

ALMA MATER STUDIORUM UNIVERSITÀ DI BOLOGNA dipartimento di scienze mediche veterinarie Experimental Design Working Group





Workshop on Experimental Design for Animal Experiments July 18th – 19th 2022 at the University of Bologna, Italy



This two-day interactive workshop is for those using animals in their research who want to learn more about designing and conducting studies which comply with EU Directives, and to improve the reliability and reproducibility of their animal experiments. It should also be of interest to those supervising or advising on animal experiments, or assessing proposals for animal-based research. The topics will cover EU Module 10 and much but not all of EU Module 11.

The workshop will be run by tutors from the FELASA Experimental Design Working Group experienced in teaching experimental design and will have a mix of presentations, quizzes, group discussions and individual exercises. It will be entirely in English and later sessions will presume attendance at earlier sessions. Participants should have good understanding of English and will need to commit to the full two days.

Registration will be limited to 20 participants. Preference will be given to younger researchers, and for 12 of the places to local attendees, but otherwise on a first-come, first-served basis, with a June 1 deadline.

Tutors:

Derek Fry, University of Manchester, Manchester, United Kingdom Manuel Berdoy, University of Oxford, Oxford, United Kingdom Monica Forni, University of Bologna, Bologna, Italy Carlos Oscar S. Sorzano, National Center of Biotechnology (CSIC), Madrid, Spain Nuno Franco, i3S, Porto, Portugal Thomas Steckler, Janssen Pharmaceutica, Beerse, Belgium

Registration Fees There will be no fee for the course

Local contact: Monica Forni

Registration: To get a registration form or further details please email <u>felasa.edwg@gmail.com</u>

Location

Centre for Applied Biomedical Research (CRBA) Open Space Polo Murri



Draft detailed programme

Time	Title
Day 1	
9.00	Introductions
9.20	Quiz 1
9.50	General ideas
10.10	Basic experimental design
10.50	BREAK
11.10	Group session 1: Design fundamentals
12.20	Animal-related issues
13.00	LUNCH
13.45	Basic statistics, hypothesis testing and power
14.50	Group session 2: Randomisation
15.10	BREAK
15.30	Group session 2 (cont): Power analysis
16.00	Animal models and harm-benefit analysis
16.30	Reproducibility issues from the conduct of an experiment
17.00	CLOSE Day 1
Day 2	
9.00	Group session 3: Errors in design
9.00 9.30	Group session 3: Errors in design Standard designs
9.30	Standard designs
9.30 10.00	Standard designs Picking a suitable design
9.30 10.00 10.20	Standard designs Picking a suitable design Group session 4 – Selecting designs
9.30 10.00 10.20 11.00	Standard designs Picking a suitable design Group session 4 – Selecting designs BREAK
9.30 10.00 10.20 11.00	Standard designs Picking a suitable design Group session 4 – Selecting designs BREAK Statistical testing:
9.30 10.00 10.20 11.00 11.20	Standard designs Picking a suitable design Group session 4 – Selecting designs BREAK Statistical testing: Analysis of variance
9.30 10.00 10.20 11.00 11.20 12.00	Standard designs Picking a suitable design Group session 4 – Selecting designs BREAK Statistical testing: Analysis of variance Group session 5: Statistical testing
9.30 10.00 10.20 11.00 11.20 12.00 13.00	Standard designs Picking a suitable design Group session 4 – Selecting designs BREAK Statistical testing: Analysis of variance Group session 5: Statistical testing LUNCH
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9.30 10.00 10.20 11.00 11.20 12.00 13.00 13.45 14.30	Standard designs Picking a suitable design Group session 4 – Selecting designs BREAK Statistical testing: Analysis of variance Group session 5: Statistical testing LUNCH Reproducibility issues 2 Quiz 2
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