Members Present:  AB  JS  MRB
        JT
        GL  KG
        CC  JFI  MB  SP
        JPVH  MK

Total present: 12

Members Absent:  DM  ES  MRK
        AP
        AW  GS  MS

Opening Business
☐ The Floor was opened for public comment at 2:30 pm.
☐ The IACUC Chair called the meeting to order at 2:39 pm.

Confirmation of a Quorum and Announcement
☐ Quorum was confirmed by ZR.

Approval of the IACUC Meeting Minutes
☐ The IACUC Chair called for the approval of the AUGUST 17, 2023 meeting minutes.
    Motion was made and seconded: to approve the minutes as written.
Further Discussion: none
Vote: Approved with 11 members voting in favor, 0 against and 1 abstentions.

Benefit Story

This month’s Benefit Story is about a vaccine against opioids that can prevent death from overdose. Here at UW, the Pravetoni research team has been working with collaborators around the country to develop and test a new kind of vaccine that can elicit antibodies against opioids like heroin and fentanyl. Research using mice and pigs has shown that specially formulated vaccines can elicit the production of antibodies that selectively neutralize the target opioid, while sparing other therapeutic opioid-based medications such as methadone and naloxone. This means these other drugs remain options for treating addiction, while protecting against a heroin or fentanyl overdose. Clinical trials for the new vaccines will soon begin. If the results are as promising in people as they have been in animals, these vaccines could become a powerful tool in the fight against opioid addiction and death from overdose. As always, a big thank you to the animals that made this possible.
Crouse et al. ‘A TLR7/8 agonist increases efficacy of anti-fentanyl vaccines in rodent and porcine models’ NPJ Vaccines (2023)

Attending Veterinarian’s Report – CC

I have checked with the leadership at all sites and have one adverse event to report at this time.

This event occurred on 8/15/23 at Western Fisheries Research Center (WFRC), a USGS contract facility with which we have an inter-institutional agreement. The affected animals were on UW protocol 4063-07 and housed at WFRC. I was promptly notified of the event by their AV after it occurred.

Immediately following a routine system backflush, mortality of one adult zebrafish was noted and several other zebrafish were noted to be swimming erratically. Water quality parameters were immediately tested, and oversaturation was noted (total gas measured at 103% and dissolved O2 at 94%, normal ranges are 100-101 and 89-92, respectively). All other parameters were normal. The WFRC veterinarian was then contacted. Supplemental air stones were added to the tanks and flow rates were modified to aid in dissipation of the extra gases in the water. Empty tanks were also added to the system with higher flow rate to help clear the system of the air infiltration. All fish were observed frequently overnight until all parameters normalized the following day. There were ~1000 fish in the system at this time, and a total of 7 mortalities were recorded, including 3 fish that were humanely euthanized.

Upon inspection of the system, a small crack was noted in a section of tubing that supplies air to the sump pump that could have caused increased air to get into the system and contribute to the event. This crack was immediately repaired. In addition, the standard backflush procedure has been modified to include a one-hour period where water is run only to an empty tank (with water parameters monitored) to ensure no issues with the supply after the backflush.

I consulted with our aquatic specialist about this event, and he has reviewed the event, the response, and the mitigation efforts with me. He concurs with WFRC’s response to this supersaturation event; it was identified quickly and handled as well as possible.

This adverse event has been reported to OLAW.

Protocol Monitoring

There has been no change in the protocols on enhanced vet monitoring since the last meeting. We have the same 23 protocols on monitoring and all labs continue to work well with veterinary staff to provide updates.

OAW Director’s Report – JFI

IACUC Metrics in folder

2 new lessons soon to be published, one on reporting concerns and one on expired substances.

Response to Letter 4565-02 – JFI

No discussion or questions
(2183-02) - On 7/27/23, during a surgery certification procedure on a mouse, the veterinarians observing the procedure noted that several aspects of the surgery were not performed in alignment with the approved IACUC protocol. Specifically, lidocaine was not administered as described in the protocol, the drill burr was sterilized by a hot bead sterilizer rather than autoclave, clean bedding was provided during postoperative recovery rather than no bedding, autoclaved water from a glass bottle was applied to the skull rather than sterile saline, and although they did monitor the animals for 3 days postoperatively this monitoring was not documented. In reviewing the protocol and surgery records it was determined that 12 mice over the previous 3 months were impacted, with those surgeries performed by 2 different surgeons. The group reported that they did not observe any signs of pain or abnormal behavior following these previous surgeries, and the mice were euthanized at experimental endpoint. After becoming aware of this noncompliance the group self-reported this incident to OAW. This has been reported to OLAW.

Discussion: The noncompliance was identified when one person was being certified for this surgery. Liaison reached out to group several times to ask about surgery training and protocol review and received positive affirmations from the lab that the training and review is effective. There are some concerns that the group may not be taking this incident as seriously as the IACUC does. A member asked whether the group has had other similar incidents in past; none recently. There was general agreement that a face-to-face conversation would be the most effective way to communicate with the research team to better understand this incident. The AV, Director, and/or Chair will discuss this matter with the lab, gather additional information, and then report back to the committee next month. Member asked if AV could suspend this protocol while this is investigated, which is possible, but not pursued by the committee. Expansion of Vet Monitoring was also discussed. AV will reach out to the PI immediately after this meeting. The committee will revisit this topic at next month’s meeting.

(4387-01) – On 6/12/23, 20 mice were administered a higher-than-approved dose of PTZ, a drug used to induce seizures. 15 of the mice were in a control group, and they experienced expected behavioral seizures and were euthanized at planned endpoint that day. Five mice were in an experimental group that received an IP injection of phenytoin at the appropriate dose, followed 1 hour later by PTZ. Phenytoin in combination with PTZ can act as a proconvulsant to lower seizure threshold and evoke a more severe seizure than PTZ alone. Four of the five mice were found dead the following morning. The fifth mouse was evaluated by veterinary services and found to be stable, but the decision was made to euthanize. It was determined that the bottle of PTZ solution was mislabeled as 10 mg/mL rather than 15 mg/mL, resulting in mice receiving 1.5 times the intended dose. This was self-reported to OAW on 7/27. The senior lab member who was formulating the compounds on the testing day was preparing multiple compounds that morning, and mistakenly mislabeled the bottle. The PI reports that the lab member is trained in compound formulation and analytical balance protocols, and it is something that the lab is generally very aware of and careful with since they often work with industry partners who require verification of formulations. The PI has been very responsive and transparent about the event, and has expressed remorse for this error. This has been reported to OLAW.

Discussion: It was affirmed that this was self-reported and that they were giving drugs at appropriate intervals. Members questioned how the bottles were labeled (hand-written). The committee discussed that it was an understandable human error, but that there’s no room for error. JFI will confirm whether this group has a history of other incidents. Discussed sending a letter of acknowledgment or counsel. It is common for groups to perform a secondary check in these situations and we can ask the group to develop a mechanism.
Motion was made and seconded: to send a letter of Acknowledgement  
Further Discussion: varied opinions re: letter of acknowledgment vs letter of counsel  
Vote: Failed with 5 members voting in favor, 7 against, 0 abstentions.

Motion was made and seconded: to send a letter of Counsel  
Further Discussion: will ask for lab to develop a method of performing a secondary check  
Vote: Approved with 10 members voting in favor, 2 against, 0 abstentions.

(4202-10) – On 8/14/23, one pigtail macaque underwent a surgery to replace a telemetry implant, which is a device that is implanted subcutaneously to allow monitoring of body temperature. This is a minor surgery that involves a skin incision to remove and replace the device. The following day it was discovered that there was an error in the animal number on the surgery request form, and the telemetry repair was intended to be requested for a different animal on the project. The animal that underwent the surgery had already undergone a previous telemetry repair surgery on 8/2/23. The protocol is approved for only one telemetry replacement surgery for each animal. The PI self-reported this incident to OAW on the day that it was discovered, 8/15/23. One corrective action that has already been instituted is that surgery request forms now automatically display the surgical history of the animal, so that it is more readily apparent if the request seems inconsistent with the animal’s previous surgical record. This has been reported to OLAW and the USDA.

Discussion: Surgeries typically performed by WANPRC Research Support so committee would like to know what research support staff is expected to do to ensure compliance with the protocol. Concern over the gravity of this error. It sounds like they have recently developed a better mechanism but it could be further improved. The original error was made by the lab who listed the wrong animal on the form, then it was not caught by the staff performing the surgery. Committee discussed getting broad clarification on the role of Research Support in compliance. Member clarified that this doesn’t address the incident in question. Who should receive a letter? Committee discussed sending a letter to the PI now and gathering more information on Research Support staff’s role and expectations for their role in compliance. The AV, Director and/or Chair will talk to RSS to gain more information and report back next month. Discussed sending a letter of counsel or reprimand.

Motion was made and seconded: to send a letter of Reprimand  
Further Discussion: none  
Vote: Approved with 9 members voting in favor, 2 against, 1 abstentions.

4328-01) – During an IACUC inspection on 8/9/23, the IACUC inspectors found several bottles of expired euthanasia solution inside the locked drug box. Upon checking the drug log, it was noted that 1.0mL of euthanasia solution was used on 7/26/23, from a bottle that expired on 6/23/23. 10 mice had received the expired euthanasia solution. The drug log is tracked by bottle, and the expiration date of the bottle is indicated at the top of the drug log sheet, but this was overlooked by the lab member who retrieved and logged the drug. In discussion with the PI after the incident, they liked the idea of adding a column where the person would need to write in the expiration date each time, and they play to implement that. A member of the group confirmed on 8/23/23 that the expired bottles have now been clearly labeled and placed in a separate bag within the lock box to segregate them from other drugs. The group is working on reverse distributing the expired bottles. This has been reported to OLAW.
Discussion: The committee has previously sent letters of reprimand after expired drugs have been used. There was discussion about the reverse drug distribution program. Requested response from PI should include a description of all measures the lab is taking to avoid using expired substances, including writing down the expiration date when logging drug use. Everyone agrees that this issue is a top priority and requires management and education.

Motion was made and seconded: to send a letter of Reprimand
Further Discussion: none
Vote: Approved with 11 members voting in favor, 1 against, 0 abstentions.

Policies – CC

☐ Veterinary Authority – CC
  ▪ Statement#1: To establish and define the scope of the authority of the Attending Veterinarian (AV) regarding the care and use of vertebrate animals and cephalopods used for research, teaching, training, testing, and related activities at University of Washington.
  ▪ Statement#2: formally authorizes AV to halt activity on behalf of the IACUC
  ▪ Statement #3: Grant a temporary cage size exception pending review if it’s in the best interest of the animals

Discussion: Intention of the document is to improve communication between vets and research teams. Background section edited to say “PHS” instead of “The Guide”, suggestion to change the word “suspension” to “halt”.

Motion was made and seconded: to approve the policy with noted changes.
Further Discussion: none
Vote: Approved with 12 members voting in favor, 0 against, 0 abstentions.

☐ Non-Pharmaceutical Grade Substances in Laboratory Animals – CC
  ▪ Statement#1: This policy describes the conditions under which non-pharmaceutical grade substances may be used in laboratory animals. It also covers preparation, storage and labeling of drug formulations.
  ▪ Statement#2: Changed from 30 days to a one month period

Motion was made and seconded: to approve the policy as written.
Further Discussion: none
Vote: Approved with 12 members voting in favor, 0 against, 0 abstentions.

☐ Preparation, Storage, and Labeling of Drug and Chemical Formulations – CC
  ▪ Statement#1: Updated to be consistent with revised Expired Substances Policy.
  ▪ Statement#2: Guideline, no vote required.

No discussion
Expiration Date Management for Medical Supplies, Equipment, and Substances – CC

- Statement#1: This policy establishes limitations on usage of expired drugs and medical materials in animal research to protect the health and welfare of research animals and to ensure compliance with applicable federal, state, and local regulations. It also provides guidance for establishing expiration dates based on dilution and/or reconstitution.
- Statement#2: More comprehensive and specific about exp dates, and includes fluid use guidelines, clarifies 1 month exp for fluids, added sterilization packs.
- Statement #3: There are some things that need to be reviewed by leadership and will be added and voted on in a future meeting/revision.

Discussion: Chair asked if it’s possible to include a link on reverse distribution within the policy content. This will get added in an obvious place, such as references.

Motion was made and seconded: to approve the revision to the policy as written.
Further Discussion: none
Vote: Approved with 12 members voting in favor, 0 against, 0 abstentions.

IACUC Training

Expired Substances e learning was done as a group – CC

Discussion: Member pointed out that the language of “discard the drug” might be misinterpreted, suggested adding “discard properly” to clarify.

Other Business

Primate Standard Housing Variance Exception – JFI

Questions/Comments: none

Motion was made and seconded: to approve the exemption as written.
Further Discussion: none
Vote: Approved with 11 members voting in favor, 0 against, 1 abstentions.

Closing Business:
The Meeting was brought to a close at 4:09 pm.