**Module:**

**Microbiology, Diseases and Health Monitoring**

This module provides the practical and theoretical knowledge and skills regarding microbiology, diseases and health monitoring required by designated veterinarians and other onsite personnel responsible for the welfare and care of laboratory animals in the conduct of experimental procedures.

The module looks at the importance of health monitoring and the range of diseases that can affect laboratory animals and how diseases may affect experiment results.

This module also provides practical training in relation to animal biology, euthanasia and minimally invasive methods.

**Syllabus:**   
Topic 1. Introduction to the pathology and infectious diseases of laboratory animals

Topic 2. Definition, importance and microbiological characteristics of laboratory animals. Microbiota and its influence in animal models.

Topic 3. Diseases in rodents and rabbits.

Basic concepts.

Diseases in mice.

Diseases in rats.

Diseases in guinea pigs.

Diseases in rabbits.

Topic 4. Health monitoring in rodents and rabbits

Importance of infectious diseases in animal experimentation

Health monitoring following FELASA recommendations

Evaluation of the risk of spread of infectious agents in animal housing facility

Maintenance and control of a high quality sanitary status

Practical case study

Topic 5. Clinical biochemistry and hematology studies

Basic concepts and interpretation of results

Topic 6. Clinical sings in experimental animals

Topic 7. Microbiology and diseases in carnivores

Diseases in dogs, cats and ferrets

Health monitoring: FELASA recommendations.

Prevention of diseases, clinical examination and taking samples.

Topic 8. Microbiology and diseases in fish

Introduction

Microbiology and diseases in fish

Health monitoring and biosecurity in laboratory fish: FELASA recommendations

Topic 9. Microbiology and diseases in ruminants and pigs

Microbiology and diseases

Health monitoring: FELASA recommendations

Topic 10. Microbiology and diseases in primates

Health monitoring: FELASA recommendations.

Disease Prevention, clinical exploration, sampling.

Primate diseases

Topic 11. Microbiology and diseases of poultries

Health monitoring

Disease Prevention, clinical exploration, sampling.

Primate diseases

Topic 12. Experimental pathology

Practical sessions: Necropsy and tissue sampling in rodents and pig.

**Duration of course:** 6 ECTS (44 attendance hours)  
  
**Course dates:** 1 October - 15 December 2023   
  
**Attendance dates at UAB:** 20-24 November 2023