

# OIE Reference Laboratory Reports Activities

## *Activities in 2020*

**This report has been submitted : 2020-12-22 22:57:00**

|  |   |
|--|---|
| <b>Name of disease (or topic) for which you are a designated OIE Reference Laboratory:</b> | Scrapie   |
| <b>Address of laboratory:</b>  | University of Bern Vetsuisse Faculty Division of Neurological Sciences NeuroCenter Bremgartenstrasse 109A 3012 Bern SWITZERLAND   |
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| <b>Name (including Title) of Head of Laboratory (Responsible Official):</b>                | Prof Dr med vet Torsten Seuberlich FVH  |
| <b>Name (including Title and Position) of OIE Reference Expert:</b>                        | Prof Dr med vet Torsten Seuberlich FVH  |
| <b>Which of the following defines your laboratory? Check all that apply:</b>               | 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)

No

***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?

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?

No

If the answer is no, please provide a brief explanation of the situation:

We have no ongoing active surveillance program in Switzerland and submissions for diagnostic testing are usually send to the EURL in Europe

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:

see my comment above

**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: 6

1: Hierweger MM, Boujon CL, Kauer RV, Meylan M, Seuberlich T, Oevermann A. Cerebral Ovine Herpesvirus 2 Infection of Cattle Is Associated With a Variable Neuropathological Phenotype. *Vet Pathol.* 2020 Nov 18:300985820970493. doi: 10.1177/0300985820970493. Epub ahead of print. PMID: 33205708.

2: Schmidt-Posthaus H, Koch M, Seuberlich T, Birrer C, Hirschi R, Kugler M. Mysterious syndrome causing high mortality in wild brown trout in Eastern Switzerland, pathology and search for a possible cause. *J Fish Dis.* 2020 Oct;43(10):1317-1324. doi: 10.1111/jfd.13241. Epub 2020 Aug 24. PMID: 32830324.

3: Hierweger MM, Koch MC, Seuberlich T. Bovine Polyomavirus 2 is a Probable Cause of Non-Suppurative Encephalitis in Cattle. *Pathogens.* 2020 Jul 29;9(8):620. doi: 10.3390/pathogens9080620. PMID: 32751201; PMCID: PMC7459705.

4: Zaccaria G, Lorusso A, Hierweger MM, Malatesta D, Defourny SV, Ruggeri F, Cammà C, Ricci P, Domenico MD, Rinaldi A, Decaro N, D'Alterio N, Petrini A, Seuberlich T, Marcacci M. Detection of Astrovirus in a Cow with Neurological Signs by Nanopore Technology, Italy. *Viruses.* 2020 May 11;12(5):530. doi: 10.3390/v12050530. PMID: 32403368; PMCID: PMC7290991.

5: Kauer RV, Koch MC, Schönecker L, Becker J, Holwerda M, Glaus AN, Hierweger MM, Werder S, Dijkman R, Meylan M, Seuberlich T. Fecal Shedding of Bovine Astrovirus CH13/NeuroS1 in Veal Calves. *J Clin Microbiol.* 2020 Apr 23;58(5):e01964-19. doi: 10.1128/JCM.01964-19. PMID: 32102857; PMCID: PMC7180244.

6: Hierweger MM, Werder S, Seuberlich T. Parainfluenza Virus 5 Infection in Neurological Disease and Encephalitis of Cattle. *Int J Mol Sci.* 2020 Jan 13;21(2):498. doi: 10.3390/ijms21020498. PMID: 31941046; PMCID: PMC7013525.

## b) International conferences: 2

1. EFSA TSE Network Meeting in Parma, October 2020, virtual
2. EURL TSE Meeting Turino/Rom, October 2020, virtual

## c) National conferences: 0

## 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?

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) |
|-----------------------------------|---|
| ISO 17025 (until June 2020)       | Adobe Scan 22.12.2020 (3).pdf           |

16. Is your quality management system accredited?

Yes

| Test for which your laboratory is accredited | Accreditation body |
|--|--------------------|
| Bio-Rad TeSe ELISA                           | SAS Switzerland    |
| IDEXX Herdchek BSE                           | SAS Switzerland    |
| Scrapie confirmatory WB                      | SAS Switzerland    |
| Scrapie confirmatory IHC                     | SAS Switzerland    |
| Scrapie discriminatory WB                    | SAS Switzerland    |

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?

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?

Yes

| Purpose of the proficiency tests: <sup>1</sup> | Role of your Reference Laboratory (organiser/ participant) | No. participants | Participating OIE Ref. Labs/ organising OIE Ref. Lab. |
|--|--|------------------|---|
| Scrapie rapid test                             | participant  | 23               | Turino, Italy   |
| Scrapie IHC                                    | participant  | 20               | Turino, Italy   |
| Scrapie confirmatory WB                        | participant  | 23               | Turino, Italy   |
| Scrapie discriminatory WB                      | participant  | 12               | Turino, Italy   |

<sup>1</sup> validation of a diagnostic protocol: specify the test; quality control of vaccines: specify the vaccine type, etc.

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?

No

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

**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) |
|---------------------|----------------|-----------------------|
| OIE Manual revision | Paris by email | Manual revision       |

25. Additional comments regarding your report:

In Europe scrapie diagnostics is covered by very competent NRLs and a EURL in Italy. So training, provision of reference materials and diagnostic services are not requested very often from us.