OCT 2 3 2017

USDA registration number: 41-R-0015

Physiological Research Laboratories

10-13-17

## Re: Exceptions to the standards of The Animal Welfare Act (AWA) for 2017 USDA Annual Report

For the reporting period of 10-1-16 through 9-30-17, the following exceptions to the standards of the AWA occurred at the reporting facility. The exceptions have all been reviewed and approved by the Institutional Animal Care and Use Committee (IACUC). Justifications for these exceptions have been included in the IACUC files and the specific study files.

Modified housing procedures have been instituted for two study activities which require restrained movement of the animals to avoid damage to test devices, and potential risk to the health of the animals, should damage to the test devices occur. A restraint process has been developed, and replicated from another facility, which tethers the sheep via a halter and cross ties to the sides of the animal pen. This restraint allows the animal to move forward, backward, and rise and lie down normally in the run, but does not allow the animal to turn completely around. Turning around would damage the implanted devices, due to external cabling/tubing which is routed to external power sources and monitoring devices. The welfare of the animals and evaluation of their ability to exhibit species specific behaviors is reviewed monthly, and more frequently if technical staff observes any abnormal behaviors. This Additional enrichment is provided to include, frequent feed and supplements provided, increased human/animal contact, grooming, and toys or objects observed to stimulate the individual animal. The animals are also acclimated and screened for acceptance to this type of housing prior to enrollment on these study activities. Animals not tolerant of the housing after a reasonable acclimation period are not deemed acceptable and are assigned to other study activities. Our experience has been that appropriately acclimated animals tolerate this type of housing and exhibit behaviors like animals housed in standard housing arrangements.

## Number of animals housed in this manner during this reporting period.

16 sheep were housed using this housing arrangement during the reporting period.