

**UNIVERSITY OF MASSACHUSETTS CHAN MEDICAL SCHOOL
INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE**

Minutes from Monday, March 21, 2022

Present: MG (Chair), GD (Member-AV), LL (Member), GM (Member), GP (Member), DH (Member, Non-affiliate), CP (Member), RR (Member, Non-scientist), CT (Member), RZ (Member)

Non-Members Present: CM (IACUC/IBC Director), VCP (IACUC Coordinator), EN (Sr. Protocol Specialist), DS (Research Compliance Specialist), SC (IACUC Admin), GC (Guest)

Absent: NH (Member), HK (Member), OK (Member), MR (Member), LS (Member – vet), EL (Member), JM (Alternate Member), LS (Alternate Member), AS (Alternate- Non-scientist), YW (Alternate Member), YXW (Alternate Member), JC (Associate Director-Animal Medicine, Alternate)

This meeting was called to order by the Chair at 3:09 PM

The meeting was adjourned at 4:24 PM

1. Introductory Remarks

Members were instructed to ask questions or make comments verbally, instead of the using the comment box or hand-raising feature, as these may go unnoticed during critical discussions.

2. Protocols for Review

a. PROTO202000111 and PROTO202100207 (Amendments)

These amendments include the addition of tail tattoo as a method of identification, removal of sutures, addition of surgeon, and modification of an antibiotic. The amendments were distributed prior to the meeting for IACUC review and there were no additional IACUC comments.

A motion was made to approve the amendments PROTO202000111 and PROTO202100207.

Moved, seconded, and voted unanimously to approve the amendment to PROTO202000111 and PROTO202100207.

GD recused himself from the vote on these amendments.

b. The amendments for the below protocols were distributed to the IACUC prior to the meeting for review. The amendments include the addition of standard transcatheter perfusion and a new lab space.

- PROTO202100224

- PROTO202100036
- PROTO202100013
- PROTO202100012
- PROTO202100011
- PROTO202000184
- PROTO202000183
- PROTO202000182

A motion was made to approve the amendments to PROTO202100224, PROTO202100036, PROTO202100013, PROTO202100012, PROTO202100011, PROTO202000184, PROTO202000183, and PROTO202000182.

Moved, seconded, and voted unanimously to approve the amendments to PROTO202100224, PROTO202100036, PROTO202100013, PROTO202100012, PROTO202100011, PROTO202000184, PROTO202000183, and PROTO202000182.

- c. The amendments for the below protocols were distributed to the IACUC prior to the meeting for review of surgeons R. Chen and T. Harris. There were no additional IACUC comments.
 - PROTO202000045
 - PROTO202000055
 - PROTO201900302
 - PROTO201900301
 - PROTO202100217

A motion was made to approve the amendments to PROTO202000045, PROTO202000055, PROTO201900302, PROTO201900301, and PROTO202100217.

Moved, seconded, and voted unanimously to approve the amendments to PROTO202000045, PROTO202000055, PROTO201900302, PROTO201900301, and PROTO202100217.

3. Department of Animal Medicine Operations Update

- a. GD (Member-AV) reported on the successful outcome of the most recent USDA inspection and impact this outcome had on the frequency of the inspections.
- b. Staffing for the Department of Animal Medicine
GD reported that staff is still low. They are working to get approval for a contracting company for additional animal care staffing needs. The proposed agreement is currently in the legal department and needs to be cleared by IT.

4. Announcements and Discussion

a. Fall/Winter 2021 Inspection Findings

One additional finding was included on the semiannual inspection report, previously voted on during the January 2022 meeting. The additional finding was added to the inspection report, categorized as a minor deficiency with a corrective action plan established and adopted by the IACUC.

A motion was made to adopt the Inspection Findings Report with the additional finding.

Moved, seconded, and voted unanimously to adopt the Inspection Findings Report with the additional findings.

- b. Weaning Subcommittee update: A subcommittee was formed to standardize the care provided to newly weaned pups, including provision of food, water and hydrogel for some cages. A guidance document was created and will be shared with the researcher community and posted in animal housing rooms. The Research Advisory Committee and IO will also be made aware of IACUC expectations to reinforce the importance of providing appropriate care to animals. The IACUC discussed the guideline and requested that pictures better depict ‘incorrect’ cage setups. A comment was made clarifying that hydrogel can be stored in a closed container between uses for up to 2 weeks. Further conversation included corrective measures for “repeat offenders” and consequences of non-compliance. The IACUC will evaluate situations case-by-case to establish a root cause and corrective actions. There was also discussion on the possible impact of Animal Medicine staffing shortages or Covid on this situation.

5. Protocol Violations & Adverse Events

- a. PROTO202100134-Additional information was obtained pursuant to a discussion from the January 2022 IACUC meeting related to prescreening of a compound administered through an ICV injection of siRNA in a NHP. The test article was prescreened in 1 sheep and mice prior to this incident.

The IACUC also discussed two new reports submitted by this PI:

- Animal #1 received a lateral ventricular injection of siRNA and during recover from anesthesia, the animal experienced a drop in heartrate. The animal was resuscitated but euthanized after repeated unsuccessful attempts to remove from the ventilator and develop a response to stimuli. A necropsy was performed, and diffuse cerebral edema noted. This compound was successfully tested in 1 sheep, mice and 1 NHP prior to this incident. The PI determined the most likely cause of the cytotoxic edema was the formulation

of the compound in excessive calcium and magnesium. Future testing will not include this formulation step.

- Animal #2 was anesthetized for MRI prior to lateral ventricular injection. Before the injection occurred, there was a sudden reduction in CO₂, followed by loss of pulse oximetry signal. The animal was unable to be resuscitated despite multiple attempts. No abnormalities were noted at necropsy and after consultation with the AV, it was concluded that this outcome was due to an anesthetic complication of unknown origin. The AV discussed this outcome, noting that anesthetic complications can occur despite appropriate conduct of procedures and monitoring, as was the case in this situation.

The medical records of each animal were evaluated by veterinary staff and the IACUC during a preliminary investigation and determined to be compliant with the protocol. There were several unanswered questions such as involvement of the Department of Animal Medicine veterinary staff, specific chemistries and preparation of the test article, and outcomes of control animals. There were also discrepancies between the submitted reports and animal records in PI name and protocol number. The IACUC requested that the PI provide a response to all questions for their evaluation during the next fully convened IACUC meeting, prior to conducting more surgeries involving injections of this type. The IACUC will evaluate the cause and corrective measures once all information has been received.

6. Consent Agenda

a. Policy 7.01: Changes to Approved Protocols: Amendments

This policy was distributed to the IACUC prior to the meeting for review. The committee had no comments.

A motion was made to approve Policy 7.01: Changes to Approved Protocols: Amendments. Moved, seconded, and voted unanimously to approve Policy 7.01: Changes to Approved Protocols: Amendments.

b. Policy 7.06.01: Counting and Reporting Animals

This policy was distributed to the IACUC for review prior to the meeting. There were no comments on the policy.

The committee discussed a procedure for using the Animal Bioware software to track animals generated through breeding more accurately by using Weaning vs. Standard cage cards. Weaned animals, identified by a Weaning Cage card, would be counted at time of census during the initial scan. The IACUC discussed the possible impact this would have on researchers and Department of Animal Medicine and determined that

researchers outside of the IACUC should be consulted for input prior to implementing this change.

A motion was made to approve Policy 7.06.01: Counting and Reporting Animals. Moved, seconded, and voted unanimously to approve Policy 7.06.01: Counting and Reporting Animals.

- c. Policy for Use of Embryonated Avian Eggs
This was tabled to a future meeting.
- 7. The following educational material was presented and discussed by the IACUC. The IACUC also discussed departures from the Guide related to housing conditions.
When is a house a home?
Lauren Danridge and Bill Greer
Animal Care & Use Office, University of Michigan,
Ann Arbor, Michigan, USA.
Published online: 2 February 2022
https://olaw.nih.gov/sites/default/files/labam51_02_0222.pdf
- 8. The list of protocols approved by DMR from January 20, 2022 to March 16, 2022 was acknowledged by the IACUC.
- 9. The January meeting minutes were sent to the IACUC for review prior to the meeting. There were no concerns.

A motion was made to approve the January 24, 2022, IACUC meeting minutes. Moved, seconded, and voted unanimously to approve the January 24, 2022, IACUC meeting minutes.



Matthew Gounis, Ph.D., IACUC Chair