

26) September 8, 2008 ACUC minutes covering discussion of cat protocol.

### 8 Sep 2008 Open Session (protocol review)

M00212-0-07-08 (Renewal)

The primary and secondary reviewers led discussion of the protocol. Discussion ensued. The recommendation is to approve pending response to review questions.

#### **Review Questions:**

##### Administrative Review:

No questions.

##### Reviewer 1:

**Q8/17a-** Please describe who is responsible for animal transport specifically within the building, and clarify the circumstances under which the LAR staff (as opposed to lab staff) are involved with the animal transport.

##### Reviewer 2:

**Q8-** To be consistent with Q17a, please indicate that atropine will be given when the ketamine/Acepromazine is used.

**Q17a-** Since ketamine is not approved as a sole anesthetic for major/invasive surgeries, please specify that the use of the ketamine/Acepromazine mixture is only for minor surgical procedures as well as for short (less than 30 minutes) procedures.

**Q17a-** It states, "we will consult with the veterinarians to agree on the working weight..." Please make sure that consultations are up-to-date and documented. Please contact an RARC veterinarian for discussion if needed: Dr. [REDACTED]@rarc.wisc.edu, [REDACTED], Dr. [REDACTED]@wisc.edu, [REDACTED], Dr. [REDACTED]@wisc.edu, [REDACTED].

**Q28a-** Regarding the acute procedure, for clarification please remove the statement "However, the animal is never returned to the home cage once it is anesthetized so no monitoring by the RARC staff is needed."

**Q29-** Please clarify the analgesic regimen to indicate that analgesia will be provided for the first 48 hours in all cases, with additional analgesia as recommended by an RARC veterinarian.

### 6 July 2010 Open Session (protocol review)

M00212-0-07-08 (Amendment dated 5/18/10)

The primary and secondary reviewers led discussion of the protocol. The ACUC discussed the amendment, noting the amendment is clear but the entire protocol really needs to be re-reviewed. [REDACTED] Name suggested the PI submit a full rewrite for an early renewal after consulting with an RARC veterinarian. Discussion ensued.

[REDACTED] Name / [REDACTED] Name moved to approve the amendment to protocol M00212 pending response to review questions, and to require the PI to consult with an RARC veterinarian to create an early protocol renewal application, with focused attention given to providing full descriptions of all procedures being performed, removing of procedures that are not being used, ensuring consistency and clarification of analgesics and anesthesia, and including details of wound maintenance and closures of chronic instrumentation. The vote was unanimous (see attached).

#### **Review Questions:**

##### Administrative Review:

**Q16a-** Please update the dates of your last literature search and the years covered by your literature search to more current dates.

**Q22-** Please add, "some animals may be transferred to other investigators with the approval of a veterinarian."

protocol review details (review Qs, DRs) compiled by [redacted] for internal use; excerpts of minutes in separate [redacted] doc

Reviewer 1:

**Q15-** Can Drs. [redacted] and [redacted] be removed from this protocol?

Reviewer 2:

**Q17a (First paragraph)-** You say you will monitor the cat's anesthetic state hourly, when in reality, it is monitored much more frequently via the leads you have attached to detect muscle movements and by heart and respiratory. Please clarify this in the protocol.

**Q28a-** You mention the possibility of perfusion in Q16b, but it is not discussed in Q21 or in Q28a. Terminal perfusion is considered a surgery, so you need to provide more information (e.g. do you open the chest to perfuse through the heart?)

### 1 Nov 2010 Open Session (protocol review)

M00212-0-10-10 (Renewal)

The primary and secondary reviewers led discussion of the protocol. [redacted] Name provided a brief history on this protocol, noting the PI submitted an early renewal as requested by the ACUC. [redacted] 2ndary Personnel reminded the ACUC that they did not approve this protocol's annual reapproval at last month's meeting pending the PI's submission of an early renewal. Discussion ensued. [redacted] Name / [redacted] Name moved to approve the annual reapproval protocol M00212. The vote was unanimous.

Discussion of the protocol submission and the complexity of the projects ensued. [redacted] Name moved to defer the early renewal of protocol M00212 and to require the PI to consult with RARC veterinarian [redacted] Name regarding the protocol rewrite. The vote was unanimous (see attached).

#### **Review Questions:**

##### Administrative Review:

**Q9a** – Please add "other investigators" under source.

**Q15/Q24** – Dr. [redacted] has not completed the Animal User Certification course, however, he may fall under the visiting scientist policy. Please review and remove if applicable.

<http://www.rarc.wisc.edu/policy/1999-006.html>

**Q16a** – Please update the dates of your last literature searches and the years covered by your literature searches to more current dates.

Reviewer 1:

No questions.

Reviewer 2:

**Q9c** – Please add, "Animals from other investigators will be experimentally naïve or previous use will not have compromised the animal's health or the proposed research. All transfers will be approved by an RARC veterinarian."

**Q15** – Dr. [redacted] will be required to take the RARC surgery course once he arrives.

**Q16a (Chart #1, Unnecessary duplication)** – Please add "cat" and "feline" to the search terms.

**Q16a (Chart #2, Alternatives to Potentially painful/distressful procedures)** – Please add "cat," "feline," "ear muscle denervation," "eye coil," "alternative," "refinement," "head post," "cranial implant," "kanamycin deafening," and "neomycin deafening" to the search terms.

**Q16c** – The reviewer recommends all personnel wear mask and exam gloves when working with any cats with head posts to prevent possible inadvertent/nosocomial infection of wound edges.

**Q17a/Q17c** – The reviewer recommends that all descriptions of food deprivation be replaced with the term "regulating or regulation" in the protocol.

protocol review details (review Qs, DRs) compiled by [REDACTED] for internal use; excerpts of minutes in separate doc

**Q17a/Q19** – For head cap cleaning and maintenance, the reviewer recommends that ointments and topical antimicrobials be rotated to prevent selection of resistant microbes. Please speak with the veterinary staff about potential agents/medications that can be used.

**Q17a (Surgery E, Implant cortical cooling probes, 1<sup>st</sup> paragraph, last sentence)** – The reviewer recommends the following changes: "...will be assisting the initial surgical procedures from implantation of the cryoloops; he will be a visiting scientist as per All Campus policy #1999-006."

**Q27a (Surgery 1)** – Medetomidine is no longer available and should be replaced with dexmedetomidine.

**Q27a** – The reviewer recommends that dexmedetomidine and atipamezole be dosed IM not IP.

**Q29** – Please underline "yes." Please include a plan for suture removal from cortical cooling loop surgery.

## 10 Jan 2011 Open Session (protocol review)

M00212-0-10-10 (Renewal)

The primary and secondary reviewers led discussion of the protocol. Discussion ensued. The recommendation is to approve pending response to review questions (see attached).

### Review Questions:

#### Administrative Review:

**Q16a (Painful and distressful portion)** – Please update the years covered and the date of your last literature search to more current dates.

#### Reviewer 1:

**General:** Protocol is much clearer than previous version. Thank you.

**Q16a** – Please add "food regulation" to the list of keywords.

**Q17a (ABR section)** – Please add the phrase, "Animals are sedated as described in Q27."

**Q17a (Surgery B section)** – Please define BUN the first time it is used (2<sup>nd</sup> paragraph in this section versus 4<sup>th</sup> paragraph).

**Q18** – Different anesthetics may be used during surgery. Therefore the reviewer suggests substituting "anesthetic" for "isoflurane."

**Q28a (Surgery E section)** – Please provide the approximate size range of craniotomy for implantation of cooling probe.

**Q28a (Surgery E section)** – Please indicate the type of suture material (e.g., absorbable) used for closing dural margins.

#### Reviewer 2:

**Q17a – (First paragraph)** – Please add "cats that fail to adapt will be removed from the study." Under Surgery A (First paragraph regarding anesthesia in the fourth sentence): Please add "see Q27a for details." The very end of the last paragraph: Please add that any replacement of eye coils will be done under sedation.

**Q17d** – Please add a statement clarifying the single-housing of animals contact RARC veterinarian Dr. [REDACTED] @rarc.wisc.edu, [REDACTED] for assistance.

**Q18** – Please consult with RARC veterinarian Dr. [REDACTED] @rarc.wisc.edu, [REDACTED], to clarify/cover pain mitigation of all painful procedures described in this protocol.

**Q27a (First paragraph)** – The concentration of commercially available dexmedetomidine is 0.5 mg/ml, please correct this in your answer.

**Q27a – (Third paragraph)** – Please add "mechanical ventilation may be used." At the end of the same paragraph please change "Tobradex drops will be used" to "Tobradex drops may be used with veterinary consultation..." (Sixth paragraph, second statement): Please clarify the dosing of Orbax is once daily.

**Surgery E:** Please consult with RARC veterinarian Dr. [REDACTED] @rarc.wisc.edu, [REDACTED] regarding the wording for the description of anesthetic support.

**Q27a (Fourth paragraph)** – Carprofen is only recommended for 2 days in the cat. Meloxicam should be dosed as follows: 1<sup>st</sup> dose 0.1-0.2 mg/kg SC then oral 0.05 mg/kg PO q24h for up to 3 days. Ketoprofen should be dosed as follows: 1<sup>st</sup> dose 2 mg/kg SC then 1 mg/kg for all subsequent doses for up to 3 days.

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**Q29 (Second paragraph, second sentence)** – Please delete the word “veterinary” from this description. As written, it implies that anesthesia is being monitored by a board certified veterinary anesthetist.

## **7 Nov 2011 Open Session (protocol review)**

M00212-0-10-10 (Amendment dated 10/10/11)

The primary and secondary reviewers led discussion of the protocol. The committee discussed the procedures described. [REDACTED] noted the use of pentobarbital for prolonged sedation, described subsequent consultations and recommended possible anesthesia with the PI indicating anesthesia alternatives may be included. Discussion ensued. [REDACTED] / [REDACTED] moved to require modifications (see attached) to secure approval. The vote was unanimous.

### **Review Questions:**

#### **Administrative Review:**

No questions.

#### **Reviewer 1:**

No questions.

#### **Reviewer 2:**

**Q11a** – Please define “binaural interaction” in layperson’s terms.

**Q16b** – Please remove the line under “pending” for the status of OBS-2.

**Q17a** – Please define ABR and HRFT the first time they are used (first sentence under Flowchart of experimental procedures).

**Q17a** – Under Surgery A, it states that animals will be taken to the [REDACTED] for MRI. Per Q8, please change this to [REDACTED]

**Q17a** – Under Surgery B, the reviewer recommends moving the seventh paragraph (beginning “To deafen the cats, we will use one of the following procedures...” ) to the beginning of this section.

**Q17a** – Please clarify if the cat would be anesthetized during the administration of kanamycin and ethacrynate sodium, and if so, with what anesthetic regimen.

**Q17a** – Please clarify if the neomycin, kanamycin, and ethacrynate sodium used are pharmaceutical grade, and if they are not, please justify why pharmaceutical grade compounds are not used.

**Q17b** – Please change this answer to “yes.”

**Q27a** – Under Surgery 1, Surgery A, and Surgery B, it states that cats will be pre-medicated with buprenorphine and then intubated and placed on isoflurane. Please state what induction drugs will be used to allow the cat to be intubated.

**Q27a** –Based on input from the research animal veterinarians the committee believes some flexibility in potential anesthesia strategies is warranted. Therefore, please replace the text stating you will not use isoflurane with the following:

“Cats will be intubated and may be provided oxygen. In consultation with RARC veterinarians, isoflurane anesthesia may be provided as an alternate to pentobarb. The acoustical noise created by some support and monitoring equipment may interfere with the acoustic response properties of the auditory neurons we are trying to study, and may be provided remotely.”

**Amendment dated 7/30/12 to add 1 procedure room, reviewed via vet-chair DR, appd 8/7/12**

Review Qs posed: Q8: change building name to [REDACTED]



protocol review details (review Qs, DRs) compiled by [REDACTED] for internal use; excerpts of minutes in separate doc

Amendment dated 8/14/12 to add 1 procedure room, reviewed via vet-chair DR, appd 8/18/12

Review Qs posed: none

#### **4 Feb 2013 Open Session (protocol review)**

M00212-0-10-10 (Amendment dated 1/17/13)

The reviewers led discussion of the protocol. Extensive discussion ensued.

Name [REDACTED] moved to require modifications to secure approval (see attached) and to require the PI to have in-person consultation with an RARC veterinarian in order to address the review questions prior to resubmission. The vote was unanimous. The following ACUC members requested to review the rewrite: [REDACTED] IACUC member

[REDACTED] IACUC member

#### **Review Questions:**

##### **Administrative Review:**

No questions.

##### **Reviewer 1:**

**Q12** -While this section is greatly improved and addresses statistical power indirectly, a more direct expression of power would be helpful here. Can a target number of neurons needed to obtain sufficient statistical power to detect biologically meaningful differences be specified? Can this be linked to the number of cats proposed (n=10) over the next 3 years, based on data obtained over the last 20 years? This type of brief power analysis would solidify the argument that 10 animals are needed.

Please delete the sentence "While we have historically used about 2-3 chronic animals per year ..." This does not help explain the proposal for 10 animals.

**Q16a (page 6, Narrative 2, line 7)** - Please change "food deprived" to "food regulated."

**Q16c (page 8, third block of text)** - Remove "obstreperous." Last sentence, replace "sacrifice" with "euthanize."

**Q17a (page 9: Under flow chart heading)** - Please spell out HRTF because this is the first time the abbreviation is used. Also, please revise the first sentence in this paragraph, where it is noted that several procedures do not involve any surgery. While this is true, this sentence may create a misunderstanding that not all cats receive surgery. All cats do receive a surgical procedure, as shown in the flowchart and indicated in Question 26.

**Q27 (Page 18, under Surgery 1)** - Please revise the first sentence to read, "If it is anticipated that the surgical procedure will be longer than about 30 minutes, cats will be premedicated ..." Similarly, under ABR, eye coil heading, add "if it is anticipated" to the sentence. It will then read, "For procedures in which it is anticipated that the cat requires anesthesia for a short time (<30-120 min) ..." The reviewers other concern with these two descriptions is what constitutes a short surgery, requiring different anesthesia from a long surgery. Is the cut off 30 min, or is it 120 min? Are these two consistent?

**Q30a (page 22, bottom of first paragraph)** - Please delete the last sentence as it appears inconsistent with the request for 10 animals over 3 years. Or, modify the sentence to read, "We plan to use up to 10 cats in this chronic preparation over the next 3 years."

##### **Reviewer 2:**

**General** - The terminology used in this protocol should be carefully considered to ensure the most appropriate terms are being used and that they are consistent. For example, the term "recording cylinder" should be used instead of "recording chamber" and should be differentiated from the acoustic sound chambers. The reviewer recommends using the term "cephalic implant" instead of "head cap". The reviewer recommends "ear canal molds" instead of "ear molds or ear casts". The reviewer recommends "scleral search coils and pinna coils" instead of "eye and ear coils". Also, the statements like "cat put in

bag" should be clarified to state "cat put in restraint bag" or "perfusions done in hood" could be clarified to "perfusions done in fume hood."

Q1 – Please provide an alternate for clerical purposes.

Q4 – Please underline "research".

Q8 - Last line entry, please remove "cat" in first box, change last box to "anesthetized animal covered, procedure done in a fume hood."

Q11a – Please provide more details on the goals of studying cochlear implants as part of this protocol.

Q11a - Please modify "Understanding the neural mechanisms will help in the design of hearing aids and therapy while the cochlear implant project will improve our understanding of cochlear implants in human patients." To "Understanding the neural mechanisms will help in the design of hearing aids and therapy. The cochlear implant project will improve our understanding of cochlear implants in human patients" and provide more explanation of the importance or relevance of studying bilateral cochlear implants (as indicated by funding title)

Q11a - Please modify sentences: "In recent years we have discovered a new reflex that involves movements of the pinnae or external ears of the cat and is in principle the same as the well-known vestibulo-ocular reflex (VOR). The reflex maintains the external ears in a stable position independent of head movements."

Q12 – Please modify: "While we have historically used about 2-3 chronic animals/year, this number is variable, depending upon the specific protocol-approved experiments that are being performed at any given moment. We request 10 animals over the 3 year period of this protocol based on the average number of animals that we have used in the last 20 years."

Q12 – Please delete last half of last sentence: **the amendment will include pertinent recent statistics on neuron recordings to demonstrate to the ACUC the necessity for an increase in animal numbers**

Q15 – Please list which specific procedures each individual listed will perform as part of this protocol. Please list years of experience for each individual as "since XXXX".

Q15 - This question asks for a list for each individual of the procedures they will perform in this protocol. Please update with relevant procedures, e.g. eye coil removal, ABR, etc.

Q15 - Please list years of experience for each individual as "since XXXX".

Q15 – Please change procedure description for [REDACTED] to "cephalic implant surgery and maintenance since 1997, Consultant only."

Q15 – For [REDACTED] please remove reference to monkeys. You can state that he has experience with cephalic implant surgery since 1997.

Q16a (1)/Q16a (2) – Please update the dates of your most current searches, as well as the years covered by your search.

Q16a (1) – Please include the search term "cochlear implants".

Q16a (1) – Please add a statement that results of your searches have not shown any unnecessary duplication.

Q16a (1) - Update last date of search. Remove "food regulation" from search terms. Please add "cochlear implants."

Q16a (1 Narrative) - Please state if the daily searches and communications do or do reveal duplication.

Q16a (2) – Please add the search terms "thoracotomy" and "intracardiac perfusion."

Q16a (2) – In the narrative, please remove the reference to a PubMed search done on 3/5/05. You can replace with "In a previous PubMed search...."

Q16a (2) – Please add a statement in the narrative that literature searches for alternative procedures that could cause more than momentary pain or distress did not reveal any scientifically acceptable alternatives to the procedures described in the protocol.

Q16a (2) - Please add "thoracotomy."

Q16a (2 narrative) – Please modify: As an example of the results of literature searching, following a PubMed search on March 5, 2005 we found a reference

Modify: However, it is invasive and requires surgery to implant and often the coils have to be replaced because of breakage after the many months of use.

Add: "Literature search for alternatives to procedures that could cause more than momentary pain or distress did not reveal any scientifically acceptable alternatives to the procedures that are described in this protocol. We will adopt alternatives if any are found in the future that do not compromise the goals of the research."

**Q16c** – Please modify: 1) Lab coats or dedicated uniforms are needed to enter the cat holding rooms. All personnel will wear mask and exam gloves when working with any cats with **cranial implants** head posts to prevent possible ...**reduce** inadvertent/nosocomial infection of wound edges.

2) We wear masks and gloves when cleaning the cats' wound edges **and recording cylinder**,

3) Perfusion is done under a fume hood with gloves, eye protection and lab coats

**Q17a** – Please clarify if some of the animals that have a craniotomy could also have pinnae denervation.

**Q17a** – Under Surgery D, the second sentence should read "See Q28a for details on surgical procedures" (not anesthesia).

**Q17a** – Please add a description of training to walk to a source of sound (done in room [REDACTED]).

**Q17a** – Please describe what psychophysics is (mentioned in several places).

**Q27a** – In general, the anesthetic protocols used for each procedure need to be verified and revised so it is clear exactly what is used. Analgesic regimens should be listed in Q18 and Q29, not Q27a which is only anesthesia.

**Q27a** – At the bottom of page 18, please make the following changes (underlined):

ABR, eye coil repair, replacement, or removal, ear molds for HRTFs, MRI

For the procedures in which the cat only needs to be anesthetized or sedated for a short time (<30-120 minutes) cats will be sedated with 0.5 mg/kg Dexmedetomidine IM and ketamine (20-30 mg/kg), or Acepromazine (0.2 mg/kg) and Ketamine (15-20 mg/kg), or a combination of ketamine (2-7 mg/kg IM), dexmedetomidine (0.01-0.02mg/kg), and butorphanol (0.2mg/kg) or buprenorphine (0.01mg/kg).

Dexmedetomidine can be quickly reversed with Antisedan (atipamezole, 0.15 mg/kg IM at 0.5 -1 times the volume of administered dexmedetomidine).

#### **HRTFs: measure HRTFs**

Cats are anesthetized initially with ketamine (15-20 mg/kg) and acepromazine (.2 mg/kg) or a combination of ketamine (2-7 mg/kg), dexmedetomidine (0.01-0.02 mg/kg), and butorphanol (0.2mg/kg) or buprenorphine (0.01 mg/kg).

**Q27a** – The last paragraph under Surgery 1 that discusses antibiotics, the second sentence states that Orbax or Cephalexin will be dosed orally once daily, however, the Cephalexin also says BID (which is correct). Please reconcile.



### 8 Sep 2008 Open Session (protocol review)

M00212-0-07-08 (Renewal) – “Behavioral and Physiological Studies of Sound Localization”

The primary and secondary reviewers led discussion of the protocol. Discussion ensued. The recommendation is to approve pending response to review questions.

### 8 June 2009 Closed Session (vet report)

[REDACTED] Name reported a PI reported an adverse event on their annual update for protocol M00212. He explained a problem with infections has occurred in some chronically instrumented cats assigned to this protocol. [REDACTED] Name explained the cats are instrumented with headcaps, and the open wounds never completely heal, and recently some cats developed abscesses. [REDACTED] Name said test cultures were performed and tested positive for Methicillin Resistant Staphylococcus Aureus (MRSA). All cats in the colony were then cultured and only two were positive. [REDACTED] Name said the two cats that tested positive are isolated and an SOP specific to hygiene and entry of the isolation area is being practiced. He said the best treatment based on culture and sensitivity testing is an antibiotic approach, which is being implemented. [REDACTED] Name explained that there is a minimal risk to humans, noting anyone in contact with the animals could have been a carrier and transmitted MRSA to the cats. [REDACTED] Name said that veterinary staff has been in consultation with the UW infectious disease department, who confirmed that veterinary staff is handling the situation appropriately. [REDACTED] Name said the best solution is to euthanize the two cats, but these animals are valuable and have been on the study a long time. [REDACTED] Name asked how these animals are being transported [REDACTED] Name said the animals are transported [REDACTED] Discussion of how MRSA is transmitted and additional precautions that should be taken for [REDACTED] ensued. [REDACTED] Name asked if the lab has an SOP established for cross contamination between the animals in the colony. [REDACTED] Name said LAR and veterinary staff has SOPs established for cross contamination and he believes the lab has been well informed of the risks. [REDACTED] Name said ARTs voiced a concern regarding the situation and asked if they should be tested. He asked that [REDACTED] Name meet with the ARTs to discuss the involved risks, and after that meeting [REDACTED] Name recommended that ARTs did not need to be tested. [REDACTED] Name asked Dr. [REDACTED] Name how the veterinary staff will monitor the treatment results of the infected cats. [REDACTED] Name said the antibiotic treatment will take at least 2 - 3 weeks to potentially cure the infected cats, but if someone in contact with this cat is a carrier, the animals will become re-infected. [REDACTED] Name said he will continue to monitor the situation, and he will give an update at the July meeting.

### 6 July 2009 Closed Session (vet report)

[REDACTED] Name gave an update on the cats that tested positive for Methicillin Resistant Staphylococcus Aureus (MRSA). He said the culture and sensitivity testing was redone and one cat showed positive for MRSA and the other cat tested positive for a different bacteria but negative for MRSA. He said that treatment is not likely to clear the cats of all organisms. He said one of the cats is experimentally valuable but does not have a good long-term prognosis, and he will discuss a terminal use plan for this animal with the PI. [REDACTED] Name and [REDACTED] Name noted the PPE requirements are faithfully being followed. [REDACTED] Name said he believes infections of these kinds will become more common in chronically instrumented animals, noting veterinary staff plan to meet with PIs to develop SOPs and practices to minimize or decrease these types of occurrences.

### 3 Aug 2009 Closed Session (vet report)

[REDACTED] Name gave an update on the cat that tested positive for Methicillin Resistant Staphylococcus Aureus (MRSA). He reported the animal was euthanized and submitted to necropsy, noting none of the other cats have tested positive.

### 2 Nov 2009 Open Session (vet report)

[REDACTED] Name informed the committee that the veterinary staff organized a meeting with animal care staff and PIs from SMPH who use animals with instrumented apparatuses to discuss Methicillin resistant Staphylococcus aureus (MRSA). He said that MRSA is a kind of skin infection that instrumented animals can be prone to. He said the meeting panel included experts on the disease, including representatives from the UW Hospital. He said currently there are no issues regarding MRSA, noting the meeting was organized to begin the development for a management plan and SOPs to avoid it ever becoming a serious problem. [REDACTED] Name thanked the veterinary staff for taking a proactive approach, and noted the meeting was well received by all and very productive. [REDACTED] Name agreed.

### 5 April 2010 Closed Session (vet report)

[REDACTED] Name reported an adverse event that occurred under a cranial explant protocol. He said a cat had its explant come off, noting the lab immediately contacted the veterinary staff to have the animal evaluated. The veterinary staff advised the PI to have the animal euthanized, and it was.

### 6 July 2010 Open Session (protocol review)

M00212-0-07-08 (Amendment dated 5/18/10) - "Behavioral and Physiological Studies of Sound Localization"

The primary and secondary reviewers led discussion of the protocol. The ACUC discussed the amendment, noting the amendment is clear but the entire protocol really needs to be re-reviewed. Dr.

[REDACTED] Name suggested the PI submit a full rewrite for an early renewal after consulting with an RARC veterinarian. Discussion ensued. [REDACTED] Name / [REDACTED] Name moved to approve the amendment to protocol M00212 pending response to review questions, and to require the PI to consult with an RARC veterinarian to create an early protocol renewal application, with focused attention given to providing full descriptions of all procedures being performed, removing of procedures that are not being used, ensuring consistency and clarification of analgesics and anesthesia, and including details of wound maintenance and closures of chronic instrumentation. The vote was unanimous (see attached).

### 4 Oct 2010 Open Session (annual update)

[REDACTED] Name asked about protocol M00212, and the status of the PI submitting an early renewal. Dr. [REDACTED] Name said that he explained the ACUC's concerns to the PI. Discussion ensued. [REDACTED] Name / [REDACTED] Name moved to approve all the annual re-approvals for October with the exception of M00212 and require the PI to schedule veterinary consultation by December 1, 2010. The vote was unanimous, with [REDACTED] Name abstaining. [REDACTED] Name said that he will give an update on the consultation at the December meeting.

EXCERPTS of smph acuc-approved minutes compiled by [REDACTED] for internal use; protocol review details (review Qs, DRs) in separate doc

### 1 Nov 2010 Open Session (protocol review)

M00212-0-10-10 (Renewal) - "Behavioral and Physiological Studies of Sound Localization"

The primary and secondary reviewers led discussion of the protocol. [REDACTED] provided a brief history on this protocol, noting the PI submitted an early renewal as requested by the ACUC. [REDACTED] reminded the ACUC that they did not approve this protocol's annual reapproval at last month's meeting pending the PI's submission of an early renewal. Discussion ensued. [REDACTED] / [REDACTED] moved to approve the annual reapproval protocol M00212. The vote was unanimous.

Discussion of the protocol submission and the complexity of the projects ensued. [REDACTED] / [REDACTED] moved to defer the early renewal of protocol M00212 and to require the PI to consult with RARC veterinarian Dr. [REDACTED] regarding the protocol rewrite. The vote was unanimous (see attached).

### 10 Jan 2011 Closed Session (vet report)

[REDACTED] said a PI verbally reported a protocol violation. He said that a cat received one additional analgesic dose than approved but suffered no adverse effects. He said the veterinary staff is comfortable with the outcome and that the situation was handled appropriately.

[REDACTED] reported that the USDA VMO visited UW-Madison on January 6th, 2011 regarding a complaint that the USDA had received regarding a specific protocol with cats. He said the USDA VMO was satisfied with her investigation and no citation was issued.

### 10 Jan 2011 Open Session (protocol review)

M00212-0-10-10 (Renewal) - "Behavioral and Physiological Studies of Sound Localization"

The primary and secondary reviewers led discussion of the protocol. Discussion ensued. The recommendation is to approve pending response to review questions (see attached).

### 3 Oct 2011 Closed Session (vet report)

[REDACTED] said that he has six adverse events to report. He said that the first adverse event occurred under protocol M00212 which describes two surgical procedures to be performed at different times. Two different procedures were called for because usually a significant amount of training of the animals is necessary between the two procedures. In this case, an animal was already trained, so both procedures were performed during one anesthetic event rather than two. He said that animal welfare benefited because this event occurred with one anesthetic event and operation rather than two events. He said this incident was still performed off-protocol as the procedures described in the protocol are performed in sequence at two distinct times. He said the PI self-reported the incident and the animal experienced no adverse effects occurred, noting the PI will submit an amendment to this protocol for this circumstance in the future.

**7 Nov 2011 Open Session (protocol review)**

M00212-0-10-10 (Amendment dated 10/10/11) - "Behavioral and Physiological Studies of Sound Localization"

The primary and secondary reviewers led discussion of the protocol. The committee discussed the procedures described. [REDACTED] noted the use of pentobarbital for prolonged sedation, described subsequent consultations and recommended possible anesthesia with the PI indicating anesthesia alternatives may be included. Discussion ensued. [REDACTED] [REDACTED] moved to require modifications (see attached) to secure approval. The vote was unanimous.

**27 Aug 2012 Closed Session (vet report)**

[REDACTED] reported an animal assigned to protocol M00212 was anesthetized July 25<sup>th</sup> for removal of a displaced scleral search coil. Due to suspect vascular strangulation caused by severe acute chemosis, tissue manipulation, and secondary infection the devitalized conjunctival tissue was deemed irreparable following unsuccessful medical management. As an alternative to euthanasia, an enucleation was successfully performed August 16<sup>th</sup> with full post-surgical recovery. The animal behaved and performed assigned tasks normally following the incident and has returned to continued use on study following surgery.

**7 May 2012 Closed Session (vet report; [REDACTED] absent)**

[REDACTED] said that she has one event to report to the committee. She said the incident occurred on April 5<sup>th</sup>. She said an animal on protocol M00212 sustained a thermal burn from an external heat source while under prolonged anesthesia for an approved procedure. Less than 5% of total body area was affected. Following initial wound treatment, surgical repair and closure was successfully performed on April 24<sup>th</sup>. The animal made an unremarkable full recovery. Veterinary staff initiated procedural modifications to prevent a recurrence. No further incidents have occurred. The ACUC accepted the report and requires no further action at this time.

**1 Oct 2012 Closed Session (request from OLAW)**

[REDACTED] announced that he would now take one item out of order. He reported that OLAW recently sent a letter (see attached) to him as Institutional Official (IO) regarding a complaint that they received about a University of Wisconsin project that uses cats. He noted that ACUC members may have heard about this in the local media in recent weeks. In his role as IO, [REDACTED] charged the SMPH committee with responding to OLAW's questions.

[REDACTED] explained that PETA obtained records related to SMPH ACUC protocol M00212 through the Freedom of Information Act and open records laws. Allegations that multiple violations of the Animal Welfare Act took place in 2008 were then sent to the USDA and OLAW and publicized through web postings, news reports, and public demonstrations. [REDACTED] summarized the allegations, which included improper veterinary care, guidance and oversight; that the PI did not properly justify the number of animals needed; that the PI did not appropriately search for alternatives; and that conduct of non-ACUC-approved activity occurred.



EXCERPTS of smph acuc-approved minutes compiled by [REDACTED] for internal use; protocol review details (review Qs, DRs) in separate doc

[REDACTED] Name said a response to the allegations, written for a lay audience, is currently posted on the UW web site. He said both OLAW and the USDA were informed of the existence of this response on the University's web page. He reiterated [REDACTED] Name's statement that OLAW has requested that the SMPH ACUC conduct a formal investigation of the allegations, and noted the USDA is conducting its own separate investigation. The USDA Veterinary Medical Officer (VMO) visited last Friday to review the protocol, animals, and health records. The VMO will return Tuesday morning, and is expected to provide an exit briefing at that time.

[REDACTED] Name asked who will write the response to OLAW. [REDACTED] Name said that as IO he was asked to have the ACUC perform the investigation, and that the letter to OLAW will come from his (IO) office based on the results of the ACUC's investigation. An initial response is due to OLAW October 15<sup>th</sup>, but the whole ACUC should see the final report before it is sent to OLAW. [REDACTED] Name would like a subcommittee to conduct an investigation per the letter and to prepare a report for the ACUC's review.

[REDACTED] Name pointed out that OLAW's letter cautions the ACUC to avoid any conflicts of interest. Dr. [REDACTED] Name said because she signed an op-ed letter to the newspaper supporting the researcher whose lab is the subject of the complaints, and because the PI was a mentor to her, she should not serve on the subcommittee. Discussion ensued about the composition of the subcommittee. [REDACTED] Name [REDACTED] Name

[REDACTED] Name and [REDACTED] Name will serve as the subcommittee charged with addressing the OLAW questions. [REDACTED] Name added that she had spoken with Dr. Axel Wolff earlier that week. He suggested that the ACUC's response not only address the questions, but also include program improvements and refinements to the protocol since 2008. The subcommittee will provide a report to the ACUC at the November meeting. [REDACTED] Name thanked the subcommittee.

### 3 Dec 2012 Closed Session (subcommittee report review and vet report)

[REDACTED] Name said that she was going to take one item out of order and asked for an update on the subcommittee's report on the investigation requested by the Office of Laboratory Animal Welfare (OLAW). [REDACTED] Name said that the report was reviewed and modified by the committee at last month's meeting. He asked the ACUC if the report is now ready to send to the IO for submission to OLAW. Dr.

[REDACTED] Name said that in item 1, the report states that some additional records that could pertain to an animal's clinical condition may be kept by laboratory staff at their discretion. She said that the question from OLAW asks how these records are maintained. [REDACTED] Name explained that the question was in the context of PIs maintaining clinical records separate from veterinary clinical records. He said that some laboratories may keep additional research records, but that clinical records are not required to be maintained by PHS policy. The ACUC agreed to clarify the statement to read, "All laboratories maintain study-specific research records. While these are not intended to be veterinary clinical records, information within these records can be relevant to clinical matters, such as documentation of performance of ACUC-approved surgery on rodents". The committee discussed the response to question 8 on animal numbers justification. [REDACTED] Name noted that an ACAPAC subcommittee is preparing additional guidance for investigators on this topic. She said that the subcommittee is going to recommend that statistical justification be required if appropriate, and that a range of animal numbers is not acceptable.

[REDACTED] Name left the meeting]

[REDACTED] Name said that she does not feel the numbers justification in the current protocol is adequate. She said that a justification based on the numbers of neurons does not rule out the possibility of using many animals since there is no upper limit. [REDACTED] Name moved to insert the phrase "within the limit of the number of animals accepted" to the final bullet statement in the response to question 8. [REDACTED] Name seconded the motion. Discussion ensued. The motion failed by unanimous vote with [REDACTED] Name abstaining. Discussion ensued. [REDACTED] Name reminded members of their right to file minority opinions.



[REDACTED] reiterated the changes to the report and asked if the committee wished to review the modified document prior to submission. The ACUC agreed that the subcommittee members and [REDACTED] should review the modifications but that it did not need to come back to the committee. The report will be finalized and sent to [REDACTED] who will forward the report to [REDACTED] for submission to OLAW.

(Senior Program Veterinarian Report) [REDACTED] noted that the report to OLAW says that the PI will amend protocol M00212. [REDACTED] moved that the ACUC require an amendment with revisions to the numbers justification and humane endpoints sections, and a review of the anesthesia section, and to require veterinary pre-review of the amendment prior to submission to the ACUC. [REDACTED] seconded the motion. The vote was unanimous. [REDACTED] said that she would notify Dr. Yin and ask him to provide the amendment for full committee review by January 15<sup>th</sup>.

#### 4 Feb 2013 Open Session (protocol review)

M00212-0-10-10 (Amendment dated 1/17/13) - "Behavioral and Physiological Studies of Sound Localization"

The reviewers led discussion of the protocol. Extensive discussion ensued. [REDACTED] [REDACTED] moved to require modifications to secure approval (see attached) and to require the PI to have in-person consultation with an RARC veterinarian in order to address the review questions prior to resubmission. The vote was unanimous. The following ACUC members requested to review the rewrite: [REDACTED] [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

#### 4 March 2013 Closed Session (subcommittee report review)

[REDACTED] reminded the members that the OLAW subcommittee report was distributed for review. Dr. [REDACTED] explained that after the report is finalized, it will be sent to the I.O. and then to OLAW. The ACUC reviewed the draft report. Discussion ensued. [REDACTED] thanked the subcommittee members for their efforts. [REDACTED] [REDACTED] moved to approve the report as modified by discussion. The vote was unanimous.