



FONDAZIONE GUIDO BERNARDINI
BETTER EDUCATION FOR BETTER SCIENCE

Course Organizing and operating activities in a rodent animal facility

Milan, Italy • March 6-8, 2019

iat cpd credits: 18 points

2.5 day continuing education for experimenters, study directors and heads of animal facilities by Swiss Veterinarian Associations



This three-day course benefits of the experience gained in nine years of delivery. The topics and contents are constantly revised and updated to include the most important and timely aspects of functioning of a laboratory animal facility; special attention is paid to new technological developments, scientific needs of research and management concepts.

The course is designed to advance the quality of management and care of laboratory rodents. The experienced and competent teachers enforce an interactive approach of training by identifying problematic matters and proposing technical solutions. The scientific program stimulates exchange of experiences and lively discussion between the attendees and teachers; also the visit to different functional areas of the animal facility of the Campus where the course is held contributes to facilitate the participants' learning and to improve their skills on everyday activities.

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| Day 1 | The animal facility: functional areas and workflows | Key components in an animal facility - Different functional areas Workflows of animals, personnel and equipment: risks and possible solutions - Practical examples |
| | Bio-containment & Bio-exclusion | Definition and meaning - Bio-protection of staff - Allergen control Pathogens: protection of animals, staff and environment (BSL2 & BSL3) |
| | Security in animal facility | Risk assessment - Structural and procedural solutions Management of personnel |
| | Technical solution/barriers, primary containment | Filter top, Isolators, Cubicles and Individually Ventilated Cages (IVC) Impact on organization and workload |
| | Cleansing | Cleaning routine procedures in the animal facility |
| | 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 | 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 | Selection of non heat-resistant equipment - Preparation of loads - Definition of VHP cycles - Monitoring VHP cycles - Pros and cons of chemical disinfection |
| | Cage and bottle wash operation | Throughput and workload analysis to size equipment wash area Importance of logistic evaluation of supporting equipment Organization of cage change and management of logistic workload Automation |
| | 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 Workflows for people, animals and materials |
| | Visit to "clean" 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. |
| 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 |
| | Application of Lean management in animal facilities | What is Lean management? - Benefits for animal care programs |
| | 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 |

information and registration at: www.fondazioneguidobernardini.org