

OIE Collaborating Centres Reports Activities

Activities in 2021

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Name (including Title and Position) of Head of the Collaborating Centre (formally OIE Contact Point):	James A. Roth, DVM, PhD, Director, Institute for International Cooperation in Animal Biologics an OIE Collaborating Center for Vaccine Evaluation in the Americas
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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
Preparedness Resources	Deliver a variety of foreign animal disease preparedness resources at www.cfsph.iastate.edu/emergency-response Deliver infection control resources at www.cfsph.iastate.edu/infection-control
Secure Food Supply Plans	Work with federal, state, and industry officials on plans to avoid interruptions in animal product/animal movement to commercial processing from farms with no evidence of infection during a foreign animal disease outbreak. www.cfsph.iastate.edu/secure-food-supply/
Development of plans for use and distribution of FMD Vaccine	Worked with USDA and the Iowa Department of Agriculture to develop an FMD vaccination plan for the State of Iowa. Shared the plan with other states for use as a template for their plans. Worked with USDA and the Iowa Department of Agriculture to exercise the distribution of a simulated FMD vaccine
African Swine Fever and Transboundary Animal Disease Course	Worked with the Instituto Interamericano de Cooperación para la Agricultura (IICA) and the USDA to offer the course in this hemisphere. There were 3 offerings in Spanish and 1 offering in English. A total of 1067 individuals enrolled in the courses and 666 successfully completed the courses.
Technical fact sheets for transboundary animal diseases	In 2021, the IICAB/Center for Food Security and Public Health had 148 English-language fact sheets (468,726 downloads), 138 Spanish language fact sheets (702,889 downloads), 44 Portuguese-language fact sheets (62,218 downloads) and 11 French-language fact sheets (3,293 downloads).
One page fact sheets for transboundary and zoonotic diseases (for a general public audience)	89 English (220,671 downloads), 67 Spanish (133,686 downloads)
Annotated images for transboundary animal diseases	410 images for 103 diseases, annotated by board certified pathologist. Viewed 84,447 times in 2021
Vaccines	
Title of activity	Scope

Veterinary Biologics Training Program	An in-person Training Program was planned for the last week of September 2021, but was changed to a virtual training program. The virtual program was held October - December 2021. A total of 72 individuals participated in the course including 58 from the US, 5 from Canada, 2 each from the United Kingdom and Germany, and 1 each from Argentina, Brazil, China, the Netherlands, and South Africa. In addition, there were 50 participants from the US Department of Agriculture.
Veterinary Immunology and Vaccinology online training	The IICAB offers 3 online courses related to veterinary immunology and vaccinology. There were 38 users from 7 countries in 2021.

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
Secure Food Supply Projects	Discussions on avoiding interruptions in animal product/animal movement to commercial processing from farms with no evidence of infection during a foreign animal disease outbreak. Presentations at state and national meetings. These plans cover pork, beef, milk, poultry and sheep and wool.	<input checked="" type="checkbox"/> Surveillance and control of animal diseases <input type="checkbox"/> Food safety <input checked="" type="checkbox"/> Animal welfare
FMD Vaccination plans	Worked with the USDA and the Iowa Department of Agriculture and Land Stewardship to develop a foot and mouth disease vaccination plan for Iowa. The plan was broadly shared with other states in the US for use as a template. An exercise was held to test the distribution of a simulated FMD vaccine in Iowa and several other states.	<input checked="" type="checkbox"/> Surveillance and control of animal diseases <input type="checkbox"/> Food safety <input type="checkbox"/> Animal welfare
Veterinary Biologics Training Program	Information on the US processes for assuring purity, potency, safety and efficacy of veterinary biologics. Held virtually in 2021.	<input checked="" type="checkbox"/> Surveillance and control of animal diseases <input type="checkbox"/> Food safety <input type="checkbox"/> Animal welfare
African Swine Fever and Transboundary Animal Disease online course	Worked with the Instituto Interamericano de Cooperación para la Agricultura (IICA) and USDA to offer an online course to increase the competencies of veterinarians and other animal health professionals to identify, prevent, respond, control and eradicate African swine fever. Used in the CVP countries, the Andean region, the Caribbean and Central America.	<input checked="" type="checkbox"/> Surveillance and control of animal diseases <input type="checkbox"/> Food safety <input type="checkbox"/> Animal welfare
Veterinary Immunology and Vaccinology online training	Online training related to veterinary immunology and vaccinology.	<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
Vaccine Evaluation in the Americas	USDA Center for Veterinary Biologics, Ames Iowa	<input type="checkbox"/> Africa <input checked="" type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input type="checkbox"/> Europe <input type="checkbox"/> Middle East	Worked together as a joint OIE Collaborating Center. Activities included the Veterinary Biologics Training Program and collaborating on answering questions related to vaccination.

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
Animal Disease Surveillance Systems, Risk Analysis and Epidemiological Modeling Collaborating Center	Ft. Collins, CO	<input type="checkbox"/> Africa <input checked="" type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input type="checkbox"/> Europe <input type="checkbox"/> Middle East	Secure Food Supply projects: Business continuity and development of plans for FMD vaccination
Laboratory Animal Welfare and Science	Washington, DC	<input type="checkbox"/> Africa <input checked="" type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input type="checkbox"/> Europe <input type="checkbox"/> Middle East	Evaluate and work to reduce animal testing in vaccine development and evaluation
Biological Threat Reduction	College Station, TX	<input type="checkbox"/> Africa <input checked="" type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input type="checkbox"/> Europe <input type="checkbox"/> Middle East	Vaccination plans, diagnostics

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
James Roth	Participant in an ad hoc group	Developed compartmentalization guidelines for ASF
Molly Lee, James Roth	Participant in an ad hoc group	Developed materials on Veterinary Emergencies, including high level Guideline on animal health and welfare simulation exercises

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: 3
 c) Hands-on training courses: 0
 d) Internships (>1 month): 0

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. Veterinary Biologics Training Program	Vaccine regulations	Argentina, Brazil, Canada, China, Germany, United Kingdom, New Zealand, United States, South Africa	148
b. African Swine Fever and Transboundary Animal Disease Courses	African Swine Fever Preparedness and Transboundary Animal Diseases	CVP countries: Argentina, Brazil, Chile, Paraguay, Uruguay; Caribbean Countries: Trinidad Tobago, Belize, Jamaica, Cayman Islands, Dominica, Saint Martin, Virgin Islands, Saint Lucia, French Guiana, Saint Kitts and Nevis, Anguilla, Bonaire; Central America: Costa Rica, Honduras, Mexico, Nicaragua, El Salvador, Guatemala, Panama; Andean Region: Colombia, Bolivia, Ecuador, Peru, Venezuela	1067
b. Veterinary Immunology and Vaccinology Courses	Immunology, Vaccination	United States, Australia, Brazil, China, Norway, Sweden, New Zealand, Russia	38

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: 4

Falkenberg, S.M., R.P. Dassanayake, B. Terhaar, J.F. Ridpath, J.D. Neill, and J.A. Roth. 2021. Evaluation of antigenic comparisons among BVDV isolates as it relates to humoral and cell mediated responses. *Front. Vet. Sci.*, 15 June 2021 | <https://doi.org/10.3389/fvets.2021.685114>

Contributions to Monographs:

Obbink, K. and J. A. Roth. 2021. Epidemiology and Biosecurity. In: *Honey Bee Medicine for the Veterinary Practitioner*. T.R. Kane and C.M. Faux (eds.) John Wiley & Sons, Inc. Pp. 209-218.

Roth, J.A and M. R. Sandbulte. 2021. The Role of Veterinary Vaccines in Livestock Production, Animal Health and Public Health. In *Veterinary Vaccines Principles and Applications*, S. Metwally, G. Viljoen, and A. El Idrissi (Eds), Food and Agriculture Organization of the United Nations. John Wiley& Sons, Inc. Pp. 3-10.

Roth, J.A. 2021. Forward In: *Immunity of the Bovine and Prevention Strategies*. C.C. Chase (Ed). In Press.

b) International conferences: 1

Food and Agriculture Organization of the United Nations – Launch of Veterinary Vaccines: Principles and Applications. “Panel discussion: Views from the authors and users”. May 12, 2021.

c) National conferences: 21

In Person Presentations

Agriculture Think Tank Meeting. “Overview of the evolving response to FMD in the U.S.” Ames, IA November 29, 2021

2021 Invited Webinars

Coalition for Epi Response, Engagement and Science (CERES), Biosecurity, Infectious Disease, and the Animal-Human Interface webinar. “National Panzootic Plans for Livestock”. January 28, 2021,

Iowa Veterinary Medical Association. “Secure Pork Supply Plan Update”. February 12, 2021.

Iowa Department of Agriculture and Land Stewardship; Foreign Animal Disease Webinar. “Foot and Mouth Disease (FMD) Awareness and Vaccination Planning”. April 12, 2021.

BioConnect Iowa; Vaccines and Immunotherapeutics Platform. “Veterinary Biologics Training Program: What you need to know to get a veterinary biologic licensed”. May 13, 2021.

Iowa Foreign Animal Disease (FAD) Preparedness and Response webinar series. “Secure Pork Supply Plan – Continuity of Business in the Event of an ASF, CSF or FMD Outbreak”. June 23, 2021.

USDA APHIS Veterinary Services National Training and Exercise Program. "Developing, Refining, and Exercising the Iowa Emergency FMD Vaccination Plan". July 13, 2021.

2021 National Veterinary Summer Scholars Symposium. Keynote Presentation: "Infectious disease control through research, policy development, and education". August 5, 2021.

American Association for the Advancement of Science Charles Valentine Memorial Lecture (virtual). "Zoonotic Diseases of Food Animals Threaten Global Food Security and Public Health". August 24, 2021.

Organized 12 Webinars for the Iowa Department of Agriculture and Land Stewardship. Experts in each subject delivered the presentations. The webinars were advertised nationally and had a broad audience of U.S. participants. Available on the IDALS website.

March 10: Poultry Foreign Animal Diseases and Response

March 17: Key Elements of a FAD Response – State, Federal, and Producer Perspectives

April 13: Swine Foreign Animal Diseases (ASF and CSF) and the US Swine Health Improvement Plan (SHIP) Overview

April 21: Foot and Mouth Disease (FMD) Awareness and Vaccination Planning

May 5: Got Biosecurity? Resources to Protect Your Herd/Flock Now

May 18: Resource Coordination Center Support during COVID-19 Supply Chain Disruption: Role of IDALS, ISU Extension, Industry

June 23: FAD Control Areas, Secure Pork Supply, and the Permitting Process in Iowa

July 26: FAD Control Areas, Secure Poultry Supply, and the Permitting Process in Iowa

August 25: FMD Control Areas, Secure Beef, Milk, Sheep and Wool Supply Plans, and the Permitting Process in Iowa

September 10: Iowa Perspective: ASF Action Week

September 17: Next Steps in Iowa: ASF Action Week

October 19: Mental Health Resources for Producers and Veterinarians

d) Other

(Provide website address or link to appropriate information): 14

www.cfsph.iastate.edu/IICAB

www.cfsph.iastate.edu

www.cfsph.iastate.edu/Secure-Food-Supply

www.securebeef.org

www.securepork.org

www.securemilksupply.org

www.securesheepwool.org

www.cfsph.iastate.edu/Secure-Poultry-Supply

www.cfsph.iastate.edu/diseaseinfo

www.asf.cfsph.iastate.edu/login.index.php

www.cfsph.iastate.edu/product/veterinary-immunology-courses

<https://www.cfsph.iastate.edu/es/>

<https://www.cfsph.iastate.edu/diseaseinfo/factsheets-pt/>

<https://www.cfsph.iastate.edu/diseaseinfo/disease-fr/>

9. Additional comments regarding your report:

COVID 19 continued to impact activities for IICAB in 2021. The in-person Veterinary Biologics Training Program was moved to a virtual training. Scientific meetings were either cancelled or held virtually. However our website remained a much used resource.