Members Present:			
	JLS	LJE	KL
	SL	JS	JFI
	CG	MB (AS Alt)	BM (CH Alt)
	RR	JB	JM
	SH	PB	
Members Absent:	AB	ML	TB
	JPVH		

Opening Business

The IACUC Chair called the meeting to order at 2:33 pm

Confirmation of a Quorum and Announcements

Quorum confirmed.

Protocol Review WSG Sablefish Project – LI

A partnership between NOAA and the Jamestown-S'Klallam tribe aimed at developing a sustainable fish-farming enterprise was described by NOAA and UW representatives. Partial funding will come through Washington Sea Grant. There was discussion as to whether or not this joint venture falls under the auspices of the University of Washington IACUC. Topics raised include funding of the project, ownership of the animals, veterinary care, impact of the fish on the area, UW vulnerability, and applicability of regulatory and accrediting agencies (OLAW, USDA, AAALAC).

Four main questions were raised by the IACUC, and answered by Project representatives:

- 1. Is any part of this project considered research? No, there is not any research being done as part of this project; it is entirely a commercial venture.
- 2. Will there be any teaching of UW students? No, no UW students (undergraduate or graduate) will be taught as part of this project.
- 3. Will there be any training of UW students? No, no UW students (undergraduate or graduate) will be trained as part of this project.
- 4. Does UW ever own the animals in the project? No, UW does not, at any point, have ownership of the animals involved in the project.

Motion: A motion to not require a protocol was made and seconded.

<u>Discussion</u>: It was reiterated that no research, teaching, or training will take place as part of the project and that UW does not ever own the animals involved.

<u>Vote on the Motion</u>: The motion was approved with 14 members voting in favor, 0 against, and 0 abstaining

Approval of the IACUC Meeting Minutes

The IACUC Chair called for the approval of the September 21, 2017 IACUC meeting minutes.

Several minor corrections were suggested.

<u>Motion</u>: A motion to approve the minutes with the corrections suggested was made and seconded. <u>Discussion</u>: There was discussion about the level of detail of meeting minutes and what was required by law. <u>Vote on the Motion</u>: The meeting minutes were approved with 11 members voting in favor, 1 opposed, and 2 abstentions

Benefit Story – JS

Over the past several years, we have become increasingly aware of the profound impact that the gut microbiome has on health and disease. This month's Benefit Story comes from the DePaolo lab, whose research in mice aims to identify genetic and environmental signals that influence the composition and distribution of bacterial species in the GI tract. The DePaolo group also wants to understand how changes in the gut microbiota can subsequently alter an individual's propensity to develop chronic inflammation. Changes in the gut microbiota can be both beneficial and harmful to the organism, and changes that may be protective at one time, can become deleterious if they persist. The DePaolo lab has identified genetic factors that can influence the host response during acute GI infection, and trigger chronic inflammation long after pathogen clearance. These long-lasting changes to the immune response were associated with changes in the gut microbiota of infected mice. DePaolo's group was able to prevent microbiota alterations and inflammation by treating infected mice with probiotic bacteria. Understanding the relationship between acute infections, the host genome, gut microbiota, and chronic inflammatory bowel disease has the potential to help many individuals with this persistent and painful condition. [Kamdar K, Khakpour S, Chen J, Leone V, Brulc J, Mangatu T, Antonopoulos DA, Chang EB, Kahn SA, Kirschner BS, Young G, DePaolo RW 'Genetic and Metabolic Signals during Acute Enteric Bacterial Infection Alter the Microbiota and Drive Progression to Chronic Inflammatory Disease.' Cell Host Microbe. 19:21-31 (2016)]

Attending Veterinarian's Report - GS

Facility issues:

Humidity: No issues reported.

Temperature and lights:

8/31/17: Seattle City Light experienced electrical bumps in power that affected the whole UW campus. Many facilities were affected, but through diligent work of facilities, DCM and WaNPRC staff most facilities stayed within appropriate temperatures ranges. One room in a centralized mouse facility reached 83.5 degrees briefly in the middle of the afternoon. The sensaphone alarmed and fans were brought into the vivarium. A control valve had to be rebuilt, but the temperature dropped quickly (by 4:30 pm) and remained normal.

9/22/17: Lights failed to go off in 4 rodent rooms as they should have in the evening. The issue was a software/electrical panel. It has been fixed, but a more permanent fix is in the works (change the electrical configuring).

Protocol Monitoring:

There are 18 active protocols on the veterinary monitoring program. I will be talking about one of those in the adverse event summary.

Adverse event:

This protocol was placed on Veterinary Monitoring on 8/24/17 (TB put it on following a request from an IACUC member), and the PI was notified to contact Vet Services prior to performing any surgeries. The PI responded and explained he would be out of town and a time in September was agreed upon to meet. However, prior to that meeting two surgical events took place (9/6/17 and 9/18/17; 8 fish total) and the surgeries were performed by a group member who had not completed the surgical training requirements and was not certified. The group had been informed of the training requirements by email when the project was approved.

The protocol monitor has reviewed the surgical training policies and procedures with the group, and is currently working with the group to oversee training progress. In addition, the group has been informed that after completing surgery certification, Vet Services will need to be present for all future surgeries until notified otherwise.

The group provided information on the success of the procedure. Four groups of zebrafish (n=4-6 fish/group, 18 fish total) had open chest surgery with or without heart cryoinjury performed between 7/26/17-9/18/17. One to three fish per group (25-50% open chest/cryoinjury, 25% open chest alone) were found dead most commonly at one day post op (range 1-7 days). This is slightly higher than the expected mortalities for both procedures on the protocol (average 20% for both procedures, up to 40% for cryoinjury).

To summarize, the group failed to follow a direct veterinary order. Second, they failed to follow the IACUC Surgical Training Policy. Third, the mortality is higher than expected, however, this may be rectified with further training.

Discussion of adverse event:

There was general discussion of the IACUC's interactions with the PI to date as it is a relatively new investigator and it was noted that the PI, their lab, and the lab members are all located in different locations across UW's campuses which makes communication difficult. Further discussion about how these issues have been handled in the past and precedence is that the PI comes to IACUC meeting and speaks to the IACUC. It was noted that the protocol is effectively paused until lab members complete training with the aquatic veterinarian.

<u>Motion</u>: A motion to send a letter of reprimand and request the PI come to speak to the IACUC at the November meeting about the committee's concerns and how they will address them. It will also reiterate that surgeries are not to be done until personnel have completed trainings with the aquatic veterinarian. <u>Discussion</u>: Clarified wording to be used in the letter (not to use "suspension"). Vote on the Motion: The motion was approved with 14 members voting in favor, 0 opposed, and 0 abstentions

HBA Subcommittee:

The HBA committee met this month and discussed incidents of morbidity and mortality in USDA species. Several protocols and procedures were discussed.

OAW Director's Report – STI, LI

The IACUC received a reply to a letter sent out previously. The PI takes the issue very seriously and is making many changes to address the IACUC's concerns and ensure that the issue does not happen again.

No other outstanding letters at this time.

The Director had one issue to report. On 9/26 a sick animal was reported to vet services. The vet tech and lab member agreed that the animal should be euthanized, but when vet tech came back hours later, the mouse had not been euthanized and the lab member who reported the sick animal was gone. A vet came to re-examine the mouse, which died upon being picked up.

Motion: A motion to send a letter of counsel to PI and lab member

<u>Discussion</u>: There was discussion regarding the history of the lab member in question. As the lab member was not present when the vet tech came back, it was unclear if there were any other lab members involved. There was concern raised that there was not enough information present to make an appropriate motion. The OAW will get more information to bring to the November IACUC meeting.

<u>Vote on the Motion</u>: The motion was not approved with 0 members voting in favor, 14 opposed, and 0 abstentions

Protocol Review 4221-01 – Repair Surgery – JFI

This is a primate neuroscience protocol. The studies on this protocol are designed to provide a foundation for understanding normal and pathological eye movement control, and ultimately to enhance therapeutic approaches for patients with defective oculomotor control.

With this amendment, the group is requesting two repair surgeries for animal Z13218. This animal is enrolled in Experiment 6, Group II on the protocol, in which animals undergo surgery to create a strabismic model, and later receive a head post, 2-3 recording chambers, and eye coils so that the group can evaluate information processing related to vision and eye movements. Z13218 is a 4 year old male pigtail macaque who received eye manipulation surgery as an infant to create strabismus, was implanted with a head post and recording chambers this past April, and received 2 eye coil implants in August. His left eye coil was removed for clinical reasons 2 week after implantation because the coil plug had broken off. In late September, his approved repair surgery was used to re-implant a left eye coil, and also remove his right eye coil, which had begun to fail presumably due to a break in the wire (typical cause of failure for eye coils). The group is requesting one repair surgery to replace the right eye coil, and a second repair surgery to have available in the future if needed.

The group reports that this animal is very valuable due to the fact that he is a rare juvenile strabismus animal, and has a large degree of strabismus. In reviewing his clinical record, he appears healthy and seems to have recovered well from his previous surgeries. He did have an episode of right leg paresis in September after a testing session, which resolved over 5 days. The animal was monitored closely and remained bright and alert throughout that time.

Behaviorally, this animal has a locomotor stereotypy and is being monitored by BMS. He is pair-housed with a long-term social partner in convertible caging, which allows additional vertical space as therapy for his locomotor stereotypy. In reviewing his behavioral observation record, the most recently recorded abnormal behavior was in early September, and he seems to respond well to the convertible caging. It also looks like he and his current social partner are a good pair – lots of comments about positive interactions between them.

It was asked how many surgeries a typical animal might have over their lifetime and how long, on average, the implants may last. Both are highly variable. There was discussion about why the group is requesting two repair surgeries at one time, but it was noted that this is a common approach and allows for a 'banked' repair surgery. The IACUC was reminded that they would see another request from the group if the animal needed further surgeries beyond those in the request and that the veterinary staff always has final say before an animal undergoes surgery.

<u>Motion</u>: A motion to approve the amendment as written was made. <u>Discussion</u>: No further discussion. <u>Vote on the Motion</u>: The motion was approved with 13 members voting in favor, 1 opposed, and 0 abstentions

It was noted that the WaNPRC checks with the OAW to confirm a repair surgery is approved on the protocol before moving forward with the surgery. The OAW will report back to the IACUC if/when the second repair surgery is used.

Standard Operating Procedures / Policies / Guidelines

a. Environmental Enrichment SOP for Gerbils – AA

Gerbils will be socially housed with males of the same litter. Stimulate digging with tube or hut, partially buried with additional corn-cob bedding. Singly housed animals will get extra enrichment via additional nestlets or tubing.

<u>Motion</u>: A motion to approve the updated SOP as written was made. <u>Discussion</u>: No further discussion <u>Vote on the Motion</u>: The motion was approved with 14 members voting in favor, 0 opposed, and 0 abstentions

b. IACUC Protocol Requirements – JFI

Policy for when an IACUC protocol is required has been updated to reflect the new e-IACUC solution implemented by UW.

Motion: A motion to approve the updated requirements as written was made.

Discussion: No further discussion.

<u>Vote on the Motion</u>: The motion was approved with 14 members voting in favor, 0 opposed, and 0 abstentions.

Other Business

a. Implementing new site visit practice - TN

The IACUC conducts approximately 200 site visit "blocks" per site visit cycle (January – April and July – October). The proposed SOP will reduce the site visit 'blocks' by about 30%, which is about 60 fewer every six months. This SOP will retain compliance while reducing the burden on both researchers and the IACUC. Below is the Site Visit Practice SOP:

All DCM and Primate Center managed spaces, and all lab-managed housing or surgery spaces, will continue to be visited every 6 months. For lab spaces that have two consecutive deficiency-free site visits, the next site

visit will occur in 12 months instead of 6 months; all others will be visited every 6 months. Implementing this practice will reduce burden on the IACUC and researchers.

There was a short discussion as to what constitutes a deficiency and various examples were given. It was emphasized that any housing or surgery locations, and all vivaria will still be inspected every six months and that UW has done due diligence on the related laws & regulations.

Motion: A motion to approve the updated site visit SOP was made.

Discussion: No further discussion.

<u>Vote on the Motion</u>: The motion was approved with 14 members voting in favor, 0 opposed, and 0 abstentions.

b. HB: Procedure for requesting a response to your review questions - GL

Submit a private comment when you want to see responses to your questions if you are not the assigned reviewer, otherwise the DMR will ensure that the questions have been adequately addressed.

c. Semiannual Report – LI

It was announced that the OLAW checklist has been posted for the IACUC to review in advance of the semi-annual review and the IACUC was reminded of the main aspects of the report. If there are any particular areas you want data or more information, let OAW know. There was further discussion related to the submittal of minority views including examples.

d. Significant Change Policy to be reviewed in November – JS

It was noted that this policy will be discussed at the November IACUC meeting and everyone was asked to read it in advance of the meeting.

Closing Business:

The Meeting was brought to a close at 4:47 pm. The floor was opened to public comment.