

Gordon State College

Animal Care and Use Committee (GSC-IACUC)

ANIMAL USE PROPOSAL FORM – APPENDIX A

ANIMAL USE CLASSIFICATIONS

Type A: Studies, which cause little or no pain or distress. Examples include standard approved methods of euthanasia that induce rapid unconsciousness (without surgical interventions prior to death of the animal). Also included are housing and brief restraint of animals for observation or examination; single blood sampling; single injections of non-toxic materials; short periods (a few hours) of food and water deprivation; and behavioral observations.

Type B: Studies, which may involve minor pain or distress of short duration, but where pain relieving drugs, are given as part of the study. Examples include surgical procedures and other studies on **anesthetized** animals where the animals **do not** regain consciousness (non-survival surgery) and surgical procedures where animals do regain consciousness (survival surgery) but where post-surgical pain and distress are expected to be minimal and analgesics are given to control pain as appropriate. Following all survival surgical procedures, it is expected that investigators adhere to acceptable veterinary practices including postoperative analgesia, fluid therapy and veterinary nursing care as appropriate. Also included in Category B are overnight or longer food or water deprivation; behavioral studies on awake animals that involve short-term restraint; studies using noxious stimuli from which escape is possible; using tumor implants or hybridomas under guidelines as outlined by the IACUC; and the use of Freund's complete adjuvant under guidelines as outlined by the IACUC.

Comment: During and after Type B studies animals are not expected to show anorexia, dehydration, abnormal discharges, hyperactivity, increased recumbency or dormancy, increased vocalization, self-mutilation, aggressive-defensive behavior or demonstrate social withdrawal and self-isolation.

Type C: Studies, which may involve moderate pain or distress. These include major recovery surgical procedures performed under anesthesia where there is possible distress in animals even though analgesics are given to eliminate pain. Following all survival surgical procedures, it is expected that investigators adhere to acceptable veterinary practices including postoperative analgesia, fluid therapy and veterinary nursing care. Also included in Category C are studies involving prolonged periods (several hours or more) of physical restraint; prolonged deprivation of the animals' environmental necessities, such as food or water; procedures which alter perceptual or motor functions, such as the induction of paralysis or seizures; and induction of infectious diseases or toxicities, and when severe clinical symptoms begin to appear the animals are treated or euthanized.

Comment: The IACUC normally requires monitoring of type C studies by veterinary staff and/or IACUC members. Involvement of trained technicians, scientists and veterinarians is critical if this pain is to be minimized or avoided. Animals used in Type C studies should not show signs of prolonged clinical distress, such as behavioral abnormalities, lack of grooming, dehydration, anemia, abnormal vocalization, prolonged anorexia, self-mutilation, increased signs of infectious processes (peritonitis, pneumonia, diarrhea, encephalitis, etc.). If these clinical abnormalities develop, the necessary treatments to alleviate the symptoms must be available and provided. If the symptoms cannot be alleviated, the animals must be euthanized with minimal delay.

Type D: Projects that may involve moderate to severe pain or distress without the benefit of pain-relieving drugs or other appropriate therapy. Such studies include application of noxious stimuli from which escape is impossible;

exposure to noxious stimuli or agents whose effects are unknown; completely new experiments which have a high degree of invasiveness; induction of aggressive behavior leading to self-mutilation or fighting; and induction of infectious diseases or toxicities where death is an end point and animals are not treated or euthanized when severe clinical abnormalities develop.

Comment: Type D projects present an explicit responsibility on the faculty to explore alternative methods before proceeding with the study. Type D projects are considered by some to be highly questionable or unacceptable, irrespective of the significance of the anticipated results. Before the IACUC can review and approve these projects, the justification statements and the veterinary involvement must be clearly presented.