FIU | FLORIDA INTERNATIONAL UNIVERSITY

SOP #: 118.01

Title: **SOP -** Assigning Animals to USDA Pain and Distress Categories

Approvals:

Attending Veterinarian _____ **Date:** 10/18/22

IACUC Chair REL **Date:** 10/19/22

1. Purpose

1.1 The intent of this standard operating procedure (SOP) is ensure IACUC protocols are approved in accordance with USDA pain and distress categories, regardless if the animal is considered a USDA regulated species. In addition, this SOP will provide examples on USDA pain and distress categories.

2. Responsibility

2.1 It is the responsibility of all personnel using animals in research, teaching and training to abide by this SOP. It is the responsibility of the IACUC to review protocols and confirm that they meet the aforementioned criteria.

3. Definitions

3.1 Distress – an aversive state in which an animal fails to cope or adjust to various stressors with which it is presented.

3.2 Pain – A complex experience that typically results from stimuli that damage or have the potential to damage tissue, such stimuli prompt withdrawal and evasive action.

4. Guidelines

4.1 When completing the protocol form, assign each animal under the highest pain/distress category that will apply to the animal at any time while on the protocol.

4.2 The examples provided below are representative of the types of procedures or conditions that correlate with a particular category. The example list is not intended to be all-inclusive, rather a guidance tool to assist principal investigators and the IACUC.

4.2.1 Category B:

4.2.1.1 Animals being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not yet used for such purposes.

4.2.1.2 Animals being bred or housed without any research manipulations (should not include animals undergoing genotyping procedures)

4.2.2 Category C:

4.2.2.1 Animal use activities that involve no more than momentary or slight pain or distress (no greater than an injection) where there is no need for use of pain-relieving drugs.

4.2.2.2 Holding, weighing, or physical examinations of animals in teaching or research activities

4.2.2.3 Injections, blood collection, or catheter implantation via superficial vessels

4.2.2.4 Observation or positive reinforcement training of animals in a laboratory setting

4.2.2.5 Pre-weaning (<21 days of age) methods of identification or genotyping (ear notching, tail clipping) Feeding studies that do not result in clinical health problems

4.2.2.6 Humane euthanasia that meets current AVMA standards

4.2.2.7 Live trapping with minimal potential for injury

4.2.2.8 Short-term physical restraint or chemical immobilization, such as for transport

4.2.2.9 Studies involving clinical signs not judged to involve more than slight pain or distress

4.2.3 Category D:

4.2.3.1 Animal use activities that involve accompanying pain or distress to the animals and for which appropriate anesthetics, analgesics, tranquilizing drugs, and/or humane endpoints are used to avoid pain, distress, or discomfort.

4.2.3.2 Survival surgical procedures where perioperative pain or distress is alleviated, such as: catheter cut-down, laparoscopy, and biopsies.

4.2.3.3 Application of noxious chemicals or stimuli (e.g. electrical shock) when the animal can avoid/escape the stimuli, and/or it is severe enough to cause pain or distress

4.2.3.4 Non-survival surgical procedures

4.2.3.5 Retro-orbital blood collection in mice and rats

4.2.3.6 Exsanguinations under anesthesia

4.2.3.7 Tail clipping in rodents > 21 days old, or tattooing that requires general anesthesia

4.2.3.8 Induction of disease, infection, or a genotype that causes pain or distress which is alleviated as soon as signs develop with the use of pain-relieving drugs or humane euthanasia

4.2.4 Category E:

4.2.4.1 Animal use activities that involve accompanying pain or distress to the animals and for which appropriate anesthetic, analgesic, tranquilizing drugs; or other methods for relieving pain or distress are NOT used. Category E research, testing, or procedures will require strong scientific justification as to why pain-relieving drugs or other methods for relieving pain cannot be used on animals. This includes citation(s) to published studies if applicable, describing what alternatives were considered and how alternatives will be used whenever possible, clarifying whether animals will be euthanized when moribund, and if not, what information is to be gained in the interval between moribundity and death.

4.2.4.2 Research, testing, or procedures that require death as an endpoint or continuation without pain-relieving intervention, even after clinical signs of pain or distress are evident

4.2.4.3 Application of noxious chemicals or stimuli (e.g. electrical shock) when the animal cannot avoid/escape the stimuli, and/or it is severe enough to cause pain or distress

4.2.4.4 Prolonged physical restraint

4.2.4.5 Exposure to extreme environmental conditions

4.2.4.6 Food or water deprivation beyond that necessary for routine pre-surgical preparation or is deemed stressful to the animal

4.2.4.7 Euthanasia by non-AVMA approved methods

4.2.4.8 Any procedures for which needed analgesics, anesthetics, or tranquilizers must be withheld for justifiable purposes

5. References

5.1 https://www.aphis.usda.gov/animal_welfare/downloads/Animal%20Care%20Policy%20Manual.pdf