



ParaFishControl

Workshop “Control of Parasitic Diseases in Aquacultured Fish - Innate and Acquired Resistance”

General information:

Organisation	ParaFishControl in collaboration with DAFINET Danida
Venue	Copenhagen (Denmark)
Dates	30 th April 2019
Target audience	Aquaculture experts, industry, scientists and postgraduate students
Number of participants	70

Description of the workshop:

ParaFishControl organised a short training course and workshop with the title “Control of parasitic diseases in aquacultured fish – innate and acquired resistance” at the University of Copenhagen on April 30th, 2019. The course focused on various aspects of fish immune responses with particular emphasis on innate mechanisms and selective breeding of disease resistant fish. One of the parasites in focus was the white spot disease caused by the ciliate *Ichthyophthirius multifiliis* but other pathogens such as the zoonotic nematode *Contracaecum osculatum* and the myxozoan *Tetracapsuloides bryosalmonae* causing PKD were also studied.

Expert Jørgen Ødegård from Aquagen in Norway gave a thorough description of the most recent research on selective breeding of disease resistant fish. The most recent studies concerning the management of salmon lice *Lepeophtheirus salmonis* and monogeneans were also presented. Professor Barbara Nowak from University of Tasmania (Figure 9) provided new insights into parasitic diseases associated with salmon and tuna farming down-under. Amoebic gill disease AGD has now been recognised as a main problem in mariculture, during this training new methods to control the problem were presented. Studies on vaccination and antigen dosage were also discussed. Transcriptomic analyses of fish responses to parasitic invasions such as *I. multifiliis* and *C. osculatum* showed that these methods provide a more varied picture of immune responses as previously known. The day was loaded with presentations, demonstrations and discussions from the seventy participants from Scotland, Italy, Denmark, Estonia, Australia and Norway.



Dr Novak presenting best practices for the management of parasitic diseases in mariculture