**Vertebrate Animals Research**

**DIRECTIONS**: Address and remove all highlighted grey areas before submission. Provide a concise description of the proposed procedures to be used that involve live vertebrate animals. Identify all project performance (or collaborating) sites and describe the proposed research activities with vertebrate animals that will be conducted in those sites.

**1. Description of Procedures**

Provide a concise description of the proposed procedures to be used that involve live vertebrate animals. Identify the species, strains, ages, sex, and total number of animals by species to be used. If dogs or cats are proposed, provide the source of the animals.

**2. Justifications**

Provide justification that the species are appropriate for the proposed research. Explain why the research goals cannot be accomplished using an alternative model (e.g., computational, human, invertebrate, in vitro).

**3. Minimization of Pain and Distress**

Describe the interventions to minimize discomfort, distress, pain, and injury. These include analgesia, anesthesia, sedation, palliative care, and humane endpoints.

**4. Method of Euthanasia**

Provide a justification for methods of euthanasia that are not consistent with the American Veterinary Medical Association (AVMA) Guidelines for the Euthanasia of Animals. If answer is “No” to the question “Is method consistent with AVMA guidelines?”, describe the method and provide scientific justification in the text field provided.