



### **Policy on Analgesia in Research and Instruction Animals**

The mitigation of pain and distress in animals being used in research and instruction is a moral obligation and agrees with the 3 Rs' Refinement principle. Analgesics are drugs that mitigate pain. The use of appropriate analgesia to mitigate pain is required unless an exception, with scientific justification, is approved by the IACUC.

This policy serves to ensure the humane use of animals and adherence to animal welfare principles outlined by the USDA Animal Welfare Act Regulations and the Public Health Service Policy. Additionally, it increases the probability of a successful outcome for procedures that may induce pain.

Regulatory bodies require that any procedure that would be considered painful/distressful to humans must be considered painful/distressful to animals. Pain and distress in research animals is most often associated with surgical procedures, but other experimental procedures and conditions might also result in pain/distress.

Poor pain management can potentially invalidate research results, as uncontrolled pain may initiate a stress response, resulting in hormonal, metabolic and physiologic imbalances. Efficacious analgesia may decrease morbidity and reduce mortality following surgical manipulations.

The use of analgesia **must** be planned in advance, in consultation with a laboratory animal veterinarian (during the AUP review or before the AUP submission)

Animals undergoing major or minor surgical procedures **must** be administered appropriate analgesics to mitigate the pain and distress associated with the procedure. This requirement **includes** preemptive analgesia, administered before the procedure. Multimodal analgesia **should** be administered when appropriate.

Appropriate intra- and post-procedural monitoring and supportive care **must** be provided to ensure effectiveness of pain mitigation.

Personnel monitoring animals for signs of pain to determine if analgesia is needed **must** be appropriately trained and competent to recognize signs of pain in that species.

Administration of analgesics **must** be documented, either in the animal's individual Clinical Health Record, or, for rodents and non-mammals, on a group record.

Specific guidance and recommendations are available in the document, "Guidance on Analgesia in Research and Instruction Animals," and from the URAR veterinarians.