

University of Washington  
October 22, 2015 IACUC Meeting Minutes

Members Present:	PB	JM	MN
	CG (Scientist)	JPVH	SL
	CH	JS (Chair)	TB
	CJ	MG	JS (Public)
	EC	ML	
Members Absent:	AB	JB	
	CG (Public)	NK	

### **Opening Business**

The IACUC Chair called the meeting to order at 2:32pm.

Jane welcomed JPVH back on the Committee

### **Approval of the IACUC Meeting Minutes**

The Chair called for the approval of the September 17, 2015 IACUC meeting Minutes.

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

Discussion: None

Vote on the Motion: The meeting minutes were approved with 9 members voting in favor and 3 abstentions. SL and CJ were not present for the vote.

**Sentinel Reduction Plan** Presented by SD – See PowerPoint Presentation in folder.

The Committee discussed the plan, which was intended to be rolled out in 2016. This would primarily apply to sentinels housed in individually ventilated racks and was expected to reduce the number of animals used. The sentinels used in the non-ventilated racks would likely remain.

### **Attending Veterinarian's Report**

#### **Facility issues:**

**Humidity**: No reports

#### **Temperature and lights:**

- On September 21, 2015 a decentralized rodent lab recorded temperatures outside the normal 4-degree temperature variation. They notified facility management, who made adjustments and the problem has resolved.

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- On August 29, 2015 and September 1, 2015 large temperatures variations and high temperatures were reported in this decentralized rat housing room the weekend of the power outage. The highest temperature reported was 79.4°F and the widest variation was 6.5°F. The facility services technicians had to return twice to work on the system before the issues were resolved. No further issues have been noted.

**Protocol Monitoring:** There are 14 protocols on the veterinary monitoring program. Ten protocols involve surgery, 2 involve restraint and surgery, 1 involves anesthesia and other procedures, and 1 involves other procedures.

**Harm Benefit Analysis (HBA) Committee:**

The HBA Committee is still drafting Food and Water Restriction policies for mice and rats and non-rodent USDA species.

At the last committee meeting, protocols involving total body irradiation were discussed and criteria to be used in retrospective analysis of pain and distress of individual animals were determined.

**Adverse Events:**

On October 15, 2015 at 6:52pm an urgent sick animal report was submitted to the University of Washington South Lake Union 3.1 facility veterinary services email account by an investigator regarding an experimental mouse that was described as diabetic, dehydrated and lethargic with difficulty breathing. The investigator then paged Vet Services and after a time left the facility. The duty veterinarian on call at the time did not get the page as his pager was not functioning normally (this was determined the next day). The next morning the mouse was found dead in its cage. This incident has been reported to OLAW.

In response to this incident, the directions on the form that explain how to page the duty veterinarian have been changed to say to repeat the page until you reach someone. In addition, the use of an answering service is being explored, although mistakes could be made by an answering service as well. Dr. Brabb explained that the service would continue to page the Duty Veterinarians until a call was returned.

**Housing of Mice and Rats in the same room:**

At the UW it is rare to house more than one species in a room, although there are exceptions made to that depending on the compatibility of the species and the potential for disease transmission between species. We do not house predators and prey species together in such a way that the prey species can feel threatened by the predators. Traditionally, the decision has been left with the veterinary staff to make those decisions on a case-by-case basis and the IACUC is aware of them as you visit those spaces. For instance, there are numerous situations where different species of fish are housed in the same room.

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Today, TB wanted to address one situation as it comes up more often and there are concerns associated with it and that is housing of mice and rats in the room. The concern with housing mice and rats in the same room is that there is evidence that some mice view rats as a natural predator. In contrast to that, there is evidence from at least one publication, that housing them in the same room has no discernable effect on the mice or mice breeding. To be conservative, but still allow co-housing in some cases, we have strict guidelines as to how this can be accomplished in such a way as to minimize interaction of transfer of smells between the two species and TB brought those working guidelines here today.

**OAW Director's Report** – Summary slide in folder.

### **Protocol Review**

Dr. Klatt, 4314-06, V.3 “Mucosal Kinetics During Antibiotic Treatment”

The Committee was discussing the significant change because the group was adding laparoscopic mesenteric lymph node and liver biopsies. The IACUC has the responsibility to determine whether or not this is a major or minor surgery.

In December, 2014, the IACUC performed a similar evaluation for a group adding laparoscopic mesenteric lymph node biopsies only. In that instance the IACUC voted that the surgery was minor.

However, according to the Guide, pg 117, whether a laparoscopic procedure is deemed major or minor should be evaluated on a case-by-case basis by the veterinarian and IACUC. The differentiation of surgical procedures as major or minor impacts research because AWA regulations: 1) require that major operative procedures on nonrodent species be performed in dedicated surgical facilities, and 2) no animals will be used in more than one major operative procedure from which it will recover, unless it's justified for scientific reasons by the principal investigator, in writing or required as routine veterinary procedure or to protect the health or well-being of the animal as determined by the attending veterinarian.

USDA and OLAW agree that the IACUC has the authority to determine whether specific manipulations used in research are major operative procedures.

- Consider detailed description of the procedure, and
- The anticipated or actual consequences to the animal

Also from the Guide, page 117, surgical procedures can be categorized as major or minor. Major survival surgery penetrates and exposes a body cavity, produces substantial impairment of physical or physiologic functions, or involves extensive tissue dissection or transection (e.g., laparotomy, thoracotomy, joint replacement,

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and limb amputation). Minor survival surgery does not expose a body cavity and causes little or no physical impairment (e.g., wound suturing, peripheral vessel cannulation, percutaneous biopsy, and most procedures routinely done on an outpatient basis in veterinary clinical practice). Animals undergoing a minor survival surgical procedure typically do not show significant signs of postoperative pain, have minimal complications, and quickly return to normal function.

And, laparoscopic surgeries may be classified as major or minor surgery depending on their impact on the animal. For example, laparoscopic techniques with minimal associated trauma and sequelae (e.g., avian sexing and oocyte collection) could be considered minor, whereas others (e.g., hepatic lobectomy and cholecystectomy) should be considered major.

Below is a link of a letter to the editor that supports the idea that laparoscopic surgery may be a minor surgery rather than major.

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2824959/>

The goal of this study is to investigate the effects of antibiotics on the microbial communities and the mucosal immunology of the GI tract. Use of antibiotics in both therapeutic and prophylactic settings is common practice in veterinary medicine, but can have significant effects on the physiology of experimental animals. It has been well documented that antibiotics can disrupt microbial communities sometimes resulting in diarrhea and associated enterocolitis. The nature, significance, duration, and similarities/changes to pretreatment populations of the microbial flora post antibiotic treatment have not been extensively studied in primates.

A large number of mucosal studies are on-going at the Washington National Primate Center. In tandem, antibiotic use in Primate Centers is very important for treating/preventing disease. The exact effect of antibiotics on gut mucosal immunology and immune response kinetics is not fully documented, and can be further confounded by the type/class of antibiotics used which dictates which microbes are predominantly impacted.

Looking at these different classes of antibiotics and evaluating their impact on the gut flora and the mucosal immunology will help veterinarians and researchers evaluate the potential impacts of these treatments as well as determine appropriate points post treatment where animals would have stabilized and be ready to begin an experimental protocol.

In order to determine the effects of acute and long-term antibiotic on mucosal immunity and microbiome multiple biopsy collections will be essential to determine the kinetics of the mucosal and lymphoid immune response over time and in response to the antibiotics.

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- A. Rectal Biopsies (24 pinch biopsies)
- B. Colon Biopsies (24 pinch biopsies)
- C. Jejunum Biopsies (24 pinch biopsies)
- D. Lymph Node (mesenteric) biopsy
- E. Liver biopsy (up to 3 pinches)

CH explained that the possible complications of liver biopsies include hemorrhage and adhesions. With laparoscopic biopsies, pinching the edge of the liver seals it and thus there is not a lot of bleeding when done correctly.

JS (Chair) summarized the criteria for minor surgeries and asked if they would apply to this surgery. CH said that they could and commented that if any of the criteria develop, the classification of surgery could be changed and the individual animals would be review by the IACUC.

CJ asked if the biopsies are being done at the same time, liver and lymph notes. MG asked if there was a cumulative effect, for example, if a minor procedure is done 4 times, would that make that procedure major. ML commented that in that case there would be an increased likelihood of adhesions. TB said that the papers referenced did it 3 times and only reported minor adhesions.

Motion: A motion was made and seconded to classify the surgeries as major.

Discussion: The Committee continued to discuss potential complications and the surgeon's qualifications.

Vote on the Motion: The motion passed with 9 members voting in favor and 5 members opposed.

Department of Comparative Medicine Husbandry Limitation Request Form – EW

EW presented the form and explained its purpose. The Committee discussed how the form would be used. It was suggested that a question could be included in the PRF to capture this issue. STI, explained that this issue is coming up largely because groups are shifting form lab-managed to DCM managed housing and groups want to continue to have their dedicated person continue to provide care. JS asked if a line could be added to the protocol just to alert people. Inclusion of this as part of the PRF would be added the electronic system wish list.

**Environmental Enrichment SOPS**

TB explained that no changes had been made to the EE SOPs which were due for their periodic review.

- a. B.1068 Environmental Enrichment for Cats

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- b. B.1069 Environmental Enrichment for Ferrets
- c. B.1070 Environmental Enrichment for Swine
- d. B.1071 Environmental Enrichment for Rats
- e. B.1072 Environmental Enrichment for Mice
- f. B.1084 Environmental Enrichment for Aquatic Amphibians (*Xenopus laevis*)
- g. B.1086 Environmental Enrichment for Guinea Pigs
- h. B.1095 Environmental Enrichment for Gerbils
- i. B.1096 Environmental Enrichment for Chicks and Poults
- j. B.1097 Environmental Enrichment for Bats
- k. B.1098 Environmental Enrichment for Hamsters
- l. B.1099 Environmental Enrichment for Birds

Motion: A motion was made and seconded to approve all SOPs.

Discussion: The Committee discussed the following:

- The need for an SOP for *Xenopus* amphibians and it was explained that their needs are reviewed on a case-by-case.
- Whether birds singly housed following surgery be included. It was decided that this should be addressed in the protocol.
- The issues associated with socially housing mice of various ages.

Vote on the Motion: The SOPs were approved unanimously with 14 members voting in favor.

IACUC Member Training - STI

STI reminded the IACUC that AAALAC would be visiting the UW in November and discussed the types of thing that they would be interested in speaking with the IACUC about. Following the November 19, 2015 IACUC meeting the IACUC and AAALAC will have a meet and greet.

Veterinary Verification and Consultation of Timing of Procedures, Timing of Administration of Agents, and Changes in Procedures

TB summarized the changes proposed which had to do with anesthesia for retro orbital blood collections. Whether or not anesthesia is used for this method will be determined based on the proficiency of the person performing the procedure. If anesthesia is to be used, it must be to be on the protocol already or the vet staff has to administer until its on the protocol.

Motion: A motion was made and seconded to approve the changes to the SOP.

Discussion: None

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Vote on the Motion: The SOP was approved unanimously with 14 members voting in favor.

**Harm Benefit Subcommittee:**

Pre-review process: MB explained that the pre-review process was working well and it had been decided that the next step, involving utilization of IACUC members as DMRs would be initiated. The Committee discussed the change in process and how they would interact with other IACUC members and veterinarians. Communication would be primarily through the Comprehensive Reviewer.

JPVH summarized the plan DMR plan. See Power Point Presentation in folder.

The Committee continued to discuss the new process, touching on how the Chair would assign DMRs, how many items each member would be assigned and how long they would have to complete their assignments. It was noted that the process would be anonymous and correspondence to and from the PI will still come from the OAW.

The OAW team structure was summarized and it was explained how DMRs would be notified about who their team was.

CJ asked what the anticipated total timeline would be for the entire review process. This information was not known and data is being collected. The goal is 32 days or less. The Committee discussed the Review Checklist and it was explained that use of the checklist by the DMR is optional but could be used by the DMR so that they know what the OAW has done.

Committee questions and responses could be available in a separate document but the process would need to be worked out.

Closing Business:

The Meeting was brought to a close at 4:38pm. The floor was opened to public comment.

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