



FONDAZIONE GUIDO BERNARDINI

BETTER EDUCATION FOR BETTER SCIENCE

THREE DAY COURSE

 credits: 18 points - 2.5 day by Swiss Veterinary Association - 45 CPD credits by Society of Biology

Organizing and Operating Activities in a Laboratory Animal Facility

4th to 6th of March 2015

OBJECTIVES

The most relevant aspects of the general functioning of laboratory animal facilities are covered with particular attention to new technological developments, scientific needs of research and management concepts.

The course aims to enhance participants' knowledge and to improve their skills on everyday activities through theoretical and practical examples applicable to a modern laboratory animal facility in all its aspects.

The training environment fosters the interaction between speakers and attendees who are encouraged to share information and practical experiences.

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 management: duty assignment and work 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	Essential principles in the care and use of laboratory animals	Ethics; Animal welfare; The 3Rs
	The animal facility: functional areas and workflows	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
	Bio-containment & Bio-exclusion	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
	Cage change procedures	Pros and Cons of different procedures Integral cage change Vs partial cage changes: impact on biosecurity, workload, layout, and budget
Day 2	Cleansing	Cleaning routine procedures in the animal facility
	Washing	Washing: why, when and how Washing equipment Visually Vs. microbiologically clean Standard loads, special loads, cycles Use Vs non use of detergents
	Autoclaving	Why autoclaving? Equipment and workload Standard cycles, preparation of loads Cycle monitoring Possible problems and drawbacks
	Decontamination	Definitions and meaning Preparation of loads Validation and monitoring of decontamination cycles Pros and cons of chemical disinfection
	Overview of the mouse facility of the research centre	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
Day 3	Visit to “dirty” area	Different functional areas and equipment Main procedures and workflows
	Health monitoring programmes	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
	Example of health monitoring programme in an IVC equipped facility	Health monitoring programme: organization and costs Interpretation of results
	Management of routine activities in the facility	Animal care procedures – Technicians' weekly schedule Non-animal care procedures - Theory and practice
	Budgeting and Per Diem calculation	Theory and practical examples
	Visit to “clean” area	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

