

Yale Environmental Health & Safety

Laboratory Biosecurity Project Internship

Internship Description and Objectives:

This internship will introduce the student to the field of Biological Safety as part of an introduction to laboratory biosecurity, which is focused on the protection of high-risk or valuable biological materials. Following classroom education and training, along with field internships to demonstrate the application of laboratory biosafety and biosecurity, the intern will conduct laboratory biosecurity assessments of laboratories at Yale registered for the possession of human pathogens with the State of Connecticut Department of Public Health.

The target goal for the summer internship is to audit 25% of the State registered laboratories in order to acquire sufficient data for the identification of trends in conformity with laboratory biosecurity best practices. The student will utilize existing laboratory biosecurity checklists from Yale EHS (or other national or international authorities) for the collection of baseline laboratory biosecurity practices.

Outcomes:

- Identification of conformity with key laboratory biosecurity measures, including:
 1. Restricted access to laboratories where biohazards or valuable biological materials are either used or stored.
 2. Accurate inventories for these materials.
 3. Training and awareness in laboratory biosecurity measures.
 4. Locked primary and where applicable secondary barriers to prevent unauthorized access.
 5. Control of readily available information regarding the presence and specific location of biohazards or valuable biological materials. This includes information security and site-information to avoid providing a road map to the secure locations.
 6. Security for transfers or transport of these materials.
- Analyzing the collected data to develop rates of conformity with laboratory biosecurity in the key measures noted above.
- Creation of a written support with the collected data that includes recommendations for improving laboratory biosecurity in our Yale labs.
- Developing a presentation to provide to the Biosafety Section staff, to Yale EHS, and possibly other biosafety related campus groups if applicable.

All EHS internships are subject to change based on the most pertinent needs for each section within EHS. All EHS internships will provide as many learning opportunities and experiences to provide examples of the range of knowledge, skills and abilities required for the respective EHS discipline selected by the intern.