

OIE Reference Laboratory Reports Activities

Activities in 2021

This report has been submitted : 2022-01-04 08:18:55

Name of disease (or topic) for which you are a designated OIE Reference Laboratory:	Porcine reproductive and respiratory syndrome
Address of laboratory:	No.17 Tiangui Street Biomedical Base Daxing District Beijing 102618 CHINA (PEOPLES REP. OF)
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Website:	
Name (including Title) of Head of Laboratory (Responsible Official):	Chuanbin Wang
Name (including Title and Position) of OIE Reference Expert:	Kegong Tian
Which of the following defines your laboratory? Check all that apply:	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		Nationally	Internationally
LSIVET SUIIS PRRS A/S (LSI) (type North American)	Yes	5081	0
Porcine reproductive and respiratory syndrome virus antibody test kit (IDEXX) (type North American)	Yes	452	0
Direct diagnostic tests		Nationally	Internationally
Cell Culture (PAM/Marc-145)	Yes	158	0
Real-time RT-PCR gene Nsp2	No	5884	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?

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?

Yes

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

Yes

Name of the new test or diagnostic method or vaccine developed	Description and References (Publication, website, etc.)
Double RT-PCR Detection Kit of Porcine Reproductive and Respiratory syndrome Virus	Differential diagnosis for American strain and European strain of porcine reproductive and respiratory syndrome virus
Porcine Reproductive and Respiratory Syndrome Virus ELISA kit for antibody assay	Detection for American strain of porcine reproductive and respiratory syndrome virus antibody
Highly Pathogenic Porcine Reproductive and Respiratory Syndrome Purification and Thermo-stable Vaccine, live (JXA1-R Strain[Suspension culture])	Prevention for Highly pathogenic porcine reproductive and respiratory syndrome virus

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
COLOMBIA	Share PRRSV testing experience at the request of the National Veterinary Institute in Sweden and Pork colombia in Colombia	The experience of detecting PRRSV was shared, including the selection of RNA extraction methods and PCR detection methods.
BRAZIL	Provide reference material for detection of nucleic acid of PRRSV at the request of ADIAGENE in France and Federal Laboratory for Agriculture Defense in Brazil.	Provide reference material information for detection of nucleic acid of PRRSV strain NVDC-JXA1 to the laboratory in Brazil
FRANCE	Provide reference material for detection of nucleic acid of PRRSV at the request of ADIAGENE in France and Federal Laboratory for Agriculture Defense in Brazil.	Provide reference material information for detection of nucleic acid of PRRSV strain NVDC-JXA1 to the laboratory in France

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
Linking Epidemiology and Laboratory Research on Transboundary Animal Diseases and Zoonoses in China, Lao and Myanmar (LinkTADS)	5 Years	LinkTADS brings together world-class research institutes and experts in cross-border cooperation with the aim to coordinate research among the Lao, Myanmar and China, thus improving scientific excellence in animal health(epidemiology and laboratory).	FAO, OIE	LAOS
Linking Epidemiology and Laboratory Research on Transboundary Animal Diseases and Zoonoses in China, Lao and Myanmar (LinkTADS)	5 Years	LinkTADS brings together world-class research institutes and experts in cross-border cooperation with the aim to coordinate research among the Lao, Myanmar and China, thus improving scientific excellence in animal health(epidemiology and laboratory).	FAO, OIE	MYANMAR

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:
on OIE virtual meeting, the situation of PRRSV in European was shared by Dr Podgórska from OIE PRRSV refernece labotaatory .

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:
on OIE virtual meeting, the situation of PRRSV in China was shared by Dr Zhi Zhou from OIE PRRSV reference laboratory.

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

Chen N, Li S, Tian Y, Li X, Li S, Li J, Qiu M, Sun Z, Xiao Y, Yan X, Lin H, Yu X, Tian K, Shang S, Zhu J. Chimeric HP-PRRSV2 containing an ORF2-6 consensus sequence induces antibodies with broadly neutralizing activity and confers cross protection against virulent NADC30-like isolate
Vet Res. 2021 May 27;52(1):74. doi: 10.1186/s13567-021-00944-8

b) International conferences: 3

Regional Laboratory Expert Meeting on ASF and other swine diseases in Asia and the Pacific, 24 June, 2021.

The 3rd OIE Regional Meeting for OIE Reference Centres in Asia and the Pacific, 24-25 February, 2021.

OIE Virtual Event: Diagnosis and Control of Porcine Reproductive and Respiratory Syndrome. 9-10 December, 2021

c) National conferences: 3

The 1st Symposium on PRRS prevention and control in Neimenggu, China. 29-30 September, 2021

The National Training on Animal disease diagnosis technology and standard material development. QinHai, China, 13-16 September, 2021.

Prevention and control measures against swine diseases & laboratory diagnostic techniques in Beijing, China. 27-28, April, 2021.

d) Other:

(Provide website address or link to appropriate information) 0

NO

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: 0

b) Seminars: 1

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
PRRSV epidemic and control in European	Katarzyna Podgórska, Poland	Cambodia,China, Indonesia,Japan,Korea ,Laos,Malaysia,,Mongolia,Myanmar,Philippines,Nepal,Thailand,Vietnam
PRRSV epidemic and control in China	Zhi Zhou,China	Cambodia,China, Indonesia,Japan,Korea ,Laos,Malaysia,,Mongolia,Myanmar,Philippines,Nepal,Thailand,Vietnam
Diagnose and control of new PRRS strain in the US: 1-4-4 lineage 1c	Jianqiang Zhang, American	Cambodia,China, Indonesia,Japan,Korea ,Laos,Malaysia,,Mongolia,Myanmar,Philippines,Nepal,Thailand,Vietnam

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)
CNAS	BSL-3□□□□.pdf

16. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
PRRSV diagnosis for antibody and pathogeinc	CNAS
PRRSV Animal assay	CNAS

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?

Yes

National/ International	Title of event	Co-organiser	Date (mm/yy)	Location	No. Participants
International	Virtual Event: Diagnosis and Control of Porcine Reproductive and Respiratory Syndrome	OIE	12/2021	China/Japan	Cambodia,China, Indonesia,Japan,Korea ,Laos,Malaysia,,Mongolia,Myanmar,Philippines,Nepal,Thailand,Vietnam
National	The 1st Symposium on PRRS prevention and contol in Neimenggu, China. 29-30 September,2021		09/2021	China	China veterinary workers

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
The 3rd OIE Regional Meeting for OIE Reference Centres in Asia and the Pacific	02/2021	Japan	Sparker	The introduction of PRRSV reference Laboratory in China
Regional Laboratory Expert Meeting on ASF and other swine diseases in Asia and the Pacific	06/2021	Japan	short communications	

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?

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?

No

25. Additional comments regarding your report:

No