

Module: Biosafety and Biosecurity

Module coordinator: Xavier Abad

Module outline

In this module, students will be introduced to the concept of biosafety and biosecurity and will know the hazard criteria and the categorisation of most important disease agents. The risk assessment and the management and handling of human people and animals under biocontainment will be discussed. The characteristics and specifications of different biosafety laboratory levels will be presented. Students will be trained to work in the highest levels of biosafety laboratories and animal housing facilities (BSL3 and BSL4).

Topics

Hazard Criteria and Categorisation of Microbes

BSL3 and BSL4 Lab Technical specifications

Risk assessment procedures and Biosecurity

Experimental procedures with animals under biocontainment

Practices: how to move in and out of BSL3 lab, handling of virus, cell cultures and spore forming bacteria in BSL3, handling positive pressure masks.

Learning : 3 ECTS

Lectures: 20h

Practices: 20h

Independent work: 35h

Assessment

50% Evaluation of performance in the BSL-3 laboratory

50% Review of a research paper