



Veterinærinstituttet
Norwegian Veterinary Institute

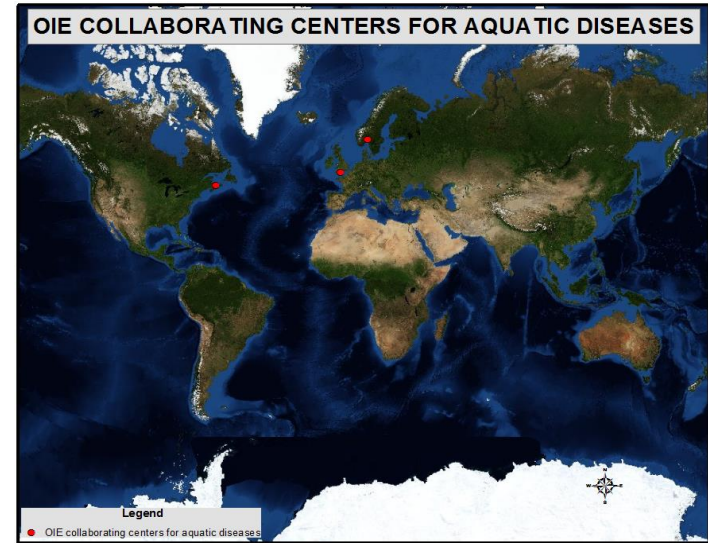
Networking Collaborating Centres

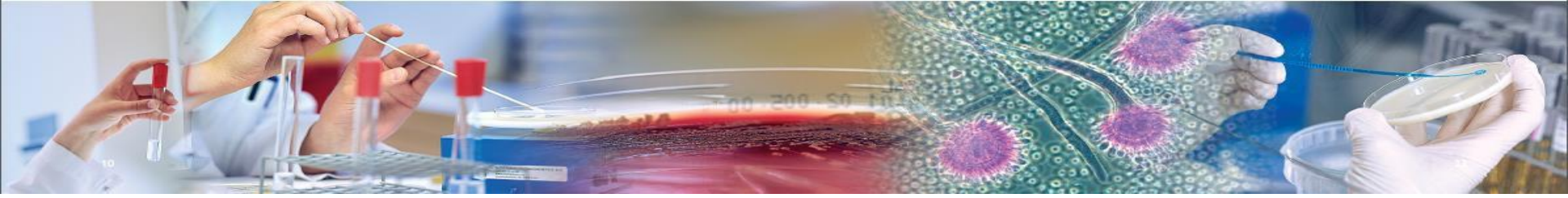
Regional Workshop for WOA National Focal
Points for Aquatic Animals IV Cycle Chioggia
(Italy) 18th - 20th October 2023



WOAH Collaborating Centres - Aquatic

1. Emerging Aquatic Animal Diseases, UK
2. Epidemiology and Risk Assessment of Aquatic Animal Diseases (Americas), Canada
3. Epidemiology and Risk Assessment of Aquatic Animal Diseases (Europe) in Norway
4. Antimicrobial Stewardship in Aquaculture in Chile





Norwegian Veterinary Institute (NVI) has two WOAHC

- **Collaborating Center for Epidemiology and Risk Assessment of Aquatic Animal Diseases (Europe)**
- Associate for Collaborating Centre for Economics of Animal Health

Collaborating Centre for ERAAAD (Europe)

- Established in 2010, as a bi-national collaboration between Norwegian Veterinary Institute and Atlantic Veterinary College

Two designated co-chairs



Dr. Edgar
Brun



Dr. Larry
Hammel

[AquaEpi I: 1st global conference in epidemiology and diseases in aquatic animals. In Oslo, Norway](#)



Dr. Saraya
Tavornpanich



AquaEpi II. In Thailand
Workshop on Aquatic
RA

- ERAAAD – Europe (NVI)
- ERAAAD – Americas (AVC)

5 years (2020-2024) strategic goals

2010

2016

2018

2019

2020

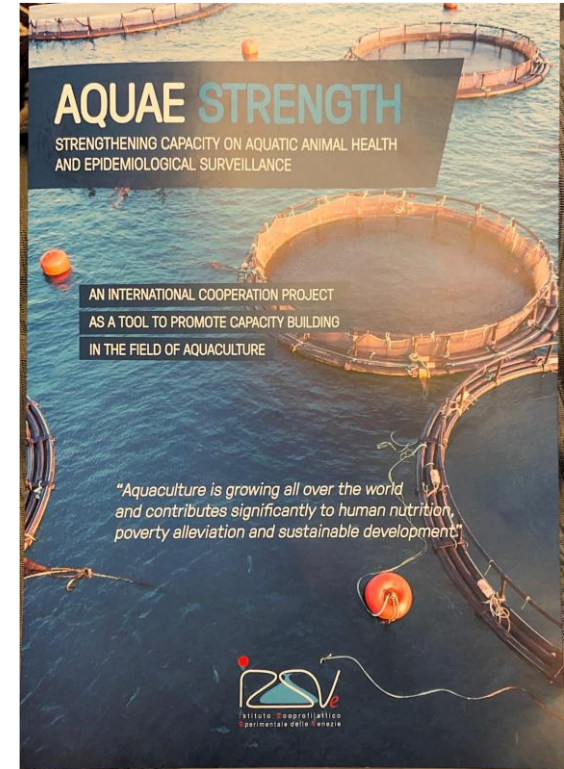
2024

Collaborating Centre for ERAAAD (Europe)

The center aims to operate as a global centre of research, expertise, standardization of techniques and distribution of knowledge in the specialized area of aquatic animal diseases, and help building capacity for the WOAH member countries through research collaborations, trainings, and participation in assessments of performance of veterinary services (PVS)

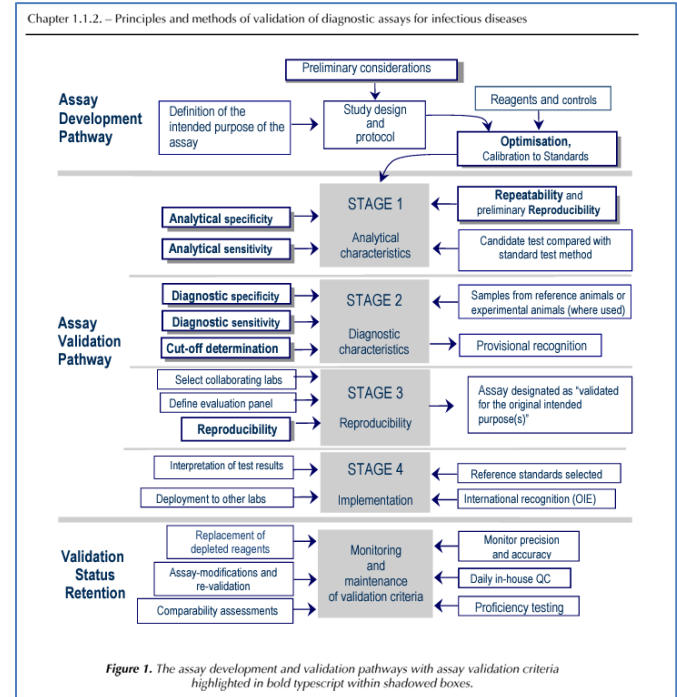
Collaborating activities

- External advisor on the use of GIS in aquaculture in the project “**Aquae Strength**” 2022-2025
- The project aims to assist beneficiary countries on disease surveillance and emerging disease response in aquatic animal health management



Collaborating activities

- Expert panel for the WOAHA Registration of Diagnostic assays for aquatic animal diseases
- Review and comment Dossiers for validation of diagnostic assays



Collaborating activities

- WOAH Ad hoc group member (e.g. tilapia lake virus, biosecurity chapters): providing expert consultation at the disposal of the WOAH

Collaborating activities

Part of the technical Committee for AQMENET (Aquaculture Middle East Network).

The short-term action plans focus on building countries capacity on Biosecurity and Surveillance, Emergency preparedness, Diagnostics and Developing system for AMU

Member countries of AQMENET include the following countries, bordering the Red Sea and the Gulf: Bahrain, Djibouti, Egypt, Iraq, Jordan, Kuwait, Oman, Qatar, Saudi Arabia, Somalia, Sudan, United Arab Emirates, and Yemen.



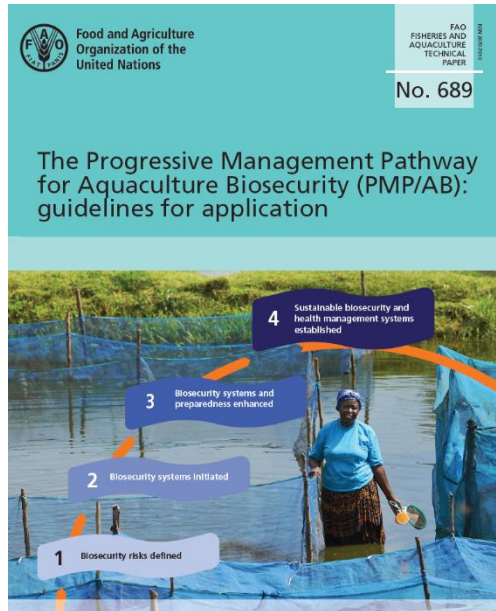
Network of Aquaculture Centre in Asia-Pacific (NACA)

Co-opted member of NACA Advisory Group
To provide advice to NACA members in the Asia-
Pacific region on aquatic animal health management.



The NACA member countries include Australia, Bangladesh, Cambodia, China, Hong Kong SAR, India, Indonesia, Iran, LaoPDR, Malaysia, Maldives, Pakistan, Philippines, Sri Lanka, Thailand, Vietnam, Myanmar, Governance, Kingdom of Saudi Arabia (joined August, 2023)

Collaboration with FAO



Technical working group for development and implementation of Progressive Management Pathway for Aquaculture Biosecurity (PMP/AB)

Development of step-wise guideline for farm-level (enterprise) biosecurity action plans for seabass/seabream, Shrimp, Seaweed, Salmon, Tilapia productions

COST ACTION: Novel tools for test evaluation and disease prevalence estimation (Harmony)

- Core group
- Bayesian analysis workshop for estimation of DSe and DSp for infection with SAV



The Action members from Norway are organizing a two-day training school, hosted by the Norwegian Veterinary Institute (NVI), Ås, Norway [14 – 15 September 2021].

Saraya Tavornpanich, Jörn Klein, Ingrid Toftaker, Katharine Dean, Haakon Bakka are organizing a two-day training school.

Collaboration with World Fish

Increased Sustainability in the Aquaculture Sector for countries in Sub Sahara Africa through Improved Aquatic Animal Health Management

- 13 MSc students Practical training (physical in Abbassa and webinars) of participants from different countries and different background
- fish health management, biosecurity, epidemiology, vaccination, outbreak investigation
- Epidemiological field study performed
- Network building between participants

Training program on aquatic animal health and outbreak investigation in Kenya (March 15 – 17, 2023), and Ghana (April 19 - 21, 2023)

Participants: veterinarians, fish health service from Fisheries Commission, MSc and PhD students and staff of University of Ghana



Fish for Development program (Ghana, Colombia)

Provide practical and theoretical knowledge on aquatic animal health management

- ❑ Tailored Courses in aquatic epidemiology, risk analysis and outbreak investigations.
- ❑ Courses to small-scale farmers, extension staffs, researchers, policy people and regulatory authorities on best practices in fish health management
- ❑ Biosecurity plan
- ❑ Guideline for Design of surveillance programs
- ❑ Guideline for Data collection/registration system
- ❑ Fish disease diagnostics

Support in data analysis, study design and supervision



A baseline study to map fish disease occurrence in tilapia farms on Lake Volta.

The study was designed to get a clearer picture of the disease situation and to serve as guide to improving Fish Health Management in Ghana



A survey of IPNV infection in farmed trout production in Lake Cocha, Colombia


Biosecurity plan, evaluation for small scale farms



Scientific conference

CC has been involved in organizing and scientifically supporting the International Conference on Aquatic Epidemiology (AquaEpi)

- AquaEpi I (Oslo, Norway in 2016),
- AquaEpi II (Hua-Hin Thailand in 2019),
- AquaEpi III (Lucknow, India in 2023)



The poster features logos for ICAR, International Society of Aquatic Animal Epidemiology (ISAAE), ABCS, and NBFGR at the top. The main text reads: 'The International Society of Aquatic Animal Epidemiology (ISAAE) proudly presents the 3rd International Conference on Aquatic Animal Epidemiology (AquaEpi III)'. It is organized by the Indian Council of Agricultural Research (ICAR), New Delhi and Aquatic Biodiversity Conservation Society (ABCS), Lucknow. The dates are November 21-23, 2023. The venue is ICAR-National Bureau of Fish Genetic Resources (NBFGR), Lucknow. The bottom of the poster shows a photograph of the NBFGR building.



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International Aquaculture Team

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Thank you for your attention!