Members Present:			
	AB	JS	SL
	AS	JFI	TB
	CG (scientist)	ML	JB
	СН	SH	JM
	*EC		
Members Absent:	PB (could not connect)	MG	KL

*EC alternate for JPVH

Opening Business

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

Approval of the IACUC Meeting Minutes

The IACUC Chair called for the approval of the May 18, 2017 IACUC meeting minutes.

<u>Motion</u>: A motion to approve the minutes as written was made and seconded. <u>Discussion</u>: None <u>Vote on the Motion</u>: The meeting minutes were approved with 10 members voting in favor and 3 abstentions.

Benefit Story - JS

This month's Benefit Story on the neurotoxicity of traffic-related air pollution [Costa LG, Cole TB, Coburn J, Chang YC, Dao K, Roqué PJ (2017) Neurotoxicity of traffic-related air pollution. *NeuroToxicology* 59: 133-139] comes from the Costa lab, which aims to understand the effects of air pollution on brain development and brain disorders. It has been well established that airborne traffic-related particles, especially the particulate matter produced by diesel exhaust, can contribute to morbidity and mortality caused by respiratory and cardiovascular diseases. More recently, evidence has been accumulating that air pollution can also have a negative effect on the brain. The fine particles of diesel exhaust can readily gain access to the brain through mucus membranes in the nose, and the Costa group has found that exposing adult mice to air containing fixed amounts of diesel exhaust increases signs of oxidative stress and inflammation throughout the brain. Intriguingly, male mice appear to be more susceptible to these effects. PRENATAL exposure to diesel exhaust was found to produce autism-like symptoms in young mice, again with greater deficits observed in males. High levels of air pollution continue to be a problem in many cities around the world, and a variety of occupations place several million workers in the United States at elevated risk. Identifying the effects of diesel exhaust exposure on brain development early in life, and brain degeneration later in life, will provide motivation for government policies to reduce air pollution and aid in the treatment of air pollution-related diseases.

Attending Veterinarian's Report - TB

Facility issues:

Humidity: No issues reported.

Temperature and lights:

CHDD: In Jan., I reported on a centralized facility that was having swings in temperature. Facility services was working on further investigation of the issue at that time. They finished their investigations and have confirmed that there have been numerous swings in temperature in that facility. LI in OAW has been integral in gathering this data and preparing a letter to the investigators of the facility outlining the potential solutions to the problem. The letter is in the folder for this month's meeting and hopefully, you have had time to read it in full. I am just going to summarize the major points.

Problems with temperature regulation were noted in the three housing rooms (076A, 076B, 076E) starting in 2015. From January 2015 to December 2016, DCM contacted UW Facilities Maintenance 11 times to assess and adjust the temperature control for these rooms. Despite these attempts to stabilize the HVAC system, excursions continue to occur. An analysis of recent history shows:

room	076A	076B	076E
proportion of days in 2016 that exceeded 4 °F swing		70%	66%
proportion of days in May 2017 that exceeded 4 °F swing		68%	97%

DCM had already met with HSA to determine if money could be found to fix the HVAC issue, and was not successful. The next plan of action was to meet with the users, provide them with the data, and work out a plan of action. This letter grew from that meeting. The letter outlines three choices of action and provides a 30-day deadline for the users to propose a plan.

<u>Motion:</u> A motion to approve letter as written was made and seconded. <u>Discussion:</u> Comments made on letter – well written. Questions were asked for clarification of plan and location of building.

Vote on the Motion: The motion was unanimously approved with 13 members voting in favor.

Disease outbreak:

There was a potential disease outbreak of pinworms in one centralized rat room. The room was placed in under quarantine in May. It turns out it was a false positive in the PCR tests that occur at the vendor who does those tests. The quarantine has been lifted.

Protocol Monitoring:

There are 14 active protocols on the veterinary monitoring program (8 surgical, 3 other, 3 tumor) and I will be adding one protocol to the protocol that will be working with hypoxia in rats. I used to always describe what was happening on one monitoring protocol a month, and I am going to try to go back to that.

<u>Protocol 3393-01</u> was added to the veterinary monitoring program in October of 2015. This study involves validating an animal model of obstructive sleep apnea in obese minipigs in order to investigate tongue base, soft palate, and pharyngeal wall in upper airway function and collapse

during sleep. Their hypothesis is that obese minipigs develop spontaneous obstructive sleep apnea with upper airway collapse, and non-obese controls have no sign of OSA, and then they will correlate the physical attributes that lead to obstructive sleep apnea in the obese pigs. The technical aspects include placing instruments including nasal cannula, thorax and abdominal belts, pulse oximeter, microphone, mock EEG/ECG electrodes, and a recorder box on the pigs while they sleep. They will wear a jacket while sleeping and this jacket contains the necessary instruments. This protocol was added to the veterinary monitoring program due to the potential complications with wearing a jacket.

The group recently worked with the monitoring veterinarian to add a significant change to acclimate the pig to the jacket so that they could extend the amount of time the pig was wearing the jacket and devices in a gradual way in the hope that the pig would sleep naturally with the jacket and instruments on. Pigs arrived last week and just two days ago a pig was sedated to place the jacket. The jacket was too tight (these are the first obese pigs they have done) and would likely have interfered with respirations, so the monitoring veterinarian insisted they remove the jacket and found them a different jacket. The pig was instrumented, and returned to the room, for a "sleep session" which is monitored real time with cameras and wireless input from the devices. After about an hour, the pig got the jacket and instruments off, however, the veterinarian and lab staff retrieved everything before the pig ate any of the instruments. They are working on jacket modifications. They were doing the second pig today.

Adverse event:

No adverse events to report.

HBA Subcommittee:

The HBA committee met this month. We had a discussion regarding clinical cases of morbidity and mortality in the WaNPRC and DCM. A researcher from the WaNPRC came to our meeting to share information about a particular case and the meeting was quite successful in clearing up misunderstandings.

TB: new position

TB is taking a new position and will no longer be serving as the Attending Veterinarian on the IACUC.

• B.1109 Small Animal Cage Change Procedures – TB

<u>Motion</u>: A motion to approve the policy with a small change suggested by JS was made and seconded. <u>Discussion</u>: The policy was discussed.

Vote on the Motion: The motion was unanimously approved with 13 members voting in favor.

• Adhesion Policy Revision – TB

<u>Motion</u>: A motion to approve the revised Policy with minor word changes was made and seconded. <u>Discussion</u>: None

Vote on the Motion: The motion was unanimously approved with 13 members voting in favor.

• Veterinary Verification and Consultation (VVC) SOP – TB

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

Discussion: The policy was discussed.

Vote on the Motion: The motion was unanimously approved with 13 members voting in favor.

• Physical Restraint Policy – JFI

<u>Motion</u>: A motion to approve the Policy with additional changes to add frequency was made and seconded. <u>Discussion</u>: The policy was discussed.

Vote on the Motion: The motion was approved with a unanimous 13 members voting in favor.

• Sterilants Policy – JFI

<u>Motion</u>: A motion to approve the Policy with reclassification as a Guideline was made and seconded. <u>Discussion</u>: Agreed that this is more of a guideline.

Vote on the Motion: The motion was unanimously approved with 13 members voting in favor.

HoverBoard activity as of 6/12/2017							
ltem type	status	count	average workdays from submission to IACUC approval	standard deviation, workdays			
New protocols	reviewed and approved	85	39	20.2			
	under review	16					
Migrated and active in HoverBoard, but no annual or triennial review yet		121					
closed or allowed to lapse by the PI		42					
Triennial Reviews	reviewed and approved	26	31	15.9			
	under review	14					
Annual Reviews	reviewed and approved	216	23	15.2			
	under review	26					
Amendments - regular	reviewed and approved	227	28	16.3			
	under review	70					
Amendments - VVC	reviewed and approved	56	2	5.7			
Amendments - room change, personnel change, or technical correction only	reviewed and approved administratively	598	1	3.6			
Items submitted by PI but discarded		10					

HoverBoard Activity

Deficiencies at a Glance (DAAG)

The Director pointed out that some spaces in the new ARCF had been visited by the IACUC and all members should review the few concerns that arose.

Adverse Events

Protocol 4308-02: Study evaluates alcohol interference with the immune response during infections of the liver. Four mice died at 4 weeks due to a miscalculation of the concentration of alcohol in the water. Mice were given 6.7% v/v alcohol accidentally instead of 5.5% v/v. The lab recognized the error and self-reported to OAW.

IACUC acknowledged incident and appreciated prompt self-reporting and will be reported to OLAW. A letter of acknowledgement will be sent.

<u>Motion:</u> A motion to send letter of acknowledgement was made and seconded <u>Discussion:</u> None.

Vote on the Motion: The motion was unanimously approved with 13 members voting in favor.

Protocol 4390-01: evaluates the immune response in relation to parasitic infections. One mouse was fasted overnight without prior approval. Mouse was euthanized the next morning after being reported to Vet Services for lack of food.

<u>Motion:</u> A motion to send letter of counsel was made and seconded <u>Discussion:</u> None. <u>Vote on the Motion:</u> The motion was unanimously approved with 13 members voting in favor.

2 members left the room at 3:27 pm

Hajjar, 4320-01, Housing Request

An amendment to the protocol is requested to singly house knock-out mice and controls for a specific experiment that requires gathering of fecal samples from individuals. The amendment has had pre-review and veterinary review and is recommended for approval. It is brought to the committee meeting because the triennial review of the protocol is underway and this amendment cannot be acted on in HoverBoard while the triennial review is in progress.

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

<u>Discussion</u>: Housing request was discussed in addition to discussion of coming up with a mechanism for what to do when a protocol change needs to be made while a triennial is under review.

Vote on the Motion: The motion was unanimously approved with 11 members voting in favor.

IACUC Training: Reporting Site Visit Findings – TN

TN reviewed how site visitors should report their findings, to ensure timely correction of any deficiencies:

The notes that you turn in after a site visit must include the following for each concern:

- Room #
- Where in the room it is
- What the concern is
- Why is it a concern
- What should be done about it

He has posted a help document with this information and numerous examples.

It was emphasized by JS that site visitors should be letting researchers know that they will receive email notification from HoverBoard rather than from OAW and if they have any concern to forward it to OAW for confirmation that it is legitimate email.

TN also noted that site visits of non-housing spaces will change to annually if the lab has had 2 site visits in a row without any concerns. If the lab has had a concern then they will be visited semiannually. JS encouraged IACUC members to let labs know of the change

IACUC Training

EC announced the next round of IACUC Trainings will focus on review of protocols in HoverBoard. Expect details later in June

Closing Business:

The Meeting was brought to a close at 3:49 pm. The floor was opened to public comment.