**Basic course for PhD students in Science of Laboratory Animals**

**Teaching methods and duration of the course:** 12 hours of lectures, divided into 3 days of 4 hours (9-13). This course is directed to graduate students enrolled in the first year of the PhD programme. The course is programmed every year in January / February.

**Knowledge outcomes**

After completing the course, students know the national and European laws on the use of animals for experimental purposes, as well as the ethical issues, animal welfare and the alternative methods. In addition, students learn the key aspects of the care, maintenance and use of animals, can recognize the pain and know the main analgesic/anesthetic protocols. Finally, students are informed on issues related to the safety of workers in the workplace.

**Program / Content:**

Friday, 10 February 9-13 - Classroom 2, Via Belmeloro, 6

• Laws on the use of animals for experimental purposes, the critical points in the compilation of an authorization request for a research protocol according to the Legislative Decree no. 26/2014 (2 hours);

• Experimental design, ethics of animal testing and alternative methods (2 hours);

Friday, 17 February 9-13 - class B, via Irnerio, 42

• Anatomy and physiology of laboratory rodents, housing, welfare and environmental enrichment (2 hours);

• Techniques for manipulation, sexing and treatment, management of genetically modified lines (2 hours);

Friday, 24 February 9-13 - class B, via Irnerio, 42

• Work safety in animal facility and waste disposal; web tools; national and international scientific association (2 hours);

• Recognition and control of pain and distress, anesthesia, analgesia and euthanasia (2 hours).

**Teachers:**

Dr. Buonacucina: lows aspect

Dr. Lorenzini: pain, stress and anesthesia, animal handling and treatment/ natomy

Dr. Vasina (safety enclosure with web tools)

Dr. Forni (experimental design and ethics, physiology and housing)