

# OIE Reference Laboratory Reports Activities

## *Activities in 2020*

**This report has been submitted : 2021-01-29 15:38:10**

<b>Name of disease (or topic) for which you are a designated OIE Reference Laboratory:</b>	Infection with infectious salmon anaemia virus
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<b>Name (including Title) of Head of Laboratory (Responsible Official):</b>	Gaute Lenvik, Director General
<b>Name (including Title and Position) of OIE Reference Expert:</b>	Dr. Ole Bendik Dale, VMD, PhD, Section leader, Aquatic biosecurity research
<b>Which of the following defines your laboratory? Check all that apply:</b>	Governmental

**ToR 1: To use, promote and disseminate diagnostic methods validated according to OIE Standards**

1. Did your laboratory perform diagnostic tests for the specified disease/topic for purposes such as disease diagnosis, screening of animals for export, surveillance, etc.? (Not for quality control, proficiency testing or staff training)

Yes

Diagnostic Test	Indicated in OIE Manual (Yes/No)	Total number of test performed last year	
		Nationally	Internationally
Indirect diagnostic tests			
Histopathology	Yes	292	0
Direct diagnostic tests			
Real-time RT-PCR	Yes	3625	
Immunohistochemistry	Yes	584	
Cell culture/IFAT for virus isolation/identification	Yes	43	
Sequencing for genotyping	Yes	195	

**ToR 2: To develop reference material in accordance with OIE requirements, and implement and promote the application of OIE Standards. To store and distribute to national laboratories biological reference products and any other reagents used in the diagnosis and control of the designated pathogens or disease.**

2. Did your laboratory produce or supply imported standard reference reagents officially recognised by the OIE?

No

3. Did your laboratory supply standard reference reagents (non OIE-approved) and/or other diagnostic reagents to OIE Member Countries?

No

4. Did your laboratory produce vaccines?

No

5. Did your laboratory supply vaccines to OIE Member Countries?

No

***ToR 3: To develop, standardise and validate, according to OIE Standards, new procedures for diagnosis and control of the designated pathogens or diseases***

6. Did your laboratory develop new diagnostic methods validated according to OIE Standards for the designated pathogen or disease?

No

7. Did your laboratory develop new vaccines according to OIE Standards for the designated pathogen or disease?

No

***ToR 4: To provide diagnostic testing facilities, and, where appropriate, scientific and technical advice on disease control measures to OIE Member Countries***

8. Did your laboratory carry out diagnostic testing for other OIE Member Countries?

No

9. Did your laboratory provide expert advice in technical consultancies on the request of an OIE Member Country?

No

***ToR 5: To carry out and/or coordinate scientific and technical studies in collaboration with other laboratories, centres or organisations***

10. Did your laboratory participate in international scientific studies in collaboration with OIE Member Countries other than the own?

Yes

Title of the study	Duration	Purpose of the study	Partners (Institutions)	OIE Member Countries involved other than your country
ISAV vs. RBCs - The interaction between infectious salmon anaemia virus and Atlantic salmon red blood cells and its relation to infectious salmon anaemia pathogenesis	3	Study ISA pathogenesis	Food, Veterinary and Environmental Agency, the Faroes EURL, Copenhagen, Denmark	DENMARK

***ToR 6: To collect, process, analyse, publish and disseminate epizootiological data relevant to the designated pathogens or diseases***

11. Did your Laboratory collect epizootiological data relevant to international disease control?

Yes

If the answer is yes, please provide details of the data collected:
ISAV sequences submitted to the Gene Bank

12. Did your laboratory disseminate epizootiological data that had been processed and analysed?

Yes

If the answer is yes, please provide details of the data collected:
Epizootic data published through the National Fish Health Report (This report also have an English version published on our Web-site)

**13. What method of dissemination of information is most often used by your laboratory? (Indicate in the appropriate box the number by category)**

a) Articles published in peer-reviewed journals: 1

Infectious salmon anaemia virus detected by RT-qPCR in Norwegian farmed rainbow trout, *Oncorhynchus mykiss* (Walbaum, 1792)

Marta Alarcón Torfinn Moldal Mona Dverdal Jansen Maria Aamelfot Hilde Sindre Trude M. Lyngstad Knut Falk First published: 07 December 2020 <https://doi.org/10.1111/jfd.13315>

b) International conferences: 1

Modelling scenarios for control and mitigation of Infectious Salmon Anemia (ISA)

Britt Bang Jensen<sup>1</sup>, Magne Aldrin<sup>2</sup>, Ragnar Bang Huseby<sup>2</sup>, Mona Dverdal Jansen<sup>1</sup>

<sup>1</sup>: Norwegian Veterinary Institute, <sup>2</sup>: Norwegian Computing Central, at EURL-meeting November 2020, <https://www.eurl-fish-crustacean.eu/Fish/Annual-Workshop>

c) National conferences: 1

OB. Dale & Debes Christiansen, Kort om ILA og forløperen HPR0, at Akvaveterinærenes forenings høstkurs, 12-13th October 2020

M. D. Jansen, ILA epidemiologi & OK-ILAV HPR0, at Akvaveterinærenes forenings høstkurs, 12-13th October 2020  
Arr by <https://www.vetnett.no/english/category925.html>

d) Other:

(Provide website address or link to appropriate information) 3

OB.Dale, ILA virus en større trussel enn vi har trodd?, Lofotseminaret August 2020, Arr Stim.no

T Moldal, "De siste års utbrudd av ILA og Kartlegging i settefiskanlegg" 26 February 2020, Møte for fiskehelsepersonell i Midt-Norge.

T Moldal, 'ILA-situasjonen 2020' 29. Oct 2020, ILA-møte arr av Veterinærinstituttet for fiskehelsetjenester, Mattilsynet og næringa.

**ToR 7: To provide scientific and technical training for personnel from OIE Member Countries**

**To recommend the prescribed and alternative tests or vaccines as OIE Standards**

14. Did your laboratory provide scientific and technical training to laboratory personnel from other OIE Member Countries?

No

**ToR 8: To maintain a system of quality assurance, biosafety and biosecurity relevant for the pathogen and the disease concerned**

15. Does your laboratory have a Quality Management System?

Yes

Quality management system adopted	Certificate scan (PDF, JPG, PNG format)
ISO17025, <a href="https://www.akkreditert.no/akkrediterte-organisasjoner/akkrediteringsomfang/?AkkId=222">https://www.akkreditert.no/akkrediterte-organisasjoner/akkrediteringsomfang/?AkkId=222</a>	ISO 17025 doc.jpg

16. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
Flexible accreditation for real-time RT-PCR methods including ME07_181: ISAV matrix real-time RT-PCR	Norwegian Accreditation, member of EA,

17. Does your laboratory maintain a “biorisk management system” for the pathogen and the disease concerned?

Yes

(See *Manual of Diagnostic Tests and Vaccines for Terrestrial Animals*, Chapter 1.1.4)

***ToR 9: To organise and participate in scientific meetings on behalf of the OIE***

18. Did your laboratory organise scientific meetings on behalf of the OIE?

No

19. Did your laboratory participate in scientific meetings on behalf of the OIE?

No

***ToR 10: To establish and maintain a network with other OIE Reference Laboratories designated for the same pathogen or disease and organise regular inter-laboratory proficiency testing to ensure comparability of results***

20. Did your laboratory exchange information with other OIE Reference Laboratories designated for the same pathogen or disease?

No

21. Was your laboratory involved in maintaining a network with OIE Reference Laboratories designated for the same pathogen or disease by organising or participating in proficiency tests?

No

22. Did your laboratory collaborate with other OIE Reference Laboratories for the same disease on scientific research projects for the diagnosis or control of the pathogen of interest?

No

***ToR 11: To organise inter-laboratory proficiency testing with laboratories other than OIE Reference Laboratories for the same pathogens and diseases to ensure equivalence of results***

23. Did your laboratory organise or participate in inter-laboratory proficiency tests with laboratories other than OIE Reference Laboratories for the same disease?

Yes

Note: See Interlaboratory test comparisons in: Laboratory Proficiency Testing at:  
<http://www.oie.int/en/our-scientific-expertise/reference-laboratories/proficiency-testing> see point 1.3

Purpose for inter-laboratory test comparisons <sup>1</sup>	No. participating laboratories	Region(s) of participating OIE Member Countries
The EU-RL Annual Inter-laboratory Proficiency Test	50+	<input type="checkbox"/> Africa <input checked="" type="checkbox"/> Americas <input checked="" type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East

### ToR 12: To place expert consultants at the disposal of the OIE

24. Did your laboratory place expert consultants at the disposal of the OIE?

Yes

Kind of consultancy	Location	Subject (facultative)
Revision of Aquatic manual CHAPTER 2.3.5.INFECTION WITH HPR-DELETED OR HPR0 INFECTIOUS SALMON ANAEMIA VIRUS	web	Diagnostic procedures for ISA

25. Additional comments regarding your report:

NRL activities - The Norwegian Veterinary Institute (NVI) has in 2020 increased national activities esp in diagnostics/screening for ISA due to a moderate increase in number of outbreaks and addressed this issue at several occasions incl scientific and branch meetings covered by the nationwide mass media. As NRL of Norway, NVI arranged a proficiency test for ISA and other viral diseases for designated, private fish disease testing laboratories.

Internationally NVI, represented by both former and present OIE-Expert contributed to the technical revision of ISA diagnostic procedures in EU organised by the EURL.

Collaboration other OIE ref lab: An ISA research project application involving Chile will soon be sent to Norwegian research council, and other efforts will be made to revive the contact with the other OIE reference laboratory for ISA.

The former OIE-expert expressed a need for improvements in handling the OIE tasks at NVI. This issue is now addressed by an on-going re-organisation that will lead to a better co-ordination and leadership of all NVI activities on ISA and support the OIE function by giving the OIE-expert a central position in the re-organised activities. This includes a new priority for scientific activities on ISA in two strategic NVI programs for genesequencing-bioinformatics (Seqtech) and biomarker development (Biodirect) respectively.

We expect the above mentioned increased efforts to understand and control ISA to improve NVI's capability to meet the requirements of OIE expert assistance.

