



Plant Biosecurity

Come to K-State's Biosecurity Research Institute for a short course in plant biosecurity. An international panel of instructors will share diverse perspectives on plant biosecurity through a combination of lectures, hands-on laboratory exercises, case studies, and open discussions. Course topics include plant biosecurity concepts, diagnostics, and strategies in support of plant biosecurity.

Course participants will:

- Engage in biosecurity problem solving
- Gain hands-on experience in handling high consequence pathogens in a state-of-the-art biocontainment environment
- Develop biosecurity plans for 3 defined scenarios



"I left New Zealand with not many expectations and came back convinced that such an experience should be mandatory for any student, even those just remotely involved in biosecurity."
- Francesco Martoni

Social Activities

BBQ & Hike in the Konza Prairie (National Science Foundation Long-Term Ecological Research site).

A night at the museum: dinner and leisure at the Great Plains Discovery Center.

Course Registration

For registration and booking information, visit:
www.jstacklab.com/courseregistration

Course participation is limited to 30 individuals. All participants receive the lab training. The in-depth lab experience is capped at 20 - please indicate if interested.

KANSAS STATE UNIVERSITY

BRI
Biosecurity Research Institute

USDA
United States Department of Agriculture
National Institute of Food and Agriculture

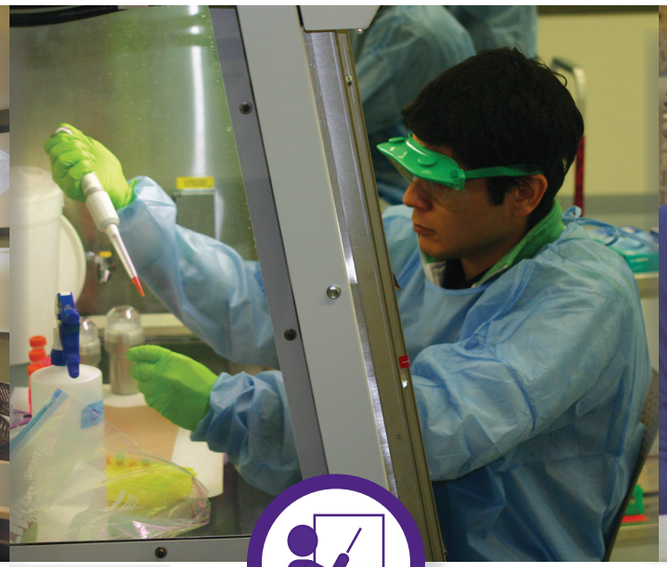


Plant Biosecurity in Theory & Practice

May 14-18, 2018

"The importance of having courses like this... is establishing networks of collaboration, of friendships around the world. That is critical to making the world a safer place. We all depend on communications, notifying each other and sharing resources."
-Stephen Higgs, BRI Director







Case Studies

The theory and practice of plant biosecurity will be illustrated through several plant biosecurity case studies that demonstrate how these events play out in the real world. Instructors from several countries will present case studies that were identified to represent different agents and response efforts that either succeeded or failed. The case studies include bacteria, viruses, fungi, arthropod-borne pathogens, natural and agricultural plant systems, aerial and soil-borne organisms, and an U.S. select agent.

The case studies provide an eye-opening view of preparedness and response to biological invasions in several countries.



"The case studies have been amazing in terms of how different countries are dealing with things and how they go about investigating. This has been a very worthwhile course for all of us."
- Toni Chapman

Lab Experience

Participants will receive expert training in the Biosecurity Research Institute's (BRI) mock biocontainment training Lab; a near-exact replica of an actual containment lab. BRI's biosafety staff will teach proper use of biocontainment equipment and space, safe and secure handling of high consequence organisms, and essential biosecurity and biosafety measures in containment.

Optional in-depth lab experience: A limited number of participants can choose an in-depth biocontainment experience in an operational biosafety level 3 containment lab. Under the supervision of experienced BSL-3 researchers, participants will enter a working lab and conduct a small exercise with a high consequence plant pathogen.



"For someone who has been in plant biosecurity for a long time, it is a great refresher to remind us there's a lot more out there than the little things we tend to get preoccupied and focused on in our own research."
- Grant Smith

Biosecurity Plan Development

Participants will be assigned to teams that will develop biosecurity plans for a nation, a commodity, and an agent. Experienced team leaders will guide the development of the plans. A group discussion will identify the elements of a good plan.

Forensic Desktop Exercise

Participants will engage in a desktop exercise to analyze a disease outbreak in a forensic framework. Teams will be provided a scenario, evidence and an opportunity to query experts. The challenge will be to determine: intentional, accidental or natural? How good are your investigative skills?



"This is fantastic, especially for younger scientist such as myself that are here listening to experts in this field and learning about the gaps. It is also great to listen to the other countries and how they view plant biosecurity..."
- Ian Moncrief