

Memorandum to: Joe Giffels

From: Institutional Animal Care and Use Committee

Subject: Semiannual Report of the Program Review and Facility Inspection

Date: July 30, 2021

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.](#)):

As of 2/1/21 The University of Washington Office of Animal Welfare is now part of the Office of Research which is currently led by Dr. Mary Lidstrom, Vice Provost for Research.

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:

- 50 protocols with prolonged restraint (bats, birds, fish, mice, non-human primates, wild mammals)
- 9 protocols with housing at non-standard temperatures (4 mice, 1 rats, 1 mice and rats, 3 zebrafish)

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

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:

- 16 protocols with cage size variances (12 for mice, 1 rats, 3 mice and rats)
- 6 protocols with wire bottom cages (4 mice, 2 rats)
- 50 protocols with weaning variances (48 mice, 2 rats)
- 2 protocols with a non-AVMA endorsed euthanasia method (1 small birds, 1 frogs)
- 37 protocols with multiple major surgeries (6 species)
- 5 protocols with other policy variances (3 mice, 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 July 2021

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

Over the past six months, 8 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 July 2021

- ☐ 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 170 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	31	0	Personnel Precautions	15	0
Sanitation	18	0	Feed	10	0
Husbandry	9	0	Environment	2	0

Equipment	19	0	Signage and Information	22	0
Drugs	13	0	Research Chemicals	2	0
Supplies	23	0	Protocol/Procedures	6	0

166 have been resolved while 4 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
99	Concurred	7/15/21
	Abstained	7/20/21
	Concurred	7/27/21
	Concurred	7/16/21
	Concurred	7/20/21
	Concurred	7/27/21
	Concurred	7/15/21
	Concurred	7/27/21
	Concurred	7/16/21
	Concurred	7/15/21

99		Concurred	7/19/21
		Concurred	7/15/21
		Concurred	7/15/21
		Concurred	7/27/21
		Concurred	7/16/21

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

Severity	Repeat?	Location	Deficiency and Corrective Action Plan	State	Date Complete
Significant	no	Vivarium	Mortality due to no access to food or water. One approximately 10 day old pup with an ear tag was found alone in a cage on the rack. The cage was turned backwards on the rack so the lixit was not engaged, and there was no food in the hopper. As the investigator was ear tagging, the pups were transferred into a new clean cage and one pup was missed as pups were returned to the home cage. The investigator will no longer transfer pups to a new cage while ear tagging if they are too young to be weaned.	Complete	3/8/2021
Significant	no	Vivarium	Mortality due to no access to food. 4 of 5 mice were found dead in a cage with no food. The responsible employee was re-trained and now has more direct oversight from supervisory staff. Entire lab re-trained on SOPs.	Complete	3/29/2021
Significant	no	Vivarium	Mortality due to no access to water. Staff must check cages to ensure that each is fully seated in the rack such that water is flowing correctly. The responsible employees was re-trained and lab was re-trained on SOPs.	Complete	3/29/2021
Significant	no	Vivarium	Animals not checked. Upon arrival from vendor, rabbits were not checked for 2 days. Twice daily room check procedure for rabbits revised such that different technicians will perform the AM and PM checks whenever possible.	Complete	3/31/2021
Significant	no	Vivarium	Protocol noncompliance. Animals were dosed with a substance that was not approved on the relevant protocol. Administration of the substance was suspended. The PI met with lab personnel to remind them of the importance of knowing what is approved on its protocol and also provided training on how to check the protocol on-line. Administration of the substance has now been approved on the protocol.	Complete	6/8/2021
Significant	no	Vivarium	Mortality due to no access to food. Food is now added in the receiving room and will evaluate that change. Staff will be re-trained on adjusting light in animal rooms. There is an increased awareness about removing cloudy cages. Spare cages are now stored on racks in a standard orientation to make it easier to note when cages do not have food or are not engaged in the rack.	Complete	7/6/2021
Significant	yes	Vivarium	Mortality due to no access to food. Research staff member took appropriate re-trainings. Lab practices were reviewed with all lab staff regarding the feeding of recently weaned mice. Vivarium staff will be re-trained on correct procedures.	Complete	7/6/2021

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Significant	no	Vivarium	Protocol noncompliance. A procedure was performed that was not approved on the protocol. Procedure has been added and approved on the protocol. OAW staff will meet with the lab to review the protocol and remind staff to verify what procedures are on the protocol.	Complete	7/6/2021
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Appendix B: Deficiencies in the Institution's Animal Facility

Severity	Repeat?	Location	Room	Deficiency and Corrective Action Plan	Correction Due Date	Date Complete
Minor	no	DCM ARCF	B182	Paint peeling/chipped on wall opposite side entry door approximately 5-6 inches long and 1 inch wide. Recommend adding to list of repairs and do at one time when there are several 'fixes' rather than individual one-offs and a few months triennial inspection.	9/30/2021	
Minor	no	WaNPRC I-Wing	I071	Wall ding in laundry room needs repair.	9/30/2021	
Minor	no	WaNPRC I-Wing	I463	Automatic door closer is broken and needs to be fixed.	9/30/2021	
Minor	no	WaNPRC Western	WaNPRC Western	Elevator floor that would be under the door when the elevator is closed is eroded. Needs repair.	9/30/2021	
Minor	yes	DCM Roosevelt	DCM Roosevelt	Extremely strong rodent odors and possible allergens present. Confirmed with Host that the portable Carbon Filtration System outside 257 is/was not working as of Wednesday 1/13. Per Host, DCM put this in place to help alleviate the odors, etc. Needs to be fixed and operational as soon as possible as the odors were quite bad.	6/30/2021	6/22/2021
Minor	no	WaNPRC I-Wing	I563	Large ding in floor needs repair.	9/30/2021	6/22/2021
Minor	no	WaNPRC I-Wing	I565	Several deep dings in floor need repair.	9/30/2021	6/22/2021
Minor	no	DCM ARCF	B141A	Anesthesia and Vaporizer were last tested 8/2018. Service was due 8/2019. Please post a sign stating "Do Not Use Until Calibrated."	6/30/2021	6/21/2021

Minor	no	DCM SLU 3.1	E068	Equipment is not calibrate. Please label "Do Not Use Until Calibrated."	6/18/2021	6/16/2021
Minor	no	DCM SLU 3.1	E068	Isoflurane dispenser out of date (last calibration 4/2019).	6/18/2021	6/16/2021
Minor	no	Guthrie	342A	Drug safe is located in room and the light bulb in the room is burned out. Please submit a work order to replace the light bulb.	6/11/2021	6/7/2021
Minor	no	DCM Guthrie	369 Hallway	Eyewash station is missing one of the dust cap to the eyewash flush nozzle (it has been broken off). The dust cap needs to be replaced as it is a requirement for a functional eyewash.	6/30/2021	6/1/2021
Minor	no	WaNPRC HSB	I013, I021	Air filters in ceiling looked dirty and probably need to be replaced.	5/31/2021	6/1/2021
Minor	no	Guthrie 052: Missing ceiling tiles	Guthrie 052: Missing ceiling tiles	052: 2 ceiling tiles missing (FS fixed leaking pipe, but didn't replace ceiling tiles). Inspectors noted at least 3 other intact ceiling tiles with water damage. Please replace all missing ceiling tiles and 3 water stained/damaged ceiling tiles.	5/31/2021	5/26/2021
Minor	no	WaNPRC ARCF	B283	Broken mop holder needs to be replaced.	5/31/2021	5/25/2021
Minor	yes	HSB	NW141A	Eyewash is currently being flushed 1x monthly per eyewash log and should be flushed 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.	5/14/2021	5/14/2021
Minor	no	DCM Guthrie	351B	Food and bedding storage bins were not labeled. Please label expiration dates.	5/14/2021	5/7/2021

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Minor	no	HSB	H231	Two temperature and humidity monitors were not consistent. One monitor was last calibrated in 2016. Please replace or repair monitor.	4/30/2021	5/5/2021
Minor	no	Guthrie	416, 418	It appears the cagewash is being used, but no room logs have been filled out since 2020. Daily/weekly room logs should be maintained when room is active, and clearly marked as being inactive if log is not being maintained.	4/30/2021	5/4/2021
Minor	no	DCM ARCF	B226	Barrel labeled for Pig Food with an expired date written on the tag was actually holding a bag of rodent chow. This should just be checked and clarified to avoid confusion.	4/30/2021	4/30/2021
Minor	no	DCM ARCF	B152	Cage change logs are either missing or not filled out since November 2020 on all cage racks in this suite. Metro racks in anteroom (for supplies storage) needed sanitization.	4/30/2021	4/29/2021
Minor	no	HSB	J106	All posted paper needs to be encased in plastic, replace any tape that is peeling or crumbling with fresh, sanitizable lab tape.	5/14/2021	4/29/2021
Minor	no	DCM Brotman	P164	Cracked paint on south wall, need patching and painting.	4/30/2021	4/28/2021
Minor	no	DCM Guthrie	369F	Low humidity room must be noted and reported to the Facility Supervisor and Vet Services.	6/30/2021	4/28/2021
Minor	no	DCM Guthrie	369H	Low humidity room must be noted and reported to the Facility Supervisor and Vet Services.	6/30/2021	4/28/2021
Minor	no	DCM Guthrie	369	DCM Cloth Mask Guidance signage (updated 5/8/20) taped on the inside of the entry room door is not sanitizable. Paper	5/14/2021	4/28/2021

				posting should be laminated or encased in plastic.		
Minor	no	DCM Guthrie	369F	Expired Clidox (mix made on 3/6 per label on bottle). Please discard.	5/14/2021	4/28/2021
Minor	no	DCM Guthrie	369H	Expired artificial tears ointment. Please discard.	5/14/2021	4/28/2021
Minor	no	HSB	J661A	Eyewash is not being flushed weekly (per the eyewash log, last flushed in 10/2020). 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.	5/14/2021	4/27/2021
Minor	no	DCM ARCF	B185	Ventilated racks not being changed out every 8 months as indicated on individual rack log sheets. The log sheets should be edited/revised if racks are not currently on 8 month change out.	4/30/2021	4/27/2021
Minor	no	HSB	NW141A	7-8 vials of saline (for in vivo use) expired (2 vials exp. 2015 and 5 vials exp. 2019) and disposed of during visit.	4/26/2021	4/26/2021
Minor	no	HSB	NW141A	Rodent chow/food pellet stored in 50-100mL Corning media bottle unlabeled and disposed of during visit.	4/26/2021	4/26/2021
Minor	no	HSB	NW141A	One bottle of disinfectant (for bench top) expired (exp. 2015) and disposed of during visit (no further action required).	4/26/2021	4/26/2021
Minor	no	DCM ARCF	B173	Unlabeled container of what appeared to be sunflower seeds.	4/30/2021	4/23/2021
Minor	no	DCM Brotman	Stairwell (Passage from Phase I to Phase 2)	Cracked paint on walls, need patching and painting. DCM has submitted work order.	4/30/2021	4/21/2021

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Minor	no	WaNPRC ARCF	B285	Remove autoclave tape and replace with bungee cord or other type of cable to secure the power strip on the cart in the back of the room.	4/30/2021	4/20/2021
Minor	no	DCM NLD	DCM NLD	Several cages with singly housed mice inside. The protocol does not appear to be approved for single housing. Please submit a Husbandry variance.	4/16/2021	4/20/2021
Minor	no	Guthrie	028C1, 028C2	Maze in the back room has tape holding one part of the maze together and a piece of damaged (exposed) wood on another part of the maze. Please find solutions to keep maze functional that do not require tape or exposed bare wood. All surfaces should be sound, sealed and sanitizable. Water should bead up on any surface, not absorb. Tape should be used minimally, then only plasticized lab tape, such as Timemed tape.	4/30/2021	4/20/2021
Minor	no	DCM ARCF	B234	One of the white plastic cutting boards needs to be replaced (stained, scuffed).	4/30/2021	4/19/2021
Minor	no	DCM ARCF	B271 (Dirty Cagewash)	According to the Logistics Supervisor, biological indicators (BI) have not been run on the autoclaves over the last several months. No explanation as to why that was the case.	4/30/2021	4/19/2021
Minor	no	DCM ARCF	B234	Expired B-Virus scrub kit found in Acid Cabinet below fume hood.	4/30/2021	4/19/2021
Minor	no	DCM ARCF	B265 (Clean Cagewash)	Not always using the available metal pin to keep cage wash doors open (should be used every time); safety signage posted throughout room is inconsistent on rules for when to use the	4/30/2021	4/19/2021

				pin. Signage should be consistent throughout the cage wash telling people to always use the pin.		
Minor	no	DCM ARCF	B141D	Carcass in freezer to be disposed of.	4/23/2021	4/19/2021
Minor	no	DCM ARCF	Transport Vehicle (White Prius)	Expired Clidox in spray bottle. Last date was 7/2? Please discard.	4/30/2021	4/19/2021
Minor	no	WaNPRC ARCF	B241	Expired H2O2 spray bottle. Please discard.	4/30/2021	4/19/2021
Minor	no	WaNPRC ARCF	B276	Expired surgical gloves. Please mark expired and not for animal use or discard.	4/30/2021	4/19/2021
Minor	no	DCM LSB	B119A	Expired 50 mL conical tube of 4 mg/mL tricaine with date of 1/21/21 without an expiration date and as it has a working solution concentration in refrigerator. The tube should have an expiration date and working solution expires after 1 month.	4/30/2021	4/16/2021
Minor	no	DCM ARCF	B164	One bottle of betadine scrub with expiration date of 11/20 crossed out and 3/24 written over it. Inspector discarded it at the time of the inspection. AT in room thought the group could have transferred scrub from another bottle into this one and changed the expiration on the old bottle. If group wants to move substances to a secondary container, it should be a new container with a label that has the name of the substance and the expiration date not reusing an old container and scratching out the expiration date.	4/30/2021	4/15/2021
Minor	no	DCM ARCF	B207, B213, B219	Expired bottle of Clidox. Please dispose of.	4/30/2021	4/13/2021

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Minor	no	DCM Brotman	B36 (Dirty Cagewash)	Walls in dirty cagewash area need patching and painting.	4/30/2021	4/11/2021
Minor	no	DCM ARCF	B163	3 bottles of expired Baytril, and a package of artificial tears that expired in 2016. Please discard.	4/30/2021	4/9/2021
Minor	no	DCM ARCF	B186	One opened bag of food with no open date and not stored in secondary container; more importantly, they should not have been in this room per DCM host as it is a storage room. Please remove bag of food.	4/30/2021	4/9/2021
Minor	no	DCM Brotman	P154	Cracked paint on wall need patching and painting.	4/30/2021	4/9/2021
Minor	no	DCM ARCF	B203A	Multiple cage card tags have Expected Euthanasia dates (2/2020) that precede the written infection dates (12/2020) A typo from the lab on the euthanasia dates?	4/30/2021	4/9/2021
Minor	no	DCM Brotman	P170	Cracked paint above the door need patching and painting.	4/30/2021	4/8/2021
Minor	no	DCM ARCF	B160	Expired Clidox. Please dispose of.	4/30/2021	4/6/2021
Minor	no	DCM ARCF	B173	Expired clidox (1.15.21). Please discard.	4/30/2021	4/5/2021
Minor	no	DCM ARCF	B168	2 small bags of special diet food stored in cabinet and not at 4C as recommended; bags not labeled correctly (no open date) and not in secondary container.	4/30/2021	4/5/2021
Minor	no	DCM ARCF	B165	Monthly cleaning logs on both fume hoods were not filled out for March 2021.	4/30/2021	4/5/2021
Minor	no	DCM ARCF	B167	2 out of 4 food storage bins containing rodent chow had the wrong "Food Card" affixed to top of lid. These cards had an expiration date column listed instead of a mill date column. Confirmed with DCM host that these are not	4/30/2021	4/2/2021

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				the correct cards. Incorrect Food Cards (White) need to be replaced with correct Food Cards (Blue).		
Minor	no	Western Fisheries	D119A	Wall that door is on has gouge/peeled off paint and needs patch/paint. Spot is lower down the wall and close to the sink in the corner of the room.	4/30/2021	4/2/2021
Minor	no	DCM ARCF	B144A	Expired Jet Liquid (exp 12.31.20); requested group discard during visit - no further action required.	4/2/2021	4/2/2021
Minor	no	DCM CHDD	076A	Light is out in procedure room. Facility Supervisor to submit work order request.	3/31/2021	4/1/2021
Minor	no	DCM T-Wing	Hallway Refrigerator	Found set of keys to Rooms T127 and T129 inside 4C. Research group present indicated they stored the backup key here in case they forget their keys. Site visit team recommends storing lab keys in secured, wall-mounted combo lock key box rather than in the refrigerator as the room keys are not secure and anyone in the vivarium could access the rooms.	4/30/2021	3/31/2021
Minor	no	HSB	RR711	Paper signage (x2) taped on wall above survival surgery area should be encased in plastic or laminated to ensure they can be sanitized properly. Also, site visit team recommends not using tape to secure signage or duct tape being used to cover hole in the dedicated survival surgery bench area, as glue tends to leave residual gluey substance that is not easily sanitizable. The	4/9/2021	3/31/2021

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				hole in the dedicated survival surgery bench could be covered with a piece of plastic or Plexiglass (e.g., something that can be sanitized and sturdy enough to cover hole).		
Minor	no	HSB	RR711	Isoflurane anesthesia machines (x2) need calibration. Should be calibrated annually. Last calibration date 4/2019 (exp 4/2020). Please label "Do Not Use Until Calibrated."	4/30/2021	3/30/2021
Minor	no	DCM T-Wing	T123	Several bottles of solutions (saline; VirkonS) did not have formulation dates. While several of the bottles in question were empty, the general practice of including formulation date and expiration date should be incorporated into procedures in this room.	4/2/2021	3/30/2021
Minor	no	DCM T-Wing	T121	Large container (approximately 3-5L) of 95% EtOH that was out in the room. The container was closed, but this may be a fire risk, and may need to be relocated to a fire safety cabinet.	4/2/2021	3/26/2021
Minor	no	DCM T-Wing	Hallway Refrigerator	Found black nitrile glove inside 4C with some sort of chemical in Eppendorf tube. The tube was labeled, but the research group was not sure what it was. Per the refrigerator signage, it should be used for food storage only per outside label.	4/2/2021	3/26/2021
Minor	no	WaNPRC RR-Wing	RR-Wing	Eyewash logs were not updated for a month in the middle of February. The eyewash logs are back in place.	4/2/2021	3/24/2021

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Minor	no	WaNPRC I-Wing	I733	Daily log sheet outside room had an entry crossed out without explanation; please follow up with group.	3/26/2021	3/23/2021
Minor	no	Western Fisheries	D119D, D119E, D119F	Rooms have peeling ceilings. Previously noted ceiling issue in D119D has been "repaired" with duct tape. The host indicated there are plans to replace the building roof and the ceilings would be repaired at that time. No welfare impacts due to the ceiling issues.	4/30/2021	3/22/2021
Minor	no	Western Fisheries	D119B	Wall that has door looks like something dripped down it and looks dirty. Not sure if it can be cleaned or not.	4/30/2021	3/22/2021
Minor	no	DCM T-Wing	T115	Container of bedding material was unlabeled and could have easily been mistaken for a garbage can.	3/26/2021	3/22/2021
Minor	no	DCM K-Wing	K017B	Isoflurane unit is out of date (12/20/20). Please label "Do Not Use Until Calibrated."	3/19/2021	3/19/2021
Minor	no	WaNPRC HSB	I013, I021	All paper posted (including Post-It notes) need to be encased in plastic sleeves or laminated	3/19/2021	3/19/2021
Minor	no	DCM Roosevelt	256	Micro-isolator tops were very dusty/dirty. Apparently DCM following 28 day cleaning protocol. Would recommend more frequent cleaning protocol considering how dusty the tops were.	2/19/2021	3/17/2021
Minor	no	WaNPRC	I726	All posted paper should be laminated or encased in plastic sleeves.	4/2/2021	3/15/2021
Minor	no	DCM T-Wing	T133	Emergency contact not listed on cage cards. Emergency contact should be listed on cage card.	3/12/2021	3/13/2021
Minor	no	WaNPRC	I726	New 10mL bottle of Ketamine was entered	3/12/2021	3/12/2021

				into drug log during visit.		
Minor	no	DCM T-Wing	T131	Singly housing rats (x13 cages). Unclear if animals were to be singly housed or not because there was no way to know if they were surgered animals (i.e., didn't see any implant on the heads of the rats that were singly housed, but could have missed it as the room was on reverse cycle which made it hard to see without disturbing the rats). Additionally, as noted, many of the cage cards were blank with no additional info that could have been helpful and no Special Service Request cards present.	3/19/2021	3/12/2021
Minor	no	DCM T-Wing	T131	Triple housing rats (x2 cages). Unclear if animals were to be triple housed or not because there was no way to know if they were surgered animals (i.e., didn't see any implant on the heads of the rats that were triple housed, but could have missed it as the room was on reverse cycle which made it hard to see without disturbing the rats). Additionally, as noted, many of the cage cards were blank with no additional info that could have been helpful and no Special Service Request cards present.	3/19/2021	3/12/2021
Minor	no	DCM T-Wing	T131	Cage cards missing emergency contact, DOB, Strain, Age, Sex, and Number of animals (x12 out of 35 cages/cage cards).	3/12/2021	3/12/2021

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Minor	no	DCM 6th Fl	C608, C609, C613, C615, C618, C621	Update animal and room care log. Upper section (Research Staff Duty section) is no longer used because it pertains to the old way to earning charge credits if each lab's research staff completed tasks in the rooms.	2/19/2021	3/11/2021
Minor	no	DCM 6th Fl	G614	Two ceiling air filters are from 2017 and very dirty. Please submit a work order to replace the air filters.	3/26/2021	3/10/2021
Minor	no	WaNPRC Western	315	Paint is peeling off the walls. Need re-painting.	9/30/2021	3/9/2021
Minor	no	Ben Hall	365	Mop found propped up in the corner of room. Mops should be hung up on mop holders.	3/12/2021	3/8/2021
Minor	no	Ben Hall	Ben Hall	Eyewash has not been flushed since 9/19 (assuming year 2020) per log sheet. 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.	3/12/2021	3/8/2021
Minor	no	WaNPRC Western	213	Need to ensure that all of chemicals on the floor next to the washer have some type of spill containment.	3/26/2021	3/8/2021
Minor	no	WaNPRC Western	327	1 expired drug and 1 expired venous catheter - discarded during the visit.	3/4/2021	3/4/2021
Minor	no	DCM 6th Fl	E611 (Dirty Cagewash)	Leaky hose nozzle needs repair or replacement. Facility Supervisor to submit work order request.	3/26/2021	3/4/2021
Minor	no	WaNPRC Arizona	AB Main Colony	There are rolled up tarps hanging from the middle of the ceiling on the eastern side of the central aisle of the colony. These tarps are collecting water. Husbandry to discuss if tarps are needed (previously used as a visual barrier) and	3/31/2021	3/4/2021

				decide whether to remove, clean, or replace them. Due by 3/30/21.		
Minor	no	WaNPRC I-Wing	I567	Broken cage door found during visit, animals excluded from this cage so it could be repaired.	9/30/2021	3/4/2021
Minor	no	WaNPRC Western	310	Lock looped through the floor drain and locked to help lift the drain up is a trip hazard. Should use removable hook to lift the drain up. Corrected during the visit.	3/4/2021	3/4/2021
Minor	no	WaNPRC Western	WaNPRC Western	Mop sticks and handles (without the squishy bottom part) resting on the floor rather than suspended on the wall (unsure if they weren't fully assembled if they were required to be mounted on the wall), but we reset them in the mounts so all was taken care of.	3/4/2021	3/4/2021
Minor	no	WaNPRC Arizona	AA Kitchen	Puzzles (frozen cubes and treats for enrichment) in bags were not labeled with contents, date made, and expiry date. Due date: use/distribute by 3/5/21.	3/5/2021	3/4/2021
Minor	no	WaNPRC Western	WaNPRC Western	Discarded 6 catheters and attached tubing that were in expired packets. Corrected during visit.	3/4/2021	3/4/2021
Minor	no	WaNPRC Arizona	AB305	Storage rack did not have a sanitized tag on it: sanitize and tag rack, due by 3/8/21.	3/8/2021	3/3/2021
Minor	no	WaNPRC Arizona	AB300	The following items were expired and discarded immediately: triple antibiotic ointment, dopram, 500ml bag of LRS.	3/2/2021	3/2/2021
Minor	no	DCM 6th Fl	D604	Protocol reminder sheet on one of the experimental chambers is affixed with lab tape. Please encase posting	2/19/2021	3/2/2021

				in plastic sleeves or laminated.		
Minor	no	WaNPRC Arizona	AA102	The following items were expired and discarded immediately: triple antibiotic ointment, sodium bicarb, animax ointment, dopram, vitamin C gummies, 250ml bag of LRS, fecal opti swabs (10).	3/2/2021	3/2/2021
Minor	no	WaNPRC Arizona	AA202	Instrument milk bath in metal container that wasn't labeled. Corrected immediately.	3/2/2021	3/2/2021
Minor	no	SLU	N101 (NMR)	Isoflurane equipment is past due for calibration, but now scheduled for February/March (Covid-related delay). Please post 'DO NOT USE' sign on machine (and do not use) until it has been re-calibrated. Note: another isoflurane machine whose calibration is not due until March may be brought in from a near-by room if NMR experiments must be conducted.	3/31/2021	3/1/2021
Minor	no	Western Fisheries	D119F	Rusty sink - can the rust be removed?	4/30/2021	3/1/2021
Minor	no	DCM T-Wing	T131	Three containers of MOTT Applesauce in the groups plastic storage bin labeled as "Post-op care". The applesauce doesn't expire until 8/21 and the packaging didn't indicate it had to be stored at 4C; however, after some consideration, the food should be stored in its own secondary container labeled as "Food". Furthermore, after reviewing the protocol, the group appears to be approved for Special Diet of "baby food" (i.e., Vegetable beef-	3/12/2021	2/26/2021

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				water, carrots, tomato puree (water, tomato paste), peas, beef, whole grain brown rice flour, onion powder. Applesauce was not listed. Recommend that the assigned OAW liaison add applesauce to the Special Diet procedure if the group is using it as an administrative change.		
Minor	no	DCM SLU 3.1	E040	Biosafety cabinet log not completed since 11/20.	2/26/2021	2/26/2021
Minor	no	DCM T-Wing	T115	Contained on bottle of Povidone solution with unknown expiration date.	3/12/2021	2/26/2021
Minor	no	DCM T-Wing	T115	Clear plastic tote on bottom lower shelf contained two unlabeled containers (one bag; one plastic pipette tip box) of unknown pellets, perhaps sucrose, with unknown formulation and expiration dates.	3/12/2021	2/26/2021
Minor	no	DCM 6th Fl	D607	Move racks for feed storage 6" away from wall to ensure that bags are at least 6" away from wall, as required.	2/26/2021	2/25/2021
Minor	no	DCM NLD	Food Storage	One unopened bag of rodent chow was inside a large Rubbermaid garbage can labeled as "This Bucket for NLD. Thanks." The secondary container should be labeled properly if used to store rodent chow/food.	3/5/2021	2/25/2021
Minor	no	DCM Roosevelt	264A	No food stored. Supplies only. If not being used for food storage, consider labeling door correctly to reflect use as/if necessary.	2/19/2021	2/25/2021
Minor	no	DCM T-Wing	T131	Cage cards missing emergency contact, DOB, Strain, Age, Sex,	3/12/2021	2/25/2021

				and Number of animals (x10 out of 19 cage cards).		
Minor	no	DCM T-Wing	T117	Potentially expired Napa Nectar. Date labeled on the container, but illegible and appeared to be 1/31/19, which would be expired if correct.	3/26/2021	2/25/2021
Minor	no	DCM 6th Fl	C604, C604A	Many expired items were found, including a 750mL bag of Dextrose solution, and a 750mL bag of 6% Hetastarch in Lactated Electrolyte. Various expired reagents (e.g. surgical lubricant), rusty clips on EKG leads in C604A. C604 and C604A should be explored for any other expired items that should be discarded.	3/5/2021	2/22/2021
Minor	no	DCM 6th Fl	C604, C604A	The space is cluttered, including open bags of supplies on counters and trip hazards on the floor, and could use a good organizational clean up throughout.	3/5/2021	2/22/2021
Minor	no	DCM T-Wing	T137	Found one unlabeled spray bottle containing Virkon (per research group present). Had expiration date, but the content label fell off. The research group corrected during site visit.	2/22/2021	2/22/2021
Minor	no	SLU	N527	Lab recently purchased their first bottles of Ketamine and Xylazine, which are still unopened. Logs for these drugs were not available during the visit because they have not yet been created. The lab needs to generate logs for these two drugs asap. (The group has template pages for a drug log, and planned to fill them out very soon.)	2/19/2021	2/19/2021
Minor	no	Ben Hall	Ben Hall	Gas tanks were inadequately chained,	2/19/2021	2/19/2021

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				but fixed during inspection.		
Minor	no	SLU	N527	One chair in the room has damaged foam, needs to be replaced with a chair whose surfaces are entirely 'sound, sealed and sanitizable'.	2/19/2021	2/19/2021
Minor	no	SLU	N527	CO2 euthanasia procedure station does not have updated signage to reflect the new 2020 AVMA Guidelines on CO2 euthanasia. New signage must replace old signage and flow meter should be replaced as/if necessary. Please contact your Scientific Liaison if you have any questions regarding the new CO2 euthanasia and AVMA guidelines. More information on the OAW website.	2/26/2021	2/19/2021
Minor	no	DCM 6th Fl	C604, C604A	Expired sutures found in several locations. Please collect all expired sutures in one location, away from non-expired sutures, and label clearly 'DO NOT USE IN LIVE ANIMALS' (or whatever is consistent with what is approved on the protocol).	2/19/2021	2/19/2021
Minor	no	PBB	102K	Expired Ultrasound Gel - corrected at visit.	2/19/2021	2/19/2021
Minor	no	PBB	102K	Expired surgical gloves, discarded during visit.	2/19/2021	2/19/2021
Minor	no	DCM Roosevelt	256	Overcrowded cage and DOB missing from cage card. 4 females + 9-10 pups that appeared to be 12-14 days old (no DOB or number of pups listed on cage card).	2/19/2021	2/18/2021

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Minor	no	DCM Roosevelt	256	Required information missing on multiple cage cards (appeared to be random and inconsistent in terms of information present on cage cards). E.g., some cage cards had 'Emergency Contact' while others didn't. Some cage cards had phone number while others didn't. Some cages had the pup DOB while others didn't.	2/19/2021	2/18/2021
Minor	no	SLU	N417	It looks like equipment or cabinets were moved out of the room and in those areas, the floors are dirty and areas are worn through in spot. Should clean/fix the floors.	2/26/2021	2/17/2021
Minor	no	SLU	N417	Wall that has the light switch on it is dirty especially near the floor and there are gouges in the wall. Needs patching and cleaning.	2/26/2021	2/17/2021
Minor	no	DCM 6th Fl	G615	Several blank cage cards on Rack 1, Side B. Please complete the cage cards with the required information.	2/26/2021	2/17/2021
Minor	no	DCM K-Wing	002A	Hood Check Logs Absent - 2020 2, 4, 9, 10, 11, 12.	2/26/2021	2/16/2021
Minor	no	DCM K-Wing	K024A	The EPM chamber curtains (black drapes) were dusty and should be on some cleaning schedule. Lab/group representative agreed and will work with DCM to have chamber curtains laundered monthly (verbal at time of visit).	2/19/2021	2/16/2021
Minor	no	SLU	S462	After last procedure months ago, bedding was still on the floor and what appears to be blood was on the floor and on some of the instrumentation attached to the table used. As well as some discarded paper towels, Kim wipes, etc.	3/5/2021	2/16/2021

				on the floor. Lab space must be cleaned and disinfected following all animal procedures including the table and equipment used on animals. Also, the floor should be swept and cleaned when visibly soiled like it was and on a regular schedule.		
Minor	no	DCM Brotman	P164	Right hood logs not maintained since November 2020.	3/5/2021	2/11/2021
Minor	no	SLU 3.2	F735	2 small nitrogen gas tanks on the floor beside the BSC that are not secured. Location makes it hard to secure then to a wall via brackets so what other security method could be used here?	2/26/2021	2/11/2021
Minor	no	DCM Roosevelt	254	Required information missing on multiple cage cards (appeared to be random and inconsistent in terms of information present on cage cards). E.g., some cage cards had 'Emergency Contact' while others didn't. Some cage cards had phone number while others didn't.	2/19/2021	2/11/2021
Minor	no	SLU 3.2	F735	70% ethanol in spray bottle – needs expiration date.	2/26/2021	2/11/2021
Minor	no	SLU	S509	Vials of expired mouse mix were not segregated from other controlled substances in the lock box. Suggest placing the vials in a plastic bag labeled as expired drugs until they can be disposed of.	2/26/2021	2/10/2021
Minor	no	DCM 6th Fl	C615	Expired ultrasound gel in multiple containers. Please discard and replace.	2/19/2021	2/10/2021
Minor	no	DCM SLU 3.2	F715, F717	Temperature and humidity out of range recorded in the daily logs. Facility Supervisor to contact Building Facility	5/31/2021	2/9/2021

				Services for maintenance.		
Minor	no	DCM 6th Fl	E613	Rat cage improperly labeled. 2 adult rats in a cage labeled for 10 pups. Rats that were previously housed alone (possibly with litters) had apparently been combined in cages in preparation for transfer to AUTS. Two rats in one cage had been fighting and one animal had a small wound on her back. These animals were separated by a DCM tech during the visit. Please have AUTS remind researchers NOT to combine unfamiliar animals when transferring/donating animals.	2/26/2021	2/9/2021
Minor	no	SLU 3.2	F634	Sharps within the sharps container are at the fill line – should replace with new container and dispose of full container.	2/26/2021	2/9/2021
Minor	no	DCM 6th Fl	D606	Chair with ripped back, padding exposed. Please remove chair and replace with a sanitizable chair.	2/26/2021	2/9/2021
Minor	no	DCM 6th Fl	G614	Bare paper Post-It note markers on floor should be encased in a plastic sleeve or laminated (or laid down only during videotaping).	2/26/2021	2/9/2021
Minor	no	DCM 6th Fl	C621	(Palmiter): Two isoflurane machines in the room were last serviced in 2018. Please label "Do Not Use Until Calibrated" (and do not use them!) until they have been serviced.	3/5/2021	2/8/2021
Minor	no	SLU	N417	Isoflurane vaporizer needs to be calibrated – last calibration was 10/2019.	2/26/2021	2/8/2021

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Minor	no	SLU	S509	Isoflurane vaporizer has not been calibrated since 10/2019. Lab is not using it so they need to place a sign "Do Not Use Until Calibrated."	2/26/2021	2/8/2021
Minor	no	SLU	N417	What is the plan for waste gas scavenging? There was no snorkel or charcoal canisters in the room.	2/26/2021	2/8/2021
Minor	no	DCM 6th FI	C609	Cage/wiretop change form was not complete for Racks 7, 8 & 9. Missing Static vs Ventilated information.	2/19/2021	2/8/2021
Minor	no	SLU	N131A	Two chairs in room have damaged foam, need to be replaced with chairs whose surfaces are entirely 'sound, sealed and sanitizable'.	2/26/2021	2/8/2021
Minor	no	SLU	N328	Two chairs in room have damaged foam, need to be replaced with chairs whose surfaces are entirely 'sound, sealed and sanitizable'.	2/19/2021	2/8/2021
Minor	no	SLU	N417	The room chair seat is falling apart and should be replaced.	2/26/2021	2/8/2021
Minor	no	SLU	S509	2 chair seats are falling apart – need to replace.	2/26/2021	2/8/2021
Minor	no	DCM 6th FI	C609	Cage cards (rack 7) were missing information,(no Date of Birth or Date received). Cage cards need to contain a birth date or age/weight and delivery date.	2/19/2021	2/8/2021
Minor	no	SLU	N417	Not sure what was in the spray bottle in the room labeled NPD with an expiration date.	2/26/2021	2/8/2021
Minor	no	SLU 3.2	F634	Expired suture should be labeled "expired for training use only" – corrected at time of visit.	2/8/2021	2/8/2021
Minor	no	SLU 3.2	F634	Expired 5% dextrose fluid and eye lube – discarded at time of visit.	2/8/2021	2/8/2021

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Minor	no	SLU	N115	Bare paper signage needs to be encased in a plastic sleeve or laminated.	2/19/2021	2/3/2021
Minor	no	DCM K-Wing	K024B	Isoflurane vaporizer has no calibration date/sticker on it, but rather manufacture date 3/20; could be that the unit is new but there is no indication it is, or has been, calibrated.	2/26/2021	2/2/2021
Minor	no	DCM K-Wing	K024B	Isoflurane vaporizer due for calibration (1/21). Please label "Do Not Use Until Calibrated."	2/26/2021	2/2/2021
Minor	no	DCM K-Wing	I-Wing Hallway	Logs for Thursday 1/21/21 not completed.	2/26/2021	2/2/2021
Minor	no	DCM K-Wing	K024A	"Maximum Occupancy" signage was not on the outer door (magnetic clip present, but signage missing). Due to COVID, recommend updating outside room door with proper signage as to avoid overcrowding to ensure personnel safety.	2/12/2021	2/2/2021
Minor	no	DCM K-Wing	K024A	Rubbermaid container with "Dirty Bedding" label actually had food/chow in it. Per DCM Host, this was "Dirty Betting/Used Food". Recommend that the container be labeled as Dirty Bedding/Food" so it's not confused as a secondary container for new food. DCM Host agreed the container should be labeled properly to avoid confusion.	2/19/2021	2/2/2021
Minor	no	DCM Foege	N053	Care log missing entries on 1/13, 1/14.	2/5/2021	2/4/2021
Minor	no	DCM K-Wing	K018F	Broom not stored up off floor (on floor propped up against wall). Corrected at time of visit.	1/22/2021	1/22/2021

Minor	no	DCM K-Wing	K018G	Clidox spray bottle was not marked with dilution so unclear if working solution or other concentrated solution. The bottle should have been marked as 1:18:1, per DCM Host. Corrected at time of visit.	1/22/2021	1/22/2021
Minor	no	DCM K-Wing	K030	Expired bottle of Clidox (12/24). Also, the spray bottle was not marked properly with dilution so unclear if working solution or other concentrate. The bottle should have been marked as 1:18:1, per DCM Host. Corrected at time of visit, but it the Clidox working solution was still expired.	1/22/2021	1/22/2021
Minor	no	DCM Foege	N039A	Care log missing entries since 1/12.	2/5/2021	1/18/2021
Minor	no	DCM Foege	N049	Care log missing signature on 1/12.	2/5/2021	1/18/2021
Minor	no	Brotman	446	Due to storage issues in the drug locker, expired bottles stored in the storage locker are provided with proper DEA and DOH controlled substance secondary containment, however, the new and full active bottles of controlled drugs are being stored outside of the drug storage box. Expired drugs segregate for disposal.	1/29/2021	1/14/2021
Minor	no	Roosevelt	264	Expired laboratory gloves (2-3 boxes). Corrected/discarded during site visit.	1/14/2021	1/14/2021
Minor	no	CHDD	055	Isoflurane vaporizer is overdue for service. It has not been in use since last spring. Do not use sign was placed on it at the time of the visit.	1/13/2021	1/13/2021

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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 – 6 protocols
- Wild mammals, held during capture – 1 protocol
- Wild fish, captured in gill or tow nets – 4 protocols
- Zebrafish, held in a matrix for imaging – 4 protocols
- Mice, held in tubes for various procedures – 15 protocols
- Mice, held by head posts – 7 protocols
- Nonhuman primates, held in chairs or tubes with or without head posts – 12 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 – 3 protocols
- Mice and Rats housed under cold stress or at thermo-neutral temperatures during metabolic experiments – 4 mice protocols, 1 rat, 1 mice and rat 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.

Appendix D IACUC Program Review

The Animal Care and Use Program was found to be acceptable with no suggestions for improvement.

Disaster Planning and Emergency Preparedness: The program was found to be acceptable. Need assurance that all dispersed and remote facilities have disaster plans.

IACUC: This section was found to be acceptable.

IACUC Protocol Review was found to be acceptable with the following suggestions for improvement/consideration:

- We need to ensure that alternatives to "physical restraint" are covered adequately during protocol review. For each procedure that causes more than momentary pain or distress, including "physical restraint" research groups should be sure and record their alternatives searches for "Physical Restraint" under View Procedure Search Details page, Q5 (Describe Search Strategies Used) (see Alternatives Searches and Duplication page, Q1 (Record all searches for alternatives for each procedure that causes pain or distress).
- During facility inspections, we should ensure that body weights for food/fluid restricted animals are recorded at least weekly. Scientific Liaisons can remind PIs and their lab groups that these records need to be maintained on a regular basis.
- During facility inspection, we should ensure that daily written records are maintained for food/fluid restricted animals.

IACUC Membership and Functions were found to be acceptable.

There are no issues with membership. All members are appropriately credentialed for their roles, including our two Non-Scientist members and our two Nonaffiliated non-lab animal user members. In the past couple of years, both AAALAC and the USDA have specifically reviewed our UW IACUC Membership and did not cite us for any deficiencies.

IACUC Training was found to be acceptable.

It was suggested that IACUC member training be more robust, including a two-stage orientation so members aren't overwhelmed during initial training sessions. OAW is currently updating IACUC member training.

IACUC Records and Reporting Requirements was found to be acceptable.

Veterinary Care was found to be acceptable

It is recommended that a process be created to ensure that all drug records and storage procedures are reviewed during facility inspections.

Personnel Qualifications and Training was found to be acceptable.

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In the previous semiannual review it was suggested to increase the utilization of online training via webinars, perhaps a once a year "retreat" focused on training, and more opportunities to interact with current IACUC members and/or researchers to learn to conduct site visits and protocol review. Those efforts should continue.

Online tests and questions, such as for the Laws and Regulations training, should be updated, as should hands-on courses that rely on slides such as the Aquatic Training class.

Given recent adverse events, it is recommended that animal care staff undergo a very thorough initial

training with routine follow-up by a supervisor or perhaps the possibility of a second person spot-checking to be sure that humane practices of animal care are consistently met. It may also be worthwhile to query techs/care staff that have had accidental incidents or near-misses to get feedback on their own suggestions for improving training and ways to avoid future problems.

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

There is a need for health and safety training/information/guidelines related to conducting field studies, particularly during the period of Covid. EH&S has recently created general safety guidance for field studies. Given the unexpected nature and speed of Covid's onset and spread, it would be a good idea to anticipate rare events and how they might affect our research community so guidance can be provided if they happen to occur.

Personnel Security: Acceptable.

It was suggested that perhaps all IACUC members should be screened prior to their appointment.

Investigating Animal Welfare and Concerns: Acceptable. No recommendations for improvement.

Concurrence Letters

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Minority Views

None

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