

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

Minutes from Monday, April 25, 2022

Present: MG (Chair), GD (Member-AV), NH (Member), HK (Member), OK (Member), GM (Member), GP (Member), DH (Member, Non-affiliate), CP (Member), RR (Member, Non-scientist), MR (Member), LS (Member – vet), RZ (Member), AS (Alternate- Non-scientist), JC (Alternate-Associate Director-Animal Medicine)

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

Absent: LL (Member), CT (Member), EL (Member), JM (Alternate Member), LS (Alternate Member), YW (Alternate Member), YXW (Alternate Member)

*This meeting was called to order by the Chair at 3:03 PM.
The meeting was adjourned at 4:30 PM.*

1. Introductory Remarks

None

2. Protocols for Review

a. PROTO202000055 (AR2 – DoD)

The second annual review of this Department of Defense protocol was distributed prior to the meeting for IACUC review. No animals were used during this year of the protocol. There were no questions or concerns raised during the meeting.

A motion was made to approve the second annual renewal of PROTO202000055. Moved, seconded, and voted unanimously to approve the second annual renewal of PROTO202000055.

b. PROTO201900279 (AR2 – DoD)

The second annual review of this Department of Defense protocol was distributed prior to the meeting for IACUC review. Breeding was started, but no animals were used in experiments during this year of the protocol. There were no questions or concerns raised during the meeting.

A motion was made to approve the second annual renewal of PROTO201900279. Moved, seconded, and voted unanimously to approve the second annual renewal of PROTO201900279.

c. PROTO202100059

The amendment to add surgeon to PRORO202100059 was distributed to the IACUC prior to the meeting for review. This surgeon was formerly on this protocol and has met all IACUC requirements to be added. There were no additional IACUC comments.

A motion was made to approve the amendment to PROTO202100059. Moved, seconded, and voted unanimously to approve the amendment to PROTO202100059.

MG (Chair) recused himself from this vote.

d. PROTO202000173

The amendment to add surgeon to PROTO202000173 was distributed to the IACUC prior to the meeting for review. This surgeon is new to work with mice, will follow the protocol training plan, and has met the IACUC requirements to be added. There were no additional IACUC comments.

*A motion was made to approve the amendment to PROTO202000173.
Moved, seconded, and voted unanimously to approve the amendment to PROTO202000173.*

e. PROTO202000188

The amendment to add surgeon to PROTO202000188 was distributed to the IACUC prior to the meeting for review. This surgeon is new to work with mice, will follow the protocol training plan, and has met the IACUC requirements to be added. There were no additional IACUC comments.

*A motion was made to approve the amendment to PROTO202000188.
Moved, seconded, and voted unanimously to approve the amendment to PROTO202000188.*

f. PROTO202000010 (Surgeon addition)

The amendment to add surgeon to PROTO202000010 was distributed to the IACUC prior to the meeting for review. This surgeon has less than 1 year experience, will follow the protocol training plan, and has met the IACUC requirements to be added. The responses to questions 1 through 6 will be clearly marked. There were no additional IACUC comments.

*A motion was made to approve the amendment to PROTO202000010.
Moved, seconded, and voted unanimously to approve the amendment to PROTO202000010.*

g. PROTO202100134 (Surgeon addition)

The amendment to add surgeon to PROTO202100134 was distributed to the IACUC prior to the meeting for review. This surgeon is new to this protocol, will follow the protocol training plan, and has met the IACUC requirements to be added. The surgeon form will be updated to show completion of aseptic training completed on April 22, 2022. There were no additional IACUC comments.

*A motion was made to approve the amendment to PROTO202100134.
Moved, seconded, and voted unanimously to approve the amendment to PROTO202100134.*

3. Department of Animal Medicine Operations Update

a. Staffing for the Department of Animal Medicine

GD reported that there is some new staff, but numbers are still low. They are still awaiting legal approval on a contracting company for additional animal care techs,

and hoping it is soon. This will ease staff pressure and enable them to limit using investigator staff for basic husbandry.

4. Announcements and Discussion

a. Semi-Annual Inspections

The facilities inspections have been assigned and are in process. Lab inspections are upcoming. AAALAC preparation materials will be distributed during lab inspections.

b. Semi-Annual Program Review

The Semi-Annual Program Review is in May. The IACUC director solicited agenda items from the committee.

5. Protocol Violations & Adverse Events

a. PROTO202100124

This was an update to an incident previously discussed at the March IACUC meeting regarding adverse events involving injections of siRNA. The PI provided all required information related to involvement of veterinary staff, volume of compound, outcomes of control animals, and SOP for preparation of the siRNA. The PI also voluntarily placed studies on hold while the IACUC investigated the incident.

One of the outcomes involved an adverse response to anesthesia prior to MRI and injection. The veterinary staff were involved in resuscitation of the animal and the determination to euthanize. Procedures were conducted compliantly. The IACUC was satisfied with this response and acknowledged that this was an isolated occurrence and complications of this sort are an inherent risk of anesthesia.

The second outcome involved an ICV injection of siRNA where the animal was euthanized prior to recovery. The compound was tested successfully in mice and sheep, prior to administration to nonhuman primates. The veterinary staff were involved in the procedure and determination to euthanize. The PI proposed this outcome to be related to the formulation of the test article in excessive calcium or magnesium, which was specific to a certain chemistry of siRNA used in previous studies to reduce seizure activity in mice. This preparation step will no longer be included. The IACUC discussed the information provided by the PI and agreed that this was a likely cause.

There were two additional questions related to the pH and osmolality of the final product, as well as the results of the histopath for the 3rd animal in the test group. The IACUC agreed these results and additional information can be reviewed by a veterinarian and brought to the committee for additional evaluation only if there are concerns.

Overall, the IACUC was satisfied with the PI's response and preventative measures. No further actions were required.

b. PROTO202100177

The IACUC received an anonymous report related to compliance with post-operative care requirements for 3 rabbits. The IACUC discussed the specific

concerns and evaluated the medical records of the animals. Anesthesia and analgesia were administered in compliance with the protocol and additional pain medication was administered by the veterinarians to ensure continuous analgesia. The veterinarians are currently working closely with the PI to optimize the pain management regime in the protocol for future studies. The IACUC concluded that there were no compliance concerns, and the PI and veterinary staff are providing optimal post-operative care for the animals.

c. PROTO201900265 Update

An update was provided to an adverse event report submitted and previously discussed by the IACUC in April 2020. The previous UAE described several possible causes of the incident and corrective actions. The IACUC requested an update on the corrective measures once studies had resumed. The PI provided a comprehensive update with data to support the correlation between certain parameters, specifically dose and animal weight, and the outcome. Humane endpoints were also updated in response to the PIs findings. The IACUC appreciated the PIs ongoing efforts to investigate the cause and had no further concerns.

6. Consent Agenda

a. Policy 5.02: *Euthanasia of Mice and Rats by Cervical Dislocation (CD)*

This policy was sent to the IACUC for review prior to the meeting. There were some typographical errors changed within the policy.

A motion was made to approve Policy 5.02: Euthanasia of Mice and Rats by Cervical Dislocation (CD)

Moved, seconded, and voted unanimously to approve Policy 5.02: Euthanasia of Mice and Rats by Cervical Dislocation (CD)

b. Policy 7.09: *Use of Embryonated Avian Eggs (E15 and older)*

This policy, which addresses early inadvertent hatching, was sent to the IACUC for review prior to the meeting. The IACUC and veterinary staff need to be contacted, in the event inadvertent hatching occurs. The committee discussed the hatching timeline and concluded that no changes needed to be made.

A motion was made to approve the Policy 7.09: Use of Embryonated Avian Eggs (E15 and older).

Moved, seconded, and voted unanimously to approve new policy: Use of Embryonated Avian Eggs (E15 and older).

AS and MR left at 3:58pm

c. Policy 4.07.04 *Anesthesia and Analgesia Recordkeeping*

This policy was sent to the IACUC for review prior to the meeting. Revisions were made and the committee discussed several aspects of the policy including when animal weight should be captured when using inhalant anesthetics. The committee determined that the weight of the animal would be required for surgical procedures. Additionally, labs will no longer be required to submit analgesia/anesthesia forms to the IACUC for approval prior to use.

A motion was made to approve Policy 4.07.04 Anesthesia and Analgesia Recordkeeping.

Moved, seconded, and voted unanimously to approve Policy 4.07.04 Anesthesia and Analgesia Recordkeeping.

d. **HURON SOPs (appendix)**

The below spreadsheet containing 35 HURON SOPs and small group review and feedback on each was sent to the IACUC for review prior to the meeting. At the meeting, CM reviewed the 35 SOPs and the comments/recommended changes. There were no other concerns.

Motions were made to approve each of the 35 HURON SOPs for the upcoming 3-year period.

Moved, seconded, and voted unanimously to approve each of the 35 HURON SOPs for the upcoming 3-year period.

- e. **Policy 6.10: Policy for Sterilization of Surgical Instruments, Devices, and Implants**
CM brought this to the committee to share the clarification on permissible use of a dry bead sterilizer. This was not distributed prior to the meeting, so the committee members were invited to share questions or concerns on this at the meeting. There were no changes made during the meeting.

A motion was made to approve Policy 6.10: Policy for Sterilization of Surgical Instruments, Devices, and Implants

Moved, seconded, and voted unanimously to approve Policy 6.10: Policy for Sterilization of Surgical Instruments, Devices, and Implants

7. As educational material, the IACUC reviewed recent USDA inspection reports from other institutions. This led to discussions about the importance of communication between veterinary staff and researchers and recordkeeping requirements.
8. The list of protocols approved by DMR from March 17, 2022 to April 4, 2022 was acknowledged by the IACUC.
9. The March meeting minutes were sent to the IACUC for review prior to the meeting. There were no concerns.

A motion was made to approve the March 21, 2022, IACUC meeting minutes.

Moved, seconded, and voted unanimously to approve the March 21, 2022, IACUC meeting minutes.

