

European Union Reference Laboratory for Fish and Crustacean Diseases

NATIONAL INSTITUTE OF AQUATIC RESOURCES, TECHNICAL UNIVERSITY OF DENMARK

Preliminary program for EURL training course 2020 – October 5th to October 9th

| Day 1 | Day 2 | Day 3 | Day 3 | Day 5 |
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| Section 1 Legislation and implementation of surveillance plans. | Section 2 Sampling procedures for surveying listed fish diseases | Section 3 The use of cell culture for surveying listed fish diseases | Section 4 qPCR methods, sequencing and bioinformatics for surveying listed fish diseases | Section 5 Wrap up session, evaluation of the course and general recommendations |
| Course introduction Participant presentation Lectures: Aquaculture surveillance and sampling procedures in Denmark. Control and eradication of VHS in DK The legislative basis for fish health management and the new animal health law in EU | Theoretical introduction to sample preparation, cell cultivation, virus ID and qPCR for surveillance programs for the non-exotic listed fish disease in Europe Demonstration of sampling procedures, discussion on pros and cons of different sampling strategies etc | Cell culture and fish diseases Use of cell culture for implementing surveillance programs for listed fish disease Demonstration of cell culture passaging, and viral titration procedures on cell lines Lectures on titration Demonstration of cytopathic effect | PCR and real time PCR theory. PCR and Real Time PCR Troubleshooting. The diagnostic laboratory – PCR flow. Result analysis Practical exercises Sequencing theory and practical exercises Blast analysis and practical exercise Introduction to phylogenetic analysis | Assignment in groups + presentation and assessment of data obtained by each group Discussion and recommendations Conclusion Course evaluation, |