Guidelines for Reviewing Applications Involving the Scientific Use of Laboratory Animals, Institutional Animal Care and Use Committee, Academia Sinica

Approved on June 2, 2020,
Amended on September 1, 2020,
Amended on December 10, 2020,
Amended on November 12, 2024

1. The review procedure for laboratory animal use permits:
   (a) For each application, a convenor shall designate one primary reviewer and one secondary reviewer from among the Committee members. The reviewers shall examine the application materials and provide written review comments. If revisions are required, the comments shall first be returned to the applicant for reference or response. If the proposed project involves operations at Biosafety Level 3 (BSL-3) or higher, two additional experts with relevant expertise shall be included in the review process, which shall follow the same procedure as above.
   (b) If there is no dissent between the primary and secondary reviewers, and no objections are raised by other committee members after notification via the internal website or email, the application shall be deemed approved.
   Should any disagreement arise between the primary and secondary reviewer, the case shall be referred to the Committee for discussion and resolution.
   In cases involving significant disputes, the principal investigator may be invited to attend the meeting to provide clarification and participate in the discussion.
   (c) For approved cases, the Committee shall issue an approval letter, which can be downloaded via the online system.
   (d) Should there be any changes needed for an approved case, the applicant may submit a request at any time via the online system. Depending on the extent of the proposed changes, the application will be reviewed either by the Executive Members of the Committee or through an administrative review process. Upon approval, the Committee will issue a renewed approval letter via the online system.
   The criteria for determining the extent of modifications requiring Committee review shall be separately established by the Committee.
   (e) Any changes in the Project PI or the project title require the submission of a new application for animal experimentation; such changes should not be processed as amendments.
   (f) The duration of a project involving animal use shall, in principle, not exceed

five years. Extensions may be granted based on actual needs, with each extension limited to a maximum of one year.

2. Responsibilities and Special Considerations for Reviewing Animal Experimentation Projects:
   (a) Any individual intending to conduct scientific research involving the use of laboratory animals shall submit an application in advance. The application shall include the following information:
      (1) Project title
      (2) Principal investigator
      (3) Species, breeds, and quantities of laboratory animals
      (4) Experimental design
      (5) Project duration
      (6) List of personnel responsible for conducting the animal experiments
      (7) Explanation of the principles of replacement, reduction, and refinement of animal use, as stipulated in Article 15, Paragraph 1 of the Animal Protection Act
      (8) Other relevant information

      The application may proceed only upon review and approval by the Institutional Animal Care and Use Committee (IACUC). Any subsequent changes to the approved content shall be subject to the same review and approval process.
   (b) The IACUC shall give priority to recommending alternatives to the use of live animals. Based on the degree to which the proposed scientific use may affect the animals physiologically, advice may be sought from one or more experts who are not affiliated with the applicant's unit and who possess relevant expertise in scientific animal use or a background in laboratory animal welfare.
   (c) The IACUC should provide scientific consultation and training programs related to the design and application of animal experiments and suggestions for the improvement of standard operating procedures for the management of laboratory animals and care facilities.
   (d) Members of the IACUC who are affiliated with the same institute or research center as the Project PI, or who have other conflicts of interest, should recuse themselves from reviewing a project.
   (e) Academia Sinica does not have facilities for the use of dogs, cats, or primates. Any proposed scientific use of such species shall be preceded by consultation with IACUC before the submission of an application. Copies of the approved application forms for these animal experiments shall be included as annexes to the annual supervision report.
   (f) Repeated survival surgeries must be approved by the IACUC. When such

procedures are to be conducted multiple times on a single animal, a prior assessment of their impact on animal welfare is required, along with consultation with a veterinarian.

(g) If the research project involves operations at BSL-3 or above, two additional experts with relevant biosafety expertise shall be included in the review process.

(h) Pharmaceutical-grade chemicals and reagents should be used whenever available. The use of non-pharmaceutical-grade substances must be clearly justified in the application for animal experimentation and shall require prior approval from the IACUC.

(i) Any exceptions shall be clearly defined and evaluated following discussion by the IACUC.

(j) The use of non-routine identification methods for small rodents shall require approval from the IACUC or a designated subcommittee.

(k) For invasive experimental procedures such as tumor models, infectious disease studies, vaccine challenge tests, pain models, trauma, monoclonal antibody production, toxicological assessments, organ or system failure models, and cardiovascular shock models, the IACUC should carefully review the timing for both experimental endpoint and humane endpoint.

(l) Restraint devices shall be designed, sized, and used in a manner that minimizes discomfort, pain, or distress to animals, and prevents injury to both the animals and research personnel.

(m) Institutions participating in collaborative scientific projects involving animal use shall sign a formal written agreement or provide an approval document issued by the collaborating institution’s IACUC or a designated panel. The document shall clearly delineate the authority and responsibilities pertaining to the care and use of laboratory animals.