

#### DEPARTMENT OF HEALTH & HUMAN SERVICES

#### PUBLIC HEALTH SERVICE

NATIONAL INSTITUTES OF HEALTH NATIONAL CANCER INSTITUTE

Redacted by agreement Frederick, Maryland 21702-1201 National Cancer Institute at Frederick

June 20, 2019

TO: Redacted by agreement

Redacted by agreement. National Cancer Institute at Frederick

FROM: Melinda G. Hollingshead, D.V.M., Ph.D.

Chair, NCI at Frederick Animal Care and Use Committee

SUBJECT: 2019 Report of the Semiannual Facility Inspections [Inspections took place between

April 15 and May 10]

As part of the Office of Laboratory Animal Welfare animal assurance requirements, the NCI at Frederick Animal Care and Use Committee [ACUC] conducted one of the semiannual evaluations of its animal care and use program on June 20, 2019 and inspected the animal facilities between April 15 and May 10. The Environment, Health, and Safety [EHS] program conducted inspections [in conjunction with ACUC members and/or as a separate inspection]. This is the complete and final inspection report. No ACUC minority opinions were filed during this reporting period.

#### Redacted by agreement.

Inspectors: Redacted by agreement.

Date of Inspection: May 7, 2019
Date of Correction: May 14, 2019

#### **ACUC Comments:**

The facility was organized. There were no major deficiencies noted.

Room	Deficiencies Noted	Facility Response
	Automatic watering was checked on the room logs. It is suggested to retrain care staff to document best applicable entries on the animal room husbandry log (ex. Automatic watering vs. water check).	Caretakers currently record automatic watering as a check, since this means they are actually checking water bags, the same as if they were checking water bottles.
Redacted by agreement	Unlabeled euthanized neonates were found in a refrigerator.	Animal care staff and technical staff have been reminded to label all bags.
	Repeat: observed personnel improperly working in change stations with the sashes up. The fans were on but per the manufacturer, this practice does not optimize air circulation	Caretakers have been instructed to keep sashes down.
	Door with a blacked-out window that appeared to be blocked If this door is unused, a sign labeled "No Exit" or "Notice-Door Blocked" needs to be affixed to the door and the doorknob removed.	This door is closed because it leads into the Hydropak Room. A sign has been attached. The window is blackened as to not allow light to enter the animal room side during the night time hours.

Room	Deficiencies Noted	Facility Response
Redacted by	A dry ice container was found with the lid ajar and without labeling	Labels will be made.

Redacted by agreement. - Small Animal Imaging Facility

Inspectors: Redacted by agreement.

Date of Inspection: April 30, 2019
Date of Correction: May 17, 2019

#### **ACUC Comments:**

Overall, facilities were extremely well kept, staff were knowledgeable about animal studies and equipment safety. Only minor deficiencies where found.

Room	Deficiencies Noted	Facility Response
PET	Euthanasia Guidelines missing from CO <sub>2</sub> chamber area. Recommendation: Replace missing guidelines.	Missing guidelines were replaced.
	The mini-refrigerator used to store wet feed is not	A temperature gauge has been
Receiving/Storage	monitored for temperature. Recommendation: either	purchased. Daily monitoring and
area	place refrigerator on alarm/monitoring or keep a daily	logging temperature will be
	log of refrigerator temperature.	performed.

#### Redacted by agreement.

Inspectors: Redacted by agreement.

Date of Inspection: May 7, 2019
Date of Correction: May 14, 2019

#### **ACUC Comments:**

Overall, the inspection team found the facility to be well organized. No major deficiencies were noted.

Room	Deficiencies Noted	Facility Response
	The investigator name was not recorded on sentinel cage cards/cage card lacking. The identification on cage was only the vendor shipment label.	This is due to recent changes in the R&Q processes we are working on determining the best practices for this facility.
	All R&Q ASPs should be listed in paper form in the office so they are accessible.	R&Q is in transition and the new PI & ASP are being determined.
	Personnel should keep a current recording of water pH dispensed by the machine /Clean side cagewash; the acidified water bottle dispenser pH level hasn't been documented as monitored since 2018.	The new caretaker will be instructed and trained on how to record this information.

Room	Deficiencies Noted	Facility Response
Cryo lab	Insufficient storage and manpower; dirty cages were observed being stored bagged on the floor in rooms.	A full-time person has recently been hired to replace deployed personnel. Additionally, due to the various health status in the different rooms have to be autoclaved individually from other rooms. Cages are autoclaved as load cycles are available due to clean/dirty traffic flow.
Cryo lab	Expired media was found in the refrigerator. The freezer also has excess ice, which inhibits closing the door.  Additionally, there were stains on the counter, a jar with no label but white dried substance inside, a CO <sub>2</sub> hose on ground, and bedding & green liquid on ground.	These items will be discussed with Cryo staff.
Cryo lab	Long pipettes were sticking out of the Sharps container.	These items will be discussed with Cryo staff.
Redacted by agreement.	Clidox-S was stored on the same tray as Cidox-Activator.  These should be placed on separate spill trays to avoid inadvertent mixing of incompatibles.	More containers will be purchased to keep separated.
Hallway	The fire extinguisher appeared to be last checked on 12/8/18, as indicated on the tag.	The new caretaker will be instructed and trained on how to record this information.
Redacted by agreement.	Sprayer had no label and contained unknown liquid.	Sprayer has been removed.
	The feed bin was labeled with expired dates.	The feed bin has been removed.
	Mice were observed with surgical staples from April & March. Per SOP 5.031F Embryo Transfer, staples are to be removed within 7-10 days unless exemption by ACUC.	This will be discussed with the Cryo staff.
	Mouse with treatment card to check both eyes  - Treatment started on 4/8/19 and no other treatments were documented on the cage card or treatment care. The animal's left eye was resorbed/lost.	This will be discussed with Cryo staff.

## Redacted by agreement. LASP VANS

Inspectors: Redacted by agreement.

Date of Inspection: May 3, 2019
Date of Correction: May 20, 2019

#### **ACUC Comments:**

Overall the building was very clean, and mice appeared very well cared for. No major deficiencies were noted.

Room	Deficiencies Noted	Facility Response
Cagewash	Suggest placement of a safety decal for the tunnel washer	Decal provided by EHS has been
Cagewash	emergency stop.	placed.
	Staff requested a separate dilution book for controlled substances.	A separate dilution book was acquired from EHS and is now in use.
Chem/car lab	Expired formalin was found, though date of expiry was recent (4/27/2019).	Expired formal has been discarded.

Room	Deficiencies Noted	Facility Response
Redacted by agreement.	Hoods were stored in large cardboard boxes in a holding room with animals. According to management this is a temporary arrangement but is not ideal.	Alternative storage space has been arranged. Work order #632133 has been placed for a request of labor crew. The stored hoods were removed on 5/24/19.
Redacted by agreement Van	Redacted by agreement.  Very clean	N/A
Redacted by agreement Van	Redacted by agreement.  Cargo Van  Needs cleaning/sanitizing. Documentation appeared incomplete for the previous week.	Drivers have been reminded to please post all documentation including the sanitizing documentation. Sanitizing task in general has been reviewed and these procedures would also apply to all vans that are used for transporting animals.
Redacted by Van agreement.	Redacted by agreement.  Very clean	N/A
Van	Redacted by agreement.  Needs cleaning/sanitizing	The van has been cleaned and sanitized and documented in the logbook.
Van	Redacted by agreement. Cargo Van Very clean. Battery needs to be changed in the temperature sensor.	The battery has been replaced.

#### Redacted by agreement.

Inspectors: Redacted by agreement.

Date of Inspection: April 17, 2019
Date of Correction: May 3, 2019

#### **ACUC Comments:**

The facility was very clean, well-organized and well run. No major deficiencies were noted.

Room	Deficiencies Noted	Facility Response
Redacted by agreement.	It is suggested to add a Support Area Log per SOP 3.01F to document sanitation. This was noted during the last semiannual inspection as well.	A support area log will be added.
Redacted by agreement.	Instances of irregular temperature and humidity were noted.	This had been called into FME; however, they did not have access to the trend reports at the time. They have since been attached to the room logs, and facility staff has notified the manager of these irregular temps and humidity's.
Dirty side, cagewash	Corrosive acid carboy (acid powder) should be placed in a solid secondary container.	Secondary containment has been ordered.

Redacted by agreement.

Inspectors: Redacted by agreement.

Date of Inspection: April 17, 2019 Date of Correction: May 3, 2019

#### **ACUC Comments:**

The facility was very clean, well-organized and well run. No major deficiencies were noted.

Room	Deficiencies Noted	Facility Response
Facility entrance	Recommend updating the old LASP phone listing.	Updated.
Corridor	Recommend updating the animal welfare reporting posting.	The updated sheet is on the office door.
Redacted by agreement.		EHS door sign is on the room door and might have been behind one of the papers.  Redacted by agreement is ABSL2 at all times so personnel should always have secondary PPE when they enter that room by default. Cage cards are labeled with viral injection and date, and CAPR has the study set-up sheets. The virus and what was injected is stated on the door.  Currently an old employee is listed on the sheet and that will be changed this week.
Procedure room Redacted by	The room doesn't appear to have been documented as sanitized since January on the Support Area Log.	CAPR staff will address.
Procedure room Redacted by	Suggest updating the front of the controlled substance log book to accurately list current accessible users.	CAPR staff is working on this with EHS.
Procedure room Redacted by agreement	Weekly eyewash checks appear incomplete for April.	This has been updated.
Procedure room Redacted by agreement		This was a reagent not used for injection in mice. A label has been added to indicate that it should not be used for in vivo purposes.

#### Redacted by agreement.

Inspectors:

Redacted by agreement.

Redacted by agreement.

Date of Inspection: April 30, 2019

Date of Correction: N/A

#### **ACUC Comments:**

Overall the facility was very well kept and animals were well cared for.

No deficiencies were observed; however, it was noted by all persons on the inspection team that it would be helpful to have signs indicating required PPE and entry procedures for each animal room posted on the door of the room.

Room	Deficiencies Noted	Facility Response
	No findings	N/A

#### Redacted by agreement.

Inspectors: Jatinder Gulani (ACUC/Veterinary Staff),

Date of Inspection: May 1, 2019 Date of Correction: May 23, 2019

Room	Deficiencies Noted	Facility Response
Redacted by agreement.	No findings	N/A
	No findings	N/A
	No findings	N/A
	Xenopus laevis SOP in the protocol book is not consistent with the current husbandry practice. It is recommended to keep an updated SOP that matches with the current husbandry practices.  • Recorded conductivity and pH readings were out of range per the SOP present in the room; however, the readings were still within the recommended range for X. laevis.  • The SOP did not include the housing density information for 40 liter tanks. It does incude housing density for the 16L tanks. Recommend to add housing density for the 40L tanks to the SOP.	-The "Xenbase" formatted SOP found in the Redacted by binder is being replaced with a 560/22-69-specific SOP using SOP 3.016F (571) as the template.  -This SOP will reflect the water quality parameters specific to the Pentair apparatus (XR3 and -4) as established by the manufacturer/installer.  -Housing density information is contained in Redacted by and will explicitly be listed 1 60/22-69-specific SOP as shown below:  "Housing Densities: 40 L tanks (XR4 rack): 15 adult frogs 16 L tanks (XR3 rack): 5 adult frogs"
	Recommend to use a more elaborate room log, which was in the folder and was in use until 2017. This log had information like feeding schedule, health checks, room and tank cleaning schedule. The current log lacks this information.	The 2017 log format will now be used with the headers shown below:  - Year, month, date, water temp, water conductivity, water pH, feeding, tank sanitization, room sanitization, health checks, checked by
	Recommend scrubbing the tanks regularly to prevent the algae build up. Algae is not considered harmful to the frogs; however, it could potentially cause issue with the water filtration system.	Algae will be regularly removed from the front and side panes of the tanks to allow better visual inspection of animals.

Redacted by agreement.

Room	Deficiencies Noted	Facility Response
Redacted by agreement.	If it is helpful, the LASP Xenopus husbandry SOP 3016F could be used as a template to create one specifically for the satellite facility.	A modified version (water chemistry parameters, feeding, housing densities) of SOP 3.016F will be included in the Redacted by binder for reference as agreement. Intioned above.
	Noted the use of pharmacy grade MS222. Recommend discarding the non-pharmaceutical grade MS222 from the laboratory so that someone does not use it inadvertently	The non-pharmaceutical grade MS222 has been discarded.
	No findings	N/A
	CO <sub>2</sub> does not have a lockbox in install Redacted This will need to be	FME will be contacted to put a lockbox on the CO <sub>2</sub> regulator.
	No findings	N/A

### Redacted by agreement.

Inspectors: Redacted by agreement.

Date of Inspection: April 23, 2019
Date of Correction: May 10, 2019

#### **ACUC Comments:**

Overall we found the Redact animal facility to be in excellent condition with no major deficiencies. We found no issues with the mouse e in the facility. However, there are several safety issues that require resolution and/or clarification of the applicable policies.

Room	Deficiencies Noted	Facility Response
	Electrical panel EP1 does not have an arc flash assessment.  This issue was reported last year and the deficiency closed but the panel is still not labelled.	EHS will resolve this.
	Drums of corrosive cage wash fluids are not placed on spill pallets or other containment devices, but the requirement for these is not clear. This was cited as a deficiency last year and closed, and the year before that and closed.	The facility is looking into the possibility of covering the floor drain in the area when it is not needed so an accidental spill would be prevented from entering the drain system.
	The airflow in multiple A2 BSCs is obstructed by rat cages of materials. This has been discussed with the Biosafety Officer and it is in fact a deficiency as it could lead to exposure to hazards in the future.	Staff has been reminded and retrained. Supervisors will monitor work stations and help employees better organize their supplies so air flow in the hoods is not impeded.

Room	Deficiencies Noted	Facility Response		
	Dosimetry has not been performed in the cage dumping area since the new disposal system was installed.	EHS will schedule dosimetry readings.		
Redacted by agreement.	The BSC that was turned off does not need to be running continuously. Non-exhausted cabinets are not required to run continuously. It was at one time a best practice, but now that energy conservation is more popular it is not required.	No action needed.		

Redacted	by	agreement

Inspectors: Redacted by agreement.

Date of Inspection: April 16, 2019
Date of Correction: May 8, 2019

#### **ACUC Comments:**

The facility was very well kept and organized. No major deficiencies were noted.

Room	Deficiencies Noted	Facility Response
Redacted by	A Sharps container was overlined with large pipettes;	The container was disposed of and staff was
agreement	recommend using the large Sharps boxes.	reminded to not overfill
	Controlled drugs: Recommend providing a current list of	The book was updated, and a list sent to
	persons with access to the controlled drugs.	EHS.
	Amoxicillin in the refrigerator will soon be outdated.	The amoxicillin was discarded.
	Lab Diet in microisolator: The date opened was not present	Staff was reminded to keep the diet in the
	and the lid was not on securely. Additionally, part of the	container with the lid secure.
	bag was hanging out of the microisolator and it was unsure	
	if it was being kept at the proper temperature as the storage	
	of natural ingredient diets is less than 70°F and the average	
	room temperature per the log was 71-82°F	
	Autoclave feed bag inside the feed bin doesn't appear to be	The storage was labeled.
	labeled with the mill date.	2.5 12 12 1
	Media in the refrigerator was expired.	Media was disposed.
	Personnel observed did not have eye protection.	This person was a post-doc, who
		immediately placed safety eye wear on. A
		reminder was sent to the lab manager, who
	L DOTA	then sent an email reminder to her lab.
	ABSL2 signs were not consistent and ASP/IBC info was not	ABSL2 was updated with ASP and IBC
	up to date.	information through EHS.
	Safetygram in the hallway was outdated.	Safetygram was removed.
	Cage cards need to be updated to identify singly housed	Staff were reminded about the singly housed
	animals.	animal policy and cage card was updated.
	Rack was not plugged in.	This was corrected immediately.
		Additionally, staff were spoken to and all
		staff were reminded about this at the Animal
	Diagonal - (C. (Cd 1 4)C. (1	Care meeting.
	Please clarify if the racks are certified.	Racks have not been certified in Redac since
	Venerus acce conde ware leaking the DOD	they arrived.
	Xenopus cage cards were lacking the DOB.	Cards were updated.
	The dump station sign was faded and hard to read.	A new, readable sign has been made.

Room	Deficiencies Noted	Facility Response
Cagewash,	Suggest labeling the emergency stop button on the tunnel	Machine has been labeled with a new
clean side	washer with Safety Decal.	sticker.

Redacted by agreement.

Inspectors: Redacted by agreement.

Date of Inspection: May 10, 2019
Date of Correction: May 31, 2019

#### **ACUC Comments:**

The facilities were clean and well maintained. There were no major deficiencies.

Bldg.	Deficiencies Noted	Facility Response
Redacted by agreement.	Recommend moving the CO2/euthanasia station to the lab instead of on the freezer in the outer room.	It is not possible to move the euthanasia station in the laboratory area since microinjection, surgery, and other sensitive work is being performed in this room, therefore, traffic to this area should be limited to laboratory staff.  Masks and other PPE are now placed in the changing room and will be put on prior to walking into the outer room.
Redacted by agreement.	ABSL1 signs need to be replaced on the laboratory doors.	Signs have been replaced.

Redacted by agreement.

Inspectors: Redacted by agreement.

Date of Inspection: April 22, 2019

Date of Correction: N/A

#### **ACUC Comments:**

Overall, the facilities were found to be well organized. Staff are to be commended for maintaining clean and orderly facilities. No major or minor deficiencies were noted.

Room	Deficiencies Noted	Facility Response
	No findings	N/A

Redacted by agreement.

Inspectors: Jatinder Gulani (ACUC/Veterinary Staff),

Redacted by agreement.

Redacted by agreement.

Date of Inspection: April 15, 2019
Date of Correction: April 24, 2019

#### **ACUC Comments:**

Overall, the facilities were found to be well organized. No major deficiencies were noted.

Dldg /Doors	Deficiencies Noted	Facility Despays
Bldg./Room Redacted by	Deficiencies Noted	Facility Response
agreement.	Expired vial of bupivacaine was present in the	Proper disposal was arranged and the staff
g.cc.mc.m.	controlled substance drawer. As per the staff, it was	was asked to write "expired" on the vial.
	not in use. The staff was asked to write "expired"	
	with a marker on the vial so that no one uses it by	
	mistake. It was also recommended that staff arrange	
	the proper disposal of the expired agent.	
	There were two conductivity standard bottles with	EHS picked up the bottles.
	expired dates.	
	Three bagged carcasses did not appear to be labeled	Staff was reminded to label bagged
	in the dead animal fridge.	carcasses.
	Can it be clarified how often the water filter log	The water filter log was for the ice machine.
	needs to be completed? It appears to be last	FME now changes the machine filter.
	documented on 10/14/18.	Redacted has RO watering system for animals,
	'	nd Edstrom changes those filters.
	There was an open autoclaved feed bag on top of a	The feed had just been autoclaved in. The
	rack of cages.	feed does better when autoclaved in at a
		higher elevation. The bag split during
		autoclaving, which normally doesn't happen,
		but the staff was waiting for feed to cool
		before transferring to a feed container.
	There was a diluted vial of Buprenorphine HCl with	A technician will check with the PI.
	an expiration date of 9/2020. Typically, the	
	recommendation is that the diluted buprenorphine is	
	only good for a month.	
	It is recommended to add tint to the window shared	A work order (#630000) has been submitted.
	between the animal holding room and autoclave	
	room to prevent effects of light exposure on the	
	colony.	
	There were a few vials of Matrigel in the procedure	The dates on the Matrigel were received
	room freezer. Some have dates on the them and	dates.
	some did not. The significance of the date was not	
	clear.	

Redacted by agreement.

Inspectors: Redacted by agreement.

(Facility)

Date of Inspection: April 29, 2019
Date of Correction: May 8, 2019

#### **ACUC Comments:**

Overall, facilities were nicely kept, staff were well aware of their responsibilities and cared for animals on their studies. Only minor deficiencies where found.

Additionally, within the lab area of building is currently labeled as an emergency exit. Up scussion with the investigator responsible for the animals in the facility, the door was installed for moving equipment into the facility and should not be labeled as an emergency exit. Furthermore, the tape was installed as a temporary measure, in place a better seal, to prevent air and dust from entering the facility.

Bldg.	Deficiencies Noted	Facility Response
Bldg. Redacted by	Mice within the isolator were lacking protocol number,	
agreement.	PI, and ASP expiration date. Recommendation: add	
	information to card on or in the isolator, or if all animal	The information is posted on each isolator.
	within the facility are on the same protocol, put card/sign	_
	on door indicating protocol information.	
	Used tips and tubes were found in emptied distilled water	
	bottles, without indication of contents. Recommendation:	"Distilled water" was crossed out and
	cross out distilled water and indicate these are being used	"waste" was written on the label.
	as containers for non-hazardous solid waste.	
	Used serological pipettes were being placed in biomedical	The wood ninettee were because and alread
	waste bags directly. Recommendation: after bagging the used pipettes within the BSC, place bagged pipettes in a	The used pipettes were bagged and placed in a 5G Sharps container.
	cardboard box to prevent them from piercing the bag.	in a 3G Sharps container.
	Mini-fridge used for dead animal waste was placed	
	directly on floor. Recommendation: raise off floor to	A shelf or cart will be located or purchased
	allow for proper sanitization of floor and prevent objects	to hold the mini-fridge.
	from becoming trapped under equipment.	
	"Leftover Drugs" in refrigerator without date.	Technicians have been reminded to please
	Recommendation: label vials with date of use and	date all drugs when put into use and ensure
	expiration date; if no longer in use dispose of drugs.	the expiration date is on the vial as well.
	For the month of April, multiple autoclave test strips were	There was an open work order on the
	found to have failed however the log indicated autoclave	autoclave (#627389). This autoclave has
	strips as "pass." Recommendation: Retrain responsible	also been monitored with spore strips,
	personnel for reading test strips and service autoclave to	which have come back negative. Staff was reminded to rerun if the integrators do not
	ensure proper sterilization.	pass.
		The staff had signed off on the racks being
	Racks against wall were not a regular schedule of turning	rotated M-F and were not rotating the racks
	to provide light to animals facing wall. Recommendation:  Rotate racks daily.	on the weekend. They have been reminded
	•	to rotate on the weekend as well.
	A container of Nutra-gel was found opened without the	Staff has been reminded to relabel once
	"opened" date. Recommendation: Remind staff to label	opened.
	containers when open	-F
	"Leftover Drugs" in refrigerator without date. Recommendation: label vials with date of use and	Technicians have been reminded to date
	expiration date; if no longer in use dispose of drugs.	drugs and use expiration dates.
	Clean Cages were stored next to dirty cages without	
	coverage. Recommendation: This was likely temporary	Staff has been reminded to cover the clean
	due to cage changes being performed at the time of	cages when they are in the same space as
	inspection, but if dirty and clean cages are to remain in	the dirty cages. They have also been asked
	the same space for an extended amount of time, it is	to label both clean and dirty.
	recommended to cover the clean cages.	
	Animal with ulcerated tumor found. Recommendation:	
	The technician responsible for the animal was notified	
	and they agreed that the tumor was beginning to ulcerate	The technician has addressed the tumor.
	and that the animal would be watched and dealt with	
	accordingly.	

Attachments: Attachment A - Semiannual Program Review Checklist

Attachment B - EHS Inspection Reports

Distribution:

ACUC Members Facility Managers

### NCI AT FREDERICK SEMI-ANNUAL PROGRAM REVIEW June 20, 2019

### **INSTITUTIONAL POLICIES AND RESPONSIBILITIES**

	Animal Care and Use Program	$\mathbf{A}^{\star}$	M	S	C	NA
•	Responsibility for animal well-being is assumed by all members of the program	X				
•	IO has authority to allocate needed resources	X				
•	Resources necessary to manage program of veterinary care are provided	X				
•	~ 00' 1	X				
•		X				
•		X				
•		X				
•		X				
2. I	Disaster Planning and Emergency Preparedness	$\mathbf{A}^{\star}$	M	s	С	NA
•	Disaster plans for each facility to include satellite locations are in place	X				
•	Plans include provisions for euthanasia	X				
•	Plans include triage plans to meet institutional and investigators' needs	X				
•	Plans define actions to prevent animal injury or death due to HVAC or other failures	X				
•	Plans describe preservation of critical or irreplaceable animals	X				
•	Plans include essential personnel and their training	X				
•		X				
•		X				
3 I	IACUC	$\mathbf{A}^{\star}$	M	S	C	NA
•	0.1001	X				1121
•		X				
		X				
	1 IACLIC evaluates the effectiveness of framing programs					
•	IACUC evaluates the effectiveness of training programs	X				
	IACUC Protocol Review - Special Considerations	$\mathbf{X}$ $\mathbf{A}^{\star}$	M	s	C	NA
	IACUC Protocol Review - Special Considerations	X	M	S	C	NA
4. I	IACUC Protocol Review - Special Considerations  Humane endpoints are established for studies that involve tumor models, infectious diseases, vaccine challenge, pain modeling, trauma, production of monoclonal antibodies, assessment of toxicologic effects, organ or system failure, and models of cardiovascular shock	$\mathbf{X}$ $\mathbf{A}^{\star}$	M	S	C	NA
4. I	Humane endpoints are established for studies that involve tumor models, infectious diseases, vaccine challenge, pain modeling, trauma, production of monoclonal antibodies, assessment of toxicologic effects, organ or system failure, and models of cardiovascular shock     For pilot studies, a system to communicate with the IACUC is in place	X A* X	M	S	C	NA
4. I	Humane endpoints are established for studies that involve tumor models, infectious diseases, vaccine challenge, pain modeling, trauma, production of monoclonal antibodies, assessment of toxicologic effects, organ or system failure, and models of cardiovascular shock  For pilot studies, a system to communicate with the IACUC is in place  For genetically modified animals, enhanced monitoring and reporting is in place	X A* X X	M	S	C	NA
4. I	Humane endpoints are established for studies that involve tumor models, infectious diseases, vaccine challenge, pain modeling, trauma, production of monoclonal antibodies, assessment of toxicologic effects, organ or system failure, and models of cardiovascular shock  For pilot studies, a system to communicate with the IACUC is in place  For genetically modified animals, enhanced monitoring and reporting is in place  Restraint devices are justified in the animal use protocols	X A* X X X	M	S	C	NA
4. I	Humane endpoints are established for studies that involve tumor models, infectious diseases, vaccine challenge, pain modeling, trauma, production of monoclonal antibodies, assessment of toxicologic effects, organ or system failure, and models of cardiovascular shock  For pilot studies, a system to communicate with the IACUC is in place  For genetically modified animals, enhanced monitoring and reporting is in place  Restraint devices are justified in the animal use protocols  Alternatives to physical restraint are considered	X A* X X X X	M	S	C	NA
4. I	Humane endpoints are established for studies that involve tumor models, infectious diseases, vaccine challenge, pain modeling, trauma, production of monoclonal antibodies, assessment of toxicologic effects, organ or system failure, and models of cardiovascular shock  For pilot studies, a system to communicate with the IACUC is in place  For genetically modified animals, enhanced monitoring and reporting is in place  Restraint devices are justified in the animal use protocols  Alternatives to physical restraint are considered  Period of restraint is the minimum to meet scientific objectives	X  A* X  X  X  X  X	M	S	C	NA
4. I	Humane endpoints are established for studies that involve tumor models, infectious diseases, vaccine challenge, pain modeling, trauma, production of monoclonal antibodies, assessment of toxicologic effects, organ or system failure, and models of cardiovascular shock  For pilot studies, a system to communicate with the IACUC is in place  For genetically modified animals, enhanced monitoring and reporting is in place  Restraint devices are justified in the animal use protocols  Alternatives to physical restraint are considered  Period of restraint is the minimum to meet scientific objectives  Training of animals to adapt to restraint is provided	X X X X X X X X	M	S	C	NA
4. I	Humane endpoints are established for studies that involve tumor models, infectious diseases, vaccine challenge, pain modeling, trauma, production of monoclonal antibodies, assessment of toxicologic effects, organ or system failure, and models of cardiovascular shock  For pilot studies, a system to communicate with the IACUC is in place  For genetically modified animals, enhanced monitoring and reporting is in place  Restraint devices are justified in the animal use protocols  Alternatives to physical restraint are considered  Period of restraint is the minimum to meet scientific objectives  Training of animals to adapt to restraint is provided  Animals that fail to adapt are removed from study	X X X X X X X X X	M	S	C	NA
4. I	Humane endpoints are established for studies that involve tumor models, infectious diseases, vaccine challenge, pain modeling, trauma, production of monoclonal antibodies, assessment of toxicologic effects, organ or system failure, and models of cardiovascular shock  For pilot studies, a system to communicate with the IACUC is in place  For genetically modified animals, enhanced monitoring and reporting is in place  Restraint devices are justified in the animal use protocols  Alternatives to physical restraint are considered  Period of restraint is the minimum to meet scientific objectives  Training of animals to adapt to restraint is provided  Animals that fail to adapt are removed from study  Appropriate observation intervals of restrained animals are provided	X X X X X X X X X X	M	S	C	NA
4. I	Humane endpoints are established for studies that involve tumor models, infectious diseases, vaccine challenge, pain modeling, trauma, production of monoclonal antibodies, assessment of toxicologic effects, organ or system failure, and models of cardiovascular shock  For pilot studies, a system to communicate with the IACUC is in place  For genetically modified animals, enhanced monitoring and reporting is in place  Restraint devices are justified in the animal use protocols  Alternatives to physical restraint are considered  Period of restraint is the minimum to meet scientific objectives  Training of animals to adapt to restraint is provided  Animals that fail to adapt are removed from study  Appropriate observation intervals of restrained animals are provided  Veterinary care is provided if lesions or illness result from restraint	X X X X X X X X X X X	M	S	C	NA
4. I	Humane endpoints are established for studies that involve tumor models, infectious diseases, vaccine challenge, pain modeling, trauma, production of monoclonal antibodies, assessment of toxicologic effects, organ or system failure, and models of cardiovascular shock  For pilot studies, a system to communicate with the IACUC is in place  For genetically modified animals, enhanced monitoring and reporting is in place  Restraint devices are justified in the animal use protocols  Alternatives to physical restraint are considered  Period of restraint is the minimum to meet scientific objectives  Training of animals to adapt to restraint is provided  Animals that fail to adapt are removed from study  Appropriate observation intervals of restrained animals are provided  Veterinary care is provided if lesions or illness result from restraint  Explanations of purpose and duration of restraint are provided to study personnel)	X X X X X X X X X X X X X X X X	M	S	C	NA

			Α	TTA	CHM	ENT	Α
	•	Multiple survival procedure justifications in non-regulated species conform to regulated species	X				
	•	standards Animals on food/fluid restriction are monitored to ensure nutritional needs are met	X				
	÷	Body weights for food/fluid restricted animals are recorded at least weekly	X				
	•	Daily written records are maintained for food/fluid restricted animals	X				
	•	Pharmaceutical grade chemicals are used, when available, for animal-related procedures ( <i>Guide</i> ,	X				
	•	Non-pharmaceutical grade chemicals are described, justified, and approved by IACUC	X				
	•	Investigators conducting field studies know zoonotic diseases, safety issues, laws and regulations	X				
		applicable in study area					
	TAC	CUC Membership and Functions	$\mathbf{A}^{\star}$	M	S	C	NA
•	•	IACUC is comprised of at least 5 members, appointed by CEO	X	IVI		•	IVA
	÷	Members include a veterinarian, a scientist, a nonscientist, and a nonaffiliated non-lab animal user	X				
	÷	IACUC authority and resources for oversight and evaluation of institution's program are provided	X				
	÷	IACUC conducts semiannual evaluations of institutional animal care and use program	X				
	÷	Conducts semiannual inspections of institutional animal facilities	X				
	•	IACUC organizationally reports to the Institutional Official )	X				
	•	Methods for reporting and investigating animal welfare concerns are in place )	X				
	•	Reviews and investigates concerns about animal care and use at institution)	X				
	•	Procedures are in place for review, approval, and suspension of animal activities	X				
	•	Procedures are in place for review and approval of significant changes to approved activities	X				
	•	Policies are in place for special procedures (e.g., genetically modified animals, restraint, multiple	X				
		survival surgery, food and fluid regulation, field investigations, agricultural animals)					
	TAC	CUC Training	$\mathbf{A}^{\star}$	M	S	C	NA
•	•	All IACUC members should receive:	A	IVI	3	•	NA
		Formal orientation to institution's program	X				
		Training on legislation, regulations, guidelines, and policies	X				
		Training on how to inspect facilities and labs where animal use or housing occurs ( <i>Guide</i> ,	X				
		Training on how to review protocols as well as evaluate the program	X				
		Ongoing training/education	X				
	TAC	CUC Records and Reporting Requirements	$\mathbf{A}^{\star}$	M	S	C	NA
•	•	Semiannual report to the IO)	A	IVI	<u>.</u>		NA
		Submitted to IO every 6 months	X				
		Compiles program review and facility inspection(s) results (includes all program and facility	X				
		deficiencies)					
		o Includes minority IACUC views	X				
		<ul> <li>Describes IACUC-approved departures from the Guide or PHS Policy and the reasons for each</li> </ul>	X				
		departure					
		Distinguishes significant from minor deficiencies	X				
		o Includes a plan and schedule for correction for each deficiency identified	X				
	•	Reports to OLAW  O Annual report to OLAW documents program changes, dates of the semiannual program	X				
		o Annual report to OLAW documents program changes, dates of the semiannual program reviews and facility inspections and includes any minority views	Λ				
		o Promptly advises OLAW of serious/ongoing <i>Guide</i> deviations or PHS Policy noncompliance	X				
	•	Records					
		IACUC meeting minutes and semiannual reports to the IO are maintained for 3 years	X				
		Records of IACUC reviews of animal activities include all required information	X				
		Records of IACUC reviews are maintained for 3 years after the completion of the study	X				
	¥7.		A *		C	~	<b>3</b> 7.4
•		erinary Care (See also next section - Veterinary Care)	A <sup>*</sup>	M	S	C	NA
	•	An arrangement for veterinarian(s) with training or experience in lab animal medicine is in place including backup veterinary care	X				
	•	Veterinary access to all animals is provided	X				
	•	v ctermary access to an animars is provided	<b>∠ ≥</b>	i			1

		Α	TTA	CHN	[ENT	A
•	Direct or delegated authority is given to the veterinarian to oversee all aspects of animal care and use	X				
•	Veterinarian provides consultation when pain and distress exceeds anticipated level in protocol	X				
•	Veterinarian provides consultation when interventional control is not possible	X				
•	Regular communication occurs between veterinarian and IACUC	X				
		X				
•	Veterinarian(s) have experience and training in species used	X				
•	Veterinarian(s) have experience in facility administration/management	Λ				
. Pe	rsonnel Qualifications and Training	$\mathbf{A}^{\star}$	M	S	C	NA
•	All personnel are adequately educated, trained, and/or qualified in basic principles of laboratory					
	animal science. Personnel included:					
	<ul> <li>Veterinary/other professional staff</li> </ul>	X				
	o IACUC members	X				
	o Animal care personnel	X				
	Research investigators, instructors, technicians, trainees, and students	X				
•	Continuing education for program and research staff provided to ensure high quality care and	X				
	reinforce training					
•	Training is available prior to starting animal activity	X				
•	Training is documented	X				
•	Training program content includes					
	Methods for reporting concerns	X				
	Humane practices of animal care (e.g., housing, husbandry, handling)	X				
	Humane practices of animal use (e.g., research procedures, use of anesthesia, pre- and post-	X				
	operative care, aseptic surgical techniques and euthanasia)	21				
	Research/testing methods that minimize numbers necessary to obtain valid results	X				
	Research/testing methods that minimize animal pain or distress)	X				
	Use of hazardous agents, including access to OSHA chemical hazard notices where applicable	X				
	o Animal care and use legislation	X				
	IACUC function	X				
	Ethics of animal use and Three R's	X				
	Control of animal use and Timee R s	<u> </u>				
0. Oc	cupational Health and Safety of Personnel	$\mathbf{A}^{\star}$	M	S	C	NA
•	Program is in place and is consistent with federal, state, and local regulations	X				
•	Program covers all personnel who work in laboratory animal facilities	X				
•	Changing, washing, and showering facilities are available as appropriate	X				
•	Hazardous facilities are separated from other areas and identified as limited access	X				
•	Personnel training is provided based on risk (e.g., zoonoses, hazards, personal hygiene, special	X				
	precautions, animal allergies)					
•	Personal hygiene procedures are in place (e.g., work clothing, eating/drinking/smoking policies)	X				
•	Procedures for use, storage, and disposal of hazardous biologic, chemical, and physical agents are	X				
	in place					
•	Personal Protective Equipment for the work area is appropriate and available	X				
•	Program for medical evaluation and preventive medicine for personnel includes:					
	Pre-employment evaluation including health history	X				
	Immunizations as appropriate (e.g., rabies, tetanus) and tests as appropriate	X				
	o Zoonosis surveillance as appropriate (e.g., Q-fever, tularemia, Hantavirus, plague)	X				
	o Procedures for reporting and treating injuries, including accidents, bites, allergies, etc.	X				
	Promotes early diagnosis of allergies including preexisting conditions	X				
	Considers confidentiality and other legal factors as required by federal, state and local	X				
	regulations					
	o If serum samples are collected, the purpose is consistent with federal and state laws	X				

Waste anesthetic gases are scavenged

Hearing protection is provided in high noise areas

Respiratory protection is available when performing airborne particulate work

Occupational safety and health of field studies is reviewed by OSH committee or office

X

X

X

X

ATTACHMENT A

11. Personnel Security	$\mathbf{A}^{\star}$	M	S	C	NA
Preventive measures in place include pre-employment screening, and physical and IT security )	X				
12. Investigating & Reporting Animal Welfare Concerns	$\mathbf{A}^{\star}$	M	S	C	NA
Methods for investigating and reporting animal welfare concerns are established	X				
Reported concerns and corrective actions are documented	X				
<ul> <li>Mechanisms for reporting concerns are posted in facility and at applicable website with instructions</li> </ul>	X				
Includes multiple contacts	X				
<ul> <li>Includes anonymity, whistle blower policy, nondiscrimination and reprisal protection</li> </ul>	X				

<sup>\*</sup> A = acceptable

M = minor deficiency

S = significant deficiency (is or may be a threat to animal health or safety)

C = change in program (PHS Policy IV.A.1.a.-i.) (include in semiannual report to IO and in annual report to OLAW)

NA = not applicable

NOTES:

### Veterinary Care

1. Clinical Care and Management	A <sup>*</sup>	M	S	C	NA
Veterinary program offers high quality of care and ethical standards	X				
<ul> <li>Veterinarian provides guidance to all personnel to ensure appropriate husbandry, handling,</li> </ul>	X				
treatment, anesthesia, analgesia, and euthanasia					
Veterinarian provides oversight to surgery and perioperative care	X				
Veterinary care program is appropriate for program requirements	X				
<ul> <li>Veterinarian(s) is familiar with species and use of animals and has access to medical and</li> </ul>	X				
experimental treatment records	77				
Procedures to triage and prioritize incident reports are in place	X				
Procedures are in place to address:					
o Problems with experiments to determine course of treatment in consultation with investigator	X				
<ul> <li>Recurrent or significant health problems with the IACUC and documentation of treatments and outcomes</li> </ul>	X				
<ul> <li>Veterinary review and oversight of medical and animal use records</li> </ul>	X				<u> </u>
<ul> <li>Procedures established for timely reporting of animal injury, illness, or disease</li> </ul>	X				
<ul> <li>Procedures established for veterinary assessment, treatment, or euthanasia</li> </ul>	X				
<ul> <li>Veterinarian is authorized to treat, relieve pain, and/or euthanize</li> </ul>	X				
2. Animal Procurement and Transportation/Preventive Medicine	$\mathbf{A}^{\star}$	M	S	C	NA
Procedures for lawful animal procurement are in place	X				1121
Sufficient facilities and expertise are confirmed prior to procurement	X				
Procurement is linked to IACUC review and approval	X				_
Appropriate records are maintained on animal acquisition)	X				+
Animal vendors are evaluated to meet program needs and quality	X				+
Breeding colonies are based on need and managed to minimize numbers	X				_
Procedures for compliance with animal transportation regulations, including international	X				
requirements, are in place	1				
Transportation is planned to ensure safety, security and minimize risk	X				
Movement of animals is planned to minimize transit time and deliveries are planned to ensure	X				
receiving personnel are available	11				
Appropriate loading and unloading facilities are available	X				
Environment at receiving site is appropriate	X				
Policies in place on separation by species, source, and health status	X				
Procedures in place for quarantine to include zoonoses prevention	X				
Quarantined animals from different shipments are handled separately or physically separated	X				_
Procedures in place for stabilization/acclimation	X				
Policies in place for isolation of sick animals	X				_
Program is in place for surveillance, diagnosis, treatment and control of disease to include daily	X				_
observation	1				
Diagnostic resources are available for preventive health program	X				
	$\mathbf{A}^{\star}$	1/	C		NT A
Surgery     Surgical outcomes are assessed and corrective changes instituted	X	M	S	C	NA
	X				+
Researchers have appropriate training to ensure good technique  Programming laborators developed and include vectoring with the control of the control	X				+
<ul> <li>Pre-surgical plans are developed and include veterinary input (e.g., location, supplies, anesthetic and analgesic use, peri-operative care, recordkeeping)</li> </ul>					
<ul> <li>Aseptic surgery is conducted in dedicated facilities or spaces, unless exception justified and IACUC approved</li> </ul>	X				
Surgical procedures including laparoscopic procedures are categorized as major or minor	X				
For nonsurvival surgery, the site is clipped, gloves are worn and instruments and area are clean	X				
Aseptic technique is followed for survival surgical procedures	X				

		Α	TTA	CHN	IENT	`A_
	<ul> <li>Effective procedures for sterilizing instruments and monitoring expiration dates on sterile packs are in place</li> </ul>	X				
	Procedures for monitoring surgical anesthesia and analgesia are in place	X				
	<ul> <li>Post-operative monitoring and care are provided by trained personnel and documented (e.g., thermoregulation, physiologic function, analgesia, infection, removal of skin closures)</li> </ul>	X				
4.	Pain, Distress, Anesthesia and Analgesia	$\mathbf{A}^{\star}$	M	S	C	NA
	<ul> <li>Guidelines for assessment and categorization of pain, distress and animal wellbeing are provided during training</li> </ul>	X				
	<ul> <li>Selection of analgesics and anesthetics is based on professional veterinary judgment)</li> </ul>	X				
	Painful procedures are monitored to ensure appropriate analgesic management	X				
	<ul> <li>Nonpharmacologic control of pain is considered as an element of postprocedural care</li> </ul>	X				
	<ul> <li>Procedures are in place to assure antinoception before surgery begins</li> </ul>	X				
	<ul> <li>Guidelines for selection and use of analgesics and anesthetics are in place and regularly reviewed and updated</li> </ul>	X				
	Special precautions for the use of paralytics are in place to ensure anesthesia	X				
5.	Euthanasia	$\mathbf{A}^{\star}$	M	S	C	NA
	<ul> <li>Methods are consistent with AVMA Guidelines on Euthanasia unless approved by the IACUC</li> </ul>	X				
	<ul> <li>Standardized methods are developed and approved by the veterinarian and IACUC that avoid distress and consider animal age and species</li> </ul>	X				
	<ul> <li>Training is provided on appropriate methods for each species and considers psychological stress to personnel</li> </ul>	X				
	Procedures and training are in place to ensure death is confirmed	X				
6.	Drug Storage and Control	$\mathbf{A}^{\star}$	M	s	C	NA
	Program complies with federal regulations for human and veterinary drugs	X				
	<ul> <li>Drug records and storage procedures are reviewed during facility inspections</li> </ul>	X				
	<ul> <li>Procedures are in place to ensure analgesics and anesthetics are used within expiration date</li> </ul>	X				
	• Anesthetics and analgesics are acquired, stored, and their use and disposal are recorded legally and	X				

safely A = acceptable

 $\mathbf{M} = \text{minor deficiency}$ 

S = significant deficiency (is or may be a threat to animal health or safety)
C = change in program (PHS Policy IV.A.1.a.-i.) (include in semiannual report to IO and in annual report to OLAW)

NA = not applicable

#### **NOTES:**

Date:	05/09/2019
To:	Redacted by agreement.
Thru:	Redacted by agreement.
From:	Redacted by Lead Inspector agreement.
Subject:	Location Redacted by agreement Animal Facility Inspections
	119, EHS inspected your area in Redacted by agreement. There were no safety or tal deficiencies noted during the evaluation.
Your assista	ance during the inspection was appreciated.
If you have a	any questions, please contact us at Redacted by agreement.
No Deficienc	nice Word Equal In the Dragger Area

Date:	05/03/2019
To:	Redacted by agreement.
Thru:	Redacted by agreement.
From:	Redacted by agreement. Lead Inspector
Cc:	Redacted by agreement.
Subject:	Location, Redacted by agreement. Animal Facility Inspection

On 05/02/2019, Redacted by agreement. From the Environment, Health and Safety Program, inspected Redacted by The purpose of this inspection was to evaluate your area in accordance with applicable safety and environmental requirements. To comply with NCI Contract Number HHSN261200800001E this initial inspection report is being provided to you, the Animal Facility Coordinator. Corrective action for any open deficiency is required within 30 - 45 days by the appropriate personnel. The results of future re-inspections shall be reported to the Key Person or Government authority as appropriate.

The findings identified during our inspection are noted below with the remedial action required to correct each deficiency. Your assistance during the inspection was appreciated.

If you have any questions, please contact us at

Redacted by agreement

Following are the deficiencies we found that may need your attention.

### Program is Responsible for Correcting the Following Deficiencies

Deficiency	Space	Remedial Action	Comments	Status
				(b) (5)

### EHS is Responsible for Correcting the Following Deficiencies

(b)

### FME is Responsible for Correcting the Following Deficiencies

Deficiency	Space	Remedial Action	Comments	Status
				(b) (5)

Date:	05/09/2019
То:	Redacted by agreement.
Thru:	Redacted by agreement.
From:	Redacted by agreement Lead Inspector
Cc:	Redacted by agreement.
Subject:	Location. Redacted by agreement. Animal Facility Inspections
environment report is beir required with	Redacted by agreement. If you have a specific to the Environment, Health and Safety Program, inspected agreement. If you have a specific to the Environment, Health and Safety Program, inspected agreement. To comply with NCI Contract Number HHSN261200800001E this initial inspection agreements. To comply with NCI Contract Number HHSN261200800001E this initial inspection agreement and provided to you, the Animal Facility Coordinator. Corrective action for any open deficiency is nin 30 - 45 days by the appropriate personnel. The results of future re-inspections shall be reported to son or Government authority as appropriate.
The findings deficiency. Y	identified during our inspection are noted below with the remedial action required to correct each four assistance during the inspection was appreciated.
If you have a	any questions, please contact us at Redacted by agreement.
Following are	e the deficiencies we found that may need your attention.

### Program is Responsible for Correcting the Following Deficiencies

Deficiency	Space	Remedial Action	Comments	Status
				(ъ) (5
Materials used and stored in laboratory are not labeled.	Kedacted agreem	Clearly identify materials used and stored in the laboratory.	Unlabeled spray bottle containing an unknown liquid	Resolved

### FME is Responsible for Correcting the Following Deficiencies

Deficiency	Space	Remedial Action	Comments	Status
			1	(b) (

Date:	05/02/2019	
To:	Redacted by agreement.	
Thru:		Redacted by agreement.
From:	Redacted by agreement. Lead Inspector	
Cc:	Redacted by agreement.	
Subject:	Location, Redacted by agreement.	Animal Facility Inspections

On 05/02/2019, Redacted by from the Environment, Health and Safety Program, inspected Redacted by agreement Redacted by The purpose of this inspection was to evaluate your area in accordance with applicable safety and environmental requirements. To comply with NCI Contract Number HHSN261200800001E this initial inspection report is being provided to you, the Animal Facility Coordinator. Corrective action for any open deficiency is required within 30 - 45 days by the appropriate personnel. The results of future re-inspections shall be reported to the Key Person or Government authority as appropriate.

The findings identified during our inspection are noted below with the remedial action required to correct each deficiency. Your assistance during the inspection was appreciated.

If you have any questions, please contact us at

Following are the deficiencies we found that may need your attention.

### Program is Responsible for Correcting the Following Deficiencies

Deficiency	Space	Remedial Action	Comments	Status
Acids stored with flammables.	Redacted by agreement.	Relocate acids to segregated	Isopropyl alcohol in corrosive cabinet with hydrochloric acid	Resolved
Incompatible materials are stored together.		Move incompatible materials to separate storage locations.	Windex (ammonia) stored with bleach	Resolved

Date:	05/24/2019
To:	Redacted by agreement.
Thru:	Redacted by agreement.
From:	Lead Inspector
Cc:	Redacted by agreement.
Subject:	Location, Redacted by agreement. Issue Inspections
On 05/24/20 Redacted by	e purpose of this inspection was to evaluate your area in accordance with applicable safety and
report is bei	requirements. To comply with NCI Contract Number HHSN261200800001E this initial inspection provided to you, the . Corrective action for any open deficiency is required within 30 - 45 days by e personnel. The results of future re-inspections shall be reported to the Key Person or Government

The findings identified during our inspection are noted below with the remedial action required to correct each deficiency. Your assistance during the inspection was appreciated.

If you have any questions, please contact us at

Redacted by agreement

Following are the deficiencies we found that may need your attention.

### Program is Responsible for Correcting the Following Deficiencies

Deficiency	Space	Remedial Action	Comments	Status
Inhalation hazards or Particularly Hazardous Substances (PHSs) used outside of an exhausted engineering controls.	Redacted by agreement.	Only use inhalation hazards or PHSs inside of properly exhausted engineering controls.	Isoflurane used in A2 BSC without active scavenging. No potential for exposure over 2 ppm due to room ventilation but exposure should be as low as reasonably achievable. Resolved by installation of exhausted nose cone (checked by EHS) the next day.	Resolved

Date:	05/02/2019
To:	Redacted by agreement.
Thru:	Redacted by agreement.
From:	Redacted by agreement Lead Inspector
Cc:	Redacted by agreement.
Subject:	Location, Redacted by agreement. Animal Facility Inspections

On 05/02/2019, Redacted by agreement from the Environment, Health and Safety Program, inspected requirements. To comply with NCI Contract Number HHSN261200800001E this initial inspection report is being provided to you, the Animal Facility Coordinator. Corrective action for any open deficiency is required within 30-45 days by the appropriate personnel. The results of future re-inspections shall be reported to the Key Person or Government authority as appropriate.

The findings identified during our inspection are noted below with the remedial action required to correct each deficiency. Your assistance during the inspection was appreciated.

If you have any questions, please contact us at

Following are the deficiencies we found that may need your attention.

### Program is Responsible for Correcting the Following Deficiencies

Deficiency	Space	Remedial Action	Comments	Status
Exits are not free of obstructions.	Redacted by agreement	Relocate items to appropriate storage area.	Drum in front of exit door.	Resolved

### FME is Responsible for Correcting the Following Deficiencies

Deficiency	Space	Remedial Action	Comments	Status
Fire extinguisher tag not initialed to indicate monthly inspection.		FME will ensure the monthly inspection requirement is met.	Outside Redacted Not checked Free April 2019	byResolved nt

	110	done	on Hau	mai Lai	oor atory		
Date:	05/02/2019						
To:		Redacted by	agreement.				
Thru:				Redacted by a	agreement.		
From:	Redacted by ag	greement. Le	ad Inspector				
Cc:			d by agreement.				
			1 . 11				
Subject:	Location,	Re	edacted by agreement.	Animal Facility I	nspections		
report is be required withe Key Pe The finding deficiency.  If you have Following a	he purpose of the ntal requirements in provided to stith 30 - 45 days arson or Governments identified during Your assistance any questions, pare the deficienci	is inspections. To come you, the Area by the application of the applic	on was to evalua aply with NCI Connimal Facility Cooperate person with a appropriate pection are noted a inspection was antact us at Redant agrand that may need	te your area in actract Number HH ordinator. Correct nel. The results of e. below with the re appreciated. acted by eement. your attention.	Safety Program, in cordance with appl SN2612008000018 ive action for any of future re-inspection medial action requirements.	licable safet E this initial pen deficier ons shall be ired to corre	inspectior ncy is reported
Deficienc	* ************************************	Space	Remedial Actio		Comments	Status	
							(b) (5)
D 6 :		T			ing Deficiencie		
Deficienc	у	Space	Remedial Actio	n	Comments	Status	(b) (5)-
	FME is Res	ponsible	e for Correcti	ng the Follow	ing Deficiencie	s	
Deficiency		Space	Remedial Action		Comments	Status	
							(b) (5)

Date:	05/10/2019		
То:	Redacted b	oy agreement.	
Thru:			Redacted by agreement.
From:	Redacted by agreement	- Lead Inspector	
Subject:	Location,	Redacted by agreement.	Animal Facility Inspections
	19, EHS inspected your land the second of th		
Your assistar	nce during the inspec	ction was appreciate	ed.
If you have a	ny questions, please	e contact us at	Redacted by agreement
No Deficienc	ies Were Found In th	ne Program Area.	

Date:	05/13/2019
To:	Redacted by agreement.
Thru:	Redacted by agreement.
From:	Redacted by agreement. Lead Inspector
Cc:	Redacted by agreement.
Subject:	Location, Redacted by agreement. Animal Facility Inspections
report is bein required with	Redacted by agreement from the Environment, Health and Safety Program, inspected e purpose of this inspection was to evaluate your area in accordance with applicable safety and al requirements. To comply with NCI Contract Number HHSN261200800001E this initial inspection ag provided to you, the Animal Facility Coordinator. Corrective action for any open deficiency is also a 45 days by the appropriate personnel. The results of future re-inspections shall be reported to son or Government authority as appropriate.
	identified during our inspection are noted below with the remedial action required to correct each our assistance during the inspection was appreciated.
If you have a	any questions, please contact us at Redacted by agreement.
Following ar	e the deficiencies we found that may need your attention.

### Program is Responsible for Correcting the Following Deficiencies

Deficiency	Space	Remedial Action	Comments	Status
				<b>(b)</b> (5)

### FME is Responsible for Correcting the Following Deficiencies

Deficiency	Space	Remedial Action	Comments	Status
				(b)

Date:	05/20/2019
To:	Redacted by agreement.
Thru:	Redacted by agreement.
From:	Redacted by agreement. Lead Inspector
Subject:	Location, Redacted by agreement. Animal Facility Inspections
On 04/16/20	Redacted by agreement from the Environment, Health and Safety Program, accompanied by Redacted by agreement inspected.

The findings identified during our inspection have been resolved.

Your assistance in resolving any deficiencies was appreciated.

If you have any questions, please contact us at

inspected

The following deficiencies have been resolved:

#### EHS was Responsible for Correcting the Following Deficiencies

Deficiency	Space	Remedial Action	Comments	Status
Laboratory entrance sign is missing, or contains incomplete/incorrect information.	The state and state and	Maintain an up-to-date information sign on the entrance to the laboratory. The information should communicate hazards located within the area as well as after-hours contact information.	current ASP and	Resolved

### FME was Responsible for Correcting the Following Deficiencies

Deficiency	Space	Remedial Action	Comments	Status
Door latch is broken and does not allow for door to open, shut and latch properly.	Redacted by agreement	Fivie will repair door latch to	Door latch seems to be in good working order but door hits door frame not allowing for contact with strike preventing door from closing securely. This has the potential to impact airflow.	Resolved
Emergency Light is not operating properly	Corridor	FME will repair the emergency light.	Redacted by left light bulb is out	Resolved

Date:	05/01/2019		
То:	Redacted by	agreement.	
Thru:			Redacted by agreement.
From:	Redacted by agreement.	Lead Inspector	
Subject:	Location,	Redacted by agreement	Animal Facility Inspections
	19, EHS inspected you al deficiencies noted di	ır area in Furing the evaluation	Redacted by agreement. There were no safety or on.
Your assista	nce during the inspecti	on was appreciate	ed.
If you have a	ny questions, please c	contact us at	Redacted by agreement.
Na Dafialana	ica Mara Farind In the	D	

Date:

05/28/2019

To:

Redacted by agreement.

Thru: From:

Lead Inspector

Subject:

Location

Animal Facility Inspections

Redacted by agreement.

On 05/14/2019 Redacted by

agreement from the Environment, Health and Safety Program, inspected

Redacted by agreement

The findings identified during our inspection have been resolved.

Your assistance in resolving any deficiencies was appreciated.

If you have any questions, please contact us at

The following deficiencies have been resolved:

## EHS was Responsible for Correcting the Following Deficiencies

Deficiency	Space	Remedial Action	Comments	Status
Laboratory entrance sign is missing, or contains incomplete/incorrect information.		Maintain an up-to-date information sign on the entrance to the laboratory. The information should communicate hazards located within the area as well as after-hours contact information.	BSL-1	Resolved

Date:	04/30/2019
To:	Redacted by agreement.
Thru:	Redacted by agreement.
From:	Redacted by agreement. Lead Inspector
Subject:	Location Redacted by agreement. Animal Facility Inspections
	19, EHS inspected your area in Redacted by agreement. There were no safety or all deficiencies noted during the evaluation.
Your assistar	nce during the inspection was appreciated.
If you have a	ny questions, please contact us at Redacted by agreement.
No Deficienc	ies Were Found In the Program Area.

Date:	05/20/2019		
To:	Reda	cted by agreement.	
Thru:			Redacted by agreement.
From:	Redacted by agreemen	Lead Inspector	
Subject:	Location,	Redacted by agreemer	Animal Facility Inspections
	19, EHS inspecte al deficiencies no	d your area in ted during the evaluat	Redacted by agreement. There were no safety or ion.
Your assista	nce during the ins	spection was apprecia	ted.
If you have a	any questions, ple	ease contact us at	Redacted by agreement.
		I - 41 - D A	

Date:

05/20/2019

To:

Redacted by agreement.

Thru:

Redacted by

From:

Lead Inspector agreement.

Subject:

Location

Redacted by agreement

Animal Facility Inspections

Redacted by agreement

On 05/14/2019

from the Environment, Health and Safety Program, inspected

The findings identified during our inspection have been resolved.

Your assistance in resolving any deficiencies was appreciated.

If you have any questions, please contact us at

The following deficiencies have been resolved:

#### EHS was Responsible for Correcting the Following Deficiencies

Deficiency		Remedial Action	Comments	Status
Laboratory entrance sign is missing, or contains incomplete/incorrect information.	Redacted by agreement.	Maintain an up-to-date information sign on the entrance to the laboratory. The information should communicate hazards located within the area as well as after-hours contact information.	BSL-2	Resolved

Date:	05/20/2019
То:	Redacted by agreement.
Thru:	Redacted by agreement.
From:	Redacted by agreement, Lead Inspector
Cc:	Redacted by agreement.
Subject:	Location, Redacted by agreement Animal Facility Inspections
environment report is beir required with	Redacted by agreement agreement from the Environment, Health and Safety Program, inspected a purpose of this inspection was to evaluate your area in accordance with applicable safety and all requirements. To comply with NCI Contract Number HHSN261200800001E this initial inspection ag provided to you, the Animal Facility Coordinator. Corrective action for any open deficiency is ain 30 - 45 days by the appropriate personnel. The results of future re-inspections shall be reported to son or Government authority as appropriate.
	identified during our inspection are noted below with the remedial action required to correct each our assistance during the inspection was appreciated.
If you have a	any questions, please contact us at Redacted by agreement.
Following are	e the deficiencies we found that may need your attention.

### Program is Responsible for Correcting the Following Deficiencies

Deficiency	Space	Remedial Action	Comments	Status
				(b) (5)

EHS is Responsible for Correcting the Following Deficiencies

Deficiency	Space	Remedial Action	Comments	Status
				(b) (:

Date:	05/01/2019
To:	Redacted by agreement.
Thru:	Redacted by agreement.
From:	Redacted by agreement. Lead Inspector
Cc:	Redacted by agreement.
Subject:	Location, Redacted by agreement Animal Facility Inspections
On 04/22/20 Reda	O19, Redacted by agreement from the Environment, Health and Safety Program, accompanied by agreement inspected Redacted by agreement. The purpose of this inspection was to evaluate your
area in acco HHSN2612 Corrective a	ordance with applicable safety and environmental requirements. To comply with NCI Contract Number 00800001E this initial inspection report is being provided to you, the Animal Facility Coordinator. action for any open deficiency is required within 30 - 45 days by the appropriate personnel. The results inspections shall be reported to the Key Person or Government authority as appropriate.
	s identified during our inspection are noted below with the remedial action required to correct each Your assistance during the inspection was appreciated.
If you have	any questions, please contact us at Redacted by agreement.

Following are the deficiencies we found that may need your attention.

### Program is Responsible for Correcting the Following Deficiencies

Deficiency	Space	Remedial Action	Comments	Status
Materials used and stored in laboratory are not labeled.	Redacted by agreement	Clearly identify materials used and stored in the laboratory.	Pitchers inside of isolators used for pouring water not labeled.	Resolved
Materials used and stored in laboratory are not labeled.		Clearly identify materials used and stored in the laboratory.	Pitchers inside of isolators used for pouring water not labeled.	Resolved

Date:

05/28/2019

To:

Redacted by agreement

Thru:

Redacted by agreement.

From:

ead Inspector

Subject:

Location.

Animal Facility Inspections

Redacted by from the Environment, Health and Safety Program, inspected Redacted by agreement.

The findings identified during our inspection have been resolved.

Your assistance in resolving any deficiencies was appreciated.

If you have any questions, please contact us at

The following deficiencies have been resolved:

#### EHS was Responsible for Correcting the Following Deficiencies

Deficiency	Space	Remedial Action	Comments	Status
Laboratory entrance sign is missing, or contains incomplete/incorrect information.	Redacted by agreement	Maintain an up-to-date information sign on the entrance to the laboratory. The information should communicate hazards located within the area as well as after-hours contact information.	BSL-1	Resolved

Date:	04/30/2019			
То:	Redacted by agree	ment.		
Thru:		Redacted by agreement.		
From:	Redacted by agreement Lead Inspec	stor		
Cc:	Redacted I	by agreement.		
Subject:	Location, Red	Animal Facility Inspection	ns	
environmenta report is bein required with	oose of this inspection was to all requirements. To complying provided to you, the Anir	nvironment, Health and Safety Program, to evaluate your area in accordance with y with NCI Contract Number HHSN26120 mal Facility Coordinator. Corrective action ropriate personnel. The results of future ray as appropriate.	applicable safety a 00800001E this init n for any open defi	tial inspection ciency is
		ction are noted below with the remedial a nspection was appreciated.	ction required to co	orrect each

If you have any questions, please contact us at

Following are the deficiencies we found that may need your attention.

#### Program is Responsible for Correcting the Following Deficiencies

Deficiency	Space	Remedial Action	Comments	Status
Expired drugs, chemical or supplies not disposed of.	Redacted by agreement	Dispose of expired drugs, chemical and supplies through Waste Management Redacted by	Expired bleach spray	Resolved

The findings identified during our inspection have been resolved.

Your assistance in resolving any deficiencies was appreciated.

If you have any questions, please contact us at Redacted by

The following deficiencies have been resolved:

### Program was Responsible for Correcting the Following Deficiencies

Deficiency	Space	Remedial Action	Comments	Status
Expired drugs, chemical or supplies not disposed of.	Redacted by agreement	Dispose of expired drugs, chemical and supplies through Waste Management Redacted	Expired hydrogen peroxide	Resolved

### FME was Responsible for Correcting the Following Deficiencies

Deficiency	Space	Remedial Action	Comments	Status
Biological Safety Cabinet annual certification has expired.	Redacted by agreement	Coordinate with FME to schedule the cabinet for annual certification.	C137505- Out of Certification	Resolved
GFCI protection is not utilized for equipment/locations in wet or highly conductive locations.		Utilize ground-fault circuit interrupter (GFCI) protection for equipment/locations in wet or highly conductive locations.	Outlet above sink is not GFCI	Resolved

Date:	05/01/2019
To:	Redacted by agreement.
Thru:	Redacted by agreement.
From:	Redacted by agreement. Lead Inspector
Cc:	Redacted by agreement.
Subject:	Location Redacted by agreement. Animal Facility Inspections
area in accor HHSN26120 Corrective ac	from the Environment, Health and Safety Program, accompanied by agreement. The purpose of this inspection was to evaluate your redance with applicable safety and environmental requirements. To comply with NCI Contract Number 0800001E this initial inspection report is being provided to you, the Animal Facility Coordinator. Setion for any open deficiency is required within 30 - 45 days by the appropriate personnel. The results inspections shall be reported to the Key Person or Government authority as appropriate.
The findings deficiency. Y	identified during our inspection are noted below with the remedial action required to correct each our assistance during the inspection was appreciated.
If you have a	Redacted by

Following are the deficiencies we found that may need your attention.

### Program is Responsible for Correcting the Following Deficiencies

Deficiency	Space	Remedial Action	Comments	Status
Materials used and stored in laboratory are not labeled.	Redacted by agreement.	Clearly identify materials used and stored in the laboratory.	Clidox spray bottles not labeled or label had worn off so that the contents of the spray bottle was not obvious.	Resolved

Date:	04/30/2019	
То:	Redacted by agreement.	
Thru:		Redacted by agreement.
From:	Redacted by Lead Inspector agreement.	
Subject:	Location, Redacted by	Animal Facility Inspections
	119, EHS inspected your area in tall deficiencies noted during the	Redacted by agreement. There were no safety or evaluation.
Your assista	nce during the inspection was a	opreciated.
If you have a	any questions, please contact us	at Redacted by agreement.
No Deficienc	cies Were Found In the Program	Area.

Date:

05/28/2019

To:

Redacted by agreement.

Thru:

ead Inspector

From: Subject:

Redacted by agreement.

Location,

Animal Facility Inspections

Redacted by agreement.

On 05/14/2019 Redacted by

from the Environment, Health and Safety Program, inspected

The findings identified during our inspection have been resolved.

Your assistance in resolving any deficiencies was appreciated.

If you have any questions, please contact us at

The following deficiencies have been resolved:

#### Program was Responsible for Correcting the Following Deficiencies

Deficiency	Space	Remedial Action	Comments	Status
Heat producing or high amperage appliances (microwave, coffee pot, refrigerator, freezer, etc.) are not plugged directly into a wall outlet.	Redacted by agreement	Plug equipment directly into an outlet. Have additional outlets installed if necessary.	Stirring hot plate plugged into power strip	Resolved

### EHS was Responsible for Correcting the Following Deficiencies

Deficiency	Space	Remedial Action	Comments	Status
Laboratory does not have an emergency contact sign affixed to entrance.		EHS will post an emergency contact sign.	Door sign indicates ABSL-1 instead of BSL-1	Resolved

Date:	05/20/2019		
To:	Redacted by agr	eement.	
Thru:		Redacted by agr	eement.
From:	Redacted by agreement. Lead Ins	spector	
Cc:	Redacte	ed by agreement.	
Subject:	Location	edacted by agreement. Animal Facility In	spections

Con 05/20/2019

Redacted by agreement from the Environment, Health and Safety Program, inspected Redacted by The purpose of this inspection was to evaluate your area in accordance with applicable safety and environmental requirements. To comply with NCI Contract Number HHSN261200800001E this initial inspection report is being provided to you, the Animal Facility Coordinator. Corrective action for any open deficiency is required within 30 - 45 days by the appropriate personnel. The results of future re-inspections shall be reported to the Key Person or Government authority as appropriate.

The findings identified during our inspection are noted below with the remedial action required to correct each deficiency. Your assistance during the inspection was appreciated.

If you have any questions, please contact us at Redacted by agreement.

Following are the deficiencies we found that may need your attention.

### Program is Responsible for Correcting the Following Deficiencies

Deficiency	Space	Remedial Action	Comments	Status
Flammable liquids not in use are not in a flammable storage room or flammable storage cabinet.	Redacted by agreemer	Limit flammables outside of a tt storage room or cabinet to working quantities.	Jug of acetone stored on shelf. Removed to flammable storage.	Resolved
Hazardous chemicals are stored and/or dispensed above eye level.		Relocate chemicals so that storage and/or dispensing is below eye level.	Jug of bleach stored on shelf above eye level. Removed.	Resolved

Date:	05/01/2019	
To:	Redacted by agreement.	
Thru:		Redacted by agreement.
From:	Redacted by agreement. Lead Inspector	
Subject:	Location Redacted by agreem	Animal Facility Inspections
	19, EHS inspected your area in all deficiencies noted during the evalua	Redacted by agreement. There were no safety or ation.
Your assista	nce during the inspection was appreci	ated.
If you have a	any questions, please contact us at	Redacted by agreement
No Deficienc	ies Were Found In the Program Area.	

Date:	05/13/2019
To:	Redacted by agreement.
Thru:	Redacted by agreement.
From:	Redacted by agreement. Lead Inspector
Cc:	Redacted by agreement.
Subject:	Location, Redacted by agreement. Animal Facility Inspections
safety and e inspection re deficiency is	The purpose of this inspection was to evaluate your area in accordance with applicable invironmental requirements. To comply with NCI Contract Number HHSN261200800001E this initial eport is being provided to you, the Animal Facility Coordinator. Corrective action for any open required within 30 - 45 days by the appropriate personnel. The results of future re-inspections shall be
	he Key Person or Government authority as appropriate.
The findings deficiency.	identified during our inspection are noted below with the remedial action required to correct each four assistance during the inspection was appreciated.
If you have a	any questions, please contact us at Redacted by agreement
Following ar	e the deficiencies we found that may need your attention.

### Program is Responsible for Correcting the Following Deficiencies

Deficiency	Space	Remedial Action	Comments	Status
				(b) (5

Deficiency	Space	Remedial Action	Comments	Status
				(b) (3
Personal Protective Equipment (PPE), such as lab coats or coveralls and closed-toe shoes, not worn.	Ü	Wear appropriate PPE for the type(s) of work being performed.	Safety glasses not worn. Discussed with occupant.	Resolved
				(b) (5

### FME is Responsible for Correcting the Following Deficiencies

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