

**Memorandum to:** David M. Anderson  
**From:** Institutional Animal Care and Use Committee  
**Subject:** Semiannual Report of the Program Review and Facility Inspection  
**Date:** July 30,2020

This report summarizes results of the IACUC's most recent program review and facility inspection, as required by the Public Health Service (PHS) Policy on Humane Care and Use of Laboratory Animals ([Policy](#)), Section [IV.B.1.-3.](#), the *Guide for the Care and Use of Laboratory Animals* ([Guide](#)), and the Animal Welfare Act ([AWA](#)) regulations, as applicable. Submission of semiannual reports to the Institutional Official is a condition of this institution's Animal Welfare Assurance with the NIH Office of Laboratory Animal Welfare (OLAW).

**Since the last review, the following changes have occurred in the institution's program for animal care and use (PHS Policy [IV.A.1.a.-i.](#)):**

In January we reviewed our first cephalopod protocol after agreeing to start oversight in September of 2019. The committee began meeting remotely via Zoom in April 2020. In 2019, zebrafish began occupying the aquatics area of new Life Sciences Building vivarium and in June 2020, the vivarium was approved for use by non-aquatics species.

**I. Description of the Nature and Extent of the Institution's Adherence to the PHS Policy, the *Guide*, and the AWA**

All animal care and use at the University of Washington adheres to PHS Policy, the Guide, and the AWA, as described in our Assurance. Within that framework, the IACUC has approved the following departures from PHS Policy, the AWA and the Guide:

- 58 protocols with prolonged restraint (bats, birds, fish, mice, pigs, non-human primates, wild mammals)
- 8 protocols with housing at non-standard temperatures (4 mice, 2 mice and rats, 2 zebrafish)

In February 2020 the IACUC approved the following general departure:

- **1 general cage change frequency variance for singly housed gerbils**

In May 2020 the IACUC approved the following general departure:

- **1 general L-shaped housing variance for NHPs to provide flexibility in configurations of combined cages**

The following IACUC approved general departures remain in place

- **1 general cage height variance for infant non-human primates**
- **1 general cage floor-area variance, with added vertical space, for juvenile non-human primates**
- **1 general exception for placing NHP feed on compound floors**

Details are included in [Appendix C](#).

While not departures, the IACUC has also approved the following exceptions to its policies that implement PHS Policy, the AWA and the Guide:

- 12 protocols with cage size variances (6 for mice, 2 chicks, 4 rats)
- 10 protocols with wire bottom cages (8 mice, 2 rats)
- 49 protocols with weaning variances (47 mice, 2 rats)
- 2 protocols with a non-AVMA endorsed euthanasia method (1 small birds, 1 frogs/salamanders)
- 38 protocols with multiple major surgeries (6 species)
- 14 protocols with other policy variances (10 mice, 2 rats, 2 mice and rats)

Details of these can be reviewed via reports in HoverBoard.

## II. Deficiencies in the Institution’s Animal Care and Use Program

Animal Care and Use Program Review Date(s): January through June 2020

- A. There were no deficiencies in the program during this reporting period.  
 B. The following deficiencies have been identified:

*Over the past six months, 10 adverse events or non-compliances were reported to the IACUC and, as required, to OLAW, AAALAC, or USDA. See [Appendix A](#) for details.*

*Teams of IACUC members recently reviewed all elements of the University's animal care and use program, guided by the OLAW-provided checklist. They found the program to be strong, and identified no deficiencies. Specific comments and suggestions for improvement are detailed in [Appendix D](#). The IACUC and OAW will pursue the suggestions in the coming year.*

## III. Deficiencies in the Institution’s Animal Facility

Animal Facility Inspection Date(s): January through June 2020

- A. There were no deficiencies in the animal facility during this reporting period.  
 B. The following deficiencies have been identified

*Over the past six months 180 deficiencies were identified during IACUC facility inspections or self-reported. None were considered significant. Counts by type are shown below.*

Type	Minor	Significant	Type	Minor	Significant
Facility and Furnishings	36	0	Personnel Precautions	15	0
Sanitation	32	0	Feed	8	0
Husbandry	21	0	Environment	4	0

Equipment	20	0	Signage and Information	3	0
Drugs	19	0	Research Chemicals	2	0
Supplies	19	0	Animal Health	1	0

161 have been resolved while 15 are pending corrective action. See [Appendix B](#) for deficiency details.

#### IV. Minority Views

Select A or B:

- A. No minority views were submitted or expressed.  
 B. The following minority views were expressed:

#### V. Status of AAALAC Accreditation

Reference Assurance: #000523  
Most Recent AAALAC Site Visit: 05/31/2019 through 06/07/2019  
Most Recent Full Accreditation issued: 11/01/2019

#### VI. Signatures (via signed and dated note of concurrence – see attached images)

IACUC Members	concurrence	date
<b>A.B. (Andrew)</b>		
<b>A.W. (Aaron)</b>	Concur	7/28/20
<b>C.M. (Carolyn)</b>	Concur	7/23/20
<b>D.M. (Dave)</b>	Concur	7/28/20
<b>F.R.R. (Ric)</b>	Concur	7/20/20
<b>G.S. (Garret)</b>	Concur	7/28/20
<b>J.A. (Jacqui)</b>	Concur	7/29/20
<b>J.M. (Jeanot)</b>	Concur	7/28/20
<b>J.P.V.H. (Preston)</b>	Concur	7/27/20
<b>J.S. (Jane)</b>	Concur	7/22/20

<b>K.G (Kathryn)</b>	Concur	7/21/20
<b>K.M.G. (Ken)</b>	Concur	7/20/20
<b>K.S. (Kim)</b>	Concur	7/20/20
<b>M.B. (Michelle)</b>	Concur	7/28/20
<b>M.K. (Michael)</b>	Concur	7/24/20
<b>M.L. (Molly)</b>	Concur	7/28/20
<b>S.L. (Steve)</b>	Concur	7/21/20
<b>S.R.H. (Scott)</b>	Concur	7/20/20

## Appendix A Deficiencies in the Institution's Animal Care and Use Program

Severity	Repeat?	Location	Deficiency and Corrective Action Plan	State	Date Complete
Minor	no	vivarium	Non-compliance involving second surgery on a gerbil. Letter of counsel requested a reply that indicates what will be done to ensure future compliance. Reply received and accepted by IACUC.	Complete	2/20/2020
Significant	no	vivarium	Mouse mortality due to no access to water from Hydropac. Continue to monitor for any chewed lixits.	Complete	1/22/2020
Significant	no	vivarium	Altercation between 2 male primates due to cage door failure. Temp fix in place. Unit will work long term with manufacturer to make the transfer doors impregnable while readily usable.	Complete	3/20/2020
Significant	no	vivarium	Unexpected mortality associated with an experimental procedure. Letter of acknowledgement sent to PI requesting reply re: maintenance schedule for the machine, testing after a period of no use, and importance of self-reporting adverse events. PI replied and response was reviewed by IACUC. No further action requested	Complete	3/20/2020
Significant	no	vivarium	Mortality due to no access to water. Sent letter of acknowledgement to PI requesting reply about retraining, toggling. PI replied was reviewed by IACUC with no further action requested.	Complete	3/20/2020
Significant	no	vivarium	Mortality in rats. Letter of counsel sent requesting a reply indicating how proper monitoring will be ensured and appropriate concentration of parasites assessed prior to injection. PI reply was reviewed by IACUC. No further action requested.	Complete	5/26/2020
Significant	no	vivarium	Escape leading to injuries. The male initially has been kept separate/closed from his social partner to limit his ability of breaking the locks holding the cages together and escaping. Additional locks and connectors have been added to caging and male is back with social partner.	Complete	7/7/2020
Significant	no	vivarium	Mortality in BSL3 facility due to improper docking of cage in rack. Facility staff retrained and new procedure in place to double check docking of cages in the rack.	Complete	5/26/2020

Significant	no	vivarium	Animal without access to water. Corrective action pending resolution at July 2020 IACUC meeting.		
Significant	no	vivarium	Rat mortality related to anesthesia. Sent the PI a letter of acknowledgement of the self-reporting of the incident.	Complete	5/26/2020

## Appendix B Deficiencies in the Institution's Animal Facility

Severity	Repeat?	Location	Concern Description	Date Correction Due	Date Complete
Minor	no	WaNPRC: Arizona	AB Colony: Feed Storage 2 Humidity not being monitored/recorded.	7/1/2020	7/1/2020
Minor	no	WaNPRC: Arizona	Feed Storage 1: Humidity not being monitored/recorded.	7/1/2020	7/1/2020
Minor	no	WaNPRC: Arizona	AB Colony: Light casings in animal enclosures have debris in the, suggest cleaning.	7/31/2020	
Minor	no	WaNPRC: Arizona	AB Colony: Exhaust vents have debris in them, suggest cleaning.	7/31/2020	
Minor	no	Guthrie Laboratory Spaces	418: No biological indicator (BI) testing/results have been noted in the autoclave log since September 2019 – Autoclave is currently down, but monthly BI should be done when the autoclave is operational.	7/31/2020	
Minor	no	WaNPRC: I-wing Vivarium	I047 (Instrument Prep): Hole in wall (approx. ¼ inch in diameter). Hole should be patched and paint chips on door jamb. WaNPRC to submit work order.	7/31/2020	
Minor	no	WaNPRC: I-wing Vivarium	I073 (Corridor): Main door badly damaged on back/hinge side. WaNPRC to submit work order.	7/31/2020	
Minor	no	WaNPRC: I-wing Vivarium	I363: One light is out and needs to be replaced. WaNPRC to submit work order.	7/31/2020	
Minor	no	WaNPRC: I-wing Vivarium	I089 (Corridor): Damaged hall door and needs repair. WaNPRC to submit work order.	7/31/2020	
Minor	no	WaNPRC: I-wing Vivarium	J025B: Bottom of door jamb is damaged and dry wall is exposed. WaNPRC to submit work order.	7/31/2020	
Minor	no	WaNPRC: I-wing Vivarium	I040H: Multiple paint chips on door jamb in various locations (sx corridor). WaNPRC to submit work order.	7/31/2020	

Minor	no	WaNPRC: I-wing Vivarium	I061 (Isolation/suite entry): Main door damaged on edge. WaNPRC to submit work order.	7/31/2020	
Minor	no	WaNPRC: I-wing Vivarium	I563: Chipped floor inside the housing room door, in front of the first rack of cages. WaNPRC to submit work order to repair.	7/31/2020	
Minor	no	WaNPRC: I-wing Vivarium	4th floor: Door frame around door from flex labs into vivarium needs painting. WaNPRC to submit work order.	7/31/2020	
Minor	no	WaNPRC: I-wing Vivarium	I355: Multiple dings on the wall opposite the refrigerator. Group to submit work order.	7/31/2020	
Minor	no	WaNPRC: I-wing Vivarium	I355: Install mop hanger. Group to submit work order.	7/31/2020	
Minor	no	SLU 3.1: Laboratory Spaces	Chairs in room have cracks in surface, exposing interior foam. Chairs must be replaced with ones that are sound, sealed and sanitizable.	6/30/2020	6/23/2020
Minor	no	SLU 3.1: Laboratory Spaces	Remove all cardboard and cardboard boxes from area where animals will be located, especially the cardboard around the perimeter of the air table (replace with sanitizable material such as Plexiglas or plastic sheeting). As much as possible, minimize cardboard in all parts of the room.	6/30/2020	6/23/2020
Minor	no	HSB: K-wing Vivarium	K024E (Stuber): Vials of diluted carprofen and lidocaine that either had no formulation (dilution) date or had a date that was greater than 30 days ago. Vials removed by lab group and they were informed of the IACUC policy of a 30-day expiration date for drug formulations.	1/8/2020	1/8/2020
Minor	no	HSB: K-wing Vivarium	K015A: Gas tank not secured with 2nd chain restraint. Corrected during visit.	1/8/2020	1/8/2020
Minor	no	HSB: K-wing Vivarium	K024E (Stuber): Several packs of expired suture. Removed by lab member during visit.	1/8/2020	1/8/2020
Minor	no	HSB: K-wing Vivarium	K018C (Phillips): Old mouse cage with feed in it. No label or expiration on the cage. Probably being used by Phillips lab. Removed by Facility Supervisor during visit.	1/8/2020	1/8/2020
Minor	no	HSB: K-wing Vivarium	K015C: Expired lidocaine found during visit, marked as expired,	1/8/2020	1/8/2020

			placed in bag and returned to lock box during visit.		
Minor	no	ARCF (Animal Research & Care Facility)	N057 (GNAC): Glass bottle filled with liquid that looked like Clidox was not labeled. Host said it was Clidox waste from sanitizing gloves to the flexible film isolator. This was removed for disposal at the time of visit.	1/10/2020	1/10/2020
Minor	no	ARCF (Animal Research & Care Facility)	N057 (GNAC): Bottle of expired Clidox (exp 10/22/19) removed at time of visit.	1/10/2020	1/10/2020
Minor	no	HSB: K-wing Vivarium	K007EZ: A couple of cages of singly housed rats without 2 enrichment items in the cage. No protocol exception approved for these rats. AT needs to add extra enrichment when note single housing.	2/28/2020	1/10/2020
Minor	no	HSB: K-wing Vivarium	K012F: Floor could use a sweeping. Please develop an SOP for cleaning on a regular basis.	2/28/2020	1/15/2020
Minor	no	SLU: Brotman	348: Expired bupivacaine, labeled as expired during visit.	1/17/2020	1/17/2020
Minor	no	SLU: Aquatics Facility	P125: Expired diazepam, labeled as expired during visit.	1/17/2020	1/17/2020
Minor	no	HSB: K-wing Vivarium	K018C: Expired Clidox. Please dispose of and replace.	2/28/2020	1/20/2020
Minor	no	HSB: K-wing Vivarium	K012E: Expired Clidox. Please dispose of and replace.	2/28/2020	1/20/2020
Minor	no	HSB: K-wing Vivarium	K015C: Recapped needles, no recapper in room. Please remind research not to recap needles.	2/28/2020	1/20/2020
Minor	no	Foege Laboratory Spaces	N415A: Expired dexamethasone, corrected during visit (moved to area set aside for expired drugs).	1/21/2020	1/21/2020
Minor	no	Guthrie Laboratory Spaces	Guthrie Hallway (near 053): Eyewash is not being maintained and water pressure seems low. It is not clear if parts need to be replaced or if a good cleaning could remove the crusty buildup, or what needs to be done to ensure sufficient pressure. Once the eyewash is in good shape, a testing and logging SOP will need to be devised. Someone from OAW will probably need to work with Gire and Guthrie on this.	2/28/2020	1/22/2020
Minor	no	HSB: K-wing Vivarium	K024E (Bruchas): Isoflurane vaporizer sticker indicated last service 7/18/18. Please label "Do Not Use Until Calibrated." Please verify that	2/28/2020	1/23/2020



			calibration did occur last year or get it calibrated.		
Minor	no	HSB: 6th Floor Vivarium	C604A: A research group is currently moving equipment into this room from Harborview; room will need some tidying before animal use.	2/21/2020	1/24/2020
Minor	no	HSB: K-wing Vivarium	K012E: Hood has some reddish stains beneath the work surface, near front of hood, needs cleaning.	2/28/2020	1/24/2020
Minor	no	Guthrie Laboratory Spaces	051: Please ensure that the animal care log for the octopus is stored inside of 051 proper rather than outside of the room's door so that data is not inappropriately altered (it had been kept in the main lab, 054).	2/28/2020	1/27/2020
Minor	no	HSB: K-wing Vivarium	K015M: No date on Virkon S spray bottle.	2/28/2020	1/27/2020
Minor	no	HSB: K-wing Vivarium	K015M: Dirty behavioral equipment left in sink, along with a used syringe and weigh boats. It is possible that this was left earlier today by a researcher who is coming back to clean up, but no way to know this.	2/28/2020	1/27/2020
Minor	no	HSB: 6th Floor Vivarium	C606: Daily room care log not updated since 10/7/19. When room is not in use, please make note of this on the daily room care log, so site visitors will know not to look for entries.	2/21/2020	1/28/2020
Minor	no	SLU: Brotman	446: Diluted drugs were not labeled with an expiration date. All drugs to be used in animals must be labeled with an expiration date. Typically, unless there is data to support a longer shelf life, diluted drugs should be considered good for one month after dilution.	2/21/2020	1/28/2020
Minor	no	SLU: Brotman	447: Compressed gas cylinder had only one chain around the top. An additional chain is needed around the bottom to ensure that the cylinder cannot slip out or tip over.	2/21/2020	1/28/2020
Minor	no	Guthrie Laboratory Spaces	054: Move books on shelf over tank to shelves away from tanks or add a taller lip to shelf, to keep animals safe if there is an earthquake.	2/28/2020	1/31/2020
Minor	no	CHDD Vivarium	056B, 056D: Ceiling tiles are torn and need to be replaced. Group to submit work order.	4/30/2020	2/3/2020

Minor	no	HSB: K-wing Vivarium	K024F (Stuber, Bruchas): No expiration date on 1% Virkon bottle. Please label.	2/28/2020	2/3/2020
Minor	no	HSB: K-wing Vivarium	K024E (Stuber, Bruchas): No sterilization date on items in pouches that had been sterilized. Need to add sterilization date on the pouches.	2/28/2020	2/3/2020
Minor	no	Foege Laboratory Spaces	N433A: Ceiling tiles out of place. Group to submit work order.	4/30/2020	2/4/2020
Minor	no	SLU 2 Laboratory Spaces	N115: Lots of expired sutures, moved to 'expired' bag during visit.	2/4/2020	2/4/2020
Minor	no	Guthrie Laboratory Spaces	051: Label shelves where cockroaches are housed and where cockroach supplies are kept, to make it clear that these items are not related to octopus care.	2/28/2020	2/5/2020
Minor	no	SLU 3.2: Laboratory Spaces	F775: Expired betadine, catheter introducers and tissue adhesive – disposed of during the site visit.	2/5/2020	2/5/2020
Minor	no	SLU 3.2: Laboratory Spaces	F787: Expired surgical gloves – disposed of during the site visit.	2/5/2020	2/5/2020
Minor	no	HSB: 6th Floor Vivarium	D606 (Juul): One of the chairs in room has 3 cracks in the plastic cover. Please find an acceptable way to patch these cracks or remove from room.	3/6/2020	2/6/2020
Minor	no	HSB: 6th Floor Vivarium	C608 (Palmiter): Cubicle 3/Rack 4 change date printed on log says 28 days, but this has been crossed out and replaced (in pen) with 'monthly'. Changes are being done on same date each month, not every 28 days. Changes must be done on the schedule that is in the approved protocol.	3/6/2020	2/6/2020
Minor	yes	HSB: 6th Floor Vivarium	C609 (Repeat): Flashing light in ceiling, but inspectors were told a work order had already been submitted.	4/30/2020	2/6/2020
Minor	no	Foege Laboratory Spaces	N423D: Eyewash log last filled out 11/15/19. Eyewash station requires flushing once per week to protect personnel from potential build-up of contaminants in the water line and must be recorded in a log.	2/21/2020	2/6/2020

Minor	no	HSB: 6th Floor Vivarium	C618 (Palmiter): 70% EtOH spray bottle dates were marked with ink that has run and become illegible. Use an ethanol-resistant ink pen to write key dates on containers.	3/6/2020	2/7/2020
Minor	no	HSB: 6th Floor Vivarium	C618 (Palmiter): Blue drape shielding overhead light is falling down, exposing strips of sticky tape. Replace all old tape or consider non-tape option for securing drape—strong little magnets might work nicely.	3/6/2020	2/7/2020
Minor	no	SLU: Brotman	P163A (Murry): 2 boxes of recently expired anti-nausea drug discarded during visit (these were unopened, so no chance that any expired drugs were given to animals). Multiple boxes of expired surgical gloves remain in the room. All expired items should be clearly labeled and discarded.	3/20/2020	2/7/2020
Minor	no	SLU: Brotman	B28 (Feed Room): All bags need to be stored at least 6" away from wall.	3/20/2020	2/7/2020
Minor	no	SLU: Brotman	C34: One spray bottle in an upper cabinet did not have contents labeled; this container and one other did not have the date when the solution was made up—a requirement even for non-expiring substances.	3/20/2020	2/7/2020
Minor	no	SLU: Brotman	B50: At least one lab-managed cage in room was not fully engaged (red dot on lever was visible). The host turned the wire cage top around and was able to get the cage fully engaged. This was previously noted as a problem on 3/1/19 visit in a different Brotman room (A43). Room techs are checking cages daily, even those that are being taken care of by the research team, but retraining and possible change in SOP should be considered, to ensure that ventilation is not compromised for any animals.	3/20/2020	2/7/2020
Minor	no	Guthrie Laboratory Spaces	051: Transfer stored items from their original cardboard boxes into plastic bins whenever feasible and appropriate.	2/28/2020	2/7/2020

Minor	no	SLU: Brotman	423: Expired bag of fluids belonging to the Regnier lab. Labeled as expired by site visitor during visit. A member of the Regnier lab was not present.	2/21/2020	2/11/2020
Minor	no	SLU: Brotman	446: Old unused syringes of buprenorphine were not labeled as for disposal. Old or expired drugs must be labeled as expired or waiting for disposal.	2/21/2020	2/11/2020
Minor	no	SLU 2 Laboratory Spaces	S509: A bag containing expired mouse mix was not labeled as "expired" or "do not use". Expired drugs need to be properly labeled to ensure that they are not mistakenly used in live animals.	3/6/2020	2/11/2020
Minor	no	SLU 2 Laboratory Spaces	S509: More ketamine present in lock box than indicated by drug log (~1 more bottle than log would indicate). Additionally, "calculated balance on hand" column was blank for recent entries. Controlled drug logs need to be complete, and need to be kept in agreement with actual balance on hand.	3/6/2020	2/11/2020
Minor	no	Guthrie Laboratory Spaces	051: Consider adding hanger(s) or connection to the stainless steel rack to hold up the mop and broom or move/add new holder in area of room more appropriate for active use than current configuration.	2/28/2020	2/12/2020
Minor	no	SLU 2 Laboratory Spaces	S243: Cardboard box on the floor is not sanitizable and should be raised off the floor or removed from room.	3/6/2020	2/12/2020
Minor	no	SLU 2 Laboratory Spaces	S243: Expired suture needs to be labeled "Not for use in live animals."	3/6/2020	2/12/2020
Minor	no	HSB: T-wing Vivarium	T123 (Welsh): 1 ml syringe in drawer labeled with "Lido". There was no expiration date and sterile solutions should not be stored long-term in syringes because sterility cannot be assured. This was disposed of in the sharps container by the site visitor.	2/12/2020	2/12/2020
Minor	no	HSB: T-wing Vivarium	T123 (Welsh): Loose forceps with suture needle in drawer. This is an occupational health hazard because someone could be poked. The suture needle was disposed of in a sharps container by the site visitor.	2/12/2020	2/12/2020

Minor	no	HSB: T-wing Vivarium	T123 (Welsh): Expired eye lubrication ointment (1/20) – disposed of by site visitor.	2/12/2020	2/12/2020
Minor	no	CHDD Vivarium	055: Paint chips on wall next to door. Group to submit work order.	4/30/2020	2/13/2020
Minor	no	SLU 3.2: Laboratory Spaces	F545: Cardboard box on the floor is not sanitizable and should be removed.	3/6/2020	2/14/2020
Minor	no	HSB: T-wing Vivarium	T117 (Froehner): Two Ziploc bags of special diet in the refrigerator that were not labeled with the diet name or expiration date.	3/6/2020	2/14/2020
Minor	no	Roosevelt Building	260: Expired syringes in the rooms. The syringes where the orange recapping type with an expiration date of 2007. Please dispose of. Recommend investigators go through the drawers and discard old regents or anything that is currently not being used.	2/21/2020	2/19/2020
Minor	no	SLU 3.1: Laboratory Spaces	E767: The lid of the glue pest (insect) trap in this room had been dislodged, exposing a sticky surface that could potentially trap a small rodent. Lid was snapped back on during visit.	2/19/2020	2/19/2020
Minor	no	SLU 3.1: Laboratory Spaces	E763: Autoclave log shows incomplete data for some runs— must log all required information with every load.	3/20/2020	2/21/2020
Minor	no	SLU 3.1: 0 Level Vivarium	E068: Cardboard box on floor – emptied and removed during visit.	2/24/2020	2/24/2020
Minor	no	SLU 3.1: 0 Level Vivarium	E068: Expired suture – discarded during visit.	2/24/2020	2/24/2020
Minor	no	HSB: K-wing Vivarium	K015E (Chavkin): Scotch tape should be removed from behavioral chambers, all dirty or damaged tape should also be removed.	2/28/2020	2/26/2020
Minor	no	SLU 3.1: 0 Level Vivarium	E068 (Xu): Gas anesthesia induction chamber is dirty – group should clean it after each use.	3/27/2020	2/27/2020
Minor	no	SLU 3.1: 0 Level Vivarium	E045 (Shankland): Lab supplies in plastic container - found expired materials including sterile neoprene gloves, gelfoam, suture – need to discard or mark for terminal procedures only.	3/20/2020	2/27/2020

Minor	no	SLU 3.1: 0 Level Vivarium	E088D (Van Voorhis): 6% hydrogen peroxide in spray bottles with dates on them (no year indicated) and it's unclear as to whether that is an expiration or a made by date. Please make those dates more clear.	3/13/2020	2/28/2020
Minor	no	SLU 3.1: 0 Level Vivarium	E045: Full large sharps container should be disposed of.	3/13/2020	3/3/2020
Minor	no	SLU 3.1: 0 Level Vivarium	E078: Hygrometer in room also appears to be broken. Please repair/replace as appropriate.	3/27/2020	3/4/2020
Minor	no	WaNPRC: Western	228: A couple of cage locks were found unsecured (not in locations that could have allowed animals to escape), corrected during visit.	3/4/2020	3/4/2020
Minor	no	WaNPRC: Western	241: Expired saline, discarded during visit.	3/4/2020	3/4/2020
Minor	no	WaNPRC: Western	327: Expired disinfection wipes thrown away at the time of the visit.	3/4/2020	3/4/2020
Minor	no	WaNPRC: Western	216: Some animals that should have social access had their cages closed off, not clear why. BM corrected this during the visit, but may want to follow up to understand why this happened.	3/4/2020	3/4/2020
Minor	no	WaNPRC: Western	234: Refrigerator containing controlled substances was unlocked. Locked during visit.	3/4/2020	3/4/2020
Minor	no	WaNPRC: Western	212 (Dirty Cagewash): Expired disinfection wipes thrown away at the time of visit.	3/4/2020	3/4/2020
Minor	no	SLU 2 Laboratory Spaces	N101: Floor tape should be replaced when looking dirty, OR have BGIS paint a line on the floor.	3/27/2020	3/5/2020
Minor	no	SLU 3.1: 0 Level Vivarium	E021D: 6 weeks since last entry on monthly log for changing station.	3/27/2020	3/5/2020
Minor	no	SLU 3.1: 0 Level Vivarium	E071: Both technicians working in the dirty side cage wash were not wearing required ear protection. Please be sure that all personnel wear appropriate PPE within the facility.	3/13/2020	3/5/2020
Minor	no	SLU 3.1: 0 Level Vivarium	E026: Food and nesting material seen under changing station.	3/27/2020	3/5/2020
Minor	no	SLU 3.1: 0 Level Vivarium	E026: Monthly logs not up-to-date – no entries for 2020.	3/27/2020	3/5/2020

Minor	no	SLU 3.1: 0 Level Vivarium	E085D (Rack 96, Side A, Cage 3L; PI: Von Moltke): Several cages appeared overcrowded and due to be weaned. Cages were not marked for weaning by AT (birthdates on cage suggested at least one litter in cage >21d, no weaning variance posted). Please have group check cages and wean as appropriate.	3/6/2020	3/5/2020
Minor	no	SLU 3.1: 0 Level Vivarium	E088C IVIS imaging room (Paragas): Notations on F/air canisters are unclear – last notation with weight listed is 9/18 but room is used quite a bit so must ensure that canisters are being weighed after each anesthesia session and replaced when appropriate.	3/13/2020	3/5/2020
Minor	no	SLU 3.1: 0 Level Vivarium	E085D (Rack 96, Side B, Cage 2C): 1-2 pups in cage did appear not well. DR notified vet services.	3/13/2020	3/5/2020
Minor	no	SLU 3.1: 0 Level Vivarium	E078: Door sweep prevents door from properly closing. Please repair.	4/30/2020	3/5/2020
Minor	no	SLU 3.1: 0 Level Vivarium	E026: Clidox is expired. Please discard.	3/27/2020	3/5/2020
Minor	no	SLU 3.1: 0 Level Vivarium	E045: Eyewash is not being routinely flushed. Eyewash station requires flushing once per week to protect personnel from potential build-up of contaminants in the water line and must be recorded in a log.	3/27/2020	3/5/2020
Minor	no	SLU 3.1: 0 Level Vivarium	E078: Low temperature for 2/24 not noted on daily care log or reported to supervisor.	3/27/2020	3/5/2020
Minor	no	SLU 3.1: 0 Level Vivarium	E083: Only some tasks were recorded as complete on the daily care log (though AT had already “signed off” on the room for the day). Please be sure that all daily tasks are completed and documented appropriately.	3/13/2020	3/5/2020
Minor	no	SLU 3.1: 0 Level Vivarium	E079: Only some tasks were recorded as complete on the daily care log (though AT had already “signed off” on the room for the day). Please be sure that all daily tasks are completed and documented appropriately.	3/13/2020	3/5/2020

Minor	no	SLU 3.1: 0 Level Vivarium	E085D: Bins used to store chow also seemed rather large and were heavy - seems like it might present an ergonomic issue for ATs. Please review and switch to the smaller (more standard) bin size if possible.	3/27/2020	3/5/2020
Minor	no	SLU 3.1: Laboratory Spaces	E757A: Chair in room has cracks in surface, exposing interior foam. Chair must be replaced with one that is sound, sealed and sanitizable.	3/20/2020	3/6/2020
Minor	no	SLU 3.1: Laboratory Spaces	E757: 2 small unlabeled tubes found on bench. Probably just balance tubes, but these need to be clearly labeled and contents identified.	3/20/2020	3/6/2020
Minor	no	SLU 3.1: Laboratory Spaces	E763: Chair in room has cracks in surface, exposing interior foam. Chair must be replaced with one that is sound, sealed and sanitizable.	3/20/2020	3/6/2020
Minor	no	HSB: T-wing Vivarium	T135 (Perlmutter): There was an enrichment cage with unsealed wood and toys and rope that were unsanitizable in the corner of this room. Is this being used? If so, how is it sanitized? There appeared to be a rat fecal pellet towards the bottom of the cage, near the floor.	3/6/2020	3/6/2020
Minor	no	SLU 3.1: Laboratory Spaces	E569: Expired ketamine needs to be returned to reverse distributor.	3/20/2020	3/12/2020
Minor	no	HSB: I-wing Laboratory Spaces	I534N: Eyewash was overdue for flushing. Eyewash station requires flushing once per week to protect personnel from potential build-up of contaminants in the water line and must be recorded in a log. Flushed during visit.	3/13/2020	3/13/2020
Minor	no	HSB: J-wing Laboratory Spaces	J430A: Expired fish flakes discarded during visit.	3/13/2020	3/13/2020
Minor	no	WaNPRC: Western	234: Expired Amber microtainers. Please discard.	4/3/2020	3/18/2020
Minor	no	WaNPRC: Western	Transport Van: The lower latch on the interior door (between cab and back of van) is broken (missing a securing screw) and needs to be fixed.	5/29/2020	3/19/2020
Minor	no	WaNPRC: RR-Wing Vivarium	RR142: Expired – 1 drug – discarded during visit.	3/20/2020	3/20/2020



Minor	no	WaNPRC: RR-Wing Vivarium	RR050: Expired – 2 drugs, Urinalysis pH strips, vitamins and 1 bottle of tissue adhesive – discarded during visit.	3/20/2020	3/20/2020
Minor	no	WaNPRC: I-wing Vivarium	I355: Need to record date received for produce.	4/24/2020	3/23/2020
Minor	no	ARCF (Animal Research & Care Facility)	B201 (Treatment room): Expired boxes of drug used in rodent cage for fur mite treatments – discarded at time of visit.	3/25/2020	3/25/2020
Minor	no	ARCF (Animal Research & Care Facility)	B284: Expired bag of fluids – discarded at time of visit.	3/25/2020	3/25/2020
Minor	no	WaNPRC: I-wing Vivarium	I047 (Instrument Prep): Several rust spots in bottom of stainless steel sink as a result of metal basket sitting in bottom of sink– should be scrubbed to remove rust. Found an extremely rusty metal basket (approx. 3”x 8”) that is likely used for instruments (forceps, etc.) in sink. Rusty metal basket should be discarded. Found dustpan on the floor – hung it up during visit.	5/1/2020	3/25/2020
Minor	no	HSB: B-wing Laboratory Spaces	B144C: One cage had no nestlet. It seemed to be an oversight.	4/24/2020	3/26/2020
Minor	no	WaNPRC: RR-Wing Vivarium	RR040: Emergency landline phone attached to the wall (but needs to be connected to a phone jack to work) – suggest small sign next to phone with directions on how to use it.	4/24/2020	3/27/2020
Minor	no	ARCF (Animal Research & Care Facility)	B151D: Expired 1X PBS in cabinet should be clearly marked ‘Not for use in animals’.	4/24/2020	3/30/2020
Minor	no	ARCF (Animal Research & Care Facility)	B151E: Slide warmer in rear corner of room has some brown goo that should be cleaned up.	4/24/2020	3/30/2020
Minor	no	Guthrie Laboratory Spaces	354A: Expired surgical glue, antibiotic cream and artificial tears – discarded during the visit.	4/1/2020	4/1/2020
Minor	no	Guthrie Laboratory Spaces	419A: Last entry in eyewash log is 9/30/19, need to check eyewash weekly. Eyewash station requires flushing once per week to protect personnel from potential build-up of contaminants in the water line and must be recorded in a log.	4/24/2020	4/1/2020

Minor	no	Guthrie Laboratory Spaces	044 Suite: Please always note when animals are not present in the daily care logs. It is being done sporadically, but there are a lot of partially blank logs with no notes about whether or not animals were present.	4/24/2020	4/1/2020
Minor	no	WaNPRC: I-wing Vivarium	I013: Eyewash not up-to-date. Eyewash station requires flushing once per week and must be recorded in a log.	5/1/2020	4/2/2020
Minor	no	WaNPRC: I-wing Vivarium	I013: Swifter sweeper was found propped up against the wall and resting on floor in the corner of lab. Broom, mops, etc., should be hung up off floor.	5/1/2020	4/2/2020
Minor	no	WaNPRC: Arizona	AA190C: Refrigerator had 2 containers filled with unidentified, unlabeled substance (jello?) with no dates on the container. Please immediately discarded.	5/1/2020	4/3/2020
Minor	no	WaNPRC: I-wing Vivarium	I005 (anteroom) to I013, I021 suite: Door jam with nothing but residual glue from what appears to be duct tape all the way around the door jam. It's really bad and noticeable - the residual glue needs to be removed.	7/31/2020	
Minor	no	HSB: 6th Floor Vivarium	C621: Two (2) Isoflurane dispensers need to be re-certified prior to next use. Please label clearly so they are not used until they have been re-certified.	4/17/2020	4/6/2020
Minor	no	ARCF (Animal Research & Care Facility)	B271 (dirty side): Expired hydrogen peroxide (Jan. 16, 2019).	4/24/2020	4/6/2020
Minor	no	ARCF (Animal Research & Care Facility)	B271 (dirty side): Mop standing upside down with the handle on the floor and the dirty mop in the air, leaning against the wall, directly under the hanging device. The mop should be hung up, with the mop facing down.	4/24/2020	4/6/2020
Minor	no	WaNPRC: Western	316 (Housing): One side of a dual cage (Male and Female paired) did not have a food hopper. Plenty of chow was on the floor of that side of the cage.	4/3/2020	4/6/2020
Minor	no	WaNPRC: Western	213 (Clean Cagewash): Temp Strips logged daily (except Sundays), no failures in past 2 months.	4/3/2020	4/6/2020

Minor	no	WaNPRC: Western	304 (Corridor): Expired emergency animal water (12/15/19).	4/3/2020	4/6/2020
Minor	no	WaNPRC: Western	320: Unclear if logs are kept of when these trapping run cages are sanitized. It is performed after each use according to the host.	4/3/2020	4/6/2020
Minor	no	WaNPRC: I-wing Vivarium	I441: Door needs cleaning.	4/24/2020	4/7/2020
Minor	no	ARCF (Animal Research & Care Facility)	B144D: Bottle of 70% ETOH labeled made date 3/14/19 should be discarded.	4/24/2020	4/10/2020
Minor	no	Guthrie Vivarium	369E, F: Hygrometer readings in the room showed higher than normal temperatures. Asked Facility Supervisor to check on the monitoring system readings.	4/24/2020	4/10/2020
Minor	no	North Lake Diesel	Ceiling vents (x2) were dusty (one more so than the other). Please clean as necessary.	3/20/2020	4/10/2020
Minor	no	WaNPRC: Western	213 (Clean Cagewash): Several employees are past due for cagewasher safety training.	4/10/2020	4/12/2020
Minor	no	ARCF (Animal Research & Care Facility)	B177: Small O2 tank was not secured to a wall or cage.	5/29/2020	4/13/2020
Minor	no	Guthrie Laboratory Spaces	363A: Behavior room hasn't been used in the last year, but there are small food reward pellets on the floor underneath the elevated maze. Floor should be swept.	4/24/2020	4/13/2020
Minor	no	WaNPRC: Western	Transport Van: Van was a little dirty and a little smelly. Van appears to be getting cleaned less frequently than described in SOP. Please review SOP and follow it.	5/29/2020	4/15/2020
Minor	no	WaNPRC: Western	Logs indicate that the eyewash stations/showers haven't been tested since the 2nd week of February.	4/24/2020	4/15/2020
Minor	no	HSB: 6th Floor Vivarium	AA706: Some frogs are singly housed and there was no obvious EE in any of the tanks. Inspector was told that rotifers were being provided as EE several times a week when they are available, but there have been problems with the rotifer colony, and this has not always been possible. There are no husbandry or enrichment exceptions for any of the experiments on this protocol, and I	4/17/2020	4/16/2020

			can't find guidelines on frog housing, socialization and EE, so I am not sure if these are problems or not. It does sound as if the group is working with G. Sanders to optimize the care of their animals.		
Minor	no	HSB: 6th Floor Vivarium	C615: Used F/AIR canisters stored in drawers. Used canisters should be placed in a gas-tight container (ziplock baggy or Tupperware-type container to prevent potentially toxic off-gassing) until EH&S pickup can be arranged.	4/17/2020	4/17/2020
Minor	no	North Lake Diesel	Some animal cages had "red" dot while over 60% of animal cages had no "red" dot; all caging in this facility should have "red" dot per DCM guidelines for rack/watering purposes. To be corrected in a timely manner.	3/20/2020	4/17/2020
Minor	no	ARCF (Animal Research & Care Facility)	B145A: Bottle of Isopropyl Alcohol labeled "Arrived 1-3-19". Not sure what that means, but it should have a "Made up" date.	4/24/2020	4/20/2020
Minor	no	Guthrie Laboratory Spaces	051: Daily logs not established or present. Lab need to create a daily care log, health/mort required, water parameters strongly encouraged, weekly/bi monthly/monthly tasks encouraged, behavior optional.	4/24/2020	4/20/2020
Minor	no	Guthrie Laboratory Spaces	054: Daily logs not established or present. Lab need to create a daily care log, health/mort required, water parameters strongly encouraged, weekly/bi monthly/monthly tasks encouraged, behavior optional.	4/24/2020	4/20/2020
Minor	no	WaNPRC: RR-Wing Vivarium	RR052: Checklist has daily tasks, but tasks in this room are completed only after it's been used and thus there is no signed off on tasks daily. The checklist should be modified or enter N/A on days when tasks are not necessary.	4/24/2020	4/22/2020

Minor	no	Guthrie Laboratory Spaces	354A: Surgery scope area is dirty (pieces of bedding/nestlet material) and cluttered – should be kept clean and organized.	4/24/2020	4/25/2020
Minor	no	SLU 3.1: 0 Level Vivarium	E088C and other rooms throughout the facility: Chairs are not sealed and sanitizable – need to replace with more appropriate chair material especially in the biohazard areas – Facility Supervisor to put in request to get new chairs.	4/30/2020	4/30/2020
Minor	no	WaNPRC: Arizona	Feed Storage 2: 1 bag of forage not labeled with an open date. Please label the bag with the open date and expiration date of 6 months from the open date.	5/1/2020	5/1/2020
Minor	no	WaNPRC: Arizona	AA204: Storage rack does not have a sanitized/expiration date label.	5/1/2020	5/1/2020
Minor	no	WaNPRC: Arizona	AA190B (walk in cooler): White container used for forage has no sanitized/expiration date label.	5/1/2020	5/1/2020
Minor	no	WaNPRC: Arizona Ellingson	AB307: Shiny metal table used for storage has an expired sanitized tag on it.	5/1/2020	5/1/2020
Minor	no	ARCF (Animal Research & Care Facility)	B145B: T-maze made of painted wood that contains a brown sliding divider made of hardboard (like a clipboard material) that's not sanitizable. Consider sealing the T-maze for a sanitizable surface.	5/29/2020	5/4/2020
Minor	no	WaNPRC: RR-Wing Vivarium	RR151: Cage washer emergency cable no longer has a color coating so may be difficult to see. Cable needs to be replaced with a color coated one.	5/15/2020	5/12/2020
Minor	no	ARCF (Animal Research & Care Facility)	Emergency exit test log in the wash room was not up-to-date. It is supposed to be checked quarterly, but it was last signed 6/12/19.	5/15/2020	5/13/2020
Minor	no	WaNPRC: Arizona	AA190B (walk in cooler): White container used for forage has a cracked/broken lid.	5/15/2020	5/14/2020
Minor	no	WaNPRC: Arizona Ellingson	AB307: White container used to store forage has a cracked/broken lid.	5/15/2020	5/14/2020
Minor	no	SLU 3.1: Laboratory Spaces	The wooden table in the rear corner of the room is not in good shape, with many areas where bare wood is visible. This table needs to be removed from the area where animals will be used because it	5/31/2020	5/14/2020

			cannot be properly cleaned and sanitized.		
Minor	no	SLU 3.1: Laboratory Spaces	All paper that is posted must be laminated or placed in a plastic sleeve (including post-it notes).	5/31/2020	5/18/2020
Minor	no	HSB Laboratory Spaces	NW141A: Isoflurane vaporizer is past due for service. Instructed to post a sign stating "Do Not Use Until Calibrated."	6/30/2020	5/21/2020
Minor	no	WaNPRC: Western	218: A fire sprinkler head was dangling from an unfinished hole in ceiling, please check and contact facility services if a repair is needed (it may be OK).	5/31/2020	5/21/2020
Minor	no	SLU 3.1: Laboratory Spaces	Tape use should be minimized. Any tape that is used should be sanitizable lab tape in good condition.	5/31/2020	5/25/2020
Minor	no	SLU 3.1: Laboratory Spaces	All posted signage needs to be laminated or placed in a plastic sleeve.	5/31/2020	5/25/2020
Minor	no	SLU 3.1: Laboratory Spaces	Step stool is very rusty and needs to be removed. Only non-rusty items should be in this room.	5/31/2020	5/25/2020
Minor	no	Life Sciences Building	212M: Bell jar used for euthanasia was dirty and reminded needs to be cleaned out between uses.	6/19/2020	5/26/2020
Minor	no	Portage Bay Building	162: Install hose coil for hose currently on floor. Group to submit work order.	5/31/2020	5/29/2020
Minor	no		Emergency showers in the procedure rooms (not in the main hallway) had not been checked since January 2019.	6/26/2020	6/9/2020
Minor	no	SLU 3.1: 0 Level Vivarium	E088C: No notation on vaporizer on when last calibration was performed and gas anesthesia system machine appears dirty with bedding and rust noted at the time of the visit.	7/31/2020	6/11/2020

## Status of Uncompleted Deficiencies as of the Previous Semi-Annual Report

Severity	Repeat?	Building	Concern Description	Date Correction Due	Date Complete
Minor	no	Friday Harbor Laboratories	Due to a boat being out of commission, a student course that normally does open water observational work was changed to include catching of fish via beach seine netting and placement of the fish in holding tanks at FHL. This change in plans was not covered under an approved IACUC protocol and the fish were caught without a WA State Fish and Wildlife permit. In addition, the instructor and the students involved were not enrolled in the Occupational Health Program and the students had not taken the required training for participation in vertebrate animal classes at UW FHL. A new protocol was reviewed and approved by the IACUC and the researcher obtained a WA State Fish and Wildlife permit.	2/29/2020	2/3/2020
Minor	no	Ninth & Jefferson Building	3NJ383.2: On the right front of the PET scanner, there's a hole in the floor that should be filled.	2/29/2020	2/8/2020
Minor	no	Ninth & Jefferson Building	3NJ383.2: Damaged ceiling tile (has a hole), part of the sub-ceiling is bent forming a gap in the ceiling tiles.	2/29/2020	2/8/2020
Minor	no	WaNPRC: I-Wing Vivarium	J025B: Hallway wall outside clean cagewash room has gouges. Repaired during the cagewash area renovation.	2/29/2020	2/27/2020
Minor	no	WaNPRC: I-Wing Vivarium	J025A (dirty cagewash): Coving of washdown, ceiling have significant cracks and holes. Cagewash area was completed renovated.	2/29/2020	2/27/2020
Minor	no	WaNPRC: Arizona Ellingson	Lights in hospital room need to be on timer rather than occupancy sensor.	2/29/2020	2/14/2020
Minor	no	WaNPRC: Arizona Ellingson	Windows in doors needed to animal areas.	2/29/2020	2/19/2020
Minor	no	WaNPRC: I-Wing Vivarium	I061: Chipped paint by I061. WaNPRC to submit facility repair request.	2/29/2020	Pending Corrective Action - Due Date 7/31/20

Minor	no	ARCF (Animal Research & Care Facility)	B278: Wall chip by door. Please repair/repaint so that surface is sealed and sanitizable.	2/29/2020	Pending Corrective Action - Due Date 7/31/20
Minor	no	Friday Harbor Laboratories	Lab 2 "Willows Lab" Octopus use space for Gire Lab: Open floor drains will need non-wooden covers. Remove unsealed wooden furniture, repair rusted refrigerator exterior surfaces/freezers, remove rust from bases of island desk shelving units (like previously completed for Lab 7), hole in southwest wall.	3/31/2020	Space will not be used until renovation funds are acquired by Department

## Appendix C Departures

### Prolonged restraint

Active protocols with approved prolonged restraint are as follows:

- Wild bats, held in cloth bags for transport – 1 protocol
- Wild Birds, held and hooded for transport or equipment attachment –4 protocols
- Wild mammals, held during capture – 6 protocols
- Wild fish, captured in gill or tow nets – 5 protocols
- Zebrafish, held in a matrix for imaging – 4 protocols
- Mice, held in tubes for various procedures – 16 protocols
- Mice, held by head posts – 6 protocols
- Nonhuman primates, held in chairs or tubes with or without head posts – 12 protocols
- Nonhuman primates, constrained by swaddling – 2 protocols
- Pigs, held in slings – 2 protocols

### Housing at Non-standard Temperature

Active protocols with approved housing at non-standard temperatures are:

- Zebrafish following human cell transplantation or for heat-shock gene activation – 2 protocols
- Mice housed under cold stress or at thermo-neutral temperatures during metabolic experiments – 2 protocols

### Others

- The IACUC has approved housing infant monkeys (age 2 weeks to a body weight of 1 kg) in cages that meet floor space requirements but are only 24" high. These animals climb up well, but are not adept at climbing down. The lower cage height reduces the risk of injury if an animal should fall.
- The IACUC has approved co-housing 4 juvenile nonhuman primates (up to 5 kg body weight) as a group in a Group 3 sized 4-cage rack with both vertical dividers and one horizontal divider removed. This innovative configuration meets the volume regulations for Group 3 animals and, while being shy of the floor area standard, provides the animals increased opportunity to express species-typical behavior.
- The IACUC has approved a L shaped housing variance combining cages together in configurations that provide increased vertical space for the animals and more than standard floor space but with part of the space <36 inches (but at least 32 inches) high. This will offer more choice in housing configurations to encourage species-typical behavior such as locomotion and exploration.
- The IACUC has approved scattering food on the floor of NHP housing compounds to minimize contamination and ensure access to food and foraging opportunities for all animals.



- *The IACUC has approved allowing for 28 day cage changes for singly house gerbils.*

## **Appendix D IACUC Program Review**

*The Animal Care and Use Program is, in general, excellent, and responsibilities are well-defined. In the past there was a concern about funding for facility repairs, but that has been addressed.*

*Disaster Planning and Emergency Preparedness: Disaster plans for DCM and WaNPRC were reviewed, as well as the COVID-19 work plans for DCM, WaNPRC, and OAW. They were found to be comprehensive, which means it is a challenge to keep all of the details up to date, and DCM and WaNPRC are doing an excellent job managing them. OAW, DCM, and WaNPRC are to be commended on their response to the COVID-19 pandemic.*

*IACUC: The IACUC was evaluated and found to be completely satisfactory. Regarding the evaluation of the effectiveness of IACUC training, it was noted that all programs with a pass/fail requirement meet this criteria as we know that attendees have met a minimum criteria before undertaking their roles. It was not as easy to evaluate the effectiveness of training that occurs at IACUC meetings or through mentoring by another member.*

*IACUC Protocol Review is acceptable with the following recommendations:*

- *Humane endpoints: OAW liaisons should be sure to include in liaison visits a discussion about what humane endpoints are listed on the protocol and make sure all relevant lab personnel are aware and knowledgeable about checking for them.*
- *Protocols with Food/Fluid Restriction: Recommendation to have a standard reminder for IACUC site visitors at the bottom of the visit schedule that is provided to remind site visitors to check Food/Fluid restriction logs including body weights to confirm they are being collected.*
- *Mechanism to follow up on Pilot projects: For Full Committee Reviews (FCR), the IACUC should have a mechanism to keep track of the studies that are discussed so that we can formally follow-up on the progress and results. The previous Assistant Director did that and perhaps the new one can continue to include pilot study reviews in subsequent IACUC meeting agendas. For pilot studies that are reviewed through Designated Member Review (DMR), it is recommended that a way for liaisons to check with the group on pilot study follow-up, either by e-mail or during liaison visits, is established.*

*IACUC Membership and Functions were found to be acceptable.*

*IACUC Training was found to be acceptable.*

*IACUC Records and Reporting Requirements were found to be acceptable though it was noted that the committee relies on OAW to ensure that all criteria are met. The committee is not aware of any non-compliance.*

### Veterinary Care

*Previous suggestions for improvement were reviewed as was the Veterinary Care section of the OLAW Checklist.*

*Previous suggestions:*

- *Provision of vet care to cephalopods/octopuses*
  - o *DCM and OAW have worked with the octopus group to ensure appropriate husbandry, care and personnel training. The first IACUC protocol involving octopuses was reviewed and approved in February 2020. The lab has worked with the Aquatics Vet to ensure to appropriate housing and husbandry in their lab space. A didactic class on Lab Managed Care and Records Octopus was developed and implemented as well as the Aquatics vet gave a special seminar to veterinary staff on "Octopus Regulations, Husbandry and Veterinary Care." Hands-on training for octopus handling has also been developed and implemented and all training is being tracked in Hoverboard.*

- *Involve Veterinary staff in updating of the training program (primarily rodent) to facilitate better surgery, anesthesia, and analgesia, post anesthesia/post procedural monitoring*
  - o *AUTS has worked with the vet staff to design and revise on-line lessons covering these topics including revision of the Introduction to Rodent Surgery course which will be completed and implemented shortly.*
- *Ensure upcoming revisions to the AVMA Guidelines for Euthanasia are incorporated into IACUC policies (e.g. Euthanasia of Research and Teaching Animals), SOPs, protocol standard procedures, and signage*
  - o *OAW has been working with the labs to educate them on the revisions and to add revised standard euthanasia procedure to protocols. Euthanasia of Research and Teaching Animals policy was revised and approved by the IACUC in March 2020. DCM is retrofitting CO2 flowmeters in vivarium spaces to allow the required flow rate and will update signage as that occurs.*
- *Ensure the AAALAC program description is updated to reflect changes made to the program*
  - o *work in progress.*

*Review of the OLAW checklist did not reveal any new suggestions for improvement to the veterinary care program.*

*Personnel Qualifications and Training was found to be acceptable though it was noted that pandemic guidance (including, for example, safe spacing instructions for labs) should be added to future on-line training modules for both IACUC members and UW research personnel.*

*Occupational Health & Safety of Personnel was found to be acceptable.*

*Personnel Security: There have been no changes since the previous evaluation 6 months ago. The University of Washington meets the guidelines for Personnel Security.*

*Investigating Animal Welfare and Concerns: There have been no changes since the previous evaluation 6 months ago. OAW has a clear process for investigating and reporting animal welfare concerns that meets the requirements of the Guide.*

## Concurrence Letters

Concurrence Image - KS

Concurrence Image - FRR

Concurrence Image - SRH

Concurrence Image - KMG

Concurrence Image - SL

Concurrence Image - KG

Concurrence Image - JS

Concurrence Image - CM

Concurrence Image - MK

Concurrence Image - JPVH

Concurrence Image - AW

Concurrence Image - MB

Concurrence Image - DM

Concurrence Image - ML

Concurrence Image - GS

Concurrence Image - JM

Concurrence Image - JA

## Minority Views

None