

OIE Reference Laboratory Reports Activities

Activities in 2021

This report has been submitted : 2022-01-12 15:14:25

Name of disease (or topic) for which you are a designated OIE Reference Laboratory:	Leptospirosis
Address of laboratory:	Avenida Talcahuano N° 1660 (1640) Martínez, Pcia de Buenos Aires ARGENTINA Las Cabañas y Repetto, Hurlingham (1686), Centro de Ciencias Veterinarias y Agronomicas Instituto de Patobiología INTA.
Tel.:	+54-11 48.746734 541
Fax:	+54-11 48.746700
E-mail address:	jpetrako@senasa.gov.ar
Website:	https://www.argentina.gob.ar/senasa
Name (including Title) of Head of Laboratory (Responsible Official):	Ana María Nicola (Dirección General de Laboratorios y Control Técnico. SENASA) Ruth Heinz Directora del Centro de Ciencias Veterinarias y Agronomicas (INTA)
Name (including Title and Position) of OIE Reference Expert:	Jessica Petrakovsky, Lic. MSc. Responsable Sector leptospirosis. Luis E. Samartino, Med Vet, Msc., Ph D
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
PRUEBA DE MICROAGLUTINACION (MAT)	SI	1206	44
ELISA indirecta	SI	50	
Direct diagnostic tests		Nationally	Internationally
PCR	SI	85	
MLVA	SI	2	
Aislamiento	SI	2	

**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
cepas de Leptospira sp	MAT /control de calidad biológicos	cepas	440 ml	0	2	<input type="checkbox"/> Africa <input checked="" type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input 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?

Yes

Name of the OIE Member Country receiving a technical consultancy	Purpose	How the advice was provided
KENYA	Consultar sobre adquisición de cepas para diagnóstico	virtual/correo
COLOMBIA	Asesoramiento en producción y control de vacunas con fracción leptospira	virtual /correo
VENEZUELA	Consultar sobre adquisición de cepas para diagnóstico	virtual/correo
MEXICO	Asesoramiento en mantenimiento de ceparios/brotos de leptospirosis en rodeos bovinos	virtual (video llamadas) /correo
COSTA RICA	brotos de leptospirosis en rodeos bovinos	virtual (video llamadas) correo
PARAGUAY	sesoramiento en mantenimiento de ceparios/brotos de leptospirosis en rodeos bovinos	virtual (video llamadas) correo

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 realizaron diagnósticos de vigilancia a nivel nacional que luego se informan en sistemas internacionales

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:
A través de la participación en un trabajo científico publicado y conferencias internacionales

**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: 9

Berra Y, Arocena G, Artuso C, Petrakovsky J, Orozco M y Degregorio O. Factores ecoambientales relacionados con potenciales reservorios de *Leptospira* spp. en la Reserva Ecológica Costanera Sur, Buenos Aires, Argentina. *Rev Med Vet.* 2021;(43):. doi: <https://doi.org/10.19052/mv.vol1.iss43.10>

MARA L. MARTINEZ, MARCELO A. RODRIGUEZ, LUCÍA E. IRAZU, GRACIELA N. ROMERO, VANINA R. SARAULLO A, OLIVIA WATANABE A, MICAELA HAMER A, SYLVIA GRÜNE LOFFLER, LUIS E. SAMARTINO A, BIBIANA F. BRIHUEGA (2021). New enzyme-linked immunoassay for the detection of specific antibodies against multiple *Leptospira* serogroups in bovine sera. *Comparative immunology, microbiology and infectious diseases* 75 : 101609. (abril 2021)

SARAULLO V, GRUNE LOFFLER S, FLORIN-CHRISTENSEN M, WATANABE O, HAMER M, MARTINEZ M, BRIHUEGA B (2021). Use of the *Leptospira* sp. ligB C-terminus coding region as a diagnostic tool of animal leptospirosis. *Comp Immunol Microbiol Infect Dis.* 2021 Oct; 78:101689. doi: 10.1016/j.cimid.2021.101689. Epub 2021 Jun 30. PMID: 34225227.

M. MARTÍNEZ, O. WATANABE, C. SANCHEZ, V. SARAULLO, M. HAMER, F. ORTEGA, S. GRUNE LOFFLER, L. SAMARTINO, B. BRIHUEGA. Study of *Leptospira* spp. in pigs in Argentina. Scientific meeting of the European Leptospirosis Society. May 6th, 2021

M. MARTÍNEZ; C. SÁNCHEZ; F. ORTEGA; V. SARAULLO; O. WATANABE; M. HAMER; S. GRUNE; L. SAMARTINO Y B. BRIHUEGA. Estudio de la concordancia entre ELISA y MAT en la evaluación de la respuesta de anticuerpos IgG de una vacuna comercial en bovinos. III Consensos Latinoamericanos en Leptospirosis Animal. Niteroi, 30 de noviembre al 2 de diciembre de 2021.

SARAULLO V, HAMER M, WATANABE O, GRUNNE LOFFLER S, BRIHUEGA B, MARTINEZ M. Comparación entre diferentes PCRs para la detección molecular de *Leptospira* spp. III Consensos Latinoamericanos en Leptospirosis Animal. Niteroi, 30 de noviembre al 2 de diciembre de 2021.

M. MARTÍNEZ, G. ROMERO, C. SÁNCHEZ, F. ORTEGA, V. SARAULLO, O. WATANABE, M. HAMER, S. GRUNE, L. SAMARTINO Y B. BRIHUEGA. Comparación entre un ELISA específico de *Leptospira* spp y la prueba MAT para monitorear la respuesta de anticuerpos vacunales en bovinos. XXIII Reunión Científica y Técnica y 1 Virtual. Asociación Argentina de Veterinarios de Laboratorios de Diagnóstico. Argentina Noviembre 2021

SARAULLO V, MARTINEZ M, GRUNNE LOFFLER S, WATANABE O, HAMER M, BRIHUEGA B. Avances en el conocimiento de la distribución de la distribución de los genes LigB en cepas de *Leptospira* spp. XXI JORNADAS DE DIVULGACIÓN TÉCNICO-CIENTÍFICAS-FCV-UNR. Facultad de Ciencias Veterinarias-Universidad Nacional de Rosario. 9, 10 y 11 de diciembre 2021.

M. MARTÍNEZ, G. ROMERO, C. SÁNCHEZ, F. ORTEGA, V. SARAULLO, O. WATANABE, M. HAMER, S. GRUNE, J. PONTI, L. SAMARTINO Y B. BRIHUEGA. Estudio serológico de *Leptospira* spp. en porcinos de las provincias de Buenos Aires y de La Pampa, Argentina. XXIII Reunión Científica y Técnica y 1 Virtual. Asociación Argentina de Veterinarios de Laboratorios de Diagnóstico. Argentina Noviembre 2021.

b) International conferences: 2

"III Consensos Latinoamericanos em Leptospirose Animal" (Brasil) Diciembre 2021

Congreso Virtual Producción, Innovación y Control. Presentación: "9 Cosas que Aprendimos en Leptospirosis en Animales de Producción". (Colombia) Octubre 2021

c) National conferences: 3
Jornadas del Noroeste Argentino. Asociación Argentina de Veterinarios de Laboratorios de Diagnóstico (AAVLD virtual) Argentina Mayo 2021

1 Congreso Argentino de Microbiología (virtual) Argentina Julio 2021

XXIII Reunión Científica y Técnica y 1 Virtual. Asociación Argentina de Veterinarios de Laboratorios de Diagnóstico (AAVLD). Argentina Noviembre 2021

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: 0
b) Seminars: 4
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
Diagnostico, Control de leptospirosis animal	Argentina, Brasil, Uruguay, Paraguay	19/25/8/6

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 17025:2017	Certificado de acreditación - ISO 17025-2017.pdf

16. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
MAT	Organismo Argentino Acreditación (OAA)

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?

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:

Durante el año 2021 se ha realizado el control de calidad completo (esterilidad, inocuidad, pH , inactivación y potencia) de 135 lotes de vacunas correspondientes a 26.285.487 dosis, para ser comercializadas en Argentina. Se decomisaron 7 lotes (1.642.275 dosis) por no cumplir satisfactoriamente dichos controles

En el primer semestre del año 2021 las actividades aun eran mínimas debido a la pandemia, esto impedía actividades como entrenamientos, capacitaciones "in situ", visitas etc. Las mismas se activaron fundamentalmente durante el segundo semestre 2021 pero con concurrencia limitada para organización de cursos o entrenamientos presenciales.