Wednesday late afternoon session Track B, Wednesday, Sep 24 2025, 14:00-15:30 Location: Seminar 1

Session: **Health Care Chair:** Ana Marušić

OR-59

The 3R Principles in laboratory animals experiments and the necessity of a fourth R Ilja Richard Pavone

National Research Council of Italy, Italy

In their seminal work of 1959, The Principles of Humane Experimental Technique, Russell and Burch introduced the 3Rs in animal experimentation (Replacement, Reduction and Refinement). It is an ethical framework that must address scientists when use animals in experiments and it was 'codified' in the EU Directive 2010/63/EU. One of the major bioethical issues regarding experiments on animals is related to the duplication of experiments and unnecessary experiments; in few words, a lack of respect of research integrity principles. The integrity of research results is related to the fact that the welfare of animals is well cared for throughout the research process. The aim of this paper is to discuss the possibility to add a fourth R, namely responsibility of researchers and scientists, that must avoid any form of research misconduct during experiments on animals and must strive to uphold the highest standards of animal welfare and avoid unnecessary research or studies that have already been conducted elsewhere. Against this backdrop, I will assess existing literature on this topics and will analyze legislative reforms. For instance, the Max Planck Society, after the well-known Tübingen scandal, related to the misuses of primates in research, has already introduced a fourth R (Responsibility), related to the fair conduct of scientists and researchers.