Exhibit 13

13) March 11, 2013 reply from UW IO addressing OLAW's questions.

THE UNIVERSITY of WISCONSIN MADISON

March 11, 2013

Dr. Axel Wolff, MS, DVM
Director, Division of Compliance Oversight
Office of Laboratory Animal Welfare
National Institutes of Health
Rockledge One, Suite 360
6705 Rockledge Drive, MSC 7982
Bethesda, MD 20892-7982

Dear Dr. Wolff:

This letter is a response to your January 4, 2013 request for information related to allegations made by the People for the Ethical Treatment of Animals (PETA) that involve 9 cats (G03, G04, G12, 21, 26, 28, 31, 32, 33) studied as part of an investigation of mechanisms of binaural hearing and hearing loss at the University of Wisconsin (UW) School of Medicine and Public Health (SMPH).

As indicated previously in our interim report, a subcommittee from the SMPH Animal Care and Use Committee (ACUC) was formed to investigate the 5 questions posed by your office. Results of our investigation were then discussed at the March 4, 2013 SMPH ACUC meeting. This letter contains the answers to your questions, incorporating input from all members of the SMPH ACUC.

Some answers to your questions refer you to specific items in the animal care and use protocol, specifically Q17a, Q18, Q27a, and Q29. Please refer to your copy of the protocol for these specific protocol items, as needed.

In addition to the 5 questions answered below, you also requested further information concerning funding sources for the study performed with cat G07 because we indicated in our December 27, 2012 letter that the study involving G07 was not PHS supported. While this laboratory has been funded by the NIH since 1978, the particular pilot study involving cat G07 was supported by a research agreement funded by a company Company , and not the NIH, during the relevant time period in 2008. A copy of the protocol page containing unredacted funding information (item #13) is attached to this letter, as you requested. On the advice of legal counsel, other information concerning specific locations, identifying information, and personnel remain redacted. Because funds from the Company research agreement are no longer being used by this laboratory and the agreement will be terminated soon, it has not been listed in recent versions of the protocol or the version currently under revision and review.

1. Are or were any of these animals involved in a PHS-supported study?

   NIH funding was used to support the 9 animals
   Title of Grant: Behavioral and physiological studies of sound localization
   Funding Source: NIH, NIDCD
   Grant Number: R01-DC07177
   Duration: 12/1/2004 - 11/30/2014

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Pilot project funding for cochlear implant study (the study pertaining to animal #G07, previously investigated by OLAW for events that occurred in 2008)
Title of Grant: Feasibility studies using bilateral cochlear implants in cats
Funding Source: Company
Grant Number (2): UW ID #
Duration: 9/1/2007 - 4/1/2009 with no-cost extension

2. Have any refinements been made to this study to decrease the post-surgical infection associated with the head cap implant?

    a. Yes. Effective and responsible management of cephalic implants and other types of chronic implants have been a matter of ongoing interest to the research and veterinary communities for decades. The veterinary staff and researchers at the University of Wisconsin-School of Medicine and Public Health (SMPH) continually work to improve the management of long-term implants. For this specific protocol, the following refinements to implant management have been implemented over the past 3 to 4 years:
        i. Microbial culture and sensitivity studies of implant margins were conducted by the veterinary staff to identify prevalent organisms and provide baseline data to help with decision-making processes regarding the responsible use of antibiotics.
        ii. Working in consultation with the veterinary staff, the laboratory modified its Standard Operating Procedure for care and maintenance of implant-margins. An associated log sheet kept by the laboratory documents the care that is provided. Techniques for implant maintenance that are described in the protocol are:
            1. Routine cleaning of the margin around the implant at least once per week; animals with recording cylinders have both margins and cylinders cleaned at least two or three times a week.
            2. Margins may be debrided, cleaned with hydrogen peroxide, betadine, chlorhexidine, Vetericyn, or other antimicrobial solutions as approved by RARC veterinarians, and rinsed with sterile saline or water.
            3. Cylinders are filled and soaked with a gentamicin solution (100mg/ml) 24cc in 1000ml 0 .9% NaCl. Alternatively, a solution of 5% betadine is used. The fluid is suctioned out and the cylinder is resealed either with wax or covered with a cap until the next cleaning.
            4. All ointments and topical antimicrobials will be rotated to prevent selection of resistant microbes upon advice of the RARC veterinarians.
        iii. Research Animal Resources Center (RARC) personnel experienced with the care of implants have performed evaluations of the animals and laboratory staff implant-maintenance processes, and provided subsequent training on refined techniques to laboratory members.

3. Did any of these animals reach an established weight-loss threshold? What are the current end point criteria for this study, including weight loss?

No animals have reached the established weight-loss threshold. Language in the protocol (in response to Q18 of the protocol that asks for end-point criteria) is as follows:

"If weight-loss greater than 15% of the working-weight (i.e. the healthy weight for the animal determined during initial behavioral training) of each animal is noted, RARC veterinarians will be informed, and an appropriate management plan will be implemented; animals will be humanely euthanized if there is not an acceptable response to treatment, as determined by veterinarians.

For the kanamycin/ethracrynic acid procedure, animals will be monitored daily by the lab staff for inappetence, vomiting, lack of grooming, anuria, dehydration, and lethargy and the veterinary staff contacted if any are noted. Blood chemistry will be monitored as described in Q17a. If the blood creatinine levels are greater than 2 mg/dL or urea nitrogen is greater than 40 mg/dL with USG lower than 1.025, injections will be stopped and an RARC veterinarian consulted regarding further activity. The animal will be euthanized if blood creatinine levels are >8 mg/dL or the BUN is > than 120 mg/dL. If there is an unanticipated illness or injury the lab animal veterinarian is contacted for treatment. The behavior of the animal is a significant indicator of pain or discomfort, as the animal's normal work routine in the laboratory will be noticeably affected by any unanticipated discomfort. In such situations RARC veterinarians will be contacted in order to determine and to relieve any source of discomfort. The animal will be given time off from working in the laboratory until there is veterinary approval for the animal to return to active study. If any problem is unable to be resolved, and an animal displays a reluctance or inability to work, and is inappetent and in poor body condition, the animal may be euthanized under guidance or direction of an RARC veterinarian. Ultimately, the laboratory depends on the advice and consultation with RARC veterinarians to make decisions on whether animals that are in discomfort should be euthanized or not. The veterinarians have the full authority to initiate treatments, remove animals from study or euthanize them as needed. These decisions are always made with the three R's of animal care (replacement, reduction and refinement) in mind. Over the last 20 years, we have greatly reduced the number of animals used in our experiments by an order of magnitude while maintaining their health and well-being at the highest levels."

Additional end-point criteria considered by the veterinary and laboratory staffs include loss of integrity of the bone table of the skull due to the cephalic implant, subdural or other hematomas involving the central nervous system, and systemic infections that prove resistant to treatment.

The laboratory weighs the animals at least once per week, and more frequently in most instances, and maintains records of the weights in research notebooks. Animals are observed daily by trained animal care personnel. Additionally, the veterinary staff independently weighs the animals at least quarterly, performs regular annual physical exams, and provides any monitoring, treatment, or intervention necessary based on condition of animals and/or specific clinical findings.

4. What specific clinical signs are listed in the protocol to help determine when analgesics are necessary?

The language in protocol regarding analgesic administration (in Q18 of the protocol form) is as follows:

"During all of the surgical procedures the animals are deeply anesthetized. For procedures that may potentially be painful, opioids or NSAIDS will be used preoperatively or as part of induction, including buprenorphine, butorphanol, or NSAIDs e.g. meloxicam or ketoprofen. During the post-surgical recovery phase, there is the possibility of pain or discomfort so several analgesics are routinely administered: opioids or NSAIDs as detailed in Q#27a. See Q#29 for post-anesthetic procedures. Administration of appropriate analgesics may be utilized at any time under direction of an RARC veterinarian; clinical signs indicating analgesics may be needed include (but are not limited to) inappetence, hunched or abnormal posture, inactivity, and abnormal vocalization."

5. Have any alternative methods (which decrease pain and distress) been evaluated or implemented in this study over the past five years?

   Yes. By working in conjunction with the veterinary staff, the laboratory has evaluated or implemented various refinements in anesthesia techniques, peri-operative monitoring, analgesia regimens, and experimental procedures over the past 5 years:

   a. A board-certified anesthesiologist from the UW School of Veterinary Medicine was consulted in the refining of anesthetic practices for the procedures detailed in the current animal-use protocol. Consultations took place in 2011 and 2012. A refined analgesia regimen has also been added to the current protocol; this regimen includes (but is not limited to), the addition of an analgesic as part of the routine pre-anesthetic medication, the addition of a wider variety of analgesic medications, and the addition of new dosing routes (e.g. buccal administration of an opioid analgesic).
   b. The following statement has been supplied by the investigator regarding refinements to search coil studies: "We have been actively exploring ways to improve our success with the eye coil surgeries. We have been working since 1998 to determine whether gluing with Nexban or suturing with silk or dissolvable sutures had any effect on the longevity of the wires. Furthermore we have also tried wires made by different companies (Cooner, which is the traditional source for almost all laboratories doing eye coil studies in the world, or Baird which has been described as less likely to break with repeated hundreds of thousands of rotations). The current methods employed by the laboratory are the methods that were determined from our efforts to best meet the principles of the Replace, Reduce, and Refine."
   c. Some activities that were listed in earlier versions of the approved protocol have been removed from the current version:
      i. The laboratory has stopped doing acute (non-survival) experiments in which long-term recordings were taken from animals while they were deeply anesthetized, and subsequently euthanized while still under anesthesia.
      ii. After one attempt, the Principal Investigator discontinued a regimen of multiple neomycin injections as a method of inducing the hearing loss necessary to appropriately test cochlear implant devices. The multiple-injection regimen was replaced with an alternative method involving a one-time injection and a one-time direct instillation of neomycin into the inner ear while the animal is fully anesthetized for surgery.
   d. As per an SMPH ACUC mandate that applied to all protocols at the School of Medicine, this protocol was updated within the past 3 years regarding the search for alternatives to procedures that may cause more than momentary or slight pain or distress (Q16a2 in the standard protocol form). All updates were reviewed and approved by the ACUC.

We hope that our answers to these questions provide you with a clear understanding of the facts involved in this work. We are happy to provide additional information if you desire.

Sincerely,

Name

Name

Title

Title

general direction of a sound source, not its precise location. Barn owls are not good models since they are so highly specialized (they are the only animals known to phase lock to frequencies above 3-4 kHz and they do not move their eyes) that results may not apply generally to other animals.

12. **Explain how the number of animals required was determined and justify that need.** Include all control animals and breeding colony animals in this discussion. A table may help clarify different experimental groups or studies and the specific numbers needed for each. Include any statistical analysis used (e.g. power calculations) in determining the animal numbers.

We have been studying the auditory system for over 30 years here at UW-Madison and the number of animals requested represents an average taken over a number of years. We make an extensive effort to gather as much data from each animal as possible: the chronic cats are kept for many months, even years. Ultimately, the number of cats needed is determined by the scientific aims of the experiment and is governed by many different considerations: a large number of neurons need to be sampled in order to gain statistical viability and to meet the demands of critical reviewers for our manuscripts, there are practical limits to the number of neurons we can study in each cat as it takes an hour or more to characterize each neuron, and every experiment does not work for many different reasons. It is not possible to state how many neurons are required to reach statistical viability since that depends upon the questions that we are addressing and the differences we see between different neurons in any given experiment. For example, if all the neurons consistently show a strong effect, then relatively few neurons are needed to reach significance and therefore few animals are needed; but if there is considerable variability between the neurons then many more cells are required to demonstrate the presence or absence of an effect, i.e. in a t-test. Thus, it is not only more practical but also more realistic to justify the number of animals based upon past experience. While we have averaged about 2-3 chronic cats/year, this number is quite variable, depending upon the experiments that are being done at any given moment. This number allows us to collect enough data to keep up a productive publication record that ensures our constant funding from NIH over these 30 years. We endeavor to use as few animals as possible; and the chronic experiments allow us to use the same animal many times.

13. **Current or pending funding** for this project (add more entries as needed):

Title of Grant (1): Behavioral and physiological studies of sound localization
Funding Source (1): N.I.H. Grant Number (1): R01-DC07177

Title of Grant (2):
Funding Source (2): Grant Number (2):

14. Identify the person(s) or animal care unit responsible for *daily* animal care:

Laboratory of Animal Resources

15. Research/teaching staff expected to work with the animals in this study (*please delete examples*)

INVESTIGATORS: Everyone listed below must take the "Responsible Use and Care of Laboratory Animals" certification course before starting work with research animals. Protocols cannot be approved until PI and all listed personnel are certified. *RARC also offers several species-specific animal handling courses and procedures training (e.g. blood draw techniques, surgery). For information, call RARC* Telephone #

(hit "tab" in bottom right cell to add additional row)

Name / Degree / Phone number	Will work with the following species within this protocol	List the year each individual began working with the specie(s) and performing the procedures they will work with/perform in this protocol. NOTE: *For personnel who have worked with the named species less than 1 year, indicate who will train and supervise them.*
Tom Yin/ Ph.D./elephone	Cat	Cat: surgery, recording since 1969, sterile surgery since 1974