Members Present:	AB *KSH CG CH FRR	JE JM JPVH JS KS	MK ML SJH SL SRH (remote)	TH (remote)
Members Absent:	MS	JB	KL	KG

<sup>\*</sup>KSH alternate for AS

## **Opening Business**

• The IACUC Chair called the meeting to order at 2:31 pm.

### **Confirmation of a Quorum and Announcements**

Quorum was confirmed by KC.

Member entered at 2:33 PM

#### **Protocol Review**

- AMEND201900771 (2225-07) **KSH** 
  - o The PI provided a brief presentation on their research and the history leading to the current phase.

### Member entered at 2:37 PM

- o Reason for FCR: Number of animals requested and the potential high mortality
- O The lab is evaluating the use of human embryonic stem cell-derived cardiomyocytes (hESC-CMs) as a new treatment to restore heart function in patients with heart diseases. The group uses swine models to evaluate the effect of their cell therapy on heart function in a myocardial infarction (MI) model.
  - The IACUC discussed the reduction of animals from 1162 originally requested to less than 400 and if this could potentially result in future amendments to add animals. It was confirmed by the vet monitor that <400 is a more realistic number and that there is little concern with the group needing to request additional animals.

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

<u>Further discussion:</u> *Protocol is on vet monitoring and updates will be provided to the IACUC.* <u>Vote</u>: Approved with 16 members voting in favor, 0 against, 0 abstentions.

#### **IACUC Training**

- Site Visit Refresher **JS** 
  - O The IACUC chair reminded Members, when they are site visiting lab spaces, to ask researchers whether the animal work could be done within a vivarium instead. It was also emphasized to be sure to ask when the last time a procedural space was used and if it was over a year ago, to suggest taking it off the protocol until it will again be used. Let OAW know of any groups open to either change.

Member left at 3:25 PM

# **Approval of the IACUC Meeting Minutes**

• The IACUC Chair called for the approval of the June 20, 2019 meeting minutes.

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

**Discussion**: None

Vote: Approved with 13 members voting in favor, 0 against and 2 abstentions.

### Benefit Story – JS

• This month's benefit story is about finding a cure for adult-onset blindness. A number of different diseases target the retina and cause the death of neurons that are important for visual processing. Because adult humans, like other mammals, are unable to regenerate neurons, disease progression leads to visual impairment and eventually blindness, as more and more neurons are lost forever.

While many research teams are investigating the underlying causes of individual diseases like retinitis pigmentosa, Dr. Tom Reh's group here at the University of Washington is taking a different approach to curing blindness. The Reh team is trying to figure out ways to coax non-neuronal cells in the retina to transform themselves into neurons, to replace the ones killed by disease.

It has been known for a long time that retinal regeneration <u>is</u> possible because fish do it all the time. When damage is done to a fish retina, it turns on a gene in non-neuronal cells that triggers their conversion to neurons. Although this gene is not normally activated by retinal damage in mammals, the Reh lab was able to experimentally force the expression of the pro-neural factor encoded by the gene and regenerate several different types of retinal neurons in young mice. Older mice, however, failed to show much improvement.

The breakthrough came with the addition of a treatment that modifies the chemical state of genomic DNA and makes it easier for the pro-neural factor to turn on other pro-neural genes. With the combined therapy, newly transformed cells in previously damaged adult retinas displayed many of the characteristic features of retinal neurons, including the ability to respond to light. Further work will be needed to translate these findings into clinical trials, but they open up exciting new possibilities for the treatment of blindness caused by a variety of different diseases that target the retina.

Jorstad NL, Wilken MS, Grimes WN, Wohl SG, VandenBosch LS, Yoshimatsu T, Wong RO, Rieke F & Reh TA 'Stimulation of functional neuronal regeneration from Müller glia in adult mice' Nature 548: 103-107 (2017).

### Attending Veterinarian's/OAW Director's Report - KS

- Adoptions this month 1 dog and 2 ferrets
- IACUC metrics- see meeting documents
- HBAS did not meet this month.
- Facility issues:
  - o WaNPRC I563: On the morning of 6/14/19, red ring that is supposed to be locked around the water valve was cut and missing and the valve was in the off position. It's unclear why

the valve was turned off but perhaps a water leak had been noted there. It appeared to have happened sometime between the previous night and that morning. The cage lixits in that room were checked and water flow was low. The valve was quickly turned back on, no issues have been noted since then, and a red lock was placed back on the valve. No animals were adversely affected.

### • Protocol Monitoring:

O Twenty-one total protocols. 13 involve surgery, two restraint (and sx), one conscious restraint, 1 tumor modeling, 4 miscellaneous (tape skirt, infection, water quality). Eight are inactive right now.

### • AAALAC site visit follow-up:

- o See Post Site Visit Communication document in meeting supporting documents.
- O **Update on status of mandatory finding:** For the SLU 3.1 washer, a new pull cable has been installed by clean side door so emergency egress is now possible from both doors. Staff have been re-trained on emergency procedures. Side emergency pull cables have been replaced with more visible ones in the 3.1 washer but still need to be replaced in the Brotman washer. Long range plan is to add a second emergency cable on the opposite side of the Brotman washer. Autoclave "lock-out" pins to prevent door closure have been obtained and staff trained on their usage.
- o **Update on feed storage SFI:** New air conditioner unit has been installed in the feed storage building at ABC and temperature is staying below 70°F despite the hot weather. Brotman feed storage area has been moved to a different location in the facility as the previous location could not be consistently maintained below 70°F.
- Adverse Events: None

#### Non-compliance:

- o PI Response to Letter of Counsel related to last month's non-compliance on 4431-01: Lab members have been retrained on animal handling procedures at the Brotman facility. They have been instructed to ensure that mice recovering from anesthesia are closely monitored until complete recovery.
  - The group also met with the AV and their liaison to discuss the importance of monitoring animals until they are fully recovered from anesthesia and the lab members received a special re-orientation to the Brotman facility by an Animal Use Training Services instructor. The AV, liaison, and trainer all felt that the group took the meetings and re-training seriously.
  - *No additional action asked for by the Committee.*

#### From Arizona

- o Facilities items: No items to report.
- o Adverse events: No adverse events to report.
- A member asked and the committee discussed how long feed could be in 'temporary', not climate controlled, storage. Food stored in housing rooms is different from a dedicated storage room, so the recommended storage, since it is above 70 degrees, is about a week. If the feed manufacturer has specific recommendations, they can be followed.

• A member asked about and the committee discussed temperature control in transport vehicles. For animals that are being transported in a vehicle, it is important to remind groups to keep the vehicle between 68-79 degrees so be sure to warm the vehicle up, or cool the vehicle down, before transporting the animals.

### **Standard Operation Procedures / Policies / Guidelines**

- Housing and Care of Vertebrate Animals **KS** 
  - *Updating policy to reflect current terminology and procedures in HoverBoard.*

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

**Discussion**: None

Vote: Approved with 15 members voting in favor.

#### Other Business

• WaNPRC Common Use Drug Formulary – **CH** 

• Minor changes including updating to reflect updated Standard Procedures in HoverBoard including some dose and route updates.

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

Discussion: None

Vote: Approved with 15 members voting in favor.

- Semi-Annual Program Review and report to the Institutional Official—LI
  - o The semi-annual report to the IO was reviewed.
  - o LI will update the report with the AAALAC site visit follow-ups noted above.
  - o Based on a committee member's inquiry, LI will add one departure for a procedure that was missing from the report.
  - o All members should indicate by email their concurrence, or not, with the revised report, and send any minority views, by 25 July.
- Oversight of Invertebrate Research LI
  - o Per discussion at the June meeting, a subcommittee has been formed to develop recommendations to the IACUC. A cephalopod researcher has volunteered to assist and background information has been sent out to the subcommittee. The subcommittee is planning to bring recommendations to the full IACUC by the September meeting.
- Guidelines for Drug and Chemical Formulations **KS** 
  - Due to several comments from AAALAC regarding how researchers label drug and chemical formulations, this guideline was created by pulling this content off of the Use of Pharmaceutical Grade Substances in Research Animals policy.
    - Policies are reviewed and approved on a three year basis, unless necessary changes need to be made and approved sooner.
    - Guidelines are written and the IACUC is informed about them, but the IACUC does not have to approve a guideline.
    - *SOPs are reviewed and approved by the IACUC on a case by case basis.*

- A member raised the topic of sharing knowledge across research groups
  - In the cases where a group is known to be knowledgeable in certain procedures, reach out to OAW to put groups in contact with each other in order to share information.
- A member asked how to handle site visits where controlled substances are not at the visited location.
  - If the drugs are not in the room for the lab that you are visiting, then you do not have to inspect the drugs. The drugs and drugs logs will be inspected in the location where the substances are kept.

## **Closing Business:**

The Meeting was brought to a close at 4:09 pm. The floor was opened to public comment.