

University of Washington
February 15, 2018 IACUC Meeting Minutes

Members Present:	AB	JFI	KL	SL(Entered @ 2:45)
	AS	JLS	LJE (Remote)	
	CH	JM	ML	
	FRR	JPVH	SH	
	JB	JS	TB	
Members Absent:	CG	JE	MS	

Opening Business

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

Confirmation of a Quorum and Announcements

- Quorum was confirmed by KC.

Approval of the IACUC Meeting Minutes

- The IACUC Chair called for the approval of the January 18, 2018 meeting minutes.
Motion was made and seconded: to approve the minutes as written.
Discussion: *Any discussion/changes/notes*
Vote: Approved with 15 members voting in favor.

Benefit Story – JS

After hearing Casey Childers' recent Science in Medicine lecture, I wanted to share his Benefit Story with the IACUC. Dr. Childers has led his team to find a cure for X-Linked Myotubular Myopathy, a devastating muscle disease that typically leads to respiratory failure and death by two years of age. The Childers lab had done extensive research on this disease using mouse models, and had come up with a promising lead, but they needed to extend their findings to a large animal model before they could get approval for clinical trials in humans. Working with a highly motivated patient family, a dog was found with a naturally occurring mutation in the myotubularin gene that is responsible for X-Linked Myotubular Myopathy. The Childers group has now established a colony of these dogs, and used them for an extremely successful gene-therapy study that restored motor function and prolonged survival by introducing a healthy copy of the myotubularin gene into muscle cells. Just a single systemic dose of virus was needed to cure affected dogs for up to four years. In his Science in Medicine talk, Dr. Childers was especially generous in his praise for the UW staff who take care of this colony of disease-model dogs. Caring for these pups is really difficult work—especially the ones that serve as the untreated controls that are critical for the scientific validity of these studies. Their rigor allowed the Childers group to proceed to human clinical trials that were started just a few months ago. Although not without complications, the early results are very promising and two out of three young children were already showing signs of significant improvement. Thanks to animal research, it looks like a cure for X-Linked Myotubular Myopathy may be on the horizon.

(Mack et al. 2017 'Systemic AAV8-Mediated Gene Therapy Drives Whole-Body Correction of Myotubular Myopathy in Dogs' *Molecular Therapy* 25:839-854)

University of Washington
February 15, 2018 IACUC Meeting Minutes

Attending Veterinarian's Report - TB

Facility issues:

Humidity: Low humidity reported in our older facilities without humidity control.

Temperature and lights:

1/19/18 Four mouse rooms in this rodent facility had the lights fail to come on at 6 am. The problem was fixed by 11:40 am. There was a network device down that controlled the node that controlled the lights.

Protocol Monitoring:

There are 18 active protocols on the veterinary monitoring program. We have added one protocol to the veterinary monitoring protocol in response to a concern by one IACUC member about distress during hypoxia in 21 day old ferret pups. I have observed this procedure twice, and did not observe any indications of distress or change in behavior of the pups from either before the hypoxia, or after the hypoxia when the ferrets were being exposed to hyperoxia.

Adverse event:

3230-01 This protocol studies fluid percussion injury in rats. An unapproved surgery was performed where a minipump was placed in the peritoneal cavity of a rat on Jan. 11th. Subcutaneous minipump placement is approved on this protocol, but not peritoneal. The rat did receive a local anesthetic and one dose of pain relief, as is approved on the protocol for the subcutaneous minipump placement. But pain relief was not continued for 48 hours as we would recommend for a major abdominal surgery. The rat was a practice animal for the minipump surgery and had not any other manipulations. The rat was found dead on Jan. 21st. Necropsy did not definitively indicate the cause of death but there were lesions in the abdomen associated with the minipump.

The group honestly believed that the surgery was approved, but did not go to back to their protocol to double check. They admitted that they made a mistake and that this was not intentional. There is no history of non-compliance with this group.

Motion was made and seconded: to send a letter of counsel to a group asking for how this will be avoided in the future.

Discussion: *there was some discussion whether a letter of counsel or letter of reprimand was appropriate.*

Vote: Approved with 14 members voting in favor, and 1 opposed.

HBA Subcommittee:

The HBA committee met this month and discussed incidents of morbidity and mortality in USDA species. I would urge you to look at the minutes.

University of Washington
February 15, 2018 IACUC Meeting Minutes

OAW Director's Report – LI

- **Metric Update**
 - A member asked about the number of URGENT protocols in the last month. This will be included in all future metrics.
- **Responses from PI's to letters**
 - *NHP had a small overdraw of blood: PI understands the importance of following the protocol and made changes to their procedures including aligning their tracking sheet to the Primate Center's blood draw tracking system*
 - *Survival Surgery on a frog when only terminal surgeries were approved on the protocol: PI is deeply apologetic. All surgeries were stopped, approved procedures were discussed with lab personnel, and requirement initiated for regular review of the approved protocol by everyone in the group. The group has submitted an amendment to add survival surgery to the protocol.*

MEMBER ENTERED – 2:45

Protocol Review

- AMEND201800064 (4167-01) – Repair Surgery - **JFI**

Background: The objective of this group's research is to reveal the neural mechanisms that underlie trichromatic visual perception. To accomplish this, they record the electrical activity of neurons from the visual system of rhesus monkeys to study the computations they perform with regard to their visual input.

Request: The group is requesting one repair surgery for A12013, a 10 year old male rhesus macaque. The group reports that he is a healthy, well-trained monkey who has been trained to sit calmly in a chair and fixate his gaze on a dot while a variety of visual stimuli are presented in his peripheral vision. His initial surgeries to implant head post, eye coil, and recording chamber were performed in 2013 and 2014. His first recording chamber was removed and a 2nd recording chamber implanted in June 2016 – this is an approve surgery in the protocol. A repair surgery was performed on November 2016 to reinforce that second recording chamber, and another repair was approved in December 2016. That approved repair surgery was used in May 2017 to again reinforce the chamber. There are no current problems with any of the animal's implants.

Current implants: Headpost, left eye coil, recording chamber.

Clinical history: Unremarkable. Mild hyperplasia in left eye, but no tearing or discharge.

University of Washington
February 15, 2018 IACUC Meeting Minutes

Behavior report: This animal previously engaged in some Locomotor Stereotypy (LS) but that was last reported in May 2017. He is pair-housed with a long-term social partner. BMS has recommended standard environmental enrichment (EE) 7 days a week as well as TV enrichment and audio enrichment.

Motion was made and seconded: to approve the repair surgery request as written

Discussion: *Why only asking for 1 repair surgery and none in the bank? This one will be 'in the bank'; usually ask for 2 if they already have a repair scheduled.*

Vote: Approved with 16 members voting in favor.

- 2326-09 – Repair Surgery - **JFI**

Background: The goal of this study is to establish a protocol for noninvasive vagus nerve stimulation (VNS) that will augment targeted neuroplasticity and enhance cognitive performance in normal nonhuman primates. The knowledge and technology generated by this project are vital for the development of neurorehabilitation treatments after stroke and brain injury.

Request: The group is requesting two repair surgeries for A14229, an almost 7 year old male rhesus macaque. This animal was recently transferred from protocol 2326-08 to protocol 2326-09. He received his first surgeries on protocol 2326-08 in March, May, and August 2017 to implant head stabilization hardware, a VNS nerve cuff, and brain electrodes. He also had two clinical surgeries in October and November 2017 to remove a connector on his head and to clean and debride around his cranial implant. In December 2017 his approved repair surgery was used to repair his vagus nerve cuff.

The group reports that his current vagus nerve cuff is again non-functional and they would like to replace it with a new, smaller cuff provided by a different company. They have also proposed changes to their technique that will hopefully improve their success rate. They are requesting two repair surgeries in order to use one for repair of the cuff, and have the other one banked.

The group had previously indicated that this animal did not have a particularly long attention span, but they report that his behavior has improved over the past few months and his performance is very good for the two behavioral tasks for which he is trained.

Current implants: Cortical implant with dual plug electrodes, pedestal case on skull with leads coming from vagus nerve cuff (dissect out vagus nerve in the neck and place a cuff around it to run low level electrical stimulus), and halo head stabilization.

Clinical history: This monkey has lost some weight (4.5% weight loss with a Body Condition Score of 3 which is optimum) since his last surgery, and he is currently on antibiotics, but he is bright alert and responsive and his incisions appear to have healed well. He is currently being monitored by vet staff, and he will be evaluated by a veterinarian prior to any repair surgery.

University of Washington
February 15, 2018 IACUC Meeting Minutes

Behavior report: This animal has minor alopecia. He is currently singly-housed. BMS will continue to look for a compatible partner for him. BMS has recommended standard environmental enrichment (EE) 7 days a week as well as extra enrichment, TV enrichment and audio enrichment.

Not currently in HoverBoard because there is another amendment currently in process.

Motion was made and seconded: to approve the repair surgery request as written

Discussion: *none*

Vote: Approved with 16 members voting in favor.

Standard Operation Procedures / Policies / Guidelines

- Euthanasia of Research and Teaching animals – **ML**

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

Discussion: *some discussion whether the specification of when zebrafish are adult is accurate*

Vote: Approved with 16 members voting in favor.

Other Business

- IACUC Member Expectations – **JS**
 - *Describing the 4 main responsibilities of the IACUC and the minimal expectations regarding IACUC members.*

Motion was made and seconded: to approve IACUC Members Expectations document as written.

Vote: Approved with 16 members voting in favor.

- Additional Expectations - **JS**
 - *Take site visit obligations seriously. It is unprofessional to cancel last minute.*
 - *Please leave a private comment if you have looked at a protocol (even if you are not the DMR) letting us know what you looked at and if you did or didn't have concerns or comments. This will provide information on how widely read protocols are in HoverBoard.*
- The Difference between Pain and Suffering – **Discuss at March Meeting**
 - *Article uploaded in the folder. It is an interesting and thought provoking article. Please read and be prepared to discuss at next meeting.*
- Curnow parent protocol called for review by committee member and will be discussed at the March Meeting. Please look for documents to look at in the March meeting folder.

Closing Business:

The Meeting was brought to a close at 3:12 pm. The floor was opened to public comment.