

University of Washington  
June 20, 2019 IACUC Meeting Minutes

Members Present:	AB	JE	ML
	AS	JPVH	SJH
	CG	JS	SL
	CH	KG (remote)	TH (remote)
	FRR	KS	

Members Absent:	MS	JB	JM
	KL	SRH	MK

### Opening Business

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

### Confirmation of a Quorum and Announcement

- Quorum was confirmed by KC.

### Protocol Review

- AMEND201900323 (4073-01) – AS
  - Reason for FCR: Concerns regarding scientific merit of the work and the literature search
  - The overall goal of this protocol is to evaluate dopamine signaling during motivated behaviors and decision making in rats and mice, and to gain a better understanding of how these higher-level cognitive processes change when normal dopamine signaling is disrupted. The amendment being reviewed expands Project 9 of the protocol, adding a new study that investigates the role that dopamine and stress peptides (corticotropin-releasing factors) play in mediating fentanyl self-administration and escalation.

This new study is supported by departmental funds. The Head of the Division of Psychiatric Neurosciences has reviewed the proposed work and provided a letter of support. This letter has been attached in the Amendment History. The literature search will be updated with the triennial review of the protocol next month.

*The IACUC discussed the merit letter written by the Head of the Division of Psychiatric Neurosciences, asking that the letter be attached to the supporting documents of the protocol.*

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

Discussion: Attach the letter sent from the chair into the supporting documents.

Vote: Approved with 14 members voting in favor, 0 against, and 0 abstaining.

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**Approval of the IACUC Meeting Minutes**

- The IACUC Chair called for the approval of the May 16, 2019 meeting minutes.  
Motion was made and seconded: to approve the minutes as written.  
Discussion: *None*  
Vote: Approved with 14 members voting in favor, 0 against, and 0 abstaining.
  
- The IACUC Chair called for the approval of the June 10, 2019 Special IACUC meeting minutes.  
Motion was made and seconded: to approve the minutes as written.  
Discussion: *None*  
Vote: Approved with 7 members voting in favor, 0 against, and 7 abstentions.

**Benefit Story**

- This month's benefit story is about the development of a new drug delivery system that could significantly improve the treatment of HIV, and provide a permanent cure for AIDS. Although current combined anti-retroviral therapies are able to dramatically extend the lives of AIDS patients, there are some serious drawbacks to this approach. One is the requirement for a complicated daily drug regimen that can be hard for patients to maintain. A second challenge is getting the drugs to all the parts of the body where the AIDS virus resides, especially within lymph nodes. Current anti-retroviral therapies have proven effective at clearing virus out of most parts of the body, but treatment must be continued or virus levels will rebound. It is thought that this is because the virus can hide out in lymph nodes during treatment, and emerge and replicate once treatment is discontinued.

The Ho lab here at UW has pioneered an injectable nanoparticle drug delivery system that can keep drugs circulating throughout the body for far longer than drugs taken orally, allowing them to enter and accumulate within lymph nodes to reach levels that can permanently eradicate HIV. The Ho group has bioengineered what are essentially very tiny soap bubbles filled with a combination of three powerful anti-HIV drugs. In a study using non-human primates, a single subcutaneous injection of these nanoparticles led to sustained drug levels for several weeks and produced over 50-fold higher drug concentrations within lymph nodes compared to standard oral drug delivery. These high levels of drug are expected to eradicate virus within lymph nodes, and hold promise for the permanent cure of AIDS in humans who have been infected with HIV.

Yu G, Kraft JC, Yub DY, & Ho RJY 'Recent developments of nanotherapeutics for targeted and long-acting, combination HIV chemotherapy' European Journal of Pharmaceutics and Biopharmaceutics 138: 75-91 (2019)

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

- Adoption of 1 dog and 10 zebrafish in the last month
  
- IACUC metrics- see meeting documents
  
- HBAS did not meet with month so nothing to report out.
  
- Request: If there are veterinary care related questions during DMR, please follow up with the veterinarian that conducted the pre-review.

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- Facility issues:
  - HVAC in K-wing facility: On 5/18/19, high temperature alarms occurred due to the HVAC steam valve been stuck allowing hot air into the rooms. Fans were brought in to cool housing rooms. The valve was fixed quickly and temperatures returned to normal. Highest room temperature was 82<sup>0</sup>F and total duration of high temperature alarms was 2.5 hours. No animals were adversely affected.
  - No animals remain at the HR&T facility. Some animals were euthanized per investigator's request, and many were moved to different facilities. It is unclear when the building will be cleaned up and reopened.
- Protocol Monitoring:
  - Twenty-one total protocols. Of the protocols, 13 involve surgery, two restraint (and sx), one conscious restraint, 1 tumor modeling, 4 miscellaneous (tape skirt, infection, water quality). Seven are inactive right now.
  - 3328-07: The lab group has run a number of trials of the Morris Water Maze with ferret kits. The kits have been observed to either float or swim for the full minute of the testing. As the ferrets appear to handle the testing well, I recommend that vet monitoring be discontinued for this procedure. Vet monitoring will remain in place for this group to observe the CHIMERA pilot studies which have not begun.
- Adverse Events:
  - 4298-01: 11 adult mice of varying ages and sexes were anesthetized with ketamine/xylazine prior to receiving an intracranial injection of virus. Three of the eleven mice died, and one was moribund and euthanized by Veterinary Services. All mice received the same volume of the anesthetic cocktail, regardless of their size, and thus smaller mice received anesthetic doses outside of the standard ranges for ketamine and xylazine. The presumed cause of death is anesthetic overdose.  
**Corrective action:** The group will dose with ketamine/xylazine by weight instead of giving one standardized volume to all mice. **Reported to OLAW.**
  - 4452-01: 9 cages of mice were reported for having no food, and three mice were found dead in separate cages. All mice had cranial implants placed, and the investigators had special service requests in place to allow these cages of mice to be fed on the floor with no wire top in the cage. There were many other special service requests in effect for the room, which may have led to confusion about which cages were to be fed by husbandry staff, and which were to be fed by the investigative group for restricted feed studies.  
**Corrective action:** Husbandry and Vet Services staff met with the investigative group to discuss and refine the special feeding situations in the room. A clearly identified rack with a large sign will be dedicated to cages that should be fed daily by the investigative group. Any cages not on this special rack will be fed by husbandry daily. The group will continue to mark a daily log that they have fed any cages on their special rack, and will provide a list of emergency contacts if there is a question about feeding status. **Reported to OLAW.**

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*The IACUC discussed the challenges of special cage handling within housing rooms, the various ways that investigators mark their cages, and the feasibility of using a standard method of labeling cages with different husbandry requirements.*

- Three mice were found dead in a cage that was disengaged from the rack watering system. The researcher had last handled the cage a week prior to this so it appears to be a husbandry error.  
**Corrective action:** The facility supervisor was made aware of the situation and scheduled retraining with the husbandry staff that provides care for the animals in this room to ensure cages are engaged in the rack. **Reported to OLAW.**
- Non-compliance:
  - 4431-01: Found during the AAALAC site visit. Anesthetized mice were left unattended in a cage in a ventilated change station. Some of the mice were in various states of recovery and two were deeply anesthetized. Researcher could not be immediately found and Vet Services was called to check on the mice. All mice recovered. Due to several instances of this group not following standard procedures, the AV sent a Letter of Concern to the PI and met with the PI to make clear that mice recovering from anesthesia must be closely monitored until complete recovery.

Motion was made and seconded: to send a Letter of Counsel to the PI.

Discussion: *None*

Vote: Approved with 14 members voting in favor, 0 against, and 0 abstaining.

Motion was made and seconded: to send a Letter of Commendation to the Vet Tech and their supervisor that found the animals and ensured they were cared for.

Discussion: *None*

Vote: Approved with 14 members voting in favor, 0 against, and 0 abstaining.

- USDA inspection:
  - USDA was on-site June 4-6, 2019 to conduct a routine inspection as well as investigate the three self-reported adverse events (previous reported to the IACUC) and one received complaint. They inspected all housing and procedural areas where USDA covered species are kept and they reviewed relevant records. The inspection report contained two citations; one for the NHP that died post-surgery after a shortened fasting time; and the other was the controlled substances diversion with the discovery during the inspection of an unattended drug safe being left open with the key in the door. Corrective Action: The person that left the drug safe open no longer has access and an email was sent out to all researchers informing them of the consequences of leaving the drug lock boxes open and unattended.
- From Arizona
  - Facilities items: No items to report.
  - Adverse events: No adverse events to report.

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**Standard Operation Procedures / Policies / Guidelines**

- Frog Oocyte Harvest (policy renewal) – **ML**

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

Discussion: *None*

Vote: Approved with 14 members voting in favor, 0 against, and 0 abstaining.

**Other Business**

- AAALAC Site Visit – **KS**

- One mandatory item and 11 SFIs. Finalizing draft of post site visit communication which is due 6/24/19.

*The IACUC discussed the AAALAC site visit and the findings from the visit including the one mandatory item related to the rack washer and autoclave safety measures. These are being addressed by DCM management through work orders, purchasing of equipment, change in signage of the effected units, and personnel re-training on the safety measures.*

- Semi-Annual site visit reminder

*The Attending Veterinarian brought up three main points that IACUC members should focus on when performing Semi-Annual site visits as a result of the recent AAALAC Site Visit. This includes reminding groups to never leave the safe open or the key in the door of the controlled substances safes; when visiting Aquatics areas, ask how they are preparing/handling MS-222 and remind them about safe preparations/handling of MS-222; and when in facilities with washers, verify that the emergency egress works, that signage matches what actually happens, and ask personnel about emergency exits and safety training they receive.*

*The IACUC discussed the action plans related to these items, and proposed some alternate ideas that the IACUC could do when performing site visits. The IACUC also emphasized that the washers are primarily an EH&S issue, but that it is beneficial to have as many eyes looking at them as possible.*

- Feed on the floor at WaNPRC – **TH**

- *TH presented the exception request for feeding on the floor at the WaNPRC compounds stating that scattering biscuits throughout the floor of the compound minimizes contamination, and ensures access to food and foraging opportunities for all animals. This would apply to all WaNPRC compounds, not just Arizona.*

*A modification was requested to remove AZ from the title of the exception and replace with Compounds.*

Motion was made and seconded: approve exception to the Guide, with the modification of the title to “Feed on the Floor at WaNPRC Compounds”

Discussion: *None*

Vote on the motion: Approved with 14 members voting in favor, 0 against, and 0 abstaining.

- IACUC oversight of cephalopod research – **KS**

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- A couple of PIs are known to work intermittently with octopuses. These research teams already work with the DCM aquatics veterinarian to ensure housing conditions are appropriate, but the IACUC does not currently have oversight of this research through the review and approval of a protocol, nor regularly inspects the housing and procedural spaces. Also, personnel do not have training requirements, nor are they necessarily enrolled in the occupational health and safety program.

*The IACUC discussed how many groups are currently doing cephalopod research at the UW, where to draw the line on invertebrate research that should have IACUC oversight, the potential for new policies and SOPs, and the training that may be required for personnel working in cephalopod research. A subcommittee will review these questions and make recommendations to the full IACUC.*

- Semi-annual program review – **KS**
  - For this semi-annual reporting period, we will use the AAALAC site visit as our programmatic review as they did a very thorough review of our program. Any other suggestions for program improvement? Next month we will review the semi-annual report.
- Daily Packets: *A member asked for ideas on how to manage their DMR assignments effectively. Since moving from weekly to daily packets, deadlines have been occasionally missed. OAW will look to see if it is possible to send reminder emails from HoverBoard. Other members offered some of their solutions.*

**Closing Business:**

The Meeting was brought to a close at 3:55 pm. The floor was opened to public comment.