



PLANT BIOSECURITY IN THEORY AND PRACTICE

Plant Biosecurity

Join us at 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 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

Social Activities

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

A night at a local winery: dinner and leisure.

Course Registration

Course participation limited to 26. All participants receive lab training. In-depth lab experience capped at 20.

For more information on registration, availability and additional course offerings (coming soon) visit: <https://www.jstacklab.com/>

Course Organizer: Jim Stack, Ph.D.
Course Location: Biosecurity Research Institute
Manhattan, Kansas

2026 Dates TBD

"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."

Stephen Higgs, BRI Director
Biosecurity Research Institute

"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



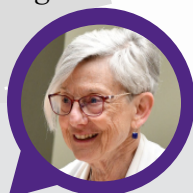


Course Overview

Trade and travel have greatly increased the global dissemination of emerging and existing pathogens and pests; some causing long-term and severe impacts. Our ability to predict, detect, and mitigate these introductions is limited. Plant Biosecurity in Theory and Practice presents the challenges and consequences to plant health with an eye to preparedness.

Forensic Desktop Exercise

Participants will engage in a desktop exercise to analyze a disease outbreak from a forensic perspective. Teams will be provided a scenario, evidence and an opportunity to determine, whether the outbreak was intentional, accidental, or natural. How good are your investigative skills?



"The threats are going to continue. This course is the most thoughtful and compelling preparation that I know of for young professionals in Plant Pathology."
- Jacqueline Fletcher

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 practices.

Optional Lab Experience: A limited number of participants can choose an experience in an operational biosafety level 3 containment lab under the supervision of experienced BSL-3 researchers. Participants will conduct a short exercise with a high consequence 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

Assigned to teams, participants will develop biosecurity plans for a nation, a commodity, and an agent. Experienced team leaders will guide the development of the plans, followed by a group discussion to identify the elements of a good biosecurity plan.

Case Studies

Instructors from several countries will present case studies involving diverse agents and plant systems, the response efforts that either succeeded or failed, while highlighting how events play out in the real world. Case studies include microbes and arthropods that impact natural and agricultural plant systems, providing an eye-opening view of biological invasions in several countries.



"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