



European Union Reference Laboratory for Fish and Crustacean Diseases

NATIONAL INSTITUTE OF AQUATIC RESOURCES, TECHNICAL UNIVERSITY OF DENMARK

Draft programme, subject to changes

Day 1	Day 2	Day 3	Day 4	Day 5
Section 1 Visit to fish farm and Veterinary services in Jutland	Section 2 Laboratory introduction and sample preparation	Section 3 PCR analysis and Cell culture methods	Section 4 PCR, blast and phylogeny	Section 5 Cell culture /bacteriology and evaluation
<p>8:00 – 11:00 Transport by car to Danish Veterinary and Food Administration, in Jutland.</p> <p>11:00 – 12:15 Introduction to surveillance programs</p> <p>Aquaculture surveillance and sampling procedures in Denmark</p>	<p>9:00 - 10:30 Introduction and practicalities. Participants experience and expectations</p> <p><u>Coffee break 10:30 - 10:50</u></p> <p>10:50 - 12:15 Theoretical introduction to sample preparation, cell cultivation, virus ID and qPCR for surveillance programs for the non-exotic listed fish disease in Europe</p>	<p>9:00 – 10:30 : PCR and real time PCR theory.</p> <p><u>Coffee break 10:30 - 10:50</u></p> <p>10:50 - 12:15 Result analysis Practical exercises.</p>	<p>9:00 - 10:30 PCR and Real Time PCR Troubleshooting. The diagnostic laboratory – PCR flow.</p> <p><u>Coffee break 10:30 - 10:50</u></p> <p>Sequencing theory and practical exercises</p>	<p>9:00 - 10:30 Cell culture observation with different reference viral isolates</p> <p><u>Coffee break 10:30 - 10:50</u></p> <p>10:50-12:15 Fish bacteriology demonstration</p>
Lunch: 12:15 - 13:00	Lunch: 12:15 - 13:00	Lunch: 12:15 - 13:00	Lunch: 12:15 - 13:00	Lunch: 12:15 - 13:00
<p>13:00 – 13:30 Transport to Fish Farm</p> <p>13:30 – 15:30 Inspection and sampling</p> <p>15:30 – 19:00</p>	<p>13:00 - 14:30 Sample preparation for cell culture, PCR and bacteriology on samples collected Monday</p> <p><u>Coffee break 14:30 - 14:45</u></p> <p>14:45- 16.45 Practical cell culture passaging and</p>	<p>13:00- 16:30 13:00-13:45 Reading cells and inoculation of samples 13:45-14:30 Use of cell culture in fish virology</p> <p><u>Coffee break 14:30 - 15:00</u></p>	<p>13:00 – 17:00 Blast analysis and practical exercise</p> <p><u>Coffee break 14:30 - 15:00</u></p> <p>Introduction to phylogenetic analysis</p>	<p>13:00 – 14:45 Assignment + presentation and assessment of data obtained by each group Discussion and recommendations Conclusion</p> <p>14:45-15:00</p>