

# OIE Collaborating Centres Reports Activities

## *Activities in 2018*

**This report has been submitted : 2019-01-15 00:18:45**

<b>Title of collaborating centre:</b>	Biological Threat Reduction
<b>Address of Collaborating Centre:</b>	1500 Research Parkway Suite B270 2129 TAMU College Station, Texas 77843-2129 UNITED STATES OF AMERICA
<b>Tel.:</b>	+1-979 845.2855
<b>Fax:</b>	+1-979 845.6574
<b>E-mail address:</b>	iiad@ag.tamu.edu
<b>Website:</b>	iiad.tamu.edu/risk101/
<b>Name of Director of Institute (Responsible Official):</b>	Melissa L. Berquist, Ph.D., Director
<b>Name (including Title and Position) of Head of the Collaborating Centre (formally OIE Contact Point):</b>	Melissa L. Berquist, Ph.D., Director
<b>Name of writer:</b>	Melissa L. Berquist, Ph.D., Director

**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**

Epidemiology, surveillance, risk assessment, modelling	
Title of activity	Scope
In-Service Applied Veterinary Epidemiology Training Programme (ISAVET)	<p>In-Service Applied Veterinary Epidemiology Training Programme (ISAVET)</p> <p>The broad goal of the Frontline ISAVET programme is to improve the ability of countries to predict, prepare, respond and recover from the critical health threats affecting humans and animals at the human-animal-environmental interface. The program has trained 47 participants.</p>
Other (Name the category)	
Title of activity	Scope
Paraprofessional Certification Program	<p>IIAD continued partnership with the OIE to conduct, 3 curricula validation missions in Cambodia, Kenya, and Dubai to crosswalk the OIE VPP Curricula draft guidelines with existing VPP educational programmes. The missions assessed fit for purpose and collected feedback from students, faculty, employers, and graduates of the established programmes. The findings from the Missions were used to inform the final draft of the OIE VPP Curricula Guidelines.</p>
IIAD Veterinary Science Certificate Program	<p>In 2018, IIAD trained 2245 students in the three-online training curricula comprising the Veterinary Science Certificate Program (VSCP) for veterinary assistants (Veterinary Science, Laboratory Science, and One Health Science and Technology).</p>
Bench to Shop Training Program	<p>IIAD partnered with Onderstepoort Veterinary Institute, an OIE Collaborating Centre in South Africa, to provide training to eight trainees in the Bench-to-Shop Program. The program provides a pathway for participants to learn techniques and processes for transition of Transboundary Animal Disease (TAD) research technologies to the global marketplace.</p>
AgSecure Africa Programme	<p>IIAD partnered with Onderstepoort Veterinary Institute, an OIE Collaborating Centre in South Africa and the Texas A&amp;M College of Veterinary Medicine and Biomedical Sciences to provide three courses in laboratory biosafety, field postmortem, and field biosecurity. These courses were provided in online and face-to-face format to 90 participants and were approved for Continuing Education through the South African Veterinary Council (SAVC).</p>

**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
Development of Cattle Fever Tick Vaccine Based on the P0 Antigen	The goal of this project is to revalidate previous research showing the Cuban P0 antigen is up to 96% efficacious for the Rhipicephalus microplus cattle fever tick. Currently available vaccines for this tick are only approximately 40% effective. This antigen can be used in vaccines globally if found to be as effective as previously published.	<input checked="" type="checkbox"/> Surveillance and control of animal diseases <input type="checkbox"/> Food safety <input type="checkbox"/> Animal welfare
Veterinary Paraprofessional Standards Certification Program	This project is in the third year of funding. A set of guidelines and recommendations for the development of standards and certifications related to veterinary para-professionals. IIAD reviewed OIE member countries information to determine current curricula and standards and make recommendations for both animal/public health and laboratory veterinary para-professionals.	<input checked="" type="checkbox"/> Surveillance and control of animal diseases <input type="checkbox"/> Food safety <input type="checkbox"/> Animal welfare
Implementation of FETPV in GHSA-I Countries of Africa (Now ISAVET)	The ISAVET Program is in the first year of funding. IIAD is a service provider to FAO for development and implementation of the Frontline ISAVET Programme. The broad goal of the Frontline ISAVET programme is to improve the ability of countries to predict, prepare, respond and recover from the critical health threats affecting humans and animals at the human-animal-environmental interface. The program has trained 47 participants.	<input checked="" type="checkbox"/> Surveillance and control of animal diseases <input type="checkbox"/> Food safety <input type="checkbox"/> Animal welfare
From the Bench to the Shop: Creation and Implementation of a Scientific Business Development & Management Program to Transition High Consequence Livestock Disease Research and Development Technologies for Commercialization	The Bench to Shop Program is in its third year of funding and is designed to develop a biologics product commercialization training program to train scientists on business regulation, federal and international approval processes, and research requirements for the creation of biologics to mitigate the impact of transboundary animal diseases.	<input checked="" type="checkbox"/> Surveillance and control of animal diseases <input type="checkbox"/> Food safety <input type="checkbox"/> Animal welfare
Less Risk, More Value: Enhancing Biosecurity Best Practices of Livestock Diseases in South Africa (EBSA)	The AgSecure Africa program trained South African veterinary services and Onderstepoort Veterinary Institute staff, 15 participants from regional laboratories, and African producers on the following topics; international SPS trade regulations for animal products, best practices for field epidemiology and surveillance operations, biosecurity and biosafety practices. Three courses were developed and piloted in South Africa to 90 participants.	<input checked="" type="checkbox"/> Surveillance and control of animal diseases <input type="checkbox"/> Food safety <input type="checkbox"/> Animal welfare

Multi-Laboratory International Collaborative Environment (MICE)	The goal of the Multi-Laboratory International Collaboration Environment (MICE) project was to investigate, implement, pilot, and evaluate a virtual collaborative environment that supports bringing together national and international animal health diagnostic and research biocontainment laboratories. This created an opportunity to improve collaboration and enabled better communication and coordination between these organizations. In a pilot environment, such collaborative technologies were used demonstrate multiple functionalities and use cases, including to facilitate meetings, research discussions and data analysis, training events, and formal briefings between researchers and responders both in support of day-to-day operations and in the face of an emerging disease outbreak. Also, this technology has the potential to align the science to support response and recovery efforts as needed.	<input checked="" type="checkbox"/> Surveillance and control of animal diseases <input type="checkbox"/> Food safety <input type="checkbox"/> Animal welfare
An Integrated One Health Approach to Detect and Respond to Emerging Disease Threats in High-Risk Regions of Central America	This project aims to maximize the ability to understand, detect, and respond to infectious disease threats in the high-risk regions of Belize and El Salvador. Use of a One Health-integrated surveillance system based in high-risk areas in Central America will strengthen regional defenses against emerging disease threats.	<input checked="" type="checkbox"/> Surveillance and control of animal diseases <input type="checkbox"/> Food safety <input type="checkbox"/> Animal welfare
High Containment Laboratory Workflow Optimization Case Study Development	Given the rapid emergence of IT & OT solutions, the IIAD team will develop case studies and conduct assessments of real-world laboratory functions in BSL-3, BSL-3Ag, and BSL-4 containment. The resulting review and analysis will serve as a reference for potential organizational implementations that maximize efficiency in mission delivery for the National Bio and Agro-Defense Laboratory as well as the broader high containment laboratory network. Additionally, this project can provide a framework to enable future collaborative efforts across government and private sector in a high-containment laboratory network.	<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?**

No

**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
Centro de Ingenieria Genetica y Biotecnologia	Cuba	<input type="checkbox"/> Africa <input checked="" type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input type="checkbox"/> Europe <input type="checkbox"/> Middle East	Collaborator with IIAD on Cattle Fever Tick Vaccine Project.
CSIRO	Australia	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input checked="" type="checkbox"/> Asia and Pacific <input type="checkbox"/> Europe <input type="checkbox"/> Middle East	Collaborator with IIAD on MICE Phase I Project.
Onderstepoort Veterinary Institute	South Africa	<input checked="" type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input type="checkbox"/> Europe <input type="checkbox"/> Middle East	Collaborator with IIAD on 1) a capacity-building training Ag-Secure Africa Programme and 2) Bench to Shop Programme.
Centro Nacional de Sanidad Agropecuaria	Cuba	<input type="checkbox"/> Africa <input checked="" type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input type="checkbox"/> Europe <input type="checkbox"/> Middle East	Consortium with IIAD for a Global Emergency Management Network
Instituto Zooprofilattico Sperimentale dell'Abruzzo e del Molise "G. Caporale"	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	Consortium with IIAD for Global Emergency Management Network

**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
Dr. Heather Simmons, Ms. Barbara Martin, and Ms. Jessica Cargill	OIE ad hoc group Member	Veterinary Para-Professionals
Dr. Dee Ellis	OIE ad hoc group Member	Animal Health/Emergency Operations Centres
Dr. Jimmy Tickel	OIE ad hoc group Member	Emergency Management

Dr. Jimmy Tickel	Subject Matter Expert, Presenter	Provided one presentation to the OIE regional workshop on the role of Veterinary Services on animal welfare in natural disasters for Balkan Countries.
Dr. Jimmy Tickel	Subject Matter Expert, FAO Global Technical Working Group	Participated in Technical Working Group (TWG) for revision of the FAO Manual "Good Emergency Management Practice: The Essentials", a guide to preparing for animal health emergencies.
Dr. David Castellan	Subject Matter Expert, FAO Global Technical Working Group	Provided input and one presentation related to the Field Epidemiology Training Programme for Veterinarians (FETPV) and the In-service Applied Veterinary Epidemiology Training (ISAVET).
Dr. Wesley Bissett	OIE ad hoc group member	Global Outbreak Alert Response Network
Drs. Heather Simmons and Ms. Jessica Cargill	Subject matter expertise, analysis of OIE data	Provided multiple presentations to the OIE ad hoc group on veterinary para-professionals (VPPs) for veterinary para-professional certification standards development over: 1) VPP curricula and 3) Curriculum Matrix.
Ms. Jessica Cargill	Subject matter expertise; evaluation and data analysis	Participated in three Validation Missions for the veterinary paraprofessional (VPP) curriculum development project.

**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: 66

b) Seminars: 0

c) Hands-on training courses: 2115

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
A (technical visit)	1. Epidemiologic evaluation and consultation on recent bovine brucellosis cases. 2. Evaluation of animal health agency infrastructure and needs. 3. Created report of potential solutions.	Panama	30

A (technical visit)	Provided a presentation on Mass Depopulation, participated as facilitator for afternoon summary session, and advisor to PPE/Biosecurity for farm visit	Ukraine	18
A (technical visit)	Conducted two scoping missions and needs assessments for an in-service applied veterinary epidemiology training programme, in partnership with FAO.	Uganda and Senegal	18
C (online)	Delivered online training courses to 4H, High School, Home School, and Community College personnel interested in becoming a certified veterinary assistant (i.e., laboratory, public health, and veterinary science).	United States	2000
C (face-to-face/online)	Bench to Shop Program	United States	8
C (face-to-face/online)	Delivered two courses in field biosecurity and field necropsy methods, in partnership with Texas A&M College of Veterinary Medicine and Onderstepoort Veterinary Research Institute	South Africa (2 trainings)	60
C (face-to-face)	Delivered 4-week training, in partnership with FAO, for an In-Service Applied Veterinary Epidemiology Training Programme for Frontline field personnel (i.e., veterinarians and paraveterinarians).	Uganda and Senegal	47

***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?**

Yes

National/International	Title of event	Co-organiser	Date (mm/yy)	Location	No. Participants
International	Ad hoc Working Group for Veterinary Para-professionals, Special Session Curriculum Development	OIE	02/18	Paris, France	11
International	VPP Validation Mission 1	OIE	06/18	Phnom Penh, Cambodia	5
International	Technical Working Group for Good Emergency Management Practices	FAO	07/18	Rome, Italy	15

International	Technical Working Group for Global Field Epidemiology Training Programme for Veterinarians	FAO	07/18	Rome, Italy	20
International	VPP Validation Mission 2	OIE	09/18	Nairobi, Kenya	4

**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: 5

- OIE, Simmons, H.L. et al. OIE Competency Guidelines for Veterinary Paraprofessionals. Published by the OIE, June 2018. PVS Pathway
- OIE, Simmons, H.L. et al. Directrices de la OIE Sobre Competencias de los Paraprofesionales de Veterinaria, June 2018. PVS Pathway
- OIE, Simmons, H.L. et al. Recommandations de l'OIE Sur Les Competences des Paraprofessionnels Veterinaires, June 2018 PVS Pathway
- Ellis, D., Veterinary Clinics of North America: Food Animal Practice: Disaster Response for Beef Cattle Operations Communication and Working with Authorities During Natural Disasters (Chapter 1), Volume 34, Issue 2, Pages 223-233 (July 2018).
- Perez de Leon, A., Mahan, S., Messenger, M., Ellis, D., Pests and vector-borne diseases in the livestock industry; Ecology and Control of Vector-borne diseases, Volume 5; Running Head: Public-Private Partnership for Integrated Use of Anti-Tick Vaccine in U.S. Cattle Fever Tick Eradication Program; pp. 275-298, Published online: August 22, 2018 [https://doi.org/10.3920/978-90-8686-863-6\\_10](https://doi.org/10.3920/978-90-8686-863-6_10)

b) International conferences: 9

- Castellan, D.; Ellis, D; Logan, L.; Simmons, H. (Participant) – Global Veterinary Epidemiology Capacity Development Workshop, Rome, Italy, March 2018.
- Castellan, D; (Participant and Presenter) – FAO Global Workshop, Rome, Italy, July 2018
- Castellan, D; Cargill, J; Simmons, H. (Presenter and Facilitator) – ISAVET Programme Inception Workshop for Uganda; Entebbe Uganda; October 2018.
- Castellan, D; Buenger, J; (Presenter and Facilitator) – ISAVET Programme Inception Workshop for Senegal; November 2019
- Tickel, J.; Berquist, M.; (Participant) –OIE Regional Workshop on the Role of Veterinary Services on Animal Welfare in Natural Disasters for Balkan Countries, Terramo, Italy, February 2018.
- Butler, J; OIE General Session 9 (Participant) – Strengthening Cooperation and Capacity for Emergency Management, Paris, France, May 2018.
- Ellis, D; (Participant) Development and Coordination of Field Epidemiology Training Programs for Veterinarians (FETPV) in Africa, Rome, Italy, February 2018
- Ellis, D; (Speaker) Livestock Insect Workers Conference, San Juan, Puerto Rico, June 2018.
- Ellis, D; (Participant) 1st Technical Working Group for Animal Health Emergency Operations Center (EOC-AH), Rome, Italy, December 2018.

c) National conferences: 7

- Cochran, M., International Society for Disease Surveillance Annual Meeting, “Overcoming One Health Barriers, Panel”, Orlando, Florida, January 30 - February 2, 2018.
- Mask, J.W., National Association for Agricultural Educators Annual Conference, “Dr. Joe's Little Black Bag: Innovative Teaching Techniques for Veterinary Science Teachers”, San Antonio, Texas, November 27-30, 2018.
- Ellis, D., National Institute for Animal Agriculture, Denver, Colorado, April 8-11, 2018.
- Ellis, D., Southern Animal Health Association, Nashville, Tennessee, June 4-7, 2018.
- Ellis, D., Western States Livestock Health Association, Big Sky, Montana June 10-13, 2018.
- Ellis, D., Southwest Veterinary Symposium, San Antonio, Texas, September 20-23, 2018.



- Ellis, D., United States Animal Health Association, Kansas City, Missouri, October 19-24, 2018.

d) Other

(Provide website address or link to appropriate information): 13

- Tickel, J., OIE Regional Workshop on the Role of Veterinary Services on Animal Welfare in Natural Disasters for Balkan Countries, "How to Conduct a Risk Analysis Prior to a Disaster", Teramo Italy, November 26-28, 2018.
- Cargill, J., VPP Curriculum Validation Mission: Royal University of Agriculture, Phnom Penh, Cambodia, June 25-29, 2018.
- Cargill, J., VPP Curriculum Validation Mission: AHITI Kabete, Nairobi, Kenya, September 24-28, 2018.
- Cargill, J., VPP Curriculum Validation Mission, Dutch Committee for Afghanistan, Phnom Penh, Cambodia. November 13-14, 2018
- Cargill, J., OIE ad hoc group on VPP, Special Session on Curricula Development, "VPP Curricula Validation Missions: Methodology and Data Analysis", Paris, France. December 3-7, 2018
- Cargill, J., ISAVET Uganda Pilot Inception Workshop: Uganda, "ISAVET Monitoring and Evaluation Framework", Kampala, Uganda. October 16-18, 2018
- Castellan, D., ISAVET Uganda Pilot Inception Workshops: Uganda and Senegal: "ISAVET Competencies and Skills"; "ISAVET Inception Workshop Pre-Workshop Survey", Kampala, Uganda. October 16-18, 2018 and Dakar, Senegal November 28-29 2018 respectively.
- Simmons, H. ISAVET Uganda Pilot Inception Workshop: Uganda, "Frontline ISAVET Overview and Activities", Kampala, Uganda. October 16-18, 2018.
- Simmons, H. ISAVET Uganda Pilot Inception Workshop: Uganda, "Frontline ISAVET Inception Workshop Objectives, Structure, and Deliverables", Kampala, Uganda. October 16-18, 2018.
- Simmons, H. ISAVET Uganda Pilot Inception Workshop: Uganda, "Frontline ISAVET Core Competencies, Skills, and Schedule", Kampala, Uganda. October 16-18, 2018.
- Ellis, D., Texas Homeland Security Meeting, Austin, Texas, January 31, 2018.
- Ellis, D., Subtropical Agriculture and Environments Society, Monte Albo, Texas, February 9, 2018.
- Ellis, D., Texas Cattle Fever Tick Forum, Kingsville, Texas, October 30, 2018.