

# OIE Collaborating Centres Reports Activities

## *Activities in 2021*

**This report has been submitted : 2022-01-19 20:49:15**

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<b>Name of Director of Institute (Responsible Official):</b>	Andres Perez
<b>Name (including Title and Position) of Head of the Collaborating Centre (formally OIE Contact Point):</b>	Andres Perez, Director
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**ToR: To provide services to the OIE, in particular within the region, in the designated specialty, in support of the implementation of OIE policies and, where required, seek for collaboration with OIE Reference Laboratories**

**ToR: To identify and maintain existing expertise, in particular within its region**

**1. Activities as a centre of research, expertise, standardisation and dissemination of techniques within the remit of the mandate given by the OIE**

Disease control	
Title of activity	Scope
tbd	tbd
Epidemiology, surveillance, risk assessment, modelling	
Title of activity	Scope
Modeling transmission dynamics and effectiveness of worker screening programs for SARS-CoV-2 in pork processing plants	Disease modeling
Chronic Wasting Disease Transmission Risk Assessment for Farmed Cervids in Minnesota and Wisconsin	Risk Assessment
Risk for African Swine Fever Introduction Into Kazakhstan	Risk Assessment
Risk of Introduction of Classical Swine Fever Into the State of Mato Grosso, Brazil	Risk Assessment
African swine fever in the Dominican Republic	Epidemiology
Assessment of the Risk of Foot and Mouth Disease among Beef Cattle at Slaughter from East African Production Systems.	Risk Assessment
Rethinking the uncertainty of African swine fever virus contamination in feed ingredients and risk of introduction into the United States	Risk Assessment
Training, capacity building	
Title of activity	Scope
Veterinary Public Health and Preventative Medicine Residency Program - Resident Advising and Mentoring	2-year Residency in Veterinary Public Health. 2 residents completed the program in 2021. The residency has trained 51 residents since 2002 and currently has 3 residents enrolled. Residents and residency involved in the public health, zoonosis and epidemiology training of 105 DVM students within the CVM program  Resident mentors: Tiffany Wolf, Jeff Bender, Andres Perez, Scott Wells, Katey Pelican, Dominic Travis, Sol Perez, Mary Katherine Obrien
Graduate Student Advising and Mentoring	6 PhD and MsSc students.

ProgRESSVet - East Africa	10 months training program for mid-career officials from East Africa. Program consists of country-based cohorts in Kenya and Uganda. In 2021 we completed the training for Cohort 2 (13 participants in Kenya and 5 participants in Uganda) and launched Cohort 3 (19 participants in Kenya and 12 in Uganda at program start); Cohort 3 is the last group we will train under the current funding package from the Bill & Melinda Gates Foundation.
ProgRESSVet - Colombia	2-months training program for 25 mid-career officials of the Instituto Colombiano de Agricultural (ICA)
<b>Food safety</b>	
<b>Title of activity</b>	<b>Scope</b>
tbd	tbd

**ToR : To propose or develop methods and procedures that facilitate harmonisation of international standards and guidelines applicable to the designated specialty**

**2. Proposal or development of any procedure that will facilitate harmonisation of international regulations applicable to the surveillance and control of animal diseases, food safety or animal welfare**

Proposal title	Scope/Content	Applicable area
Evaluating the sensitivity of US surveillance system for tier-1 foreign animal diseases of swine.	USA // USDA - APHIS	<input checked="" type="checkbox"/> Surveillance and control of animal diseases <input type="checkbox"/> Food safety <input type="checkbox"/> Animal welfare
Evaluation of the performance of ELISA for ASF-antibodies detection and its potential use in the US swine industry	USA // National Pork Board	<input checked="" type="checkbox"/> Surveillance and control of animal diseases <input type="checkbox"/> Food safety <input type="checkbox"/> Animal welfare
Critical assessment of the suggested association between hog population and negative public health outcomes in North Carolina	USA // National Pork Board	<input type="checkbox"/> Surveillance and control of animal diseases <input checked="" type="checkbox"/> Food safety <input type="checkbox"/> Animal welfare
Risk-based prioritization of foreign animal disease biosecurity gaps in the U.S. pork industry	USA // Swine Health Information Center; prime grantee: EpiX Analytics	<input checked="" type="checkbox"/> Surveillance and control of animal diseases <input checked="" type="checkbox"/> Food safety <input type="checkbox"/> Animal welfare
Veterinary Education Twinning Project Plan with Ubezkistan	Uzbekistan // OIE	<input checked="" type="checkbox"/> Surveillance and control of animal diseases <input checked="" type="checkbox"/> Food safety <input checked="" type="checkbox"/> Animal welfare
Strengthening Field Epidemiology Training Programs	South East Asia // Asia Pacific Consortium of Veterinary Epidemiology (APCOVE); prime grantee: Sydney University	<input checked="" type="checkbox"/> Surveillance and control of animal diseases <input type="checkbox"/> Food safety <input type="checkbox"/> Animal welfare

Risk for introduction of ASFv into the US through feed and feed ingredients	USA // Swine Health Information Center	<input checked="" type="checkbox"/> Surveillance and control of animal diseases <input type="checkbox"/> Food safety <input type="checkbox"/> Animal welfare
A near-real time global surveillance system for swine diseases (renewal)	USA // Swine Health Information Center	<input checked="" type="checkbox"/> Surveillance and control of animal diseases <input type="checkbox"/> Food safety <input type="checkbox"/> Animal welfare
What is causing Avian Influenza?	Minnesota/USA // State of Minnesota, Minnesota Agricultural Experiment Station	<input checked="" type="checkbox"/> Surveillance and control of animal diseases <input type="checkbox"/> Food safety <input type="checkbox"/> Animal welfare
NADPRP Knowledge Attitude and Practices regarding implementation of enhanced biosecurity measures among MN swine producers	USA // USDA - APHIS	<input checked="" type="checkbox"/> Surveillance and control of animal diseases <input type="checkbox"/> Food safety <input type="checkbox"/> Animal welfare

**ToR: To establish and maintain a network with other OIE Collaborating Centres designated for the same specialty, and should the need arise, with Collaborating Centres in other disciplines**

**ToR: To carry out and/or coordinate scientific and technical studies in collaboration with other centres, laboratories or organisations**

**3. Did your Collaborating Centre maintain a network with other OIE Collaborating Centres (CC), Reference Laboratories (RL), or organisations designated for the same specialty, to coordinate scientific and technical studies?**

Yes

Name of OIE CC/RL/other organisation(s)	Location	Region of networking Centre	Purpose
Centro Regional para el Entrenamiento de los Servicios Veterinarios (CRESVet)	Buenos Aires, Argentina	<input type="checkbox"/> Africa <input checked="" type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input type="checkbox"/> Europe <input type="checkbox"/> Middle East	Capacity building in the context of OIE learning platform; CEBASEV (now CRESVet, was CAHFS partner in developing ProgRESSVet for OIE Advanced Competency Training in Latin America 2017-18).
Veterinary Public Health Centre for Asia Pacific (VPH-CAP)	Chiang Mai, Thailand	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input checked="" type="checkbox"/> Asia and Pacific <input type="checkbox"/> Europe <input type="checkbox"/> Middle East	Capacity building in the context of OIE learning platform

Ecole Nationale des Services Veterinaires	Lyon, France	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East	Capacity building in the context of OIE learning platform + OIE eLearning Guidelines subcommittee
Istituto Zooprofilattico Sperimentale dell'Abruzzo e del Molise "G. Caporale"	Teramo, Italy	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East	Capacity building in the context of OIE learning platform + OIE eLearning Guidelines subcommittee
Panaftosa	Rio de Janeiro, Brazil	<input type="checkbox"/> Africa <input checked="" type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input type="checkbox"/> Europe <input type="checkbox"/> Middle East	Capacity building in food safety and zoonotic diseases; Capacity building in the context of OIE learning platform
Iowa State University - Center for Food Security and Public Health (CFSPH)	Ames (IA), United States	<input type="checkbox"/> Africa <input checked="" type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input type="checkbox"/> Europe <input type="checkbox"/> Middle East	Capacity building in the context of OIE learning platform + OIE eLearning Guidelines subcommittee
Ecole Inter-Etats des Sciences et Médecine Vétérinaires	Dakar, Senegal	<input checked="" type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input type="checkbox"/> Europe <input type="checkbox"/> Middle East	Capacity building in the context of OIE learning platform
Centre National de Veille Zoosanitaire (CNVZ)	Tunis, Tunisia	<input checked="" type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input type="checkbox"/> Europe <input type="checkbox"/> Middle East	Capacity building in the context of OIE learning platform + OIE eLearning Guidelines subcommittee

**4. Did your Collaborating Centre maintain a network with other OIE Collaborating Centres, Reference laboratories, or organisations in other disciplines, to coordinate scientific and technical studies?**

Yes

Name of OIE CC/RL/other organisation(s)	Location	Region of networking Centre	Purpose
Reference Laboratory for ASF and AHS	Univ Complutense de, Madrid, Spain	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East	Collaboration for supporting capacity building on ASF

Center for Epidemiology and Animal Health (CEAH)	Fort Collins, US	<input type="checkbox"/> Africa <input checked="" type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input type="checkbox"/> Europe <input type="checkbox"/> Middle East	Animal Disease Surveillance Systems, Risk Analysis and Epidemiological Modelling
Organismo Internacional Regional de Sanidad Agropecuaria (OIRSA)	San Salvador, El Salvador	<input type="checkbox"/> Africa <input checked="" type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input type="checkbox"/> Europe <input type="checkbox"/> Middle East	Support the development of animal health plans and the strengthening member countries quarantine systems.
USDA Foreign Agriculture Service (FAS)	Washington, DC	<input checked="" type="checkbox"/> Africa <input checked="" type="checkbox"/> Americas <input checked="" type="checkbox"/> Asia and Pacific <input type="checkbox"/> Europe <input checked="" type="checkbox"/> Middle East	Enhance export opportunities and global food security.
Global FMD Research Alliance (GFRA) and Global Alliance for ASF control (GARA)	Multiple	<input checked="" type="checkbox"/> Africa <input checked="" type="checkbox"/> Americas <input checked="" type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input checked="" type="checkbox"/> Middle East	Coordinate research activities between and among multiple reference laboratories on ASF and FMD control globally

**ToR: To place expert consultants at the disposal of the OIE.**

#### 5. Did your Collaborating Centre place expert consultants at the disposal of the OIE?

Yes

Name of expert	Kind of consultancy	Subject
Emilio León	Consultant	OIE ad hoc Group on OIE PVS Gap methodology (15 July, 15 October and 25 November 2021)
Sergio Duffy	Consultant	Member of the OIE ad hoc Group on Evaluation of Foot and Mouth Disease Status of Members. Virtual meeting 18, 19, 20, 22, 25 and 27 October 2021.
Andres Perez	Consultant	Provide assistance on ASF control to the DR government
Mary Katherine O'Brien	Consultant	Provided eLearning and pedagogical expertise toward the development of the OIE eLearning platform and related guidelines throughout 2021.

**ToR: To provide, within the designated specialty, scientific and technical training to personnel from OIE Member Countries**

**6. Did your Collaborating Centre provide scientific and technical training, within the remit of the mandate given by the OIE, to personnel from OIE Member Countries?**

Yes

a) Technical visits: 0

b) Seminars: 4

c) Hands-on training courses: 9

d) Internships (>1 month): 1

Type of technical training provided (a, b, c or d)	Content	Country of origin of the expert(s) provided with training	No. participants from the corresponding country
b	FMD Risk Analysis	Uganda	10
b	FMD Risk Analysis	Kenya	14
b	Webinar Colombia - Emilio	Colombia	25
b	COVID-19 biosecurity training for veterinarians and ag producers/workers (UMASH Center)	US	0
c	Introduction to International Trade Policy	Kenya	19
c	Introduction to International Trade Policy	Uganda	12
c	Planning for Disease Control at the Central Level	Kenya	32
c	Planning for Disease Control at the Central Level	Uganda	20
c	Disease prevention, detection, and containment in the field	Kenya	32
c	Disease prevention, detection, and containment in the field	Uganda	18
c	Food Safety Risk Analysis & Certification	Kenya	32
c	Food Safety Risk Analysis & Certification	Uganda	18
c	Risk Analysis	Colombia	25
c	Design of Control Programs	Colombia	25
c	African Swine Fever Epidemiology and Risk Assessment	Vietnam	22

c	Biosecurity and ASFv risk management in pig farms	Vietnam	22
c	Organization of Control Plans at the Central Level	Vietnam	22

***ToR: To organise and participate in scientific meetings and other activities on behalf of the OIE***

**7. Did your Collaborating Centre organise or participate in the organisation of scientific meetings on behalf of the OIE?**

No

***ToR: To collect, process, analyse, publish and disseminate data and information relevant to the designated specialty***

**8. Publication and dissemination of any information within the remit of the mandate given by the OIE that may be useful to Member Countries of the OIE**

a) Articles published in peer-reviewed journals: 16

Vander Waal, K., Black, L., Hodge, J., Bedada, A., & Dee, S. (2021). Modeling transmission dynamics and effectiveness of worker screening programs for SARS-CoV-2 in pork processing plants. MedRxiv

Bernstein, L. A., Shaffer, C., Walz, E., Moore, S., Sparks, A., Stone, S., ... & Wolf, T. M. (2021). Exploring Risk for Echinococcosis Spillover in Northern Minnesota Tribal Communities. EcoHealth, 18(2), 169-181.

Makau DM, VanderWaal K, Kincheloe JM, Wells SJ. Implications of farmed-cervid movements on the transmission of chronic wasting disease. Prev Vet Med 2020;182:105088

Kincheloe, J. M., Horn-Delzer, A. R., Makau, D. N., & Wells, S. J. (2021). Chronic Wasting Disease Transmission Risk Assessment for Farmed Cervids in Minnesota and Wisconsin. Viruses, 13(8), 1586

Quadri, N. S., Brihn, A., Shah, J. A., & Kirsch, J. D. (2021). Bovine tuberculosis: A re-emerging zoonotic infection. Journal of agromedicine, 26(3), 334-339.

Mung Ting Yung, S., Vázquez, R., Liebman, A., Brihn, A., Olson, A., Loken, D., ... & Kirsch, J. (2021). COVID-19 Awareness and Preparedness of Minnesota and Wisconsin Dairy Farms. Journal of Agromedicine, (just-accepted).

Malladi, S., Weaver, J. T., Lopez, K. M., Erickson, J. L., Lonsdale, P. S., Nezworski, J., ... & Halvorson, D. A. (2021). Surveillance and Sequestration Strategies to Reduce the Likelihood of Transporting Highly Pathogenic Avian Influenza Virus Contaminated Layer Manure. Avian Diseases, 65(2), 219-226.

Epidemiology of Pig Tuberculosis in Argentina. Barandiaran S, Marfil MJ, Capobianco G, Pérez Aguirreburualde MS, Zumárraga MJ, Eirin ME, Cuerda MX, Winter M, Martínez Vivot M, Perez AM, La Sala LF. Front Vet Sci. 2021 Jul 26;8:693082. doi: 10.3389/fvets.2021.693082. eCollection 2021.

Editorial: Principles and Challenges of Fundamental Methods in Veterinary Epidemiology and Economics. Dürr S, Brookes VJ, Perez AM. Front Vet Sci. 2021 Jun 14;8:705980. doi: 10.3389/fvets.2021.705980. eCollection 2021.

African swine fever in the Dominican Republic. Gonzales W, Moreno C, Duran U, Henao N, Bencosme M, Lora P, Reyes R, Núñez R, De Gracia A, Perez AM. Transbound Emerg Dis. 2021 Nov;68(6):3018-3019. doi: 10.1111/tbed.14341. Epub 2021 Oct 10.



- Risk for African Swine Fever Introduction Into Kazakhstan. Schettino DN, Abdrakhmanov SK, Beisembayev KK, Korennoy FI, Sultanov AA, Mukhanbetkaliyev YY, Kadyrov AS, Perez AM. *Front Vet Sci.* 2021 Feb 11;8:605910. doi: 10.3389/fvets.2021.605910. eCollection 2021.
- Risk of Introduction of Classical Swine Fever Into the State of Mato Grosso, Brazil. Schettino DN, Korennoy FI, Perez AM. *Front Vet Sci.* 2021 Jul 1;8:647838. doi: 10.3389/fvets.2021.647838. eCollection 2021.
- Mapping the risks of the spread of peste des petits ruminants in the Republic of Kazakhstan. Abdrakhmanov SK, Mukhanbetkaliyev YY, Sultanov AA, Yessembekova GN, Borovikov SN, Namet A, Abishov AA, Perez AM, Korennoy FI. *Transbound Emerg Dis.* 2021 Jul 15. doi: 10.1111/tbed.14237. Online ahead of print.
- One Coin, Two Sides: Eliciting Expert Knowledge From Training Participants in a Capacity-Building Program for Veterinary Professionals. Adamchick J, Pérez Aguirreburualde MS, Perez AM, O'Brien MK. *Front Vet Sci.* 2021 Oct 25;8:729159. doi: 10.3389/fvets.2021.729159. eCollection 2021.
- Assessment of the Risk of Foot and Mouth Disease among Beef Cattle at Slaughter from East African Production Systems. Adamchick J, Rich KM, Perez AM. *Viruses.* 2021 Dec 1;13(12):2407. doi: 10.3390/v13122407.
- Self-Reporting of Risk Pathways and Parameter Values for Foot-and-Mouth Disease in Slaughter Cattle from Alternative Production Systems by Kenyan and Ugandan Veterinarians. Adamchick J, Rich KM, Perez AM. *Viruses.* 2021 Oct 20;13(11):2112. doi: 10.3390/v13112112.
- b) International conferences: 4
- Schettino D, Perez Aguirreburualde MS, Perez AM. An overview of active, passive, and targeted surveillance approaches applied to early detection and substantiating freedom from disease. EUFMD/GFRA joint meeting. Buenos Aires, Argentina. March 2021.
- Elnekave E, Hong SL, Lim S, Perez A, Alvarez J. Genetic resistance determinants to quinolones and extended spectrum cephalosporins and the plasmids harboring them in *Salmonella* in United States. 4th International Conference in Antibiotic Resistance. Lisbon, Portugal, June 2021.
- Elnekave E, Hong SL, Lim S, Boxrud D, Rovira A, Mather AE, Perez A, Alvarez JA. Tracing the evolution of the emerging multidrug-resistant *Salmonella enterica* serotype 4,[5],12:l:- sequence type 34. One Health EJP Annual Scientific Meeting. Copenhagen, Denmark. June 2021.
- Lozano Calderón L, Cabanne GS, Aznar N, Marcos A, Perez A, König G. Phylogenetic Analysis of Foot-and-Mouth Disease in Mar Chiquita, Argentina. *Virus Genomics and Evolution* 2021. Virtual conference. September 2021
- c) National conferences: 8
- Schambow R., Sampedro F., Urriola P., van de Ligt J., Shurson G., Perez AM. Rethinking the uncertainty of African swine fever virus contamination in feed ingredients and risk of introduction into the United States. Allen D. Leman Swine conference, St. Paul, USA. September 2021.
- Costard S, Zagmutt, F, Perez A, Groenendaal, H. Partitioning: A cost-effective approach for the pork industry to manage ASF risks. Allen D. Leman Swine conference, St. Paul, USA. September 2021.
- Schettino D, Lopez G, Beemer O, Remmenga M, Havas K, Arzt J, Perez AM. Enhanced Passive Surveillance for African swine fever and Classical swine fever. Allen D. Leman Swine conference, St. Paul, USA. September 2021.
- Munsey A, Mwiine F, Ochwo S, Velazquez-Salinas L, Ahmed Z, Rodriguez L, Rieder E, Perez A, VanderWaal K. Tracking dispersal of foot-and-mouth disease virus across landscape gradients in Uganda using novel phylodynamic tools. *Epidemics* 8. Virtual conference. November 2021.
- Abdrakhmanov S, Schettino D, Mukhanbetkaliyev Y, Perez A, Korennoy F. Evaluating spatial risks of emerging animal diseases introduction in the Republic of Kazakhstan: the case of African swine fever and Peste des petits ruminants. EMOP 2021. Virtual conference. October 2021.
- Virtual Presentation: "SARS-CoV-2 Surveillance in MN Wildlife, a Pilot" July 31, 2021 American Veterinary Medical Association Virtual Convention.

Exploring risk for echinococcosis spillover in northern Minnesota tribal communities. American Veterinary Medical Association Annual Convention. Virtual. Jul. 29, 2021.

UMN/SHIC Survey on VDL Lessons Learned from COVID 19 Response (One Health VDL role). (Lead presenter was faculty lead-Dr. Jerry Torrison). Joint AAVLD/USAHA Committee on the NAHLN 2021 Annual Meeting.

d) Other

(Provide website address or link to appropriate information): 0

**9. Additional comments regarding your report:**