (4).** TRACKING MUCOSAL HEALTH IN PFAS-EXPOSED FISH VIA IMMUNE AND STRESS BIOMARKERS Carmen González Fernández, Coline Louvet, Laura Garnero, Valerie Hamelet, Emmanuelle Vulliet, Florent Lafay, Emilie Réalis-Doyelle.

12:30-12:45 h	**OP-30 (29).** DISTRIBUTION OF CD4 1, CD4 2, AND CD8 ALPHA POSITIVE T CELL SUBPOPULATIONS ACROSS MUCOSAL, SYSTEMIC LYMPHOID, AND CIRCULATING COMPARTMENTS IN GINBUNA CRUCIAN CARP Terumi Goto, Lik-Ming Lau, Megumi Matsumoto, Motohiko Sano, Goshi Kato.
12:45-13:00 h	**OP-31 (46).** CORTISOL MODULATES LIPOPOLYSACCHARIDE-INDUCED IMMUNE RESPONSES IN A RAINBOW TROUT INTESTINAL EPITHELIAL CELL LINE *(RTGUTGC)* Nuria Ruiz, Marlid García, Nerea Roher, Lluís Tort.
13:00-13:15 h	**OP-32 (48).** CHARACTERIZATION OF CD4+ AND CD8+ T CELL POPULATIONS IN RAINBOW TROUT *(ONCORHYNCHUS MYKISS)* SKIN AND THEIR MODULATION DURING IHNV INFECTION. Aitor Arrogante, Melanie Salazar, Samuel Vicente-Gil, Ángela Etayo, Carolina Tafalla, Germán Herranz-Jusdado.
13:15-14:30 h	**Lunch** Espacio 1902 (Level -1)
14:30-17:45 h	**SESSION: HOST–MICROBIOTA INTERACTIONS AT MUCOSAL SURFACES**
	Sala Pau Gil: main auditorium **Chairs:** **Sam Martin.** *Professor, University of Aberdeen, Director of Research, School of Biological Sciences, Director Scottish Fish Immunology Research Centre* **Carla Piazzon.** *Institute of Aquaculture Torre de la Sal, CSIC, Castellón, Spain.*
14:30-15:15 h	**KEYNOTE 4 - DECODING GRANULOMATOUS IMMUNITY IN FISH**
	Keynote Speaker: : Jorge Galindo-Villegas. Department of Genomics, Faculty of Biosciences and Aquaculture, Nord University, Bodo, Norway

15:15-16:15 h	**ORAL PRESENTATIONS 7 - Host–Microbiota Interactions at Mucosal Surfaces**	
	15:15-15:30 h	**OP-33 (13).** AMPSEQ GENOMIC SURVEILLANCE OF AMOEBIC GILL DISEASE REVEALS TRANSMISSION AND HOST-SYMBIONT DYNAMICS Brendan Robertson, Bachar Cheaib, Konstantin Checkanov, Tina Oldham, Yee Wan Liu, Martin Llewellyn, Kyrie Dickson.
	15:30-15:45 h	**OP-34 (72).** PROTEOMIC CHARACTERIZATION OF VIRULENCE FACTORS INVOLVED IN THE COLONIZATION OF *Moritella viscosa* IN SALMON MUCUS USING AN IN VITRO MODEL M Pilar Escribano, Øystein Evensen, Gustav Vaaje-Kolstad.
	15:45-16:00 h	**OP-35 (88).** SECRETORY IGM REGULATES MICROBIOTA GUT HOMEOSTASIS AND METABOLISM IN RAINBOW TROUT *(ONCORHYNCHUS MYKISS)* Oriol Sunyer, Alvaro Fernández-Montero, Yang Ding, Amir Mani, Elisa Casadei, Yasuhiro Shibasaki, Fumio Takizawa, Ryuichiro Miyazawa, Irene Salinas.
	16:00-16:15 h	**OP-36 (91). DISSECTING THE FUNCTIONAL REDUNDANCY OF IgM AND IgT IN MUCOSAL MICROBIOME HOMEOSTASIS IN TELEOST FISH** Álvaro Fernández-Montero, Yang Ding, Elisa Casadei, Daniel Montero, Irene Salinas, Oriol Sunyer.
16:15-16:45 h	**Coffee break** Espacio 1902 (Level -1)	
16:45-17:30 h	**ORAL PRESENTATIONS 8 - Host–Microbiota Interactions at Mucosal Surfaces**	
	16:45-17:00 h	**OP-37 (50).** EXTERNAL MUCOSAL MICROBIAL COMMNUITIES DETERMINED BY TIME OVER TISSUE IN ATLANTIC SALMON Marlene Lorgen-Ritchie, Lynn Chalmers, Michael Clarkson, John F. Taylor, Herve Migaud, Samuel A. M. Martin.
	17:00-17:15 h	**OP-38 (41).** DEPICTING HOST GENETICS, EPIGENETICS, AND GUT MICROBIOME DYNAMICS TO IMPROVE RESILIENCE IN FARMED FISH Federico Moroni, Ricardo Domingo-Bretón, Fernando Naya-Català, Jaume Pérez-Sánchez.
	17:15-17:30 h	**OP-39 (20).** GILL MICROBIOME RESPONSES TO PATHOGEN AND PHYTOPLANKTON EXPOSURE IN ATLANTIC SALMON Arianna Destefani, Paola E. Campos, Jens Carlsson, Colin Hannon, Oluwasegun Ige, Michelle Mccormack, Katie O'dwyer, Hamish Rodger, Orla Slattery, Liam Strachan, Julia C. Jones.

17:30-18:15 h	**POSTER SESSION** Rooms 1 & 2 (Level -1)
20:30 h	**Gala Dinner** Restaurante La Barceloneta - Carrer de l'Escar, 22, Port Vell, Barcelona

Thursday, September 10th

09:30-12:30 h	**SESSION: VACCINATION STRATEGIES FOR MUCOSAL PROTECTION IN AQUATIC SPECIES**

Sala Pau Gil: main auditorium

Chairs:

Nerea Roher. *Institut of Biotecnology and Biomedicine (IBB-MRB), Barcelona, Spain.*

Dr. Ansgar Stratmann. *Director Biotechnology, Aquatreck, Spain*

09:30-10:15 h	**KEYNOTE 5 - Oral vaccines for aquatic animals**

Keynote Speaker: Nerea Roher Armentia. Institut of Biotecnology and Biomedicine (IBB-MRB), Barcelona, Spain

10:15-11:00 h	**ORAL PRESENTATION 9 - Vaccination Strategies for Mucosal Protection in Aquatic Species**

10:15-10:30 h	**OP-41 (100).** PICHIA PASTORIS AS VECTOR FOR ORAL UPTAKE STRATEGIES A Stratmann, C Tafalla, N Lorenzen, Ep Preetham, C Gallardo, V Valenzuela-Muñoz, P Christofilogiannis.
10:30-10:45 h	**OP-42 (61).** SPORE-BASED ORAL VACCINES COMBINED WITH MOLECULAR ADJUVANTS AS NEXT-GENERATION MUCOSAL IMMUNISATION STRATEGIES FOR THE AQUACULTURE INDUSTRY Bárbara Guedes, Rafaela A. Santos, Gabriela Gonçalves, Aires Oliva-Teles, Ana Couto, Claudia R. Serra.
10:45-11:00 h	**OP-43 (6).** BATH VACCINATION INDUCES DIFFERENT IGM AND IGT REPERTOIRE SIGNATURES IN TURBOT *(Scophthalmus maximus)* SKIN Rocio Toucedo, Ana Isabel Bargiela, Jorge Hernández-Urcera, Ysabel Santos, Susana Magadán.

11:00-11:30 h	**Coffee break** Espacio 1902 (Level -1)
11:30-12:30 h	**ORAL PRESENTATION 9 - Vaccination Strategies for Mucosal Protection in Aquatic Species (Continued)**
11:30-11:45 h	**OP-44 (16).** MICROALGAE-BASED ORAL VACCINE EXPRESSING IHNV GLYCOPROTEIN G FOR SALMONID AQUACULTURE Luis Pérez, Ainhoa Gómez-Quintanilla, Yeray Cerpa-Damas, Marlid García-Ordoñez, Borja Ordoñez-Grande, Nerea Roher, María Del Mar Ortega-Villaizán.
11:45-12:00 h	**OP-45 (36).** FEEDING IMMUNITY: CAN LIVE WORMS WORK AS VACCINE CARRIER? Joyce Arguelles Hilario, Lakshan Warnakula, Jacob Günther Schmidt, Valentina Donati, Lone Madsen, Ansgar Stratmann, Martin Holmstrup, Mathias Holmstrup, Dagoberto Sepulveda, Niels Lorenzen.
12:00-12:15 h	**OP-46 (65).** ORAL MICROALGAE-BASED VACCINATION AGAINST SALMONID ALPHAVIRUS (SAV2) IN RAINBOW TROUT: IMMUNE RESPONSES AND PROTECTIVE EFFICACY Yeray Kevin Cerpa Damas, Ainhoa Gómez Quintanilla, Adrián López Murcia, Celia García Quintanila, Verónica Chico Gras, Luis Pérez García-Estañ, María del Mar Ortega-Villaizán Romo.
12:15-12:30 h	**OP-47 (27).** TARGETING SEA LICE WITH AI AND REVERSE VACCINOLOGY: ORAL VACCINE ANTIGEN DISCOVERY FOR ATLANTIC SALMON Xuhang Wu, Marc Nicolas Faber, Carol Mcnair, Ayham Alnabulsi, Dorota Androscuk, Kevin Mclean, Kim Thompson, James Bron, Alasdair Nisbet, Stewart T.G. Burgess, Sean Monaghan, Anita Jaglarz
12:30-13:30 h	**AWARDS AND CLOSING**

Sala Pau Gil: main auditorium

14:30-16:00 h	**FSI SEMINAR**

Sala Pau Gil: main auditorium

Carolina Tafalla, Steve Bird

This interactive seminar from Fish & Shellfish Immunology offers MHA2026 participants a unique opportunity to meet members of the journal's editorial team and gain practical insights into scientific writing, publishing and research integrity. As a journal closely aligned with the research interests of many attending MHA2026, the session will provide an opportunity to learn more about how the journal works, what editors and reviewers look for, how to choose the right journal and communicate research effectively, and how to navigate the peer-review and publication process. The seminar will also address emerging challenges in research integrity and responsible publishing. Importantly, the session is intended to be interactive, giving researchers the opportunity to speak directly with editors, ask questions about publishing and peer review, and discuss issues they encounter as authors. While relevant to researchers at all career stages, it should be particularly valuable for students and early-career researchers developing their experience of scientific publishing.

AQUATRECK

AQUATRECK ANIMAL HEALTH S.L. (www.aquatreck.com) is a company established in Spain in 2019 with a mission to develop high-quality vaccines and build alliances to drive the future of global aquaculture. The company has developed a pipeline of experimental, autogenous, and licensed multivalent vaccines for viral, parasitic and bacterial diseases of sea bass, trout, salmon, and tilapia. AQUATRECK covers the entire value chain, from identifying the aquaculture industry's needs to providing applied R&D in our labs and through strategic collaborations with leading research teams and innovative SMEs followed by GMP production, regulatory support, market authorization, and marketing and sales of innovative vaccine solutions. Our business model is based on a flat, agile organization that fosters inclusive, open innovation through strategic collaborations with leading tech SMEs and fish health researchers to fast-track novel vaccine and disease prevention technologies. AQUATRECK has licensing agreements for four patents with leading researchers on fish pathogens, including KHV, PKD, Tenacibaculum maritimum, and a unique quorum quenching technology.

With a long history of experience and deep knowledge in the development of aquaculture vaccines, AQUATRECK leads the field in viral inactivated vaccines and novel biotechnology vaccines, utilizing a unique technology platform for antigen expression in Pichia pastoris for viral & parasitic pathogens. Our team has unique expertise in pathogen virulence mechanisms and ensures top-quality results with access to state-of-the-art GMP manufacturing facilities. The company's vaccines are being lab-tested for quality, safety, and efficacy in approved GMP lab facilities, and our team of experts brings these technologies to fish farmers as experimental or autogenous vaccines. AQUATRECK has a team of experienced professionals in the field of fish health management, virology, and microbiology.

The management team includes: a. Dr. Panos Christofilogiannis, Director, Fish Vet/Pathologist, with experience in fish health management, applied research & development, licensing, marketing, and sales of fish vaccines. (panos@aquatreck.com – Tel:+306944418566) b. Dr. Ansgar Stratmann, Director - Head of Biotechnology, with extensive experience in biotechnology and Pichia pastoris expression platform. (ansgar@aquatreck.eu) c. Susan Anne Didlick, Director - Head of Virology & Diagnostics, with many years of experience in viral animal vaccines. Recently AQUATRECK has achieved its first market authorization in Spain, Greece, and Portugal for a novel technology, AQUATRECK VP INJ vaccine against Vibriosis and Pasteurellosis in sea bass.

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PP-01 (14). FROM IN VITRO SCREENING TO IN VIVO ROBUSTNESS: LOW-VALUE BIOMASS-DERIVED FUNCTIONAL ADDITIVES FOR IMPROVING HEALTH AND RESILIENCE IN SEABREAM *(Sparus aurata)* POST-LARVAE.

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PP-02 (22). A YEAST-BASED FUNCTIONAL INGREDIENT MODULATES SKIN MUCUS RHEOLOGICAL AND ANTIBACTERIAL PROPERTIES IN ATLANTIC SALMON DURING AMOEBIC GILL DISEASE

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PP-06 (58). PLANT-DERIVED EXTRACTS AS FUNCTIONAL FEED ADDITIVES IN EUROPEAN SEABASS: A COMPREHENSIVE HEALTH AND SAFETY ASSESSMENT

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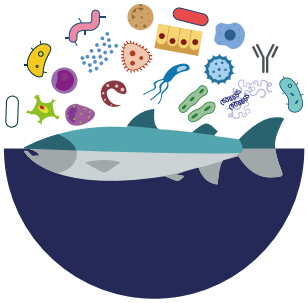

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