OIE Reference Laboratory Reports Activities

Activities in 2019

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Name of disease (or topic) for which you are a designated OIE Reference Laboratory:	Infection with infectious salmon anaemia virus
Address of laboratory:	Aquaculture Pathology Laboratory, Genetic and Molecular Immunology Laboratory of the Pontifical Catholic University of Valparaíso, Avenida Universidad, 330 Valparaíso, CHILE
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Name (including Title) of Head of Laboratory (Responsible Official):	Sergio Hernán Marshall González Ph.D. Harvard University - USA. Microbiology and Molecular Genetics. MSc. Biology. Brandeis University - USA. BA. Biology - Brandeis University - USA. Licenciatura en Biología. PUCV - Chile.
Name (including Title and Position) of OIE Reference Expert:	Sergio Hernán Marshall González Ph.D. Harvard University - USA. Microbiology and Molecular Genetics. MSc. Biology. Brandeis University - USA. BA. Biology - Brandeis University - USA. Licenciatura en Biología. PUCV - Chile.
Which of the following defines your laboratory? Check all that apply:	Governmental Academic

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	
Indirect diagnostic tests		Nationally	Internationally
IFAT anti NP	Si	50	0
Direct diagnostic tests		Nationally	Internationally
RT-qPCR Snow	Si	240	
RT-qPCR GIM	No	240	
RT-qPCR HPR0	Si	80	
PCR (Seg 6 HPR)	SI	10	
PCR (Seg 5 Insert)	No	10	
Cultivo Celular	Si	50	
RT-qPCR Multiplex	No	144	
PCR LAMP	No	34	

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?

Yes

Type of reagent available	Related diagnostic test	Produced/ provide	Amount supplied nationally (ml, mg)	Amount supplied internationally (ml, mg)	No. of recipient OIE Member Countries	Region of recipients
Material genético de ISAV en diferentes presentaciones	RT-PCR y RT-qPCR	10 variantes de ISAV	5 mL	0	1	☐Africa ☒Americas ☐Asia and Pacific ☐Europe ☐Middle East
Tejido de peces (Salmo salar) infectado con ISAV y preservado en RNALater	RT-qPCR	1 variante de ISAV	60 muestras de tejido	0	1	☐Africa ☒Americas ☐Asia and Pacific ☐Europe ☐Middle East

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?

Yes

Name of the OIE Member Country receiving a technical consultancy	Purpose	How the advice was provided
PERU	Asesoría técnica a un laboratorio Universitario de investigación en en montaje y validación del método de diagnostico (OIE) para ISAV.	Con una visita a nuestro laboratorio y una charla técnica.

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?

No

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:
Se realizó un estudio de un caso debido a una incongruencia en la caracterización genética del virus realizada por dos laboratorios distintos, en la cual se descubrió que solo se trataba de una interpretación distinta (basada en publicaciones diferentes) por parte de los laboratorios y no a un error metodológico.

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

No

If the answer is no, please provide a brief explanation of the situation:
Nuestro laboratorio está preparando un publicación sobre epidemiología molecular de ISAV, pero esta aun esta en preparación.

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
Cárdenas, C., Ojeda, N., Labra, Á., & Marshall, S. H. (2020). Phylogenetic relationships of stable Chilean Infectious Salmon Anemia Virus (ISAV) isolates in Chile. (en Preparación)

b) International conferences: 0

c) National conferences: 1
Presentación de la estrategia experimental para la comparación interlaboratorio de la capacidad de la red de laboratorios registrados por Sernapesca para la extracción de RNA total, desde muestras de tejidos de Salmo salar, y evaluación de la capacidad de detección especifica de ISAV.

d) Other:
(Provide website address or link to appropriate information) 0

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?

Yes

a) Technical visits: 1
b) Seminars: 0
c) Hands-on training courses: 0
d) Internships (>1 month): 0

Type of technical training provided (a, b, c or d)	Country of origin of the expert(s) provided with training	No. participants from the corresponding country
Visita técnica	Perú	2

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)
NCh-ISO/IEC 17025	Certificado de Acreditación.pdf

16. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
Certificado de acreditación	Instituto Nacional de Normalización (INN)

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

No

(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?

Yes

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[1]	No. participating laboratories	Region(s) of participating OIE Member Countries
□ Determinar la capacidad de los laboratorios de diagnóstico registrados por Sernapesca para recuperar material genético (ARN total) a partir de diferentes tejidos de peces para realizar diagnósticos basados en la reacción en cadena de la polimerasa con transcripción reversa (RT-PCR), aplicables a distintos patógenos acuícolas.	13	☐Africa ☒Americas ☐Asia and Pacific ☐Europe ☐Middle East
□ Determinar la capacidad de los laboratorios de diagnóstico registrados por Sernapesca para detectar en forma específica la presencia del Virus de la Anemia Infecciosa del Salmon (ISAV) en muestras de tejidos de Salmo salar con diferentes cargas de infección, mediante el uso de la metodología de diagnóstico oficial.	13	☐Africa ☒Americas ☐Asia and Pacific ☐Europe ☐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)
Revisión y aportes en el Capitulo de ISAV del Manual de Pruebas de Diagnóstico para los Animales Acuáticos	Chile	Diagnóstico y Caracterización de ISAV

25. Additional comments regarding your report:

La situación de ISAV en nuestro país ha estado relativamente tranquila con detección de casos aislados durante el año y sin mayores repercusiones. Por lo tanto la gestión de nuestro laboratorio ha sido mayormente de monitoreo y vigilancia.
Respecto a la situación de ISAV HPR0 se mantiene con un nivel de detección relativamente bajo y sin relación con mortalidad de peces ni enfermedad clínica.