

## ETH ZURICH POLICY ON EXPERIMENTAL ANIMAL RESEARCH

Experiments with living animals are of critical importance for achieving advances and gaining insights in the life sciences, nutritional sciences as well as in medical engineering. For ETH Zurich, respectful, professional and conscientious handling of animals is a major tenet in the code of ethical conduct, and a prerequisite for obtaining valid results in animal research. The ETH Executive Board is therefore committed to promoting and enforcing compliance with the following tenets and principles in its research groups.

The Executive Board enacted the “ETH Zurich Policy on Experimental Animal Research” on 30 October 2012 (with amendments to #8 and #9 of 13.11.2012). All internal directives derived from it are also mandatory.

### The Executive Board of ETH Zurich...

1. ...requires all staff members involved in animal research to observe a respectful, professional and conscientious treatment of all experimental animals.
2. ...demands exemplary implementation of the legal requirements for animal welfare<sup>1</sup> and the 3R principles<sup>2</sup>. It supports measures for implementing the 3R principles, in particular the application of methods and measures that reduce stress or discomfort to animals before, during and after the experiment (refinement), the use of state-of-the-art approaches designed to minimize the number of animals used and avoid unnecessary duplication of experiments (reduction), and the replacement of specific experiments involving animals with alternative procedures whenever possible (replacement).
3. ...provides animal facilities and research infrastructure that ensure professional housing, breeding and care of laboratory animals, while at the same time facilitating research that makes use of state-of-the-art technologies and methods consistent with modern science.
4. ...advocates knowledge transfer among researchers, in particular insights gained from negative findings, with the aim of reducing the number of experimental animals and promoting those approaches that are most suitable for achieving the research objectives.
5. ...ensures that the legally mandated training and continuous education for researchers conducting animal experiments as well as for animal technicians and care takers are carried out at a high quality level and in a timely manner. Furthermore, it fosters cooperation with external course providers accredited with the Federal Veterinary Office. Moreover, it calls for and promotes complementary internal education and subject-specific further training, whenever required.
6. ...is committed to transparent and constructive communication on animal experimentation, animal welfare and alternatives to animal testing. It presents its stance on animal research in an open dialog with policy-makers, law enforcement officials and the general public. Furthermore, it ensures that staff members are sensitized to the complexity of experimental animal research and are made aware of the controversy surrounding this subject in Swiss society, thus contributing both internally and externally to the formation of a comprehensive and differentiated opinion.

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<sup>1</sup> Swiss Federal Law on Animal Protection of 16 December 2005 (*Tierschutzgesetz* TSchG, SR 455), Art. 3, 17-20; Ordinance on Animal Protection of 23 April 2008 (*Tierschutzverordnung* TSchV, SR 455.1), Art. 112-149; Ordinance of the FVO on laboratory animal husbandry, the production of genetically modified animals and the methods of animal experimentation of 12 April 2010 (*Tierversuchsverordnung*, SR 455.163).

<sup>2</sup> The 3 Rs (replace, reduce, refine) refers to a concept developed by William Russell & Rex Burch (*Principles of Humane Experimental Technique*, 1959), which today is internationally recognized and which must be taken into account when designing experiments with animals.

7. ...supports its researchers, by means of the Animal Welfare Officer, in dealing with the authorities responsible for supervision and approval of animal experimentation and the implementation of animal-welfare regulations. In matters of strategy or communication, the Executive Board of ETH Zurich is advised by its Delegate for Animal Welfare Affairs as well as by a representative elected by those involved in running animal experiments.

#### **All ETH Zurich staff members working with animals...**

8. ...must comply with the Swiss regulatory framework<sup>3</sup> and ETH Zurich's policy on experimental animal research. They must have the professional qualifications required for their work, i.e., they must be knowledgeable about the biology of the animals used and be familiar with the legal and institutional requirements.

9. ...are called upon to personally oversee and carefully document any potential stress or discomfort on the animals before, during and after every experiment. Whenever possible, researchers must work toward reducing stress or discomfort on the animals by the introduction of suitable measures. Departures from standard housing, breeding, and care practices may only be undertaken in well-justified cases, in which they are unavoidable, in order to achieve the objectives of the experiment, and only with the approval of the responsible authorities.

#### **The ETH Animal Welfare Officer...**

10. ...acts independently of the researchers and the heads of the animal facilities and reports directly to the Vice President of Research and Corporate Relations. As the expert in charge, he or she is the link between ETH Zurich and the authorities, oversees the correct implementation of legislation and internally agreed measures at ETH, and encourages the use of established 3R procedures or the development and validation of new ones on a case-by-case basis. In cases of violations of legal obligations or deviations from agreed protocols and database entries, the Animal Welfare Officer is authorized to demand correct implementation and to enforce this with the support of the Executive Board.

#### **The heads of the animal facilities at ETH Zurich...**

11. ...are obliged to comply with legal requirements and site-specific standards for housing, breeding and care of laboratory animals as well as documenting the endurance of genetically modified animals. Together with those conducting the experiments, the Animal Welfare Officer, the veterinarians, and, where necessary, the authorities, they contribute to developing standardized, transparently documented procedures (e.g., in the form of SOPs<sup>4</sup>), implementing them in their units, and thus ensuring professional animal husbandry.

#### **The heads of research groups at ETH Zurich...**

12. ...who initiate and head animal research are responsible for ensuring the appropriate implementation of legal guidelines and internal directives in their respective research groups. As those responsible for the studies, they function as role models for their staff and promote awareness of the problems associated with the issues of animal experimentation. They support the legally required opportunities for continuous training and education. They are guided by legislation and the recommendations of professional organizations for laboratory animal science, as well as by state-of-the-art scientific knowledge.

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<sup>3</sup> Legislation on animal welfare (see note 1) as well as the *Ethical Principles and Guidelines for Experiments on Animals*, Swiss Academy of Sciences & Swiss Academy of Medical Sciences (2005).

<sup>4</sup> Standard Operating Procedures.