



INSTITUTIONAL ANIMAL CARE & USE COMMITTEE (IACUC)

Ethical Principles

Purpose

In line with its mission to monitor and review the care and use of animals in research, the IACUC has formulated a set of ethical principles and guidelines governing the care and use of animals in research protocols. These principles and guidelines intend to guide faculty members, post-doctoral fellows, research assistants, and graduate students in the planning of their experimental protocols to comply with international ethical standards on the use of animals when executing their experiments and reporting their findings for publication.

Hence, the IACUC declares its adherence to the following three ethical principles:

1. *Respect for animal life:*

This principle advocates for responsible animal research practices and acknowledges that animals are sentient beings with an inherent value that deserves respect and warrants moral concerns.

2. *Societal benefit:*

This principle requires an evaluation of the overall ethical value of animal use in research and its significance on societal good and the environment.

3. *Non-maleficence:*

This principle advocates for minimizing pain and suffering in experimental procedures involving animals.

Ethical Guidelines on Experiments on Animals

The IACUC requires that researchers or individuals involved in animal research comply with the following nine ethical guidelines:

1. *Respect for animal dignity:*

Animals are sentient beings; thus, their interest must be considered. Animal treatment in research protocols should also reflect a strong moral attitude towards their intrinsic and utility values.

2. *Expertise on animals:*

Researchers or individuals involved in animal use must have a documented expertise in animal live handling, care and use, as well as in the experiments planned in the research protocol.

3. *The REDUCE principle:*

Researchers are responsible for minimizing the number of animals used in experimental protocols. Researchers must consider the use of the necessary animal number to maintain the scientific quality of the experiments and the relevance of the results.

4. *The REPLACE principle:*

In planning their research protocols, researchers are responsible for examining whether alternatives to experiments on animals are available and whether the intended knowledge could be derived without the use of animals.

5. *Responsibility for balancing suffering and benefit:*

Researchers must recognize that animals perceive pain. Hence, researchers must assess the harm *versus* the benefit of animal use in experimental protocols and address the relevance of the execution of the research protocol for animals, society or the environment.

6. *The REFINE principle:*

Researchers are responsible for evaluating the impact of the experimental protocol on animal wellbeing. Researchers must recognize that animals are sentient beings that

perceive pain, hunger, thirst, stress, fear, abnormal cold or heat, injury, and illness, hence, their responsibility to assess and minimize animal suffering prior, during, and after the application of the experimental protocol.

7. *Responsibility for maintaining biological diversity:*

Researchers have the ethical responsibility towards an unharmed biological diversity and ecosystem while using endangered or vulnerable animal species in experimental protocols.

8. *Responsibility when intervening in a habitat:*

Researchers are responsible for reducing the disruption of environmental and surveillance technology projects on the natural behavior and habitat of animals.

9. *Transparency and integrity:*

Researchers have the responsibility to disclose their research findings and share data and experimental animal material to avoid unnecessary repetition of experiments involving animals.

References

1. [Ethical Guidelines for Research in Animal Science](#)
2. [Guidelines for Ethical Conduct in the Care and Use of Nonhuman Animals in Research](#)
3. [Guidelines for the ethical treatment of nonhuman animals in behavioral research and teaching](#)
4. The National Institutes of Health (NIH) Office of Intramural Research. Office of Animal Care and Use. <https://oacu.oir.nih.gov/regulations-standards>
5. Mohr B, Fakoya F, Hau J, Souilem O, Anestidou L. The governance of animal care and use for scientific purpose in Africa and Middle East. *ILAR* 57: 333-346, 2017.
6. Guide for the Care and Use of Laboratory Animals. Eighth Edition, National Research Council of the National Academies. <https://grants.nih.gov/grants/olaw/Guide-for-the-Care-and-Use-of-Laboratory-Animals.pdf>

7. The Association for Assessment and Accreditation of Laboratory Animal Care (AAALAC). <https://www.aaalac.org/>
8. Mohan, S and Foley, PL. Everything you need to know about satisfying IACUC Protocol requirements. ILAR Journal, 60 (1): 50-57, 2020.