

Clemson University Institutional Animal Care and Use Committee (IACUC)

Policy Number: 2.8

Policy Title: Requirements for Flowcharts

Section 1: Purpose

The *Guide* states a researcher should provide “a clear and concise sequential description of the procedures involving the use of animals that is easily understood by all members of the [IACUC] committee.” (25) In an effort to facilitate the review of animal use protocols (AUPs), the Clemson University IACUC requires inclusion of a flowchart with most AUP submissions. The following policy provides the acceptable standards for flowcharts.

Section 2: Scope

This policy applies to all Animal Use Protocols for Biomedical, Agricultural or Wildlife Teaching or Research submitted for review by the IACUC. Farm, Facility, or Colony management AUPs do not require a flowchart but it is a good practice.

Section 3: Policy

All initial AUPs submitted for review must include a flowchart uploaded as an attachment in the InfoEd eForm (Methodology Narrative section, question 6.2). The following are minimum standards for flowcharts to be accepted by the IACUC:

- The flowchart must be submitted as a single Word, PowerPoint, or pdf document. Scanned documents must be legible.
- The flowchart must be a timeline, a visual representation or diagram of the proposed study, not a narrative.
- The flowchart must depict all activities after acquisition until the study endpoints/disposition of the animal. Activities must be chronological.
- The flowchart must clearly show the progression of the animal from step to step.
- Each experimental procedure should be included.
- Surgery steps should be labeled but surgical details are not required.
- Administration of any substance must be indicated at the applicable steps.
- The collection of body fluids (i.e., blood, urine), tissue samples, and/or specimens must be indicated.
- Experimental time points must be clearly indicated.
- Animal numbers for each experimental group must be described. This includes a breakdown of the number of animals needed per group.

Flowcharts that do not meet these standards will be rejected by the IACUC. While not specific requirements, these tips can prevent the return of flowcharts:

- Use flowchart template in MS PowerPoint or Word.
- Concise flowcharts with singular aims are encouraged. Overly complex flowcharts open the possibility for future noncompliance.
- Do not use paragraphs of information to describe the flowchart steps. If you need to explain in this much detail, the flowchart is not serving its purpose.
- If animal procedures are conducted by multiple parties, a good practice is to identify who is conducting each step.

With permission from the PI, the IACUC will attach samples of flowcharts that reflect a good adherence to this policy as examples.

Procedure:

The IACUC reviewer(s) compares what is presented in the flowchart with the explanations and descriptions presented in the AUP. If there is a discrepancy or the IACUC needs further clarity, the IACUC may require the PI to revise the flowchart/AUP. The PI must upload the revised flowchart in the InfoEd eForm. An emailed flowchart will be returned to the PI for uploading.

The IACUC will not approve an AUP without an attached flowchart. The IACUC may use its discretion as to whether the submitted flowchart is acceptable under the conditions described above.

Section 4: References

InfoEd Methodology Narrative section

Guide for the Care and Use of Laboratory Animals, Eighth Edition