

## LABORATORY ISSUES – AQUATIC ANIMAL DISEASE, DIAGNOSIS AND GLOBAL TRENDS

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**Aims/Objectives:** To illustrate the importance of diseases of aquatic animals (fish, crustaceans, molluscs, amphibians) in general and specifically infectious salmon anaemia (ISA) globally and regionally. To provide an overview of current trends in laboratory diagnosis and pathogen surveillance and identify challenges faced by diagnostic laboratories for aquatic animal diseases.

**Discussion / Conclusions:** Aquaculture is the world's fastest-growing sector producing food of animal origin. The emergence and spread of serious diseases is a major threat to aquaculture, and robust methods for laboratory diagnosis and pathogen surveillance are needed to reduce the risks. This is facilitated by the work of OIE Reference Laboratories and the use of rapid and sensitive diagnostic methods such as real-time RT-PCR/PCR for early detection of infection before clinical signs develop. The 2007 – 2011 spread of ISA in the Atlantic salmon industry in Chile is a powerful example of a major disease outbreak being diagnosed and managed through the use of real-time RT-PCR testing.

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