

COLUMN E EXPLANATION

Facility Name: Massachusetts Eye & Ear Infirmary

FY 2019

Registration Number: 14-R-0022

Explanation of procedure(s) potentially producing pain and/or distress.

Restraint: During acoustic brain recordings, conscious rabbits are restrained in a Velcro jacket while the head is held in a fixed, forward facing position. Restraint is for a short period of time and all animals have been previously acclimated to accept the restraint procedure.

Deafening:

Some rabbits experience bilateral deafening for cochlear implantation; bilateral deafening may cause distress to the animal.

Feed schedule:

Some animals not provided food *ad libitum* and are food scheduled to motivate them to perform the behavioral task.

Explanation/scientific justification as to why alleviation to the potential for distress cannot be used.

Restraint:

There is no alternative to performing acoustic neuronal measurements in conscious animals without restraint and withholding agents that would sedate or tranquilize them. All animals utilized for these studies are trained and acclimated well to the restraint and testing procedures described above. The animals do not appear distressed either during or following repeated measurements, however, if an animal shows signs of distress at any time during an experimental procedure, the experiment for that day is canceled.

Bilateral deafening is required on some of the rabbits in order to investigate the effect of complete auditory deprivation and bilateral electric stimulation on neural responses. Auditory stimulation is given to the animal through bilateral cochlear implants similar to those used in human infants.

Feed scheduling: Animals fed *ad libitum* do not perform well and are not motivated to complete the behavioral tasks needed for the study. Weights will be recorded before the onset of food scheduling and documented at least twice a week.