**VERTEBRATE ANIMALS**

DIRECTIONS: Address and remove all highlighted grey areas before submission. Do not use this document to circumvent page limits in the Research Strategy. 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. The description must include sufficient detail to allow evaluation of the procedures. Identify the species, strains, ages, sex, and total numbers of animals by species, to be used in the proposed work. 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). It may be useful to refer to a power analysis used to determine the total number of animals required for the study.

1. **Minimization of Pain and Distress**:

Describe the interventions including analgesia, anesthesia, sedation, palliative care and humane endpoints that will be used to minimize discomfort, distress, pain, and injury.

1. **Euthanasia**:

FYI, this section is no longer required if your method of euthanasia is consistent with the American Veterinary Medical Association (AVMA) Guidelines for the Euthanasia of Animals. 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.