



# Biosafety Level 4 Zoonotic Laboratory Network

**VISION:** BSL4ZNet is a Network of government-mandated organizations with national level responsibility for protecting animal and human health by working together to enhance knowledge, competency and capacity to meet current and future high containment needs.

**MISSION:** To establish & sustain trusted BSL4 partnerships to strengthen international coordination, improve knowledge sharing and leverage capacity for diagnostics, research & training.

## 4 Established Working Groups: key achievements & outcomes



### TRAINING WORLD-CLASS PERSONNEL

➤ To strengthen high containment laboratory personnel training through identification and creation of training opportunities, building a highly trained, collaborative workforce able to respond to emerging procedures.



### SCIENTIFIC EXCELLENCE

➤ To promote scientific collaboration and learning within the Network, enhancing diagnostic capabilities, scientific collaborations & collective advice for decision makers.



### INSTITUTIONAL COOPERATION

➤ To promote institutional cooperation and knowledge sharing within the network to allow efficient mechanisms for harmonized exchange of laboratory-based information, such as latest advances in infrastructure and research.



### INTERNATIONAL RESPONSE

➤ To strengthen laboratory preparedness and response to potential outbreaks through knowledge sharing activities, leading to a better understanding of the hazards, exposure and vulnerability.

**A Networking Opportunity:** Recognizing the global need, emerging threats and the timeliness of the opportunity to re-define the current state, decision-makers and subject matter experts from key international organizations came together face to face in Winnipeg, MB (March, 2016) to develop a common vision for the future. A unanimous decision was reached to move forward with a strategic framework for an international Network. Since then, BSL4ZNet has flourished into a productive group that meets virtually through quarterly Steering Committee Meetings and regular Working Group discussions.



- Co-Chairs:  
**Dr. Primal Silva** - Chief Science Operating Officer, Canadian Food Inspection Agency (CFIA) &  
**Dr. Jeffrey Silverstein** - Office of National Programs Deputy Administrator USDA, Agricultural Research Service
- **Dr. Olga Pena** – Science Specialist (CFIA)
- **Funding:** through the Canadian Food Inspection Agency (CFIA); the Canadian Safety and Security Program, Defence Research Development Canada (DRDC) and the Agricultural Research Service, USDA

## PARTNERS

### COVID-19 Rapid Collaborative Response

**COVID-19 Update Meetings (January 2020 - To Date):** BSL4ZNet facilitated prompt sharing of knowledge concerning SARS-CoV-2 laboratory diagnostic protocols, survival and spread potential, susceptibility of animal species and countermeasures to control the virus. Sharing COVID-19 research plans has been a main outcome of institutional cooperation during these meetings. An inventory of coronavirus experts across the Network was generated to enhance collaboration among partner organizations.

**COVID-19 International Symposium (August - September 2020):** A six-part scientific program focused on different COVID-19 topics, including virology, epidemiology, animal studies, diagnostics, vaccines and therapeutics, was organized by BSL4ZNet involving high quality presentations by well recognized experts. This highly successful event attracted an international audience of over 1200 regulatory scientists, academia, government officials, non-profit organizations and industry.

Integrated global capacity to respond to current and emerging high consequence bio-threats through strengthened partnerships.

Country	Organization	Laboratory
Australia	Commonwealth Scientific and Industrial Research Organization (CSIRO)	Australian Centre for Disease Preparedness
Canada	Canadian Food Inspection Agency	National Centre for Foreign Animal Disease
	Public Health Agency of Canada	National Microbiology Laboratory
	Department of National Defence	Canadian Safety and Security Program
	Global Affairs	Threat Reduction Program
Germany	Fredrich Loeffler Institut	Novel and Emerging Infectious Diseases
	National Research Institute for Animal Health	Centre for Biological Threats and Special Pathogens/ Biosafety Level 4 Laboratories
	Robert Koch Institut	Centre for Biological Threats and Special Pathogens/ Biosafety Level 4 Laboratories
United Kingdom	Biotechnology and Biological Sciences Research Council	The Pirbright Institute
	Animal and Plant Health Agency	Weybridge Veterinary Laboratories
	Public Health England	Porton Down Laboratory
	Ministry of Defence of the United Kingdom	Defence Science and Technology Laboratory
United States	United States Department of Agriculture	Animal and Plant Health Inspections Services Agriculture Research Services National Bio and Agro-Defense Facility
	Centers for Disease Control and Prevention	Emerging Infectious Disease Laboratory
	Department of Homeland Security	National Biodefense Analysis and Countermeasures Center Science & Technology Directorate