

EURL-Fish training course:

Methods for
implementation of
surveillance procedures
for listed fish diseases,

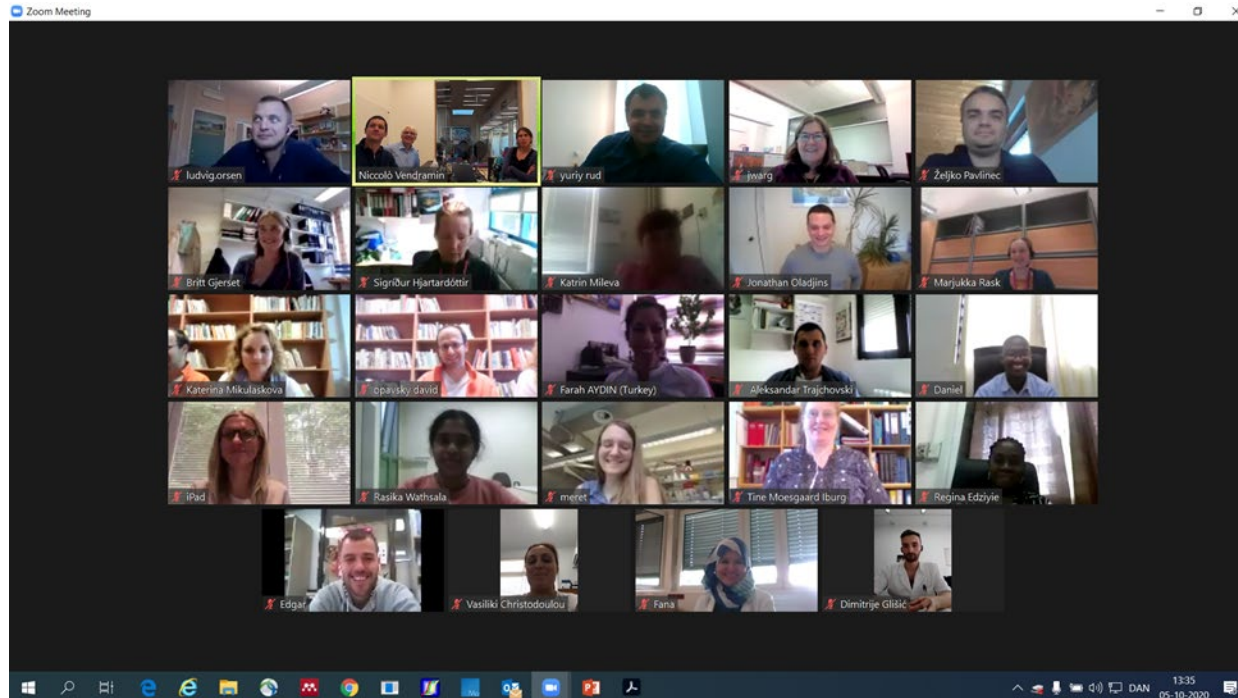
5th to 9th October 2020

In 2019 we were used to



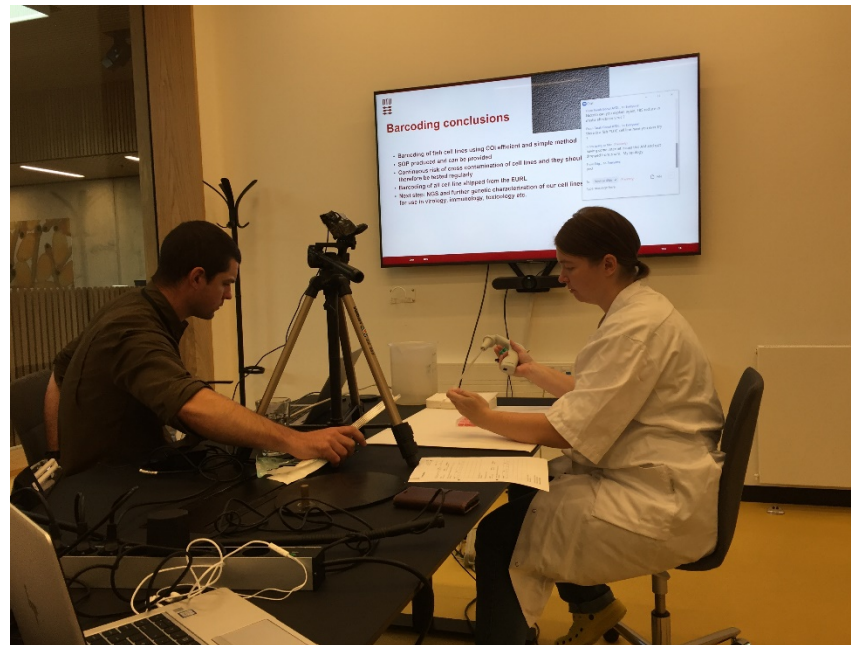
of Denmark

In 2020 we did like this



Day 1	Day 2	Day 3	Day 3	Day 5
<p>Section 1</p> <p>Legislation and implementation of surveillance plans.</p>	<p>Section 2</p> <p>Sampling procedures for surveying listed fish diseases</p>	<p>Section 3</p> <p>The use of cell culture for surveying listed fish diseases</p>	<p>Section 4</p> <p>qPCR methods, sequencing and bioinformatics for surveying listed fish diseases</p>	<p>Section 5</p> <p>Wrap up session, evaluation of the course and general recommendations</p>
<p>Course introduction Participant presentation</p> <p>Lectures: Aquaculture surveillance and sampling procedures in Denmark. Control of VHS in DK by NJ Olesen</p>	<p>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>Demonstration of sampling procedures, discussion on pros and cons of different sampling strategies etc</p>	<p>Opportunities with cell culture and fish diseases</p> <p>Use of cell culture for implementing surveillance programs for listed fish disease</p> <p>Demonstration of cell culture passaging, and viral titration procedures on cell lines</p> <p>Lectures on titration</p> <p>Demonstration of cytopathic effect</p>	<p>PCR and real time PCR theory. PCR and Real Time PCR</p> <p>Troubleshooting.</p> <p>The diagnostic laboratory – PCR flow.</p> <p>Result analysis</p> <p>Practical exercises</p> <p>Sequencing theory and practical exercises</p> <p>Blast analysis and practical exercise</p> <p>Introduction to phylogenetic analysis</p>	<p>Assignment + presentation and assessment of data obtained by each group</p> <p>Discussion and recommendations</p> <p>Conclusion</p>

Teaching on zoom – a combination of lectures, demonstration live, sharing microscope screen and assignments for the participants to be done in breakout rooms



Opportunity to give access to many more participants from countries far away

23 participants. Thanks to the organization on virtual platform we could allow the participation of almost the double amount of participants compared to when the course is organized physically, moreover this have open opportunities for attendance from far countries such as Ghana and USA.

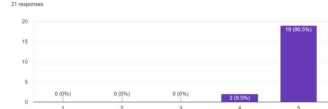
Evaluation

- Generally well perceived.
- Some technical details to be optimised
- Allowed larger number of participants, no possibility for practical exercise, ok for demonstration

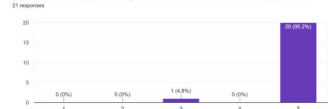
• Evaluation: Methods for implementation of surveillance procedures for listed fish diseases
 Participant satisfaction level for each respective section. The calculations are based on returned evaluation-answers from 21 participants

• Course evaluation of Day 1

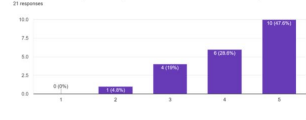
Day 1 Introduction to legislative background for listed fish diseases - teacher's expertise



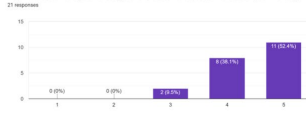
Day 1 Introduction to legislative background for listed fish diseases - teacher's preparedness



Day 1 Introduction to legislative background for listed fish diseases - relevance for you



Day 1 Introduction to legislative background for listed fish diseases - increase of your knowledge

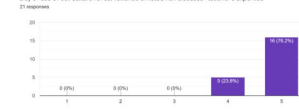


Day 1 Introduction to legislative background for listed fish diseases - overall score

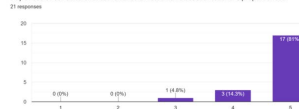


• Course evaluation of Day 3

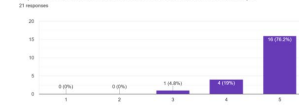
Day 3- use of cell culture for surveillance of listed fish diseases - teacher's expertise



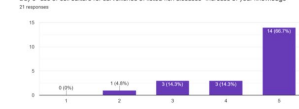
Day 3- use of cell culture for surveillance of listed fish diseases - teacher's preparedness



Day 3- use of cell culture for surveillance of listed fish diseases- relevance for you



Day 3- use of cell culture for surveillance of listed fish diseases- increase of your knowledge



Day 3- use of cell culture for surveillance of listed fish diseases- overall score



Anonymous Evaluation on google forms – will be used also for the evaluation of the AW

Training course in 2021

- Organization of training course(s) will necessarily have to deal with development of Covid-19 pandemics
- Internal discussion in the EURL will take place to ensure safety and possibility of conducting the courses at DTU premises
- Wishes and suggestion from the audience are welcome and will certainly be taken into consideration.