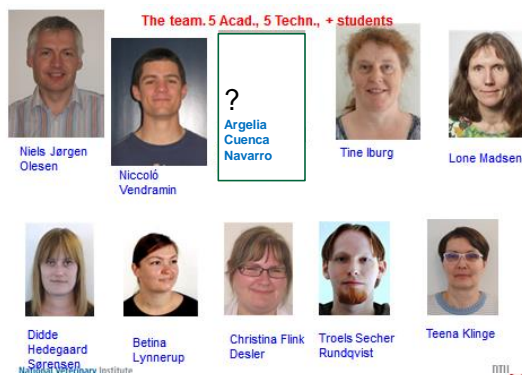
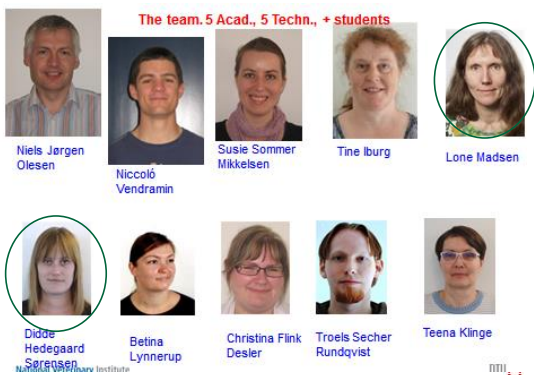
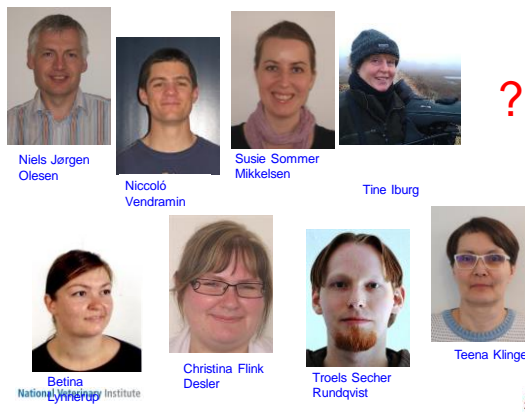




## EURL-Fish work done in 2015

*Niccolò Vendramin, Morten S. Bruun, Susie Sommer Mikkelsen, Anemone Ojala and Torsten Boutrup and Niels Jørgen Olesen*



### New scientists in our team:



Post doc Nikolaj Gedsted Andersen



Post doc. Jacob Günther Schmidt

PhD student Anna Luiza Farias Alencar

### EURL-Fish work program 2015

#### 5 main objectives

- 1. Coordination and training
- 2. Proficiency test
- 3. Reagents and products
- 4. Scientific advice and activities
- 5. Missions

#### 20 subgoals

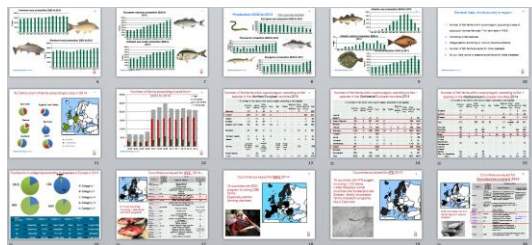
**1-1,1-2 Organise and prepare for the 19<sup>th</sup> Annual Meeting for the NRLs and produce a report from the Annual Meeting**



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**1-3 Collect and report data on the fish diseases situation in EU**



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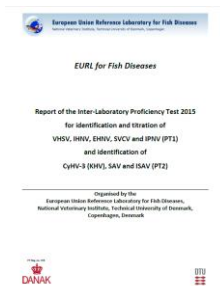
**1-4 Facilitate and provide training in laboratory diagnosis: EURL training courses 2015**  
 EURL course 1: "Methods for implementation of surveillance procedures for listed fish diseases" took place from 5<sup>th</sup> to 9<sup>th</sup> October 2015  
 EURL course 2: "Introduction to histopathology in fish diseases" and took place in Copenhagen 12<sup>th</sup> to 15<sup>th</sup> October 2015



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**2-1, 2-2 Prepare and report the Annual Inter-laboratory Proficiency Test.**  
 PT1-2014 for identification of: VHSV, IHN, EHN, SVCV and IPNV  
 and PT2 identification of: CyHV-3 (KHV), SAV and ISAV



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**3-1 Supply reference reagents to the NRLs in Member States**

**Materials supplied by the EURL**

On request, the EURL supplies material to other laboratories in Member States and Third Countries to aid in the diagnosis and characterisation of fish diseases.

Amount of Reagents supplied for EURL, fish in 2015											
Year	Reagent	Amount	Year	Reagent	Amount	Year	Reagent	Amount	Year	Reagent	Amount
2015	VHSV	1000	2015	IHN	1000	2015	EHN	1000	2015	SVCV	1000
2015	IPNV	1000	2015	CyHV-3	1000	2015	SAV	1000	2015	ISAV	1000

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**3-2 Production of antisera against selected isolates when necessary**

In 2014 no new productions of antisera were needed and our stocks of supernatants from hybridoma cells producing monoclonal antibodies were sufficient for the year

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**3-3 Update and maintain a library of isolates of ISAV, VHSV and IHNV, KHV and EHNV**

- Several isolates of the listed viruses VHSV, IHNV and KHV were received and stored in our library during 2015.

**4-1 Update the webpage for the EURL, [www.eurl-fish.eu](http://www.eurl-fish.eu)**

The EURL website ([www.eurl-fish.eu](http://www.eurl-fish.eu)) is a notice board, where NRLs and other interested parties can access relevant information and previous reports concerning the activities coordinated by the EURL and relevant upcoming events in the Union.



**4-2 Update the diagnostic manuals for VHS, IHN, ISA, KHV disease, and EHN on the EURL web page**

- Commission Decision 2015-1554 finally adopted and implemented
- Easy access through our web page



**4-3 Fishreflabnet: Maintain and further develop the interactive network with the NRLs, Fishreflabnet, in order to promote a more proactive data sharing and communication with and between reference laboratories in member states.**

- This tool is used for newsletters, scientific updates and announcements from the EURL Fish like announcements and invitations for the Annual Workshop or publication of content in the ampoules from the proficiency test or on the final Inter-laboratory Proficiency test report. In addition the e-mail group is used for announcing other workshops, training courses and conferences and new publications of interest for the NRL Fish network

**4-4 Identify and characterise selected isolates of listed viruses**

- In 2015 a number of virus isolates, sera and other reagents were received for further characterisation at the EURL
- and for storing in our virus library

Member States and countries outside EU		
Material received	Laboratories	Units
Diagnostic material for virology	8	94 samples
Diagnostic material for PCR	3	24 samples
Diagnostic material for bacteriology	2	20 samples
PCR control material	1	2 sample
MAB/PAb	2	7 samples
Other material	1	3 samples

**4-5 Update and expand [www.fishpathogens.eu](http://www.fishpathogens.eu) with more pathogens**

A large number of isolates were inserted in the database- now comprising 755 VHSV records, 92 records of IHNV and 108 betanoda records. Additionally, more than 400 VHSV isolates have been added, but are waiting to be released pending publication of papers. A new article "Fishpathogens.eu/noda: a free and handy online platform for Betanodavirus targeted research and data sharing" concerning the betanoda database has been published in Journal of Fish Diseases (J Fish Dis. 2015 Aug;38(8):755-60). A new database for SAV is being established in collaboration with the Norwegian Veterinary institute. Furthermore, a number of bugs have been corrected.



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#### **4-6 Perform molecular epidemiology analysis to improve knowledge on diseases spreading mechanisms of viral pathogens**

- A paper entitled "Phylogeny of the Viral Hemorrhagic Septicemia Virus in European Aquaculture" have been submitted to PLOS ONE.
- "Molecular Tracing of Viral Haemorrhagic Septicaemia Outbreaks in Denmark" where almost 300 Danish VHSV isolates from both marine and freshwater rainbow trout farms, spanning from 1978-2009, including all known isolates from 1993 onward, were selected for analysis in the largest study of Danish VHSV isolates to date.

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#### **4-8 Emerging diseases:**

- CEV 20 participants from 11 countries attended a 2-day meeting organized by the EURL in collaboration with CVI, NL, in order to assess the risk, diagnostic methods and implications for the carp industry of carp edema virus infections.
- Studies have been ongoing on detection of RLO- Rickettsia like organism in Sea bass in collaboration with the Veterinary Institute, Croatia (Snjezana Zrnčić)
- Wild Atlantic salmon was screened for the presence of PRV, 4 of 181 salmon were positive while an addition of 5 salmon were suspected positive.
- PRV and IHNV co-infection studies. In order to assess the risk of a potential IHNV infection in PRV infected Atlantic Salmon (*Salmo Salar L.*), and the possible interaction between PRV and IHNV co infection an infection trial was conducted in salmon
- VirusY or (PRV-Om) is a virus detected in connection with disease outbreaks in rainbow trout in Norway.

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*5-1 Missions: Organizing missions to relevant laboratories. Missions will focus on NRLs where on-site communication would be beneficial. As collaboration with NRLs in 3rd countries from where EU is importing large amount of fish*

*5-2 Attending missions, international meetings and conferences in order to be updated on emerging and listed fish diseases.*

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#### **21th Annual Workshop 2017**

- When?
- Where?



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