Members Present: AB, JE, LJE, AS, JM, ML, CG, JPVH, MS, CH, JS, SH, FRR, KL, SL, JB, KS, TH

Members Absent: CG, JB, SL, MS

Opening Business
- The IACUC Chair called the meeting to order at 2:31pm.

Confirmation of a Quorum and Announcement
- Quorum was confirmed.

IACUC Training
- Making Computational Models Reproducible – HS
  - HS gave a presentation on the importance of having reproducible computational models, and the significant challenges in making them reproducible.

KL entered at 2:34 pm

JM entered at 2:41 pm

Protocol Review
- A15381 Repair Surgery (4316-01) – KSH
  - The long-range goal of this protocol is to gain a better understanding of the neural mechanisms that underlie memory processes, in order to bring us closer to developing new therapies for these disabled individuals with impaired memory. The objective of this research is to characterize neural signals that support memory formation. The experiments in this protocol will examine the role of Medial Temporal Lobe (MTL) structures, including the hippocampus and underlying cortices, in memory. The animal currently has a “banked” repair but it will be used at the end of October, so the group is requesting a “banked” repair to be used at a later date. Including the importance of this particular animal remaining on study, this animal is actively being recorded from with a semi-chronic implant and continued data collection from this animal is necessary for completion of the current study. This animal is highly trained on multiple behavioral tasks that have been learned over the span of several years, and an aged animal, making her extremely valuable and difficult to replace.

Motion was made and seconded: to approve the repair request as written.
Discussion: any discussion/changes/notes
Vote: Approved with 14 members voting in favor, none opposed, none abstained.
AMEND201801164 (4266-12) – LJE
  - Description of item (Provided by presenter): To add animals as contemporary controls and two new types of sample collection procedures. Additional samples would occur at up to 4 surgery time points. The sample types have been termed as non-invasive.
  - LJE explained her concerns regarding this amendment and the parent protocol (below), including study rigor (selection and matching of animals, lack of randomization), characterization of swab samples as non-invasive, and number of sedation events. LJE passed out copies and referred to a March 2018 article in JAALAS that discussed the ways in which the various IACUC members can contribute to [protocol] review and ensure rigor in the experimental design.
  - There was discussion about the role of the IACUC in evaluating and mandating study design.
  - LJE moved that the amendment should not be approved and that the study control animals be matched for age, sex and MCH haplotype, early rearing condition, experimental housing and husbandry histories, and that the animals once identified are randomly assigned to either arm of the study.
  - LJE also moved to require all 6 animals be trained using positive reinforcement training (PRT) prior to the start of the study so blood draws can be taken without sedation.
  - The Chair asked for discussion on the issues raised about the Amendment and the Protocol, prior to further action on the motions. The investigator provided information.
    - The additional animals are already age and sex matched. The animals cannot be randomized into different arms of the study due to issues with their MHC haplotype. Additionally, there are not many animals available that lack the MHC haplotype.
    - The term non-invasive has been removed from the procedures that might be considered invasive.
    - There is a concern from the PRT staff as the animals are infected with transmittable diseases. WaNPRC standard is to use sedation for procedures like blood draws when animals are infected with SIV

PROTO201800048 (4266-12) – LJE
  - The protocol is a pilot study to investigate SIV infection and effect on ZIKA pathogenesis. LJE brought this protocol to full committee review due to concerns regarding the number of sedation events. Animals could be trained to undergo sampling without sedation.
  - Due to the risk to humans when animals are infected with SIV, it is following Primate Center guidelines to not do blood draws on awake animals that have been infected with SIV.

  Motion was re-made: Require all 6 animals be trained using PRT prior to the start of the study so blood draws can be taken without sedation. There was no second to the motion.

Standard Operation Procedures / Policies / Guidelines

- Food and Water Restriction in Mice and Rats – KSH
  - Update the definition of food restriction, and the final paragraph of the policy, to be 4 hours for rats and 6 hours for mice.

  Motion was made and seconded: to approve the policy with the changes noted above.
  Discussion: None
  Vote: Approved with 14 members voting in favor, none opposed, none abstained.
Antibiotic Use in Research Animals – EC
  o Moving from a policy to a guideline.

  Motion was made and seconded: to demote the policy to a guideline, with the changes as written.
  Discussion: None
  Vote: Approved with 14 members voting in favor, none opposed, none abstained.

Expired Drugs and Medical Material use in Animal Research and Teaching – EC

  Motion was made and seconded: to approve the policy, with the changes as written.
  Discussion: None
  Vote: Approved with 14 members voting in favor, none opposed, none abstained.

Ether Use – Request to Archive – KS
  o No researchers are currently using ether, so the policy is not needed. Should a researcher want to use ether, the policy can be reinstated.

  Motion was made and seconded: to archive this policy/SOP
  Discussion: None
  Vote: Approved with 14 members voting in favor, none opposed, none abstained.

Approval of the IACUC Meeting Minutes
  • The IACUC Chair called for the approval of the September 20, 2018 meeting minutes.

  Motion was made and seconded: to approve the minutes as written.
  Discussion: discussion/changes/notes
  Vote: Approved with 11 members voting in favor, none opposed, and 3 abstentions.

Attending Veterinarian’s/OAW Director’s Report - KS
  • Facility issues:
    Temperature and Humidity: No issues
    Lights –
      o ARCF – On 9/11/18 lights in one primate room did not go off completely. It appears to have been a random computer glitch with the lighting system where the controller was set to go to “low” instead of “off”. There was no alarm because the system thought it was doing what it was told to do. When the report for the whole month of September was run, that was the only day it occurred.
      o Western- On Saturday, 9/28 when the emergency generator was tested, lights in 4 rooms were affected and it was fixed by the end of the day. Then on Tuesday morning, 10/2, the lights were again off in these same rooms and by Wednesday afternoon (10/3) lights were functioning correctly. On Thursday, 10/4 lights went off in 4 other rooms, but they were easily turned back on with the external room switches. The issue with the lights was directly related to the ATS control system and their technician was needed for the repair. Repairs have been made. No issues since that time.
ARCF airflow: Commissioning is complete

Harm-Benefit Assessment subcommittee
- The HBA committee met this month and discussed potential designation of category E on a mouse study with potential neonatal mortality and a fish study with mortality related to food restriction in larvae. We also discussed concerns raised by individual IACUC members.
- I would urge you to look at the minutes for further information.

Protocol Monitoring:

Twenty-two total protocols. Of the protocols, 13 involve surgery, two restraint (and sx), one conscious restraint, 2 tumor modeling, 4 miscellaneous (tape skirt, infection, water quality). Seven are inactive right now.

Follow up on Protocol 3235-06
1. Histopathology on 1 spontaneous death of an experimental animal that was reported at the last month’s meeting. Similar histopathology as other experimental animals that were euthanized early or spontaneously died. Massive, widespread hemorrhage in the brain, GI tract and other organs post total body irradiation.
2. Discussed with PIs the current formulation and subcutaneous administration of the ART solution causing sterile abscesses in some of the animals and the recent morbidity/mortality on the protocol.
   - PI will look into reconsidering the oral administration or altering the pH of the ART, and will follow up.
   - CD90 studies – more immature stem cell population worked well in autologous, gene therapy and gene editing setting – allogeneic transplant animals should have engrafted. Both animals had multiple infections prior to transplant – campylobacter, giardia. They want clean animals without concurrent infections and may increase cell numbers used for the engraftment. Currently working with vet on the specifics. The study is on hold and the next cohort wouldn’t be started until this is validated.
   - GVHD studies – completed. No more plan studies.
   - SHIV studies – Allogeneic studies will be discontinued. Remaining animals will be transferred to a different experiment – CAR-T cell study.

An IACUC member asked if all animals are tested for campylobacter, giardia. Animals are tested if there would be an expected effect due to the research, such as total body irradiation (TBI). These animals were tested and found negative prior to TBI. PCR is used to test for these diseases, rather than cultures, as it is more sensitive.

AS left at 3:58 pm.
AS returned at 4:01 pm.

- Adverse events
  - Use of expired euthanasia solution in a rat. On semi-annual inspection, IACUC members found expired solution (expired August 2018) and the drug log book indicated that the solution had been used to euthanize a rat after the expiration date. Rat was successfully euthanized so there was no animal welfare issue. During the inspection, lab was instructed to label it as expired and dispose of properly.
Corrective action plan: The lab will assign a member to check expiration dates and report out items that are expiring at the beginning of each month and ensure the expiring items are removed. This group has had not had any issues in the past. **This will be reported to OLAW.**

Motion was made and seconded: to send the PI a letter of counsel.  
**Discussion:** None  
**Vote:** Approved with 14 members voting in favor, none opposed, none abstained.

- Improper euthanasia of a mouse. Mouse was euthanized for clinical reasons and researcher used CO2 without a secondary method. Mouse was found alive in the refrigerator approximately 30 minutes later.  
Corrective action plan: Researcher will not euthanize any mice until they undergo retraining by AUTS on euthanasia methods with an emphasis on the use of secondary methods. PI will also emphasize to the entire lab the importance of proper euthanasia methods including the use of a secondary method. This group has had no past issues. **This will be reported to OLAW.**

Motion was made and seconded: to send the researcher a letter of reprimand.  
**Discussion:** None  
**Vote:** Approved with 14 members voting in favor, none opposed, none abstained.

- **Arizona issues:**  
  - Facilities items: No items to report.  
  - Adverse events: No adverse events to report.

**Other Business**

- **Daily Packet Reminder – AS**  
  - Starting November 1st, daily packets will start.

- **WaNPRC Standard Analgesic Procedures – AS**  
  - There is a word document in Supporting Documents that details the changes that have been made.

Motion was made and seconded: to approve the WaNPRC Standard Procedures as written.  
**Discussion:** None  
**Vote:** Approved with 14 members voting in favor, none opposed, none abstained.

- **IACUC Adoption of a Definition of “Principal Investigator” – LI**  
  - There is not currently a standing university wide policy of what is required to be a Principal Investigator.  
  - EH&S has recently adopted specific definitions.  
  - What is being proposed parallels what EH&S has adopted.

Motion was made and seconded: to adopt this formal definition of a PI.  
**Discussion:** None  
**Vote:** Approved with 14 members voting in favor, none opposed, none abstained.
• What our role/responsibilities are to encourage the PIs to avoid causing pain and distress to the animals – LJE
  o LJE used an example from a recent review to give some background on why she wanted to discuss this topic and asked for the committee’s opinion on the issue.
  o Other committee members shared that to them it depends on a case by case basis and that it is important to turn to the subject matter experts for further information on whether a procedure is distressful. They also noted that stress and distress are two different terms and can often be confused with each other as it can often be subjective.
  o While investigators may be experts in their respective field they are not necessarily experts in animal welfare or the ethics of using animals in research or in the 3Rs. Nor necessarily are IACUC members.
  o It is important to challenge items as members and follow the current process.
  o One member suggested some form of IACUC continuing education on the topic of distress.

• Discussion regarding whether and/or what type of euthanasia procedures should be in place for field studies that involve the trapping/capture/handling of free-ranging animals – LJE
  o Stems from review of a penguin protocol that involves capturing penguins but did not have a euthanasia method approved on the protocol.
  o Discussions between group, OAW, and vets during last renewal led to not including a euthanasia method. Group has >35 years of experience with animals and have never needed to euthanize one. Local regulations vary and would dictate euthanasia methods that could or could not be used. The protocol does state that in the unlikely case of injury, a wildlife vet would be consulted.
  o LJE thinks that all researchers should think through what would occur should an animal be injured while undergoing procedures approved on the protocol.
  o It was recommended that if a protocol doesn’t have a euthanasia method approved on it, OAW / the vets should make note of this and offer a short explanation as to why, so that subsequent reviewers can see the issue was not missed.

Closing Business:
The Meeting was brought to a close at 4:44pm. The floor was opened to public comment.