



# FONDAZIONE GUIDO BERNARDINI

## BETTER EDUCATION FOR BETTER SCIENCE

### THREE DAY COURSE



credits: 16 points - Royal Society of Biology: 44 credits

2,5 day continuing education for person carrying out procedures on animals and person designing procedures and projects by Swiss Veterinarian Associations

# Organizing and Operating Activities in a Laboratory Rodent Facility

16th to 18th of March 2016, Milan - Italy

## OBJECTIVES

*The theme of this three-day course is the organization and management of laboratory animal facilities.*

*The continuous progress of technical tools in this field and the increasingly complex demand by the scientific community require appropriate and frequent updates of information. The expert faculty of this course will pay particular attention to the new technological developments and scientific needs of research and will accompany the participants through theoretical and practical activities that will improve their ability to face and solve everyday problems.*

## CONTENTS

*Layouts, functional areas, equipment, and workflows; Bio-containment and bio-exclusion: definitions and technical solutions; Main procedures in “clean” and “dirty” areas; Washing and decontamination; Health monitoring programmes; Colony management; Staff training and management: duty assignment and working scheduling, per diem calculation and attribution.*

## RECIPIENTS

*Facility and unit managers and supervisors, manager assistants, persons responsible for overseeing the welfare and care of animals, designated and assistant veterinarians, senior animal technologists, quality assurance managers.*



Day 1	<b>Essential principles in the care and use of laboratory animals</b>	Ethics; Animal welfare; The 3Rs
	<b>The animal facility: functional areas and workflows</b>	Key components in an animal facility Workflows of animals, personnel and equipment: risks and possible solutions Pros and Cons of different choices when laying out Different functional areas
	<b>Bio-containment &amp; Bio-exclusion</b>	Bio-containment & Bio-exclusion: definition and meaning Bioprotection of staff; Allergen control Pathogens, protection of animals, staff and environment (BSL2 & BSL3) Technical solutions/barriers, primary containment - Filter Top - Isolators - Cubicles - Individually Ventilated Cages (IVC) Impact on the organization and workload
	<b>Cage change procedures</b>	Pros and Cons of different procedures Integral cage change Vs partial cage changes: impact on biosecurity, workload, layout, and budget
Day 2	<b>Cleansing</b>	Cleaning routine procedures in the animal facility
	<b>Washing</b>	Washing: why, when and how Washing equipment Visually Vs. microbiologically clean Standard loads, special loads, cycles Use Vs non use of detergents
	<b>Autoclaving</b>	Why autoclaving? Equipment and workload Standard cycles, preparation of loads Cycle monitoring Possible problems and drawbacks
	<b>Decontamination</b>	Definitions and meaning Preparation of loads Validation and monitoring of decontamination cycles Pros and cons of chemical disinfection
	<b>Overview of the mouse facility of the research centre</b>	Research activity and technological services Different activities in the animal units Layouts of the animal facilities; Ancillary areas; Equipment Work flows for people, animals and materials
	<b>Visit to “clean” area</b>	Area entrance procedures Different functional areas Equipment Main procedures and workflows Overview of the experimental activities Breeding and maintenance of transgenic colonies Cage change procedures Sentinel animals: cage distribution, time table, sentinel replacement, rotation. Dirty bedding system in use
Day 3	<b>Visit to “dirty” area</b>	Different functional areas and equipment Main procedures and workflows
	<b>Health monitoring programmes</b>	Why should we worry about health monitoring? Microbiological agents and real risks FELASA recommendations IVCs and their impact on health monitoring Proposed approach to peculiar needs in IVCs health monitoring programmes Positive findings: what to do Quarantine procedures
	<b>Example of health monitoring programme in an IVC equipped facility</b>	Health monitoring programme: organization and costs Interpretation of results
	<b>Management of routine activities in the facility</b>	Animal care procedures – Technicians' weekly schedule Non-animal care procedures - Theory and practice
	<b>Budgeting and Per Diem calculation</b>	Theory and practical examples

