Members Present: AB JE SL

AS JFI TB

CG JM TH (remote)

CH JS

FRR LJE(remote)

JB ML

Members Absent: JPVH MS KL

SH

Opening Business

• The IACUC Chair called the meeting to order at 2:30 pm.

Confirmation of a Quorum and Announcement

- Quorum was confirmed by KC.
- Update on technical issues LI
- Announcement of new AV and OAW Director KS JS

Protocol Review

- AMEND201801199 (4167-01) **KSH**
 - O This protocol uses non-human primates to understand the neural mechanisms underlying trichromatic visual perception. The benefit of the research is an improved understanding of how the brain works, which is a necessary prerequisite for understanding how to fix it after injury or disease.
 - Viral Vector Studies
 - Animals receive the viral vector injection surgery and are euthanized up to 14 days after the surgery. Their brains are used for the purpose of histologically examining the effects of the virus on the injected brain areas.
 - Two animals have been used for the viral vector injection experiment and the group is requesting a third animal for this part of the project.
 - Justification for another animal:
 - First, the group has made several new viral vectors that appear promising in vitro and have not yet been tested in vivo.
 - Second, the group has one vector that worked well in a previous in vivo experiment, and we would like to replicate this result.
 - Third, one of the vectors that they injected into one animal failed for technical reasons.
 - The group is currently working to optimize the method for injections in different parts of the brain. These vectors have been first tested in rodent neuronal cultures.
 - The requested animal was deemed fit by BMS for this study.

<u>Motion was made and seconded:</u> to get additional information from the investigator on history of the requested animal and how the group plans to avoid the technical failures in the future.

Further Discussion: None

<u>Vote</u>: Failed with 1 member voting in favor, 13 against, 1 abstention.

Motion was made and seconded: to approve amendment as written.

Further Discussion: None

Vote: Approved with 13 members voting in favor, 1 against, and 1 abstention.

Standard Operation Procedures / Policies / Guidelines – TB

- TB presented the slate of Environmental Enrichment SOPs that have been updated by veterinary and care staff, and asked for any questions or comments from the IACUC's review of them.
 - Edit all EE SOPs to use standard language regarding "restricted or absent" when a request for enrichment limitations is submitted.
 - o Environmental Enrichment for Aquatic Amphibians
 - o Environmental Enrichment for Guinea Pigs
 - o Environmental Enrichment for Chicks and Poults
 - o Environmental Enrichment for Hamsters
 - Environmental Enrichment for Birds
 - There is a long google link. Edit this to have a title as well as the link.
 - Environmental Enrichment for Ferrets
 - o Environmental Enrichment for Swine
 - o Environmental Enrichment for Rats
 - o Environmental Enrichment for Mice
 - Environmental Enrichment for Gerbils
 - o Environmental Enrichment for Rabbits
 - Environmental Enrichment for Dogs and Puppies

<u>Motion was made and seconded</u>: to approve the Environmental Enrichment SOP's with the noted changes above.

Further Discussion: None

Vote: Approved with 15 members voting in favor.

Approval of the IACUC Meeting Minutes

• The IACUC Chair called for the approval of the August 16th, 2018 meeting minutes.

Motion was made and seconded: to approve the minutes as written.

Discussion: none

Vote: Approved with 13 members voting in favor, and 2 abstentions.

Attending Veterinarian's Report - TB

Facility issues:

<u>Humidity:</u> No low humidity reports

Temperature and lights:

ARCF airflow: The airflow in this facility is in the final commissioning phase.

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.

Protocol 4417-01: This protocol was added to protocol monitoring at the request of an IACUC member due to conscious restraint being included in the protocol for an echocardiograph procedure in mice. This project was discussed last month and reported that during the 5-minute procedure, certain strains of mice appear to tolerate the procedure well (no struggling); however, other strains (FVB) do not. They struggle, urinate, and bite at the restraint for the entire 5 minutes. The group has put in a significant change to the IACUC to clarify that the mice do struggle during this procedure and provide scientific justification to perform this procedure without anesthesia or sedation. The amendment is in pre-review and will likely be discussed at the next IACUC meeting.

Adverse event:

Protocol 3235-06 (was 4315-02 Both PI's are collaborating)

Summary for the annual renewal (10/7/17-10/6/18):

This study does not describe spontaneous death in the animal use protocol. In the last year, two animals have died spontaneously. Both animals were under the care of the vet staff at the time they died, but the veterinarians were unsuccessful in predicting their death. I am summarizing the issues seen with this project, so that the IACUC is aware and can utilize this information in their harm/benefit evaluation of this protocol. The Attending Vet will be meeting with the group in early October to determine what the next steps are in this project and to indicate that an amendment needs to be submitted to clarify expected mortality. At the October IACUC meeting, a summary of the meeting with the investigator will be presented. The different arms of this study require extensive supportive medical care of each animal and in all cases, that supportive care has been given.

There are three separate experiments:

GVHD (graft-versus-host disease)
SHIV (simian-human immunodeficiency virus),
A pilot study with CD90 cells.

All three experiments involve total body irradiation followed by transplantation of hematopoietic stem cells from a donor animal.

The GVHD study is evaluating an investigational new drug for the prevention and treatment of GVHD. Six of the 11 animals that underwent total body irradiation and transplantation, successfully engrafted and provided useful data. Four animals reached endpoint early and one died during clinical treatment. After each loss, discussions were held between research and veterinary staff and adjustments were made to try to prevent future problems.

The goal of the SHIV study is to determine the impact of allogeneic transplantation on the virus reservoir. Four animals served as untreated controls. Seven animals were inoculated with SHIV and treated with anti-retroviral therapy. One of the SHIV-infected animals underwent TBI and transplantation but met euthanasia criteria and was euthanized prior to engraftment. Following that, the research group elected to adjust their conditioning regimen in non-SHIV animals to improve their chances of success. Two of these control animals met euthanasia criteria prior to engraftment, but the third complete the study successfully. After that, a second of the SHIV-infected animals underwent TBI and transplantation but reached humane endpoint prior to engraftment. There are currently five SHIV-infected, ART-treated animals on study. The investigators have cancelled scheduled transplants and are discussing options for these animals.

Two animals were enrolled in the CD90 study. CD90 cells have been successfully used in auto transplant experiments on a different protocol, but these were the first two animals to receive allo (unmatched) transplants. The first animal developed neurologic, gastrointestinal, and renal signs and was euthanized. The second animal was being treated for gastrointestinal and renal problems when it died suddenly. Histopathology is pending. No other animals are currently assigned to this project; the investigators are waiting for more information prior to deciding whether or not to continue.

WaNPRC Records Review, which is done twice a year, is the best time to view NHP records. Normally what is brought to the meeting is a simplified version of the clinical record.

Investigators are currently working to try and figure out to what extent the treatments are contributing to the mortality.

Action Timeline

- Getting Histopathology
- Meet with group
- AV will bring results and update to next meeting

All work is currently on hold until potential solutions are determined.

AS left the meeting.

- WaNPRC ABC Supervisory Veterinarian's Report TH
 - o Facilities issues: No items to report.
 - o Adverse events: No adverse events to report

AS returned to the meeting.

OAW Director's Report - STI

- Metrics
- Adverse Events
 - o None to report.

Update on Expressed Concern about NHP care

OAW received a concern that the veterinary care of one animal at the WaNPRC was not optimal. A subcommittee was formed (JS, AB, TB) and interviews were conducted. In the opinion of the subcommittee, veterinary care was acceptable. Recommendations are being implemented to improve urgent communication between research teams and veterinarian staff, and better define for everyone end points for non-human primate studies.

An IACUC member requested additional details, however this is not normally provided in cases like this one where the subcommittee does not identify non-compliant behavior.

TB left the meeting.

IACUC Training - JM

• JM gave a presentation on zebrafish care at the UW and what to look for during IACUC site visits.

TB returned to the meeting during the IACUC training.

Other Business

WaNPRC Common Use Drug Formulary – CH

O CH informed the IACUC of the changes that were made to the drug formulary. There are new drugs have been added to the formulary.

Motion was made and seconded: to approve the new formulary as written.

Discussion: None

<u>Vote:</u> approved with 15 members voting in favor.

IACUC Access to NHP neuroscience histories – JFI

- o JFI explained the histories that are currently provided for each repair request and gave additional options for getting more information about animals and concerns regarding records (WaNPRC Records Review).
- Discussion noted that this information relates to a particular animal and does not enable looking across animals or over time. Such looking would take considerable data mining but could be interesting, though utility of the results is not clear at this time.

Motion was made and seconded: To have OAW develop a mechanism to provide the data to the IACUC.

<u>Discussion:</u> Recommend amending the motion to have a subcommittee of the IACUC assess, and report back, the expected effort needed to collect and analyze the data and prepare the result in a way the IACUC could use and compare this to the utility of the expected results to the IACUC.

Amendment was accepted by the maker of the main motion

The chair appointed four members to the subcommittee.

Vote: approved with 15 members voting in favor.

Daily packet proposal – further information – AS

- O AS provided more information on how the process of daily packets will work and the mechanisms that have been developed to make this easier. Currently, packets are sent out weekly. All mechanisms that IACUC and OAW use to see, track, and act on items would remain the same as current weekly packets, plus a new HoverBoard report has been prepared that shows all items in review, when sent, when due, species on protocol, expected reviewer, etc.
- o The committee liked the new report, which is available now in HB.
- o It was agreed to start the daily packet 1 November 2018 and see how it goes. Urgent items would still be sent via email.

Weekly committee packet to include species – LJE

o LJE agreed this was moot, given the new report available in HB.

Urgent assignments – LJE

 LJE has concerns with the number of urgent items and how they are determined to be urgent. After recent conversations with OAW, and the expected effect of daily packets to reduce the number of urgent items, LJE is now more comfortable.

Closing Business:

The Meeting was brought to a close at 5:02 pm. The floor was opened to public comment.