



## Counting down to Aquaculture Millennium +20

Preparations towards the conference are well under way, and we are pleased to share some recent updates.

First, participation in the conference is free of charge – be sure to visit the registration page to apply! Already almost 2,000 people have registered. Of those over 1,000 are youth, 800 are women, with people hailing from 119 countries.

As an important change, Millennium +20 will be a hybrid conference, with a limited number of speakers and primarily local participants attending in person, and the rest attending virtually via video conference. While we would prefer to greet everyone in Shanghai in person, the ongoing COVID-19 pandemic, necessity for quarantine periods and associated uncertainties over international travel restrictions have urged a precautionary approach, we hope you understand.

On the positive side, a hybrid structure will allow far more people to attend, albeit virtually, thereby opening participation to many more stakeholders, most of whom would not have had the time or resources to travel. We will inform all participants on how to join the virtual event in the coming weeks.

Another positive development is that the entire GCA +20 will have simultaneous interpretation in the six United Nations languages: Arabic, Chinese, English, French, Russian and Spanish.

Under the guidance of the International Programme Committee, groups of subject experts are currently drafting nine thematic reviews of aquaculture. The reviews cover a full range of key issues impacting the future of aquaculture, and will be presented and discussed during the second day.

The draft thematic reviews will also be made available for comment by registered participants, with advanced drafts posted on the GCA website. Received comments, along with the discussion during the GCA +20, will be considered in the finalisation of the thematic reviews.

### **Shanghai Declaration: Aquaculture for food and sustainable development**

The Shanghai Declaration, a key output from the GCA +20, will represent a road map to optimise the role that aquaculture can play in achieving the 2030 Agenda for Sustainable Development.

A group of aquaculture experts has prepared a first draft, and a similar commenting process will be available to registered participants. We expect that a penultimate draft will be ready during the weeks prior to the GCA, with the final text adopted by the conference on the final day.

### **Register to participate**

To participate in the conference, please register at the conference website:

- <https://aquaculture2020.org/registration/>

We look forward to seeing you online in September!

# FAO Virtual Training Course on Surveillance and Monitoring of Antimicrobial Resistance in Aquaculture

*In collaboration with IHB-CAS and INFOFISH*

**26-30 July, 14:00-17:00 Bangkok time (GMT+7)**

Antimicrobials play a critical role in the treatment of diseases of humans, farmed animals, and plants. Antimicrobial resistance (AMR), however, is a growing and complex threat to global public health. It has been a worldwide problem in human and animal healthcare. Asia accounts for more than 87 percent of the world's aquaculture production, and antimicrobials are commonly used in aquaculture for the prevention and control of common aquatic animal diseases. Considering the scale of antimicrobial use in aquaculture in Asia, timely action is needed to address the AMR risks to the aquaculture industry.

Systematic and regular collection of high quality information on AMR in aquaculture is one of the most critical steps in mitigating AMR in this industry. The organisation of a regional training course is an appropriate entry point. This course primarily focuses on methodologies relevant to monitoring and surveillance of AMR in major bacterial pathogens of diseased aquatic animals in Asia. AMR monitoring and surveillance in aquaculture is not new in the region but experiences, approaches and capacities of the countries vary. Enhancing the coordination and strengthening capacities are necessary and of great regional value. It has been difficult to compare the data from aquatic animal pathogen programmes due to the lack of uniform sampling methods, susceptibility testing methods, test for antimicrobial agents, and interpretation criteria. These are the key elements to better understand the AMR status of bacterial pathogens in aquatic animals in a country. Countries are encouraged to adopt standardised, internationally harmonised antimicrobial susceptibility testing (AST) methods such as those published by the Clinical and Laboratory Standards Institute (CLSI). These methods provide reliable, reproducible data that can provide useful temporal trends in the occurrence and spread of AMR, and can identify emerging or specific resistance profiles.

The AMR action plan of FAO and One Health global strategy aim to foster wider awareness and develop the capacity for monitoring and surveillance of antimicrobial use (AMU) and AMR in aquaculture. Capacity for monitoring and surveillance is essential for the implementation of AMR national action plans. This training course is organised by FAO in collaboration with the Institute of Hydrobiology of Chinese Academy of Sciences (IHB-CAS), and INFOFISH. This is one of the efforts to enhance national capacity, through the support from an FAO regional technical cooperation programme: TCP/RAS/3702 Support Mitigation of Antimicrobial Resistance Risk Associated with Aquaculture in Asia.

## Objectives

- The main objective of this training is to enhance national laboratory capacity for effective surveillance and monitoring of AMR associated with aquaculture in Asia. The specific objectives are:

- To update participants on information on national AMU and AMR surveillance and monitoring.
- To familiarise participants with the regional guidelines on AMR surveillance and monitoring in order to have harmonised schemes of AMR surveillance and monitoring in aquaculture among countries.
- To facilitate collaboration on AMR monitoring and surveillance across the region.

## List of resource persons

- Dr Aihua Li, Professor, Aquatic Animal Health, Institute of Hydrobiology, Chinese Academy of Sciences (IHB-CAS), China, liaihua@ihb.ac.cn
- Dr Eduardo Leano, Expert on Aquatic Animal Health, Network of Aquaculture Centres in Asia-Pacific (NACA), Thailand, eduardo@enaca.org
- Dr Hu Kun, Director of the National Aquatic Pathogen Library, Shanghai Ocean University, China, khu@shou.edu.cn
- Dr Gaurav Rathore, Nodal Scientist of the Network Programme on AMR in Fisheries, Indian Council of Agricultural Research (ICAR), National Bureau of Fish Genetic Resources (NBFGR), Lucknow, India, grathore69@gmail.com
- Dr Christina Retna Handayani, Coordinator of Pest and Fish Disease Division, Directorate of Regional Aquaculture Development and Fish Health, Directorate General of Aquaculture, Ministry of Marine Affairs and Fisheries, Indonesia, handayani\_retna@yahoo.com
- Dr Thitiporn Laoprasert, Head of Aquatic Animal Health Research and Development Section, Division of Aquatic Animal Health Research and Development, Department of Fisheries, Ministry of Agriculture and Cooperatives, Thailand, tpetchinda@hotmail.com
- Dr Le Thi Hue, Deputy Head of Veterinary Drug Management Division, Department of Animal Health, Ministry of Agriculture and Rural Development, Viet Nam, LeHue1973@gmail.com
- Junxia Song, Senior Animal Health Officer, FAO AMR focal point, AMR unit head, Joint Centre for Zoonoses and Anti-Microbial Resistance (CJWZ), FAO, Italy.
- Dr Melba Reantaso, Aquaculture Officer, Lead Officer of Food Safety, Nutrition & Health, Fisheries Division, FAO, Italy, melba.

- Dr Patricia S. Gaunt, Professor, Aquatic Animal Health, College of Veterinary Medicine, Mississippi State University, USA.
- Dr Mary Gordoncillo, Regional Project Coordinator on AMR, FAO Regional Office for Asia and the Pacific (FAORAP), Thailand.
- Dr Yuting Deng, Associate Professor, Aquatic Animal Health, Pearl River Fisheries Research Institute, Chinese Academy of Fishery Sciences (PRFRI-CAFS).
- Dr Lan Jiang, Professor, Aquatic Animal Health, Pearl River Fisheries Research Institute, Chinese Academy of Fishery Sciences (PRFRI-CAFS), China.

## Registration and programme

To register for this event, or to view the programme details, please visit the INFOFISH website at the link below:

- <http://infofish.org/APFIC/index.php/amr-training>

*This article is reproduced courtesy of INFOFISH, from the link above.*

## Free webinar: Fish Vaccination: Theory, Innovations and Application

The Fish Health Section of the Asian Fisheries Society (FHS-AFS) invites all to a free Zoom webinar:

- When: August 4, 2021 (Wednesday); 13:00 PM Bangkok (GMT+7)
- Topic: Fish Vaccination: Theory, Innovations and Application

Please register in advance for this webinar. After registering, you will receive a confirmation email containing information about how to join the webinar. Register at the link below, or scan the QR code:

<https://bit.ly/fish-vaccination>

**Fish Health Section** | **Asian Fisheries Society**

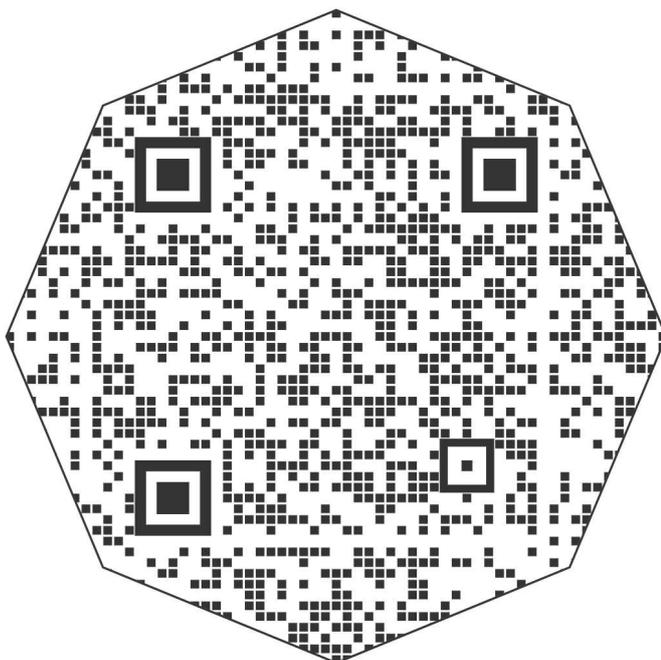
Virtual Seminars on the Path to DAA11  
(<https://www.daa11.org>)

**Fish Vaccination: Theory, Innovations and Application**  
(A Webinar)  
4 August 2021  
13:00-15:00 BKK time; GMT+7

**SPEAKERS:**

- DR. KIM THOMPSON**  
(Moredun Research Institute, United Kingdom)  
"Overview of fish vaccination - from principles to applications"
- ASSOC. PROF. WIN SURACHETPONG**  
(Kasetsart University, Thailand)  
"Tilapia lake virus: Understanding the host immunity and challenges for vaccine development"
- DR. ROBERTO CASCIONE**  
(VIRBAC, SEAsia and Middle East)  
"Fish vaccine: from vaccine development to field applications"

To join, please register in advance



## Quarterly Aquatic Animal Disease Report, October-December 2020

The Quarterly Aquatic Animal Disease report provides information about the status of aquatic animal disease in 21 participating states in the Asia-Pacific region. The diseases covered in the report are reviewed annually by the Asia Regional Advisory Group on Aquatic Animal Health. The report was first published in the second quarter of 1998. It is a joint activity between NACA, FAO and the OIE Regional Representation (Tokyo).

The 88th edition of the Quarterly Aquatic Animal Disease Report contains information from thirteen governments. The foreword provides an announcement on the new format for the Aquatic Animal Disease Report from January 2021 onwards. Download from: <https://enaca.org/?id=1155>

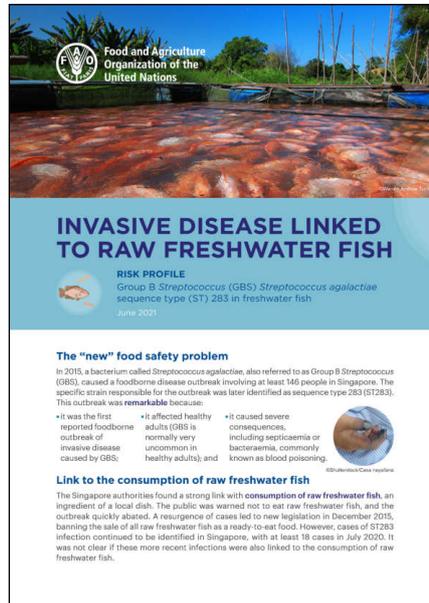
## Invasive disease linked to raw freshwater fish: Group B Streptococcus

In 2015, a bacterium called *Streptococcus agalactiae*, also referred to as Group B Streptococcus (GBS), caused a foodborne disease outbreak involving at least 146 people in Singapore, associated with the consumption of raw freshwater fish. The specific strain responsible for the outbreak was later identified as sequence type 283 (ST283). Invasive GBS ST283 disease is also found in other countries in and around Southeast Asia.

FAO has published a fact sheet and a risk profile for GBS ST283, which are available for free download. These documents provide guidance on risk reduction, and practical recommendations for food safety competent authorities.

Downloads:

- Fact sheet: <http://www.fao.org/3/cb4901en/cb4901en.pdf>
- Risk profile: <http://www.fao.org/3/cb5067en/cb5067en.pdf>



## International Crustacean Symposium 2021

The International Crustacean Symposium 2021 will be held from 7-9 December 2021 in Bushehr, Iran. The symposium is hosted by the Iranian Fisheries Science Research Institute. The theme of ICS 2021 is "New Approaches and Strategies for Sustainability of the Crustacean Industry and Adaption to Future Challenges".

The event aims to provide a sustainable platform for the participants to exchange information, ideas, and experience and also provides a unique opportunity to review the advances in the crustacean aquaculture industry development and sustainability of capture fisheries.

The symposium will feature presentations by keynote speakers on various general topics with participation of distinguished experts and decision makers, followed by poster presentations.

The official language of the symposium will be English. Abstracts of papers should be submitted by 20 July 2021. Researchers who are interested in publishing their paper in peer-reviewed scientific journals can submit their full paper after acceptance of their abstract.

**Network of Aquaculture Centres in Asia-Pacific**

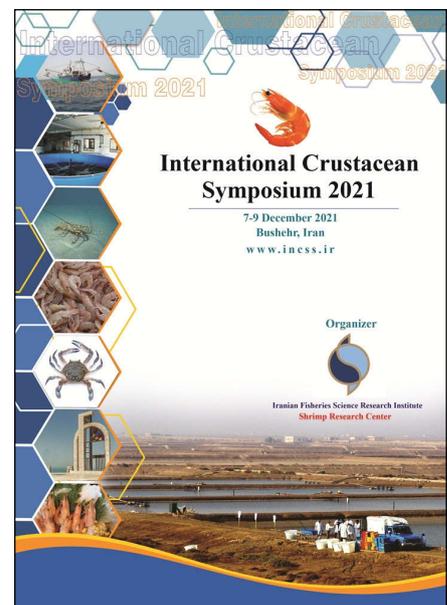
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NACA is a network composed of 19 member governments in the Asia-Pacific Region.

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Workshops on the main topics of crustacean industry and a fisheries industry expo will be held during this event.

Web site: <https://www.incss.ir>