

The UO of the 3R center and the CHT of the University of Pavia organize the transversal course:

# SCIENTIFIC RESEARCH AND THE 3R'S PRINCIPLE

Second edition

Edited by G. Cusella, A. Ferrigno, C. Lanni, M. Paolillo, M. Torre e L. Visai

**The course will be delivered online**

**IN ENGLISH by**

**TUESDAY 28 JUNE TO WEDNESDAY 6 JULY 2022**

Program and registration at the link:

<http://phd.unipv.it/corsi-trasversali-per-dottorandi/>

Accreditation of CFU for university doctorates of the Macroareas of Science and Technology, Life Science, Humanities and Social Sciences and of the IUSS doctorate of Biomolecular Sciences and Biotechnology



# SCIENTIFIC RESEARCH AND THE 3R'S PRINCIPLE

Educational objectives: the interdisciplinary course aims to provide knowledge on the topic of research within the 3Rs whose principles concern the ethical aspects of the use of animals in scientific experiments. The 3Rs are the initial letters of REDUCTION: reduction in the number of animals used for a specific study; REFINEMENT: improvement of experimental designs to reduce stress and suffering to animals; REPLACEMENT: replacement (even partial) of animal testing with alternative methods of comparable validity. These three words briefly describe the ethical principles that researchers should respect when undertaking animal experiments. The course therefore aims to present the main innovative applications of research within the 3Rs in order to promote a responsible experimentation. (4CFU)

## PROGRAM

**Tuesday 28 June 2022**

**proff. G. Cusella De Angelis, Andrea Ferrigno, C. Lanni, M. Paolillo, M. Torre, L. Visai of the center 3R, University of Pavia**

10.00-12.00 AM: "3R: Reduction, Refinement and Replacement and their applications"

**Wednesday 29 June 2022**

**Prof. Federico Zuolo, moral and political philosopher of the University of Genoa**

10.00-12.00 AM: Part 1 "The moral bases of experimentation on animals"

14.00-16.00 PM: Part 2 "The moral bases of experimentation on animals"

**Thursday 30 June 2022**

**Prof. Andrea Ferrigno, University of Pavia**

10.00-12.00 AM: Part 1 "In vivo testing protocols in order to reduce the number of animals"

14.00-16.00 PM: Part 2 "In vivo testing protocols in order to reduce the number of animals"

**Monday 4 July 2022**

**Prof. Gabriele Ceccarelli, University of Pavia**

10.00-12.00 AM: "Current tissue engineering approaches for mesodermal tissue regeneration: an overview"

**Tuesday 5 July 2022**

**Prof. Michele Conti, University of Pavia**

10.00- 12.00 AM: "3D modeling, In-silico trials, and digital twins for 3R"

**Wednesday 6 July 2022**

**Prof. Nora Bloise, University of Pavia**

10.00-12.00 AM: "From 2D monolayers to complex 3D cell cultures: applications in cancer research and regenerative medicine"

