# **WOAH Reference Laboratory Reports Activities 2023**

# **Activities in 2023**

This report has been submitted: 11 juin 2024 16:21

# **Laboratory Information**

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Name of disease (or topic) for which you are a designated WOAH Reference Laboratory:	Bovine spongiform encephalopathy
Address of laboratory:	University of Bern, Division of Neurological Sciences, Vetsuisse Faculty, Bremgartenstrasse 109a, CH-3006 Bern, Switzerland
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Website:	https://www.neurologicalsciences.ch/
Name (including Title) of Head of Laboratory (Responsible Official):	Prof. Dr. med. vet. Torsten Seuberlich
Name (including Title and Position) of WOAH Reference Expert:	Prof. Dr. med. vet. Torsten Seuberlich
Which of the following defines your laboratory? Check all that apply:	Academic institution

## **TOR1: DIAGNOSTIC METHODS**

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 WOAH Manual (Yes/No)	Total number of test performed last year	
Indirect diagnostic tests		Nationally	Internationally
Direct diagnostic tests		Nationally	Internationally
BSE Western immunoblot		39	0
BSE rapid test (ELISA)		1830	0
BSE immunohistochemistry		6	0
BSE discriminatory Western immunoblot		2	0

## **TOR2: REFERENCE MATERIAL**

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

Nο

3. Did your laboratory supply standard reference reagents (nonWOAH-approved) and/or other diagnostic reagents to WOAH Members?

Yes

TYPE OF REAGENT AVAILABLE	RELATED DIAGNOSTIC TEST	PRODUCED/ PROVIDE	AMOUNT SUPPLIED NATIONALLY (ML, MG)	AMOUNT SUPPLIED INTERNATIONALLY (ML, MG)	NO. OF RECIPIENT WOAH MEMBER COUNTRIES	COUNTRY OF RECIPIENTS
BSE positive brain	BSE Western					

homogenates	immunoblot	Switzerland	0	5 ML	1	CROATIA,

4. Did your laboratory produce vaccines?

Not applicable

5. Did your laboratory supply vaccines to WOAH Members?

Not applicable

## **TOR3: NEW PROCEDURES**

6. Did your laboratory develop new diagnostic methods for the designated pathogen or disease?

Nο

7. Did your laboratory validate diagnostic methods according to WOAH Standards for the designated pathogen or disease?

Vac

NAME OF THE NEW TEST OR DIAGNOSTIC METHOD DEVELOPED	DESCRIPTION AND REFERENCES (PUBLICATION, WEBSITE, ETC.)
Western immunoblot detection using near-infrared fluorescence	Internal validation of a new detection method for BSE Western immunoblot signals

8. Did your laboratory develop new vaccines for the designated pathogen or disease?

No

9. Did your laboratory validate vaccines according to WOAH Standards for the designated pathogen or disease?

Nο

## TOR4: DIAGNOSTIC TESTING FACILITIES

10. Did your laboratory carry out diagnostic testing for other WOAH Members?

No

11. Did your laboratory provide expert advice in technical consultancies on the request of an WOAH Member?

Yes

NAME OF THE WOAH MEMBER COUNTRY RECEIVING A TECHNICAL CONSULTANCY	PURPOSE	HOW THE ADVICE WAS PROVIDED
URUGUAY	Usage of BSE positive control tissues in immunohistochemistry	EMail

## TOR5: COLLABORATIVE SCIENTIFIC AND TECHNICAL STUDIES

12. Did your laboratory participate in international scientific studies in collaboration with WOAH Members other than the own?

Yes

Title of the study	Duration	PURPOSE OF THE STUDY	PARTNERS (INSTITUTIONS)	WOAH MEMBER COUNTRIES INVOLVED OTHER THAN YOUR COUNTRY
Second passage transmission of unusual BSE cases from Switzerland in cattle	10 years	Determine disease transmissibility	CFIA Canada, Lethbridge Laboratory	CANADA

13. In exercising your activities, have you identified any regulatory research needs\* relevant for WOAH?

No

## TOR6: EPIZOOLOGICAL DATA

14. Did your Laboratory collect epidemiological data relevant to international disease control?

Vac

IF THE ANSWER IS YES, PLEASE PROVIDE DETAILS OF THE DATA COLLECTED:
Conduction of targeted active and passive BSE surveillance and molecular typing of BSE cases

15. Did your laboratory disseminate epidemiological data that had been processed and analysed?

No

16. What method of dissemination of information is most often used by your laboratory? (Indicate in the appropriate box the number by category and list the details in the box)

a) Articles published in peer-reviewed journals:

8

Different scientific publications on neurological diseases in cattle

b) International conferences:

2

- 1. Annual European Reference Laboratory for TSE meeting, Rome (I)
- 2. TSE Network of the European Food Safety Agency, Parma (I)
- c) National conferences:

1

Annual meeting of the veterinary laboratory managements in Switzerland, Bern, Switzerland

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

0

#### TOR7: SCIENTIFIC AND TECHNICAL TRAINING

17. Did your laboratory provide scientific and technical training to laboratory personnel from other WOAH Members?

No

## **TOR8: QUALITY ASSURANCE**

18. Does your laboratory have a Quality Management System?

Yes

Quality management system adopted	Certificate scan (PDF, JPG, PNG format)
ISO17025	not yet formally accreditated

19. Is your quality management system accredited?

No

20. Does your laboratory maintain a "biorisk management system" for the pathogen and the disease concerned?

Yes

We are running a biorisk management system in line withe the Swiss Ordinance on Handling Organisms in Contained Systems

#### TOR9: SCIENTIFIC MEETINGS

21. Did your laboratory organise scientific meetings related to the pathogen in question on behalf of WOAH?

No

22. Did your laboratory participate in scientific meetings related to the pathogen in question on behalf of WOAH?

Nο

## TOR10: NETWORK WITH WOAH REFERENCE LABORATORIES

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

Yes

24. Do you network (collaborate or share information) with other WOAH Reference Laboratories designated for the same pathogen?

Yes

NETWORK/DISEASE	ROLE OF YOUR LABORATORY (PARTICIPANT, ORGANISER, ETC)	NO. PARTICIPANTS	PARTICIPATING WOAH REF. LABS
Annual EURL TSE meeting	Participant	26	WOAH BSE Ref Lab Torino/Roma (I)
EFSA TSE Network	Participant	24	WOAH BSE Ref Lab Torino/Roma (I)

25. Did you organise or participate in inter-laboratory proficiency tests with WOAH Reference Laboratories designated for the same pathogen?

Yes

PURPOSE OF THE PROFICIENCY TESTS: 1	ROLE OF YOUR REFERENCE LABORATORY (ORGANISER/ PARTICIPANT)	NO. PARTICIPANTS	PARTICIPATING WOAH REF. LABS/ ORGANISING WOAH REF. LAB.
BSE rapid test	Participant	26	WOAH and EURL BSE Ref Lab Torino/Roma (I)
BSE Western immunoblot	Participant	20	WOAH and EURL BSE Ref Lab Torino/Roma (I)
BSE discriminatory Western immunoblot	Participant	6	WOAH and EURL BSE Ref Lab Torino/Roma (I)

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

Yes

TITLE OF THE PROJECT OR CONTRACT	SCOPE	NAME(S) OF RELEVANT WOAH REFERENCE LABORATORIES
Second passage transmission of atypical Swiss BSE cases in cattle	Determine disease transmissibility	WOAH BSE Reference Laboratory, Lethbridge, Canada

## TOR11: OTHER INTERLABORATORY PROFICIENCY TESTING

27. Did your laboratory organise or participate in inter-laboratory proficiency tests with laboratories other than WOAH Reference Laboratories for the same pathogen?

## **TOR12: EXPERT CONSULTANTS**

28. Did your laboratory place expert consultants at the disposal of WOAH?

No

29. Additional comments regarding your report:

Yes

The international activity based in our mandate as WOAH Reference Laboratory for BSE remains marginal This is mainly due to the low disease burden and a low need for international expert consultancy. Nevertheless we are maintaining full testing capacities (rapid tests, confirmatory tests and discuminitory tests). The laboratory is in the progress of accredidation of the QM system. We are expecting a final decision of the Swiss Accredation Service on our application by early 2025. Untl then we are already working under a QM system accreding to ISO 17025 requirements.