

Instructions for the Research Plan Attachment Concerning Vertebrates- (leave this form attached to project when resubmitting)

The Research Plan Attachment write-up asks for a description of methods and procedures. Projects that involve vertebrate animals require an extremely detailed Research Plan Attachment for SRC review purposes. Although most of the following information is required on Non-Human Vertebrate Animal Form (5a and 5b), the SRC requires a comprehensive Research Plan (1A) and Research Plan Attachment detailing the specifics listed below. See Form (5) checklist and ISEF's "Rules and Regulations" on the website, <http://www.sciserv.org/isef/document/Rule2006.pdf> for further details.

Checklist – All of the following must be addressed directly or by clearly indicating that they do not apply to the project. It is recommended that you address the issues in the order listed below to avoid any mistakes in verification.

- Justify why animals must be used, including the reasons for the choice of species and the number of animals to be used.
- Describe any alternatives to animal use that were considered, and the reasons these alternatives were unacceptable.
- Explain the potential impact or contribution this research may have on the broad fields of biology or medicine.
- Describe in detail, how the animals will be used. Include methods and procedures, such as experimental design and data analysis.
- Identify the species, strain, sex, age, weight, source and number of animals proposed for use.
- Provide detailed information on the animal's housing, husbandry, and environment.
- Provide information on the veterinary medical/nursing care, to be obtained in the case of illness or emergency.
- Describe the procedures that will minimize the potential for discomfort, distress, pain and injury to the animals during the course of experimentation. Experiments involving more than momentary pain or distress, which duplicate previous research by others, must be avoided. **The Intel ISEF and Rio Rancho Public Schools discourage any procedures that will cause pain, discomfort, or stress to animals.**
- Describe any analgesic, anesthetic, tranquilizing or other drugs, or other substances (show dosage in mg/kg of body weight) and comfortable restraining devices used to minimize discomfort, distress, pain, and injury.
- Explain what will happen to the animal(s) after the project is finished.
- If euthanasia will be performed by a Qualified Scientist (students are not permitted to perform euthanasia except in an emergency), describe the method and reason for selection. Methods must comply with the Euthanasia Guidelines in the 2000 AVMA report.