

### Announcement of the 2019 Training Courses



MONDAY 27 MAY 19

Two EURL training courses in 2019 in diagnostics of fish and crustacean diseases is hereby announced to be held during week 41 and 42, 2019.



## Programme for:

**EURL-Fish training course:** 

Methods for implementation of surveillance procedures for listed fish diseases,

7th to 11th October 2019





#### Draft programme, subject to changes

Day 1	Day 2	Day 3	Day 4	Day 5
Section 1 Visit to fish farm and DVFA 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
8:00 – 11:00 Transport by car to Danish Veterinary and Food Administration, DFVF Vejen in Jutland. Start in front of Cabinn Hotel 11:00 – 12:15 Aquaculture surveillance and sampling procedures in Denmark, By DVM Morten Fruergaard, DFVF. Control of VHS in DK by NJ Olesen	9:00 - 10:30 Introduction and practicalities. Participants experience and expectations Coffee break 10:30 - 10:50 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	9:00 – 10:30 : PCR and real time PCR theory. <u>Coffee break 10:30 - 10:50</u> 10:50 - 12:15 Result analysis Practical exercises.	9:00 - 10:30 PCR and Real Time PCR Troubleshooting. The diagnostic laboratory – PCR flow. Coffee break 10:30 - 10:50 Sequencing theory and practical exercises	9:00 - 12:10 Team 1,2 and 3 - Cell observation Team 4, 5 and 6 - Fish bacteriology demonstration <u>Coffee break 10:30 - 10:50</u> Team 4, 5 and 6 - Cell observation Team 1,2 and 3 - Fish bacteriology demonstration
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
13:00 – 13.30 Transport to Hesselho Fish Farm 13:30 – 15:30 Inspection and sampling 15:30 – 19:00 Transport by car to Hotel Cabinn, Frederiksberg	13:00 - 14:30 Team 1,2 and 3: Sample preparation for cell culture, PCR and bacteriology on samples collected Monday Team 4, 5 and 6: Practical cell culture passaging and production of 24 well plates Coffee break 14:30 - 14:45 14:45-16.45 Change	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  Coffee break 14:30 - 15:00 15:00-16:00 Titration procedure, viral titre calculation. Barcoding cell lines	13:00 – 17:00 Blast analysis and practical exercise <u>Coffee break 14:30 - 15:00</u> Introduction to phylogenetic analysis	13:00 – 14:45 Assignment + presentation and assessment of data obtained by each group Discussion and recommendations Conclusion 14:45-15:00 Course evaluation, coffee and goodbyes











# Programme for:

EURL-Fish training course:

Histopathology in fish and crustacean diseases

14th - 18th October 2019



#### Draft programme (subject to changes

Day 1	Day 2	Day 3	Day 4	Day 5
Monday	Tuesday	Wednesday	Thursday	Friday
8:00-9:45	8:00-9:30	8:00-8:30	8:00 - 9:30	8:00 - 15:30
Course introduction	Lecture on pathology and	Introduction to DTU e-forms		Overview of Crustacean
Participants will present themselves	histopathology	reimbursement	Microscopy Room	Tissues - Structure and Function
	Place: Auditorium	8:30-9:30	Show and tell of cases by Ole	
Place: Auditorium		Lecture on IHC I	Bendik Dale with discussion	Overview of WSSV &
Coffee Break 9:45-10:15	Coffee Break 9:30-10:00	Place: Auditorium	and participation of course participants	Overview of TSV and YHV
	10:00-11:30			Coffee Break 9:30-10:00
10:30-12:00	Microscopy room I	Coffee Break 9:30-10:00	Coffee Break 9:30-10:00	
Sampling for				OIE listed diseases and
histopathological	Practical exercise	10:00-11:30	10:00-11:30	Emerging Pathogens
examination. Theory and		Lecture on IHC II	Microscopy room	
Practice			More show and tell	Microscopy Practical
		Place: Auditorium		
Place: Necropsy room KU				
Lunch 12.15 -13:00	Lunch 11.30-12:15	Lunch 11.30 -12:15	Lunch 11:30 -12:15	Lunch 11:30-12:15
13:00 - 15:30	12:15 - 13:30	12:15-13:15	12:15-14:45	12:15-15:15
Lecture on pathology and	Lecture on pathology and	Theoretical exercise on IHC	Introduction to crustacean	Microscopy Practical and
histopathology	histopathology	1	anatomy	Demonstration of Slide
	Place: Auditorium	Place: Auditorium		Scanner
Place:				
Auditorium	Coffee Break 13:30-14:00	Coffee Break 13:15 – 13.45	14:45-15:15 Sampling for	Show and tell of cases by Kelly Bateman with
	14:00-16:00	13:45-15:45	histopathological	discussion and participation
	Microscopy room II	Microscopy room III	examination of crustacean.	of course participants
	Practical exercise	Practical exercise	Theory and	or course participants
	2 modelli caci cisc	2 months tati tist	Practice	
		15:45 - 16:30	Place: Necropsy room KU	15.15 - Coffee, cakes and
		Theoretical exercise on IHC		evaluation of the crustacean
		2		day
		Place: Auditorium		Place: auditorium







### Timeline – procedure

- 1) First announcement send by email Friday 24<sup>th</sup> of May <u>PLEASE</u> <u>DISTRIBUTE FURTHER</u>
- 2) Send application form AND cover letter to Linda and Lis until <u>16<sup>th</sup> of</u> <u>August</u>

3) All application compiled and scrutinized

4) A feedback to each **applicant on 30**th **of August** 





# Planning and Conducting experimental infection trials.

Date: 11-15 November

Day 1	Day 2	Day 3	Day 4
INTRODUCTION	THE TRIAL	SPECIAL SESSION: Salmonid and Cyprinids	SPECIAL SESSION: Sea bass / Sea Bream and Immunology/Vaccinology
9:00-10:00	9:00-10:00	8:30-10:00	8:30-10:00
Course introduction Practical information Participants will present themselves  Coffee Break 10:00-10:30 10:30-12:00 Use of animal for research Use of fish for fish disease research	Trial design: Which question to answer Preparation work Standardizing environmental conditions. Coffee Break 10:00-10:30 10:30-12:00 Visit to DTU VET experimental facility Conducting a trial - Monitoring - Sampling	Salmonid physiology:  Coffee Break10:00-10:30  10:30-12:00 Trial design for bacteria and virus in Rainbow trout /salmon DTU	Bass and bream physiology:  Coffee Break10:00-10:30  10:30-12:00 Trial design Parasite in Bass and bream CSIC
Lunch 12 -12:30	Lunch 12 -12:30	Lunch12 -12:30	Lunch12 -12:30
12:30 – 14:30  Fish diseases experiments:  Pathogenicity trial  Pathogenesis study  Visit to DTU tank facilities  Coffee Break 14:30-15:00  15:00-16:30  Practical exercise. Designing trial for pathogenicity and pathogenesis	12:30 – 14:00 Analysis of samples collected  Coffee Break 14:00-14:30 15:00-16:30 Compiling and understanding data Practical exercise. Raw data given and discussion on output of the trial	12:30-14:00 Carp physiology: special requirements for trial design NAIK  Coffee Break 14:00-14:30  14:30-16:30 Use of carp isogenic for fish model NAIK	12:30-14:00 infection models in vaccinology and immunology.UOS  Coffee Break 14:00-14:30 14:30-16:00 infection models in vaccinology and immunology. UOS  16:00-17:00 Course evaluation, conclusions cakes