

# OIE Reference Laboratory Reports Activities

## *Activities in 2021*

**This report has been submitted : 2022-01-17 11:05:34**

<b>Name of disease (or topic) for which you are a designated OIE Reference Laboratory:</b>	Classical swine fever
<b>Address of laboratory:</b>	Animal and Plant Health Agency, New Haw, Addlestone Surrey KT15 3NB Weybridge UNITED KINGDOM
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<b>Name (including Title) of Head of Laboratory (Responsible Official):</b>	Mr Ian Hewitt, Interim Chief Executive Officer
<b>Name (including Title and Position) of OIE Reference Expert:</b>	Dr Helen Crooke Head of Swine fever and pestivirus research
<b>Which of the following defines your laboratory? Check all that apply:</b>	Governmental Research

**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		Nationally	Internationally
CSFV antibody ELISA	Yes	3401	0
CSFV Antibody NPLA	YES	4	0
Direct diagnostic tests		Nationally	Internationally
CSFV RT-PCR	Yes	11	0

**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
Pestivirus CSF Mab WH211	Virus detection	Provided	0	1	1	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East
Pestivirus MAb WH303	Virus detection eg IPX	Provided	75	62	8	<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

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
Epitope mapping of the structural protein E2 of classical swine fever virus	ongoing	Target epitope characterization of monoclonals targeting CSFV E2 glycoprotein	Animal Health Research Institute Taiwan	CHINESE TAIPEI
Characterisation of pestivirus monoclonal antibodies	ongoing	characterisation of monoclonals recognising to assist in diagnosis of infections with pestiviruses	University of Veterinary medicine, Hannover Germany	GERMANY

**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:
UK is recognised as CSF free

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:
UK is recognised as CSF free

**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: 3

Soldevila, Ferran; Edwards, Jane C; Graham, Simon P; Crooke, Helen R; Werling, Dirk; Steinbach, Falko; Activation of Dendritic Cells in Tonsils Is Associated with CD8 T Cell Responses following Vaccination with Live Attenuated Classical Swine Fever Virus International Journal of Molecular Sciences 22 16 8795 2021

Huang, Yu-Liang; Meyer, Denise; Postel, Alexander; Tsai, Kuo-Jung; Liu, Hsin-Meng; Yang, Chia-Huei; Huang, Yu-Chun; Berkley, Nicholas; Deng, Ming-Chung; Wang, Fun-In; Identification of a Common Conformational Epitope on the Glycoprotein E2 of Classical Swine Fever Virus and Border Disease Virus Viruses 13 8 1655 2021

Meek, Stephen; Watson, Tom; Eory, Lel; McFarlane, Gus; Wynne, Felicity J; McCleary, Stephen; Dunn, Laura EM; Charlton, Emily M; Craig, Chloe; Shih, Barbara; Stem cell-derived macrophages as a new platform for studying host-pathogen interactions in livestock bioRxiv 2021

b) International conferences: 2

Annual meeting of ASFV and CSFV reference laboratories organised by TiHo Germany and CISA INIA Spain (Online participation)

International Symposium on CSFV 2021, Beijing, China. Presentation "Genetic tracing of the last outbreak of CSF in the UK" Virtual presentation. Organised by China Institute of Veterinary Drug Control/Center for Veterinary Drug Evaluation, IVDC/CVDE

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)
ISO17025	ISO17025 Certificate.pdf
ISO9001	ISO9001 certificate 2020-2023.pdf

16. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
CSFV virus isolation	UKAS
CSFV /ASFV RT- PCR	UKAS
CSFV antibody ELISA	UKAS
Pestivirus comparative neutralisation assay	UKAS
CSFV antigen ELISA	UKAS

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?

Yes

Title of event	Date (mm/yy)	Location	Role (speaker, presenting poster, short communications)	Title of the work presented
2021 International symposium on Classical Swine fever	2-3 dec	Beijing, China	presentation	Genetic tracing of the last outbreak of CSFV in the UK
2021 International symposium on Classical Swine fever	2-3 dec	Beijing, China	Presentation	Is C Strain just a slow growing strain of CSFV

**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.
Proficiency testing for all tests used for serological and virological detection of CSF	Participant	~42	University of Veterinary medicine of Hannover, (TiHo) Germany organisers

<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?

Yes

Title of the project or contract	Scope	Name(s) of relevant OIE Reference Laboratories
Epitope mapping of the structural protein E2 of classical swine fever virus	Target epitope characterization of monoclonals targeting CSFV E2 glycoprotein	Animal Health Research Institute, Taiwan
Characterisation of pestivirus monoclonal antibodies	Testing of monoclonal antibodies using pestivirus strains that were discovered in ruminants, pigs or in non-ungulate hosts	University of Veterinary Medicine of Hannover, Germany

**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
PT0036 Detection of CSFV antibodies by ELISA or neutralisation PT provider	9	<input checked="" type="checkbox"/> Africa <input type="checkbox"/> Americas <input checked="" type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East
Proficiency testing for all tests used for serological and virological detection of CSF organised by TiHo EU reference lab	participant	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input 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 OIE terrestrial manual chapter on Classical swine fever	online	Update and revision of diagnostic manual chapter in collaboration with other OIE CSF experts

25. Additional comments regarding your report: