

Memorandum to: Fred King, PhD
From: Institutional Animal Care and Use Committee
Subject: Semiannual Report of the Program Review and Facility Inspection
Date: July 3, 2019

This report summarizes the IACUC's results of its 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.](#)): [optional]

Updates to the Animal Care and Use Program include the change of the IACUC chair on June 1, 2019. The former chair has agreed to remain on the committee as a voting scientist member. One scientist member resigned from the committee, however, the alternate member replaced that position as a full termed member.

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

Departures from the PHS Policy, the *Guide*, and the AWA.

Select A or B:

- ☐ A. There were no departures during this reporting period.
☒ B. The following departures have been reviewed and approved by the IACUC: *[include reason for each departure]*

Please see attached document. (Exemptions for Jan - June 2019)

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

Animal Care and Use Program Review Date(s):

Select A or B:

- ☐ A. There were no deficiencies in the program during this reporting period.
☒ B. The following deficiencies have been identified: *[describe each deficiency, identify each deficiency as either minor or significant, and provide a reasonable and specific plan and schedule for the correction of each deficiency, deficiencies may be recorded on a separate table and attached, the last page of OLAW's Sample Semiannual Program Review and Facility Inspection Checklist provides a sample table]*

Please see attached document. (Semi annual program review Spring 2019)

III. Deficiencies in the Institution's Animal Facility

Animal Facility Inspection Date(s):

Select A or B:

- ☐ A. There were no deficiencies in the animal facility during this reporting period.
- ☒ B. The following deficiencies have been identified: *[describe each deficiency, identify each deficiency as either minor or significant, and provide a reasonable and specific plan and schedule for the correction of each deficiency, deficiencies may be recorded on a separate table and attached, the last page of OLAW's Sample Semiannual Program Review and Facility Inspection Checklist provides a sample table]*

Please see attached document. (Semi-annual inspection Spring 2019)

IV. Minority Views

Select A or B:

- ☒ A. No minority views were submitted or expressed.
- ☐ B. The following minority views were expressed: *[insert minority views here or attach]*

V. Status of AAALAC Accreditation *[identify accredited facilities, if applicable]*

AAALAC accredited 2016, HSC, BRNI, LSB and FARF
Reaccreditation visit was March 4 - 6, 2019

VI. Signatures *[signatures of a majority of the IACUC members required by AWAR (§2.31,c,3), if applicable]*

Names of IACUC Members	Signatures

IACUC Semi-annual Program Review Spring 2019

- I. For Section 1 - 2 of the OLAW checklist, the members reviewed the OLAW requirements and recommendations for disaster planning. When the Disaster Plan was reviewed by the committee, it was noted that satellite facilities are no longer required to establish their own SOP, as they are now included in the IACUC approved disaster plan. Although some investigators decided to keep their SOPs, they are generally consistent with the overall Disaster Plan.
- II. In Section 3, it was noted that the IACUC meets as necessary to fulfill its responsibilities and that the members recuse themselves from the discussions of protocols when there is a COI. Also, regarding evaluating the effectiveness of the training programs, we accomplish this via the CITI program, verification that personnel have passed their training requirements, Post Approval Monitoring, facility and lab inspections. All items in Section 3 were deemed acceptable by the committee.
- III. For Section 4, 'IACUC Protocol Review – Special Considerations', they noted that humane endpoints are established for studies that involve tumor models and infectious diseases, among others.
 - a) Physical restraint of animals must be justified and should be limited to the minimum period to meet scientific objectives. Also, veterinary care is provided if lesions or illness result from restraint.
 - b) For food/fluid regulated animals, body weights are recorded and maintained. Sudden changes to the animal's clinical conditions are reported to the veterinary staff.
 - c) Regarding pharmaceutical and non-pharmaceutical grade chemicals, it was noted that the IACUC policy states that pharmaceutical grade compounds should be used for animal-related procedures when available, unless properly justified. The committee will continue discussing what additional information should be required for appropriate description and justification for the use of non-pharmaceutical substances. We will also review any updated OLAW guidance when provided and distribute the information to our research community.
 - d) Appendix A, for surgical procedures, was revised to define and address major versus minor surgical procedures and to allow for clear identification of plans for multiple major surgeries. This appendix was revised to address the minor deficiency found during this program review. All other items of Section 4 on the OLAW checklist were deemed acceptable by the IACUC.
- IV. For Section 5, 'IACUC Membership and Functions', the members noted that the committee is properly constituted and is comprised of members serving in all the capacities established by the *Guide*. There are methods in place for reporting and investigating animal welfare

IACUC Semi-annual Program Review Spring 2019

concerns. Additionally, the IACUC reviews and investigates concerns about animal care and use at the institution. There are procedures in place for review, approval and suspension of animal activities. There are also policies, guidelines or SOPs in place for special procedures, such as genetically modified animals, food and fluid regulation, etc. After reviewing Section 5 of the OLAW checklist, all applicable items were considered acceptable by the IACUC.

- V. In section 6 of the OLAW checklist – IACUC Training, it was noted that there is a informal orientation to introduce new members to the institution’s program and they are also asked to take the CITI training. Ongoing opportunities to enhance the members’ understanding of animal care and use are also provided. Training on regulations, guidelines, and policies are available. The Chair noted that the current committee members have recently been asked to update their CITI regulatory training. Finally, it was noted that training sessions take place at most IACUC meetings. e.g. Update on what should be in our Assurance; What the IACUC should be discussing regarding Non-Pharmaceutical Grade substances in protocols; An overview of ABSL-3 and its required PPE and the current specific agent, in order for the committee to be prepared for inspection of the facility; the history of the 3 Rs and the IACUC evaluation of them when reviewing protocols; should the IACUC review SOPs as part of the semi-annual review of the program. All items in Section 6 of the OLAW checklist were deemed acceptable by the IACUC.
- VI. In Section 7, IACUC Records and Reporting Requirements, the members noted that the semiannual report is submitted to the IO every six months, and that it compiles the program review and the facility inspection results, including all the deficiencies identified by the committee and when received, the responses from the responsible parties. When there is a minority view it would be recorded and included in the semiannual report.
 - a) OLAW is promptly notified of deviations to the *Guide* and reportable non-compliances or adverse events. The institution also reports to the USDA and other federal funding agencies as appropriate.
 - b) Records of IACUC reviews of animal activities include all required information. Records such as meeting minutes and semiannual reports are maintained for three years, as required. Finally, the records of IACUC reviews are also maintained for three years after the completion of the study. All items of section 7 of the OLAW checklist were deemed acceptable by the committee.
- VII. The committee also reviewed the topics in Section 8 of the checklist on Veterinary Care. The members commented that there is an arrangement in place for veterinarians with training and experience in lab animal medicine, including backup veterinary care. Veterinary access to all animals is available, as required. All applicable items of section 8 of the OLAW checklist were deemed acceptable by the committee.

IACUC Semi-annual Program Review Spring 2019

- VIII. Regarding Section 9, Personnel Qualifications and Training, the committee feels that all personnel are adequately educated and trained in basic principles of laboratory science, including the animal care personnel, researchers and study personnel, veterinary staff, the IACUC members.
- a) Regarding the continuing education for program and research staff to ensure high quality care, the members commented that there are OLAR training sessions available to research staff prior to starting animal activity, as well as on specific procedures. Training is documented, as required.
 - b) The members noted that the regulatory training program encompasses the required topics, such as methods for reporting concerns, humane practices of animal care and use, and IACUC functions, among others. The members also noted that there are ongoing procedural training sessions directed to the research community, i.e. breeding and weaning of rodents and calibration and use of anesthesia machines. All items of section 9 were deemed acceptable by the IACUC.
- IX. In Section 10 on Occupational Health and Safety of Personnel, the committee noted that anyone who enters the facilities, including outside vendors, are to be enrolled in the Occupational Health and Safety program. Signs posted in the laboratory areas outside of the facilities warn those entering the areas of potential animal use. For wildlife protocols, those working with mammals are flagged by the Occupational Health & Safety questionnaire and must get relevant immunizations, such as the rabies vaccine, before clearance. Medical evaluations including health history do occur pre-exposure. Serum collection occurs in select employees, such as OLAR and farm employees. All items were deemed acceptable.
- X. In Section 11 - 12. Personnel Security, the committee noted the university's use of background checks preemployment. Section 12. Investigating & Reporting of Animal Welfare Concerns, the committee pointed out that information on reporting concerns is posted [posted signs and on the website] and online anonymous reporting will be soon available. All items were deemed acceptable.
- XI. In the continuation section on Veterinary Care,
- a) In Section 1. Clinical Care and Management, all items were deemed acceptable.
 - b) In Section 2. Animal Procurement and Transportation/Preventative Medicine, the committee noted that IACUC approval of a protocol occurs prior to animal procurement and that IACUC approved exceptions for quarantine are included in the semi-annual report. All items were deemed acceptable.

IACUC Semi-annual Program Review Spring 2019

- c) In Section 3. Surgery, the AV clarified that aseptic technique is followed even in the case of emergency surgery at the farm. It was noted that there is no policy or guideline for monitoring the expiration dates on sterile packs. The committee deemed this item as a minor deficiency due to the need to develop a written policy/guideline or update the current surgical policies for researchers. All other items were acceptable.
- d) In Section 4. Pain, Distress, Anesthesia and Analgesia, the committee noted the careful consideration of protocols utilizing paralytics occur during the review of such protocol.
- e) For Section 5. Euthanasia, it was clarified that the maintenance of training records, including euthanasia training, is the responsibility of the PI. All items were marked acceptable.
- f) In Section 6. Drug Storage and Control, the committee discussed the difficulties in ensuring that opened, mixed drugs and other bottled substances for use in animals (i.e. water) are used within expiration dates since there is no written policy/guideline. The committee marked "procedures to ensure drugs are used within expiration date" as a minor deficiency. All other items were deemed acceptable.

XII. During Review of the Semi-annual Inspection Report Spring 2019,

- a) The committee decided that the deficiency for improper storage of flammable equipment in HSC necropsy was erroneously indicated as a major deficiency and should be edited to designate it as minor, with clarification that it involved equipment and supplies (i.e. non-flammables) that were being stored in the flammable cabinet. A question was posed regarding whether safety issues should be part of the inspection, and it was confirmed that the entire animal program is to be reviewed during the semi-annual inspection, including safety issues (i.e. eyewash maintenance, etc.) in the areas where animal use occurs. It was emphasized that during the inspections, there is always an escort present from the facility being inspected, to whom deficiencies can be identified and explained. Increased effort will be made to notify the escort of any deficiencies noted at the time of inspection.
- b) A question was posed as to why OLAR was considered the responsible party (RP) for deficiencies in spaces used by a PI within the facility. It was pointed out that it is necessary for OLAR to remain the RP since the general maintenance of those areas is still OLAR's responsibility.
- c) A discussion ensued in regards to the minor deficiency in the HSC facilities for having no temperature and humidity records. It was expressed that the response provided did not really address the issue as the response indicated that current readings and past trend data were available, yet they were never provided when requested by the committee

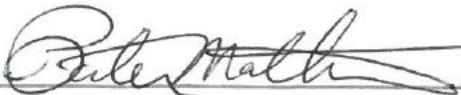


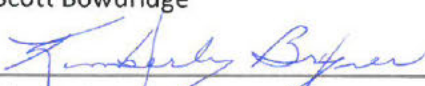
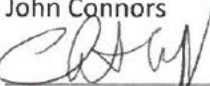
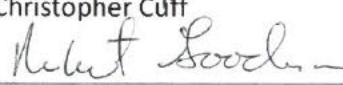



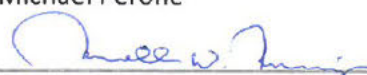
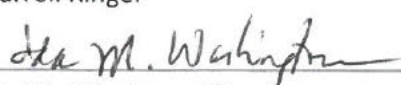
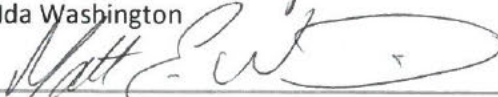
IACUC Semi-annual Program Review Spring 2019

members during inspections. A representative of OLAR indicated training was scheduled to give additional staff access to the records from the monitoring system. Concerns were expressed that PI's whose research could be compromised by out of range temp/humidity issues did not have knowledge of or access to that information, particularly historical data, and it was deemed unacceptable that access to records was not more readily available from a high-tech monitoring system.

- d) All other repeated deficiencies were reviewed with no corrections suggested other than to change the name of the JW Ruby location to JW Ruby in Reedsville. For the repeated deficiency in HCA regarding an expired alcohol bottle, the inspector indicated that the expiration date was difficult to read and may have been 2019 instead of 2014. A motion to approve the inspection report was seconded and approved unanimously.

XIII. During review of the Exemptions Spring 2019 list, OAW indicated that the process for identifying and recording exemptions has been improved and is being applied to incoming protocols. A question was asked regarding what qualifies as an exemption, and it was clarified that it is an IACUC approved exception to The Guide standards. The list of exemptions was reviewed, and only minor typo/grammatical corrections were requested.

**Signatures of the IACUC Members approving the Semiannual Program Review and
Facilities Inspection
July 2019**

 Peter Mathers (Chair)	<u>7/3/19</u> Date
 Jim Adams	<u>7/3/19</u> Date
 Jim Anderson	<u>7/03/19</u> Date
 Scott Bowdridge	<u>7/3/19</u> Date
 Kimberly Bryner	<u>7/3/19</u> Date
 John Connors	 Date
 Christopher Cuff	<u>7/3/19</u> Date
 Robert Goodman	<u>7/3/19</u> Date
 Eric Kelley	<u>7/3/19</u> Date
 Katie Knapek	<u>7-3-19</u> Date
 Margret Minch	 Date
 Michael Perone	<u>7-3-19</u> Date
 Darrell Ringer	<u>7-3-19</u> Date
 Ida Washington	<u>7/3/2019</u> Date
 Matthew Wilson	<u>7-3-19</u> Date

Exemptions Spring 2019

Protocol Number	PI Name	Species	Exception Category	Exception Description
1602000317	Stanley Hileman	Sheep	Prolonged Restraint (> 30 minutes) of unanesthetized animals	Placed into confined stalls, 2-4 times (with 7-14 d in between) for a time of 6-8 hours.
1602000495	Robert Goodman	Sheep	Prolonged Restraint (> 30 minutes) of unanesthetized animals	Placed into confined stalls, 2-4 times (with 7-14 d in between) for a time of 6-24 hours.
1602000710	Bernard Schreurs	Rabbit	Prolonged Restraint (> 30 minutes) of unanesthetized animals	Rabbit restrainer; 1 time daily for 90-110 minutes
1603001012	Steven Kinsey	Mouse	Prolonged Restraint (> 30 minutes) of unanesthetized animals	Once daily (up to 16 hr) for a max of 8 times in a 50 ml conicle tube
1604002026	Roberta Leonardi	Mouse	Changes to enrichment or no enrichment	During metabolic testing, enrichment is removed
1604002026	Roberta Leonardi	Mouse	Food regulation	Fasting up to 48 hours
1604002075	John Barnett	Mouse	Breeding	we wish to continue to house both females together throughout pregnancy and separate the litters when the offspring are not as likely to be cannibalized.
1605003053	Ivan Olfert	Rat	Prolonged Restraint (> 30 minutes) of unanesthetized animals	Restraint tube up to one hour daily for up to 7 months max.
1612004564	Janet Tou	Rat	Single housing	Metabolic testing - 8 weeks; then euthasia
1705006757	Shobhana Sivaramakris	Mouse	Prolonged Restraint (> 30 minutes) of unanesthetized animals	Body fitting apparatus (tube)in a chamber of foam with separate restraint for head (during recordings only)
1801012111	Anne DeVries-Nelson	Mouse	Prolonged Restraint (> 30 minutes) of unanesthetized animals	Plexiglas/plastic tube; 120 minutes/day for up to 7 weeks
1803013068	Xiaoping Liu	Rat	Prolonged Restraint (> 30 minutes) of unanesthetized animals	Acrylic restrainer; once daily for up to 14 days; maximum 2 hours/session
1809018212	Bernard Schreurs	Rabbit	Prolonged Restraint (> 30 minutes) of unanesthetized animals	Once per day during eyeblink conditioning procedures and during each blood draw.
1602000495	Goodman	Sheep	Exception to AVMA Guidelines for Euthanasia of Animals (2013)	Euthanasia of a USDA-covered species (sheep): During exsanguination, lack of respiration is used instead of lack of heartbeat

Exemptions Spring 2019

1602000317 Hileman	Sheep	Exception to AVMA Guidelines for Euthanasia of Animals (2013)	Euthanasia of a USDA-covered species (sheep): During exsanguination, lack of respiration is used instead of lack of heartbeat
1803013440 Ramamurthy	Mouse	Irregular diurnal cycles	Dark rearing of mice (blindness model) for max of 60 days
1801012067 DeVries	Mouse	Irregular diurnal cycles	Mice in complete darkness up to 72 hr with no daily checks (singly housed, water bottle fill limited to minimize flooding risk & hydrogel provided)

Forms Sent 5/1/2019
Inspections Due 5/15/2019

Inspector	Lab	PI	Protocols	Responsible Party	Assigned Inspector	Date Inspected	Date Received	Comments
1	BMRC 146B	Lockman Kelley Simpkins	1604001894, 1602000394 1707008288 1604002338	Lockman	Wilson	5/13/2019	5/13/2019	
1	BMRC 158	Leonardi	1604002026	Geldenhuys	Wilson	5/13/2019	5/13/2019	Remove Leonardi - she has submitted an amendment to remove this room from her protocol.
2	BMRC 341	Agmon Tucker DeVries	1604002194, 1604002316 1604002302 1801012067, 1801012111	Tucker	Washington	5/10/2019	5/14/2019	Needs: eye wash log and SDS sheets for chemicals used in the lab.
2	BMRC 342	Siravamakrishnan	1705006757	Siravamakrishnan	Washington	5/9/2019	5/14/2019	Needs: eye wash logs
2	BMRC 356	C. Anderson	1708008945	C. Anderson	Washington	5/10/2019	5/14/2019	Needs: eye wash logs
3	Eye Institute E214	J. Du	1606003142	J. Du	Bryner	6/11/2019	6/13/2019	
3	HSC-N 2077	Wan	1705006753	Wan	Bryner	5/30/2019	5/30/2019	
3	HSC-N 2079	Wan	1705006753	Wan	Bryner	5/30/2019	5/30/2019	
4	HSC 3037	Hussain	1802012692	Hussain	Minch	5/13/2019	5/17/2019	
4	HSC 3039	Hussain	1802012692	Hussain	Minch	5/13/2019	5/17/2019	
4	HSC 3110	Olfert	1605003053, 1602000661	Olfert	Minch	5/8/2019	5/17/2019	
4	HSC 3130	Chantler	1603000971, 1602000340_R1	Chantler	Minch	5/8/2019	5/17/2019	
4	HSC-N 3130C	Olfert	1605003053	Olfert	Minch	5/8/2019	5/17/2019	
5	HSC 3042	Knuckles	1707008305	Knuckles	Connors	5/15/2019	5/17/2019	
5	HSC-N 3138	Nurkiewicz Knuckles	1604001916, 1602000621 1707008305	Nurkiewicz	Connors	5/15/2019	5/17/2019	
5	HSC-N 3121	Rajendran Mattes	1604002265 1903012488	Rajendran	Connors	5/15/2019	5/17/2019	Eye wash present, but unusable. Per KB, eye wash has been repaired as of 6/2019. ak
6	HSC-N 3054	Siderovski	1603001209	Siderovski	Kelley	5/29/2019	5/29/2019	
6	HSC-N 3060	Siderovski	1603001209	Siderovski	Kelley	5/29/2019	5/29/2019	
6	HSC-N 3098	Leonardi	1604002026	Leonardi	Kelley	5/29/2019	5/29/2019	
7	HSC-S 4653	Huber Kelley	1603000924, 1712010683 1707008288	Huber	Minch	5/13/2019	5/17/2019	PI was told he needs autoclave training??? Does, however, need autoclave log book. PI also has concern re: vermin control
7	HSC-S 5401, 5402	Lindsey, Brock Li Dietz	1704005870, 1805014471 1608003733, 1705006642, 1802012323 1603001661, 1803013294	Lindsey	Minch	5/8/2019	5/17/2019	
8	ASB 1422	Wilson	1603001075	Wilson	Anderson	-	-	PI indicated room will not be used for animal work, no inspection / Check for PI change amendment

Inspection Location	Room	Description	Species	Inspection Determination	Deficiency type(s)	Deficiency	Repeat	Severity	Timeline	Deficiency explanation and/or recommendations	Notes/Comments	Responsible Party	Corrections/Reply
LSB	B17B	Housing	Pigeons	Deficiencies Identified	Area Maintenance	Damaged/missing interior structures	Yes	Minor	30	Sprinkler in room needs to have cap replaced.	None	Ida Washington	Work order submitted 4/29/19. (DC)
JW Ruby in Reedsville	Watershed Facility	Watershed Facility	Cattle	Deficiencies Identified	Area Maintenance	Damage to outer/exterior structures (walls roof gutter etc.)	Yes	Minor	150	Remove antibackup gate replace post remove damaged wood above damaged post	None	Rodney Kiser	Completed prior to 6/25/19
JW Ruby in Reedsville	Arthurdale Facility	Arthurdale Facility	Cattle	Deficiencies Identified	Area Maintenance	Floor needs to be resurfaced	Yes	Minor	150	There is a hole in the alleyway that could potentially cause injury to the animal. Repair the hole prior to running animals through.	Possibly patch the hole with quickcrete or something similar.	Rodney Kiser	Completed prior to 6/25/19
HSC	HSC 1	General Facility	All	Deficiencies Identified	Environment	Temperature/humidity logs not available	Yes	Minor	24 hours	Temperature/humidity logs not available at time of inspection for review. Also no record of alerts. Someone in facility should have access to historical data and alerts	None	Ida Washington	OLAR has access to readings from previous 24hr period. As of 4/26/19 previous week T & RH readings are emailed to Facility Mgr. Historical data available from HSC Facilities upon request. As of 5/14/19 - we are working with Facilities to be alerted to T & RH levels outside normal range.
HSC	V-126	Clean Side	None	Deficiencies Identified	Equipment	Tank overflow system spilling water	Yes	Minor	1	Filter leaking into bleach container and overflowing technician indicated this situation has not been fixed for the last 4 inspections	None	Ida Washington	The leaking component was replaced 11/2018 as per manufacturer recommendation. Replacement part failed soon after installation. New approach initiated 5/7/19 to stop overflow. (DC)
HCA	V-503	HCA Procedure	Rodent	Deficiencies Identified	Drugs/General Supplies	Expired materials not labeled properly	Yes	Minor	1d	Alcohol bottle appears to have 2014 listed as expiration date. If incorrect needs to be corrected.	None	Alexandra Elliott	4/29/19 Date was corrected
FARF	106A	Diagnostic Laboratory	None	Deficiencies Identified	General supplies/drugs	Expired supplies - for use in animals	No	Minor	1	Autoclaved surgical equipment - expiration date of 4/1/19 written on pouch	Autoclaved supplies should have the following information: Date autoclaved initials of the person packaging/autoclaving supplies and	Ida Washington	Label added "do not use until re-autoclaved." Need universal policy for expiration of autoclaved materials. (IW)
WVU IT	G6A	Experiments	Rats	Deficiencies Identified	EH&S Issues	No eyewash station testing records	No	Minor	30 days	Need to test weekly and record	Templates will be sent post inspection.	Gregory Lieving	Eye wash testing is being done and recorded
Willow Bend	Office/Shop	Office/Shop	None	Deficiencies Identified	Drugs/General Supplies	Expired supplies/substances - for USE in animals	No	Minor	1 day	Corrected at time of inspection	Fire extinguishers need to either be inspected or replaced. Last installed/checked 2011 (?)	Delvin Clarkson	Corrected at time of inspection
Willow Bend	Cattle Handling Bldg.	Cattle Handling Bldg.	Cattle	Deficiencies Identified	Area Maintenance	Light cover broken	No	Minor	150 days	1 missing cover over light bulb in barn. Other covers are in good condition.	None	Delvin Clarkson	In the process of converting all lights to LED and replacing light covers.
Stewartstown	Barn - Calf	Barn - Calf	Cattle	Deficiencies Identified	EH&S Issues	Unlabeled substance (cleaning solution/chemicals)	No	Minor	1	No expiration date on Expedite spray. Correct if needed.	Inspector unsure if this substance in fact has expiration date.	Benjamin Walsh	Spray was removed and properly disposed of. Future reference we will mix only enough cleaner for the time of use and properly dispose of any excess cleaner. Resolved week of 4/19/19
Stewartstown	Barn - Sheep	Housing	Sheep	Deficiencies Identified	EH&S Issues	Inappropriate solution/chemical storage	No	Minor	1	Full gas cans in storage room (no flammable cabinet)	None	Benjamin Walsh	Cans were removed from the facility and placed in proper storage of flammable cabinet. Resolved week of 4/19/19
Satellite	E-363	Satel ite: Eye Institute	Mouse	Deficiencies Identified	Records	No daily observation list/Husbandry log incomplete	No	Minor	1	One mouse cage in room - no temperature/humidity logs or other observational logs present.	Stoilov and Sokolov mice - records needed.	Visvanathan Ramamurthy	
Satellite	E-363	Satel ite: Eye Institute	Mouse	Deficiencies Identified	Records	Inadequate record keeping (see notes)	No	Minor	30	Daily logs need to be present and up to date.	Eye wash and shower test records also requested. Angelica will request the information and send to IACUC.	Visvanathan Ramamurthy	
Reymann Memorial	Bull Barn	Bull Barn	Cattle	Deficiencies Identified	Area Maintenance	Damaged fencing	No	Minor	150	Portion of fence being removed so new watering system can be placed; Exposed nails present; All damaged boards need to be replaced before the area is used for housing.	None	Jerry Yates	New watering system has been installed. Damaged fencing will be replaced and old water systems isolated prior to putting any animals in the pens.
Reymann Memorial	Bull Barn	Bull Barn	Cattle	Deficiencies Identified	Food and Water	Dirty bowls	No	Minor	7	Watering system needs to be cleaned before animals placed.	None	Jerry Yates	Water systems cleaned and removed from service.
Reymann Memorial	Cattle Barn/Block Barn	Cattle Barn/Block Barn	Cattle	Deficiencies Identified	Area Maintenance	Damaged fencing	No	Minor	150	Several boards are broken/damaged. Need to replace prior to using for animal housing.	None	Jerry Yates	Broken and damaged boards are being replaced prior to animal placement.
Reymann Memorial	Lambing/ feedlot	Research House	Sheep	Deficiencies Identified	Area Maintenance	Rusted/cracked/broken door(s)	No	Minor	150	Exterior door is damaged and not able to close.	None	Jerry Yates	Door has been forced closed temporarily. Replacement options are being evaluated.
Reymann Memorial	Lambing/ feedlot	Research House	Sheep	Deficiencies Identified	Area Maintenance	Light cover broken	No	Minor	150	Several light covers are missing. If animals are present covers should be replaced	None	Jerry Yates	Light covers have been replaced or ordered since we broke two during repairs.
RBC	G-202	Core: Rodent Behavior	Rodent	Deficiencies Identified	Drugs/General Supplies	Expired supplies/substances - NOT for use in animals	No	Minor	7	One expired spray bottle of disinfectant (Virkon) and one with no label.	Discuss switching to new disinfectant.	James Simpkins	The expired liquid was disposed of. EEC will coordinate with Doug to acquire alternative disinfectants.
RBC	G-202	Core: Rodent Behavior	Rodent	Deficiencies Identified	Sanitation	Dirty equipment	No	Minor	1	Animal feces in testing equipment	None	James Simpkins	The apparatus has been thoroughly cleaned
Potomac State	Gustafson Barn	Housing	Cattle	Deficiencies Identified	Area Maintenance	Damaged/Missing Interior Structures	No	Minor	3 months	Missing support beams in the barn and a piece of paneling that needs to be secured	None	Darin Matlick	
Potomac State	Malone Barn	Malone Farm	Cattle	Deficiencies Identified	Drugs/General Supplies	Expired substances for use in animals	No	Minor	complete	Corrected at time of inspection	None	Darin Matlick	Items discarded during inspection
Potomac State	Equine Indoor Arena	Main Campus	Horses	Deficiencies Identified	Drugs/General Supplies	Expired substances for use in animals	No	Minor	complete	Corrected at time of inspection. Recommendations: Wood used in horse stalls needs to be checked and replaced if damaged. Also the box fans suspended from the ceiling need to be cleaned and the twine checked for stability	None	Darin Matlick	Items discarded during inspection
Percival Hall	229	Satel ite: Hartman	Fish	Deficiencies Identified	Equipment	Refrigerator/Freezer not adequate	No	Minor	30 days	Refrigerator needs to be identified as "for items for animal consumption only". An additional small refrigerator should be purchased for food for the fish.	SOP for fish transport should be reviewed. State vehicle used for transport not available to inspect. 308A for transport tank storage.	Kyle Hartman	A 1.7 cubic foot mini refrigerator was purchased (4/25/19) and installed (4/26/19) under the metal bench near the entryway to Percival Hall 229. Food was immediately transferred to the refrigerator
Percival Hall	326A	Satel ite: Brown	Salamander	Deficiencies Identified	Drugs/General Supplies	Secondary containment not appropriately labeled	No	Minor	1	ETOH written on bottle - substance needs to be spelled out		Donald Brown	Bottle is properly labeled now.
OLAR	G-208	Procedure	Rodent	Deficiencies Identified	Other	Other	No	Minor	30	No dates on sterilized supplies.	None	Ida Washington	Exercise Physiology Core (Yakovenko). Supplies are on cart labeled "Not for Use". Need policy for autoclaved supplies. (DC)
OLAR	G-219	Surgery (USDA)		Deficiencies Identified	Equipment	Inadequate anesthesia machine setup	No	Minor	30	F-air canister missing on machine OL/VAP 07. Machine appears to be "in use" and should have F-air canister placed.	None	Ida Washington	F/AIR canister was off machine for replacement. Surgery setup has moved to G224. (DC)
OLAR	G-226	Patient Prep (USDA)		Deficiencies Identified	Equipment	Unsecured gas tanks-chain present but not adequate	No	Minor	1	Chain too thin and placed too low to be effective.	None	Ida Washington	Bracket replaced 4/21/19. (DC)
OLAR	G-226	Patient Prep (USDA)		Deficiencies Identified	Area maintenance	Power strips hanging from outlet	No	Minor	7	Power strips should not be hanging while plugged in. They need to be secured or sitting on a flat surface.	None	Ida Washington	Corrected 4/21/19. (DC)

LSB	B17B	Housing	Pigeons	Deficiencies Identified	Staff Training	Lack of knowledge of OLAR PPE policy	No	Minor	30	Lab staff entered animal housing room (pigeon) with street shoes on and no shoe covers. They were given shoe covers to use and reminded of the OLAR PPE requirements.	OLAR staff/PI may need to retrain the students if this reoccurs	Ida Washington	Not enough information to address. OLAR provides training and signage. Message regarding deficiency should come from IACUC not OLAR. (IW)
LSB	2150A	Procedure Room	Rodent	Deficiencies Identified	Drugs/General Supplies	Expired supplies/substances - for USE in animals	No	Minor	1	Styptic powder expired (Vonder Haar) Ketoprofen in a secondary container - date of 4/18/19. Not sure if that is an expiration date or a mix date. Unclear. (Vonder Haar)	None	Ida Washington	Since responsible PI is known message regarding deficiency should come from IACUC not OLAR. (IW)
LSB	2150A	Procedure Room	Rodent	Deficiencies Identified	Drugs/General Supplies	Expired supplies/substances - NOT for use in animals	No	Minor	7	One item in corrosive cabinet expired in March. Sterile sponges expired 8/2017 (Kinsey)	Items in corrosive cabinet (Kinsey) are expiring at the end of April.	Ida Washington	Since responsible PI is known message regarding deficiency should come from IACUC not OLAR. (IW)
HSC	HSC 1	General Facility	All	Deficiencies Identified	Staff Training	Lack of knowledge on how to use biosafety cabinet/changing hood	No	Minor	1 month	Deficiency: training in proper hood use - multiple people in multiple rooms were observed using incorrect hood technique.	None	Ida Washington	Need additional details to address this. OLAR staff research staff room #?
HSC	V-102	Necropsy	Rodent	Deficiencies Identified	EH&S Issues	Recapped needles noted	No	Minor	30	Recapped needles in sharps container	None	Ida Washington	Signage added to sharps container 5/23/19. (IW)
HSC	V-102	Necropsy	Rodent	Deficiencies Identified	Sanitation	Dirty equipment	No	Minor	7	Dirty Styrofoam lid as pin board - should be replaced.	None	Ida Washington	Lab notified 5/6/19 to either sanitize the styrofoam or replace it. (DC)
HSC	V-102	Necropsy	Rodent	Deficiencies Identified	Environment	No temperature monitors/broken thermometer	No	Minor	1	No records of temperature or humidity	None	Ida Washington	Temp and RH are monitored by Building Management System (BMS) so no records are kept in the room. Current readings and past trend data available from OLAR FM or HSC FM. (DC)
HSC	V-103	ABSL-2 housing	Rodent	Deficiencies Identified	Identification	Incomplete cage cards/animal identification	No	Minor	1	Specific biohazard must be listed on cage card	None	Ida Washington	Lab notified 5/6/19 to write specific pathogen on each cage card. (DC)
HSC	V-104	ABSL-2 housing	Rodent	Deficiencies Identified	Drugs/General Supplies	Expired supplies/substances - for USE in animals	No	Minor	1	Triple antibiotic	Note: Ecoflo units due for retest	Ida Washington	Items not present 5/23/19. (IW)
HSC	V-104	ABSL-2 housing	Rodent	Deficiencies Identified	Environment	No temperature monitors/broken thermometer	No	Minor	1	No history of temperature or humidity	Note: Ecoflo units due for retest	Ida Washington	Temp and RH are monitored by Building Management System (BMS) so no records are kept in the room. Current readings and past trend data available from OLAR FM or HSC FM. (DC)
HSC	V-106	ABSL-2 housing	Rodent	Deficiencies Identified	Sanitation	Dirty sink	No	Minor	1	Appears to be mold in faucet hose. Hose should be replaced.	None	Ida Washington	Tygon tubing replaced 5/23/19. (DC)
HSC	V-106	ABSL-2 housing	Rodent	Deficiencies Identified	Environment	No temperature monitors/broken thermometer	No	Minor	1	No temperature and humidity records	None	Ida Washington	Temp and RH are monitored by Building Management System (BMS) so no records are kept in the room. Current readings and past trend data available from OLAR FM or HSC FM. (DC)
HSC	V-108	ABSL-2 procedure	Rodent	Deficiencies Identified	EH&S Issues	Inappropriate solution/chemical storage	No	Minor	1	Ethanol in drawer	None	Ida Washington	Ethanol bottle placed in flammables storage cabinet 5/6/19. (DC)
HSC	V-110	ABSL-2 housing	Rodent	Deficiencies Identified	Environment	No temperature monitors/broken thermometer	No	Minor	1	No records of temperature or humidity	Note/Questions: What records are kept (and where are they located) when the PI does the cage changes and feeding?	Ida Washington	Temp and RH are monitored by Building Management System (BMS) so no records are kept in the room. Current readings and past trend data available from OLAR FM or HSC FM. (DC)
HSC	V-302	AFA Housing	Rodent	Deficiencies Identified	Records	No daily observation list	No	Minor	1	No daily observation listed for Saturday March 2. Observations should be recorded on a daily basis.	None	Ida Washington	OLAR supervisors perform rounds in all animal rooms at least once per mo. Husbandry technicians are notified of missing entries. Repeat errors are documented and can result in disciplinary action.
HSC	V-303	AFA Procedure	Rodent	Deficiencies Identified	Drugs/General Supplies	Secondary drug containment not appropriately labeled	No	Minor	1	Abbreviations used on PBS - needs to be spelled out properly	None	Ida Washington	PBS is a standard lab solution.
HSC	V-304	AFA Housing	Rodent	Deficiencies Identified	EH&S Issues	Recapped needles noted	No	Minor	30	Signage should be present on container	None	Ida Washington	Sign added 5/15/19.
HSC	V-307	AFA Housing	Rodent	Deficiencies Identified	EH&S Issues	Improper sharps disposal	No	Minor	30	Syringe and needle left on top of sharps disposal box	None	Ida Washington	Not present on 5/15/19.
HSC	V-309	AFA Housing	Rodent	Deficiencies Identified	Records	Inadequate record keeping (see notes)	No	Minor	30	Inadequate surgery card: Recording "Same as others" is not sufficient (C. Brown). No post operative records (C. Brown).	None	Ida Washington	Please send message from IACUC to PI.
HSC	V-312	AFA Housing	Rodent	Deficiencies Identified	Drugs/General Supplies	Expired supplies/substances - for USE in animals	No	Minor	1	Expired Nair cotton swabs and cotton pads noted.	None	Ida Washington	Expired supplies have been discarded. 5/15/19
HSC	V-312	AFA Housing	Rodent	Deficiencies Identified	Records	No daily observation list	No	Minor	1	Animals not observed February 24	None	Ida Washington	OLAR supervisors perform rounds in all animal rooms at least once per mo. Husbandry technicians are notified of missing entries. Repeat errors are documented and can result in disciplinary action.
HSC	V-314	AFA Housing	Rodent	Deficiencies Identified	Food and Water	Food without expiration label	No	Minor	1	Sunflower seeds label (specically the expiration date) is worn off.	None	Ida Washington	Ramamurthy lab staff writes expiration date on each conical tube of enrichment treats. Reminder sent to Ramamurthy lab 5/20/19. (IW)
HSC	V-314	AFA Housing	Rodent	Deficiencies Identified	Sanitation	Dirty equipment	No	Minor	1	Container - very dirty should be cleaned out (Ramamurthy)	None	Ida Washington	No dirty containers present on 5/6/19. Reminder sent to PI on 5/20/19 (IW).
HSC	V-314	AFA Housing	Rodent	Deficiencies Identified	Food and Water	Food not in sealed container	No	Minor	1	Lid not tight	None	Ida Washington	As a working facility feed bins are accessed many times a day. OLAR techs will be reminded to ensure lids are placed on bins. (DC)
HSC	V-316	AFA Housing	Rodent	Deficiencies Identified	Food and Water	Food not in sealed container	No	Minor	1	Lid not tight	Note: Hydrocortisone expires soon	Ida Washington	As a working facility feed bins are accessed many times a day. OLAR techs will be reminded to ensure lids are placed on bins. (DC)
HSC	V-316	AFA Housing	Rodent	Deficiencies Identified	EH&S Issues	Improper sharps disposal	No	Minor	30	(Excessive)Refuse in sharps bin. Signage should be present on container	Note: Hydrocortisone expires soon	Ida Washington	Signage added 5/20/19: "Container for sharps only (no paper trash)." Need universal policy. (IW)
HSC	V-318	AFA Housing	Rodent	Deficiencies Identified	Records	Inadequate record keeping (see notes)	No	Minor	30	Unlabeled secondary ink bottle. Unlabeled reused needle (J.Du)	None	Ida Washington	PI (Du) emailed on 5/20/19 and asked to label supplies. (IW)
HSC	V-702	AFA Necropsy	Rodent	Deficiencies Identified	EH&S Issues	Improper sharps disposal	No	Minor	30	(Excessive)Refuse in sharps bin. Signage should be present on container	None	Ida Washington	Signage added 5/20/19: "Container for sharps only (no paper trash)." Need universal policy. (IW)
HSC	V-702	AFA Necropsy	Rodent	Deficiencies Identified	Environment	Strong odors- no excessively dirty cages	No	Minor	30	Cooler has strong carcass odor; may want to place a deodorizer in cooler.	None	Ida Washington	The carcass cooler is emptied on a weekly basis and cleaned as needed. OLAR staff will monitor for excessive odor. (DC)
HSC	V-702	AFA Necropsy	Rodent	Deficiencies Identified	Records	Inadequate record keeping (see notes)	No	Minor	30	No record of training procedure for euthanasia	CO2 monitor should be placed in the room for human safety.	Ida Washington	Please clarify deficiency. PI's are responsible for training their staff on procedures unless OLAR assistance is requested. Thus OLAR does not have lab staff training records for euthanasia. (IW)
HSC	V-703	AFA Housing/Procedure	Rodent	Deficiencies Identified	Equipment	Rusted animal equipment that comes into close and/or direct animal contact	No	Minor	7	Dirty Styrofoam found on cart with dirty and rusty instruments. Styrofoam needs to be changed and instruments either need to be cleaned or replaced.	None	Ida Washington	PI (Schreurs) has been not fied of deficiency. (DC)
HSC	V-902	AFA Housing (Possible ABSL-2)	Rodent	Deficiencies Identified	Identification	Missing signage for room identification	No	Minor	1	Room signage does not reflect chemicals indicated on cage cards (DeVries)	May want to store food on lower shelf.	Ida Washington	As of 5/8/19 each of the 2 drugs listed on the door signage were also written on appropriate cage cards in room. (DC)
HSC	V-902	AFA Housing (Possible ABSL-2)	Rodent	Deficiencies Identified	Identification	Incomplete cage cards/animal identification	No	Minor	1	Abbreviated chemical on cage card (DeVries)	None	Ida Washington	Please indicate room number.

HSC	V-904	AFA Housing	Rodent	Deficiencies Identified	Drugs/General Supplies	Expired materials not labeled properly	No	Minor	1	Expired tattoo ink and needles not labeled with autoclave date.	None	Ida Washington	Materials not present on 5/20/19. (IW)
HSC	G-193 (A/B)	Laboratory Space	Rodent	Deficiencies Identified	Area Maintenance	Uncovered/broken electrical strip/outlet/cover	No	Minor	30	Room A (left) improper placement and install of electrical outlet strip.	None	Ida Washington	PI (DeVries) has been notified about deficiency. (DC)
HSC	G-194	Laboratory Space		Deficiencies Identified	Area Maintenance	Uncovered/broken electrical strip/outlet/cover	No	Minor	30	Room B (Right) missing an outlet cover and missing a junction box cover.	None	Ida Washington	PI (DeVries) has been notified about deficiency. (DC)
HSC	G-194	Laboratory Space		Deficiencies Identified	Area Maintenance	Cracks in room: wall/ceiling/floor	No	Minor	150	Room B (right) Hole in ceiling.	None	Ida Washington	Work order to be placed.
HSC	G-195	Housing	Birds	Deficiencies Identified	Records	Inadequate record keeping	No	Minor	7	Daily husbandry and health records are present but not up to date. Veterinary chart was last dated 8/2017	None	Ida Washington	Husbandry and health records up to date as of 5/1/19. (IW)
HSC	G-195	Housing	Birds	Deficiencies Identified	Identification	Incorrect cage card information	No	Minor	1	It would appear that this bird is on an expired protocol (listed on cage card: Kyonka 15-0606). Proper protocol needs to be listed ASAP.	None	Ida Washington	Protocol number and PI were corrected on 4/30/19. (IW)
HSC	G-220	Reverse light cycle - Housing	Mouse	Deficiencies Identified	Environment	Low humidity	No	Minor	30	Several low readings over last few months even with 2 humidifiers in the room	General housekeeping comment: in computer room (A) there are several paper towels crumpled on desk. Crinkle paper also present on equipment in testing room (C)	Ida Washington	Global exception. Animals are checked daily for any health concerns resulting from out-of-range RH.
HSC	G-241C	Necropsy	All	Deficiencies Identified	EH&S Issues	Unlabeled substance (cleaning solution/chemicals)	No	Minor	1	None	None	Ida Washington	No unlabeled substances found during room inspection on 5/6/19. (DC)
HSC	G-241C	Necropsy	All	Deficiencies Identified	Other	Other	No	Minor	1	Improper storage of equipment/supplies in a flammable storage cabinet	None	Ida Washington	Please clarify what "flammable equipment" was identified on inspection. All items were stored appropriately during room inspection on 5/6/19. (DC)
HSC	G-244	Laboratory (aquatic)	Fish	Deficiencies Identified	Sanitation	Excessive clutter	No	Minor	7	Needs cleaned/closed down. No animals or fish in room since fall.	None	Ida Washington	Rm G244 is clearly labeled as housing no animals now or for next 6 months. Should not be part of report. PI (Geldenhuys) was notified about clutter. (DC)
HSC	G-244	Laboratory (aquatic)	Fish	Deficiencies Identified	Drugs/General supplies	Expired supplies/materials - for use in animals	No	Minor	7	Expired materials/solutions	None	Ida Washington	See above
HSC	G-248	Laboratory	Mouse	Deficiencies Identified	Food and Water	Food not in sealed container	No	Minor	1	None	None	Ida Washington	PI responsibility
HCA	V-500	HCA Main Hallway	Rodent	Deficiencies Identified	EH&S Issues	Safety shower inspection is outdated	No	Minor	30d	Shower flow not adequate has been checked but has not passed since 4/17 - needs to have signage placed.	None	Alexandra Elliott	Re-testing of the shower has been scheduled for September 2019
HCA	V-501	HCA Housing	Rodent	Deficiencies Identified	EH&S Issues	Improper sharps disposal	No	Minor	30d	Sharps container full and refuse present.	Autoclaved PI supplies should be labeled with date autoclaved and initials	Alexandra Elliott	4/29/19 The Sharps container has been autoclaved and disposed of
HCA	V-501	HCA Housing	Rodent	Deficiencies Identified	Records	No daily observations	No	Minor	7d	No animal observation noted on March 23rd or 25th (both in the room and at the computers where the cameras are utilized). An observation was made on 3/24.	Should find husbandry tech for those days and see if there were any issues.	Alexandra Elliott	A plan was made that going forward all animal checks will be recorded on the camera log whether it is an in-person check or not.
FARF	104C	Surgery (USDA)	Sheep	Deficiencies Identified	Area Maintenance	Missing or defective door sweep	No	Minor	30	Needs new door sweep	None	Ida Washington	A new door sweep was purchased on 5/6/19 and will be installed when rec'd. (DC)
FARF	105	Recovery Pens	Sheep	Deficiencies Identified	Animal Care	Enclosures excessively dirty	No	Minor	1	Needs to be cleaned - feces found in pen.	None	Ida Washington	The recovery pens have been used & cleaned multiple times since 4/11/19. (DC)
FARF	106A	Diagnostic Laboratory	None	Deficiencies Identified	EH&S Issues	Improper sharps disposal	No	Minor	30	Refuse found in sharps box. Signage should be present.	None	Ida Washington	Needles syringes 2 glass bottles found in sharps box on 5/14/19. Please explain deficiency - Need universal policy. (IW)
FARF	106A	Diagnostic Laboratory	None	Deficiencies Identified	Food and Water	Contaminated food/water	No	Minor	1	Food inoculant in refrigerator was leaking needs to be disposed of.	For Farm Manager	Ida Washington	Not present on 5/4/19. (IW)
FARF	106A	Diagnostic Laboratory	None	Deficiencies Identified	Equipment	Rusted animal equipment that comes into close and/or direct animal contact	No	Minor	7	Suture removal scissors with rust.		Ida Washington	Not found on 5/14/19. (IW)
FARF	106C	Disaster Supply/Supplies	None	Deficiencies Identified	Equipment	Rusted animal equipment that comes into close and/or direct animal contact	No	Minor	7	Equipment in supply cabinet.		Ida Washington	All instruments with rust were removed from cabinet on 5/14/19. (IW)
FARF	107	Surgery (service/scales)	Sheep	Deficiencies Identified	Animal Care	Enclosures excessively dirty	No	Minor	1	Needs to be cleaned	None	Ida Washington	The scale & room have been used & cleaned multiple times since 4/11/19. (DC)
FARF	108	Housing	Sheep	Deficiencies Identified	EH&S Issues	Improper sharps disposal	No	Minor	30	Refuse in sharps container - signage should be present.	None	Ida Washington	Needles syringes 1 piece of gauze found in sharps box on 5/14/19. Sharps box was removed on 5/14/19. Need universal policy. (IW)
FARF	112	Storage/Feed Room	None	Deficiencies Identified	Sanitation	Accumulation of dust/debris	No	Minor	1	All metal (iron) shavings and turnings must be collected for disposal. (Shop area)	2 days in March with high humidity readings (Feed storage shed)	Ida Washington	Shop area (no animals ever present). Construction dust removed as of 4/30/19. Awaiting collection bucket from EH&S. (DC)
ESC	BMRC 142	Core: Stroke Surgical Room	Rodent	Deficiencies Identified	Drugs/General Supplies	Expired drugs that are not anesthetics/analgesics /euthanasia solutions	No	Minor	1	Blood work metabolite expired	Corrected at time of inspection.	James Simpkins	Corrected at time of inspection.
Agronomy	Office	Office/supplies	None	Deficiency	Equipment	Rusted equipment that comes into close or direct contact with the animals	No	Minor	7	Rusty scissors in blue caddy on top of refrigerator.	Need to place signage on refrigerator indicating "no food/drink for human consumption"; Should place sign inside of refrigerator to identify formula so every bottle does not have to be labeled; Eye wash weekly testing is needed and logs should be maintained.	Benjamin Walsh	Rusty equipment was removed and cleaned. Proper signage was placed on the refrigerator. Eye wash station is being tested weekly to ensure it is functional.
WVU IT	G6B	Anteroom	Rats	Acceptable						None	None	Gregory Liewing	
WVU IT	G6C	Housing	Rats	Acceptable						None	Label lids for trash and food; food label should include milling date. Review emergency plan.	Gregory Liewing	Labels have been placed on food bin (includes milling date) and trash bin.
Willow Bend	Pasture	Pasture	Cattle	Acceptable						None	None	Benjamin Walsh	
Stewartstown	Back 9	Back 9	Cattle/ Sheep	Acceptable						None	None	Benjamin Walsh	
Stewartstown	Barn - Beef	Barn - Beef	Cattle	Acceptable						None	None	Benjamin Walsh	
Stewartstown	Barn - Dairy Heifer	Barn - Dairy Heifer	Cattle	Acceptable						None	None	Benjamin Walsh	
Stewartstown	Barn - Hay	Barn - Hay	Cattle	Acceptable						None	None	Benjamin Walsh	
Stewartstown	Barn - Hog	Barn - Hog	Calves/ Sheep/ Swine	Acceptable						None	GFI circuits but uncovered still	Benjamin Walsh	
Stewartstown	Barn - Lambing	Barn - Lambing	Sheep	Acceptable						None	None	Benjamin Walsh	
Stewartstown	BH 101	Breeding House	Poultry	Acceptable						None	protocols up to date	Benjamin Walsh	
Stewartstown	BH 101A	Breeding House	Poultry	Acceptable						None	None	Benjamin Walsh	

Stewartstown	BH 101B	Breeding House	Poultry	Acceptable						None	None	Benjamin Walsh	
Stewartstown	BH 101B1	Breeding House	Poultry	Acceptable						None	None	Benjamin Walsh	
Stewartstown	BH 101B1A	Breeding House	Poultry	Acceptable						None	None	Benjamin Walsh	
Stewartstown	Big Field	Big Field	Cattle/Sheep	Acceptable						None	None	Benjamin Walsh	
Stewartstown	Bottom Field	Bottom Field	Cattle/Sheep	Acceptable						None	None	Benjamin Walsh	
Stewartstown	Dog House Field	Dog House Field	Cattle/Sheep	Acceptable						None	None	Benjamin Walsh	
Stewartstown	Driveway Field	Driveway Field	Cattle/Sheep	Acceptable						None	None	Benjamin Walsh	
Stewartstown	Dry Cow Field	Dry Cow Field	Cattle/Sheep	Acceptable						None	None	Benjamin Walsh	
Stewartstown	Grow Safe Facility	Grow Safe Facility	Cattle/Goats/Sheep	Acceptable						None	None	Benjamin Walsh	
Stewartstown	Hog Barn Field	Hog Barn Field	Cattle/Sheep	Acceptable						None	None	Benjamin Walsh	
Stewartstown	Hollow	Hollow	Cattle/Sheep	Acceptable						None	None	Benjamin Walsh	
Stewartstown	Hutches - Calf	Hutches - Calf	Cattle	Acceptable						None	None	Benjamin Walsh	
Stewartstown	Sheep Barn Field	Lower Sheep Barn Field	Cattle/Sheep	Acceptable						None	None	Benjamin Walsh	
Stewartstown	Neck	Neck	Cattle/Sheep	Acceptable						None	None	Benjamin Walsh	
Stewartstown	Pavilion	Pavilion	All	Acceptable						None	Needs new roof soon.	Benjamin Walsh	
Stewartstown	Pavilion Field	Pavilion Field	Cattle/Sheep	Acceptable						None	None	Benjamin Walsh	
Stewartstown	Pharmacy/Vet Office	Main Building	None	Acceptable						None	No expired drugs/supplies	Benjamin Walsh	
Stewartstown	Poultry Barn Field	Poultry Barn Field	Cattle/Sheep	Acceptable						None	None	Benjamin Walsh	
Stewartstown	RB 101	Research Building	Poultry	Acceptable						None	Fire extinguishers need to be inspected.	Benjamin Walsh	
Stewartstown	RB 102	Research Building	Poultry	Acceptable						None	None	Benjamin Walsh	
Stewartstown	RB 103	Research Building	Poultry	Acceptable						None	Former bsl2 space	Benjamin Walsh	
Stewartstown	RB 104A	Research Building	Poultry	Acceptable						None	None	Benjamin Walsh	
Stewartstown	RB 104B	Research Building	Poultry	Acceptable						None	None	Benjamin Walsh	
Stewartstown	RB 104C	Research Building	Poultry	Acceptable						None	None	Benjamin Walsh	
Stewartstown	RB 104D	Research Building	Poultry	Acceptable						None	None	Benjamin Walsh	
Stewartstown	RB 104E	Research Building	Poultry	Acceptable						None	None	Benjamin Walsh	
Stewartstown	RB 104F	Research Building	Poultry	Acceptable						None	None	Benjamin Walsh	
Stewartstown	RB 104G	Research Building	Poultry	Acceptable						None	None	Benjamin Walsh	
Stewartstown	RB 104H	Research Building	Poultry	Acceptable						None	None	Benjamin Walsh	
Stewartstown	RB 110	Research Building	Poultry	Acceptable						None	None	Benjamin Walsh	
Stewartstown	RB 120	Research Building	Poultry	Acceptable						None	None	Benjamin Walsh	
Stewartstown	RB 130	Research Building	Poultry	Acceptable						None	None	Benjamin Walsh	
Stewartstown	Road Field	Road Field	Cattle/Sheep	Acceptable						None	None	Benjamin Walsh	
Stewartstown	Service Dog Training Facility	Service Dog Training Facility	Dogs	Acceptable						None	Records are good	Benjamin Walsh	
Stewartstown	Shop Building	Shop Building	Cattle (calving)	Acceptable						None	None	Benjamin Walsh	
Stewartstown	Shop Field	Shop Field	Cattle/Sheep	Acceptable						None	None	Benjamin Walsh	
Stewartstown	Silo Field	Silo Field	Cattle/Sheep	Acceptable						None	None	Benjamin Walsh	
Stewartstown	Triangle Field	Triangle Field	Cattle/Sheep	Acceptable						None	None	Benjamin Walsh	
Stewartstown	Triangle Shop Field	Triangle Shop Field	Cattle/Sheep	Acceptable						None	None	Benjamin Walsh	
Stewartstown	Upper Sheep Barn Field	Upper Sheep Barn Field	Cattle/Sheep	Acceptable						None	None	Benjamin Walsh	
Stewartstown	Woods Field	Woods Field	Cattle/Sheep	Acceptable						None	None	Benjamin Walsh	
Satellite	BMRC 264	Satel ite	Zebrafish embryos	Acceptable						None	Eye wash station needs to be checked weekly and log sheet kept up to date.	David Klinke	
Satellite	HSC-N 3062/3061	Satel ite: Siderovski	Mouse	Acceptable						None	Clean; Not a lot of work going on for the next month	Vincent Setola	
Reymann Memorial	Classroom/Pharmacy	Classroom/Pharmacy	None	Acceptable						None	Refrigerator signs Look for sharps container that breaks needles	Jerry Yates	
Reymann Memorial	Beef Pasture	Beef Pasture	Cattle	Acceptable						None	None	Jerry Yates	
Reymann Memorial	Sheep Pasture	Sheep Pasture	Sheep	Acceptable						None	None	Jerry Yates	
RBC	G-201	Core: Rodent Behavior	Rodent	Acceptable						None	None	James Simpkins	
RBC	G-201A	Core: Rodent Behavior	Rodent	Acceptable						None	None	James Simpkins	
RBC	G-203	Core: Rodent Behavior	Rodent	Acceptable						None	None	James Simpkins	
RBC	G-203 A/B	Core: Rodent Behavior	Rodent	Acceptable						None	None	James Simpkins	

Potomac State	Gustafson Pasture	Gustafson Farm	Cattle	Acceptable						None	None	Darin Matlick	
Potomac State	Free Stall	Gustafson Farm	Cattle	Acceptable						None	None	Darin Matlick	
Potomac State	Goat pasture	Gustafson Farm	Cattle	Acceptable						None	None	Darin Matlick	
Potomac State	Covered Enclosure	Malone Farm	Cattle	Acceptable						None	None	Darin Matlick	
Potomac State	Pastures	Malone Farm	Cattle	Acceptable						None	None	Darin Matlick	
Potomac State	Steer Barn	Malone Farm	Cattle	Acceptable						None	None	Darin Matlick	
Organic	Handling Facility	Handling Facility	All	Acceptable						None	None	Benjamin Walsh	
Organic	Main Building	Main Building	All	Acceptable						None	None	Benjamin Walsh	
Organic	Pastures	Pastures	All	Acceptable						None	None	Benjamin Walsh	
Organic	sheep Building	Sheep Building	Sheep	Acceptable						None	None	Benjamin Walsh	
Organic	Tunnel	Tunnel	Cattle	Acceptable						None	None	Benjamin Walsh	
OLAR	G-209	Procedure/Temporary Housing	Rodent	Acceptable						None	Not clear if room has been used for housing yet but no records of temperatures or humidities (though thermometer/hygrometer present).	Ida Washington	
OLAR	G-210	Procedure	Rodent	Acceptable						None	Not suitable for animal use due to cold temp currently not in use	Ida Washington	
OLAR	G-218	Surgeon Prep (USDA)		Acceptable						None		Ida Washington	
OLAR	G-223	CLAMS housing	Mouse	Acceptable						None		Ida Washington	
OLAR	G-224	Rodent surgery	Rodent	Acceptable						None		Ida Washington	
OLAR	G-225	Procedure/rodent surgery	Rodent	Acceptable						None		Brown/ Ida Washington	
LSB	B10	Clean Side		Acceptable						None	New water system being installed on Monday	Ida Washington	
LSB	B11	Necropsy	All	Acceptable						None	Would like to see the sharpening and usage records for guillotine located in this room. Who does it belong to?	Ida Washington	
LSB	B13	Communal area	Fish	Acceptable						None	Pre/post op sx area (rats); needs to be cleaned well before procedures	Ida Washington	
LSB	B13A	Storage	Fish	Acceptable						None	Autoclave located here; logs present. Needs a good cleaning	Ida Washington	
LSB	B13B	Housing (Aquatic)	Fish	Acceptable						None	Chains for tanks being installed Monday	Ida Washington	
LSB	B13C	Housing (Aquatic)	Fish	Acceptable						None		Ida Washington	
LSB	B14	Dirty Side		Acceptable						None	Light bulb needs to be replaced - AHT to complete after the inspection	Ida Washington	
LSB	B15	Quarantine	All	Acceptable						None		Ida Washington	
LSB	B15A	Quarantine cubicle	All	Acceptable						None		Ida Washington	
LSB	B15B	Quarantine cubicle	All	Acceptable						None		Ida Washington	
LSB	B16	Feed Room	None	Acceptable						None		Ida Washington	
LSB	B17	Communal area	Pigeons	Acceptable						None		Ida Washington	
LSB	B17A	Housing	Pigeons	Acceptable						None		Ida Washington	
LSB	B21	Housing	Rodent	Acceptable						None	Hoods are due for certification by the end of April	Ida Washington	
LSB	B23	Housing	Rodent	Acceptable						None		Ida Washington	
LSB	Freight Elevator	Elevator for transport	All	Acceptable						None		Ida Washington	
LSB	2150	Communal area	All	Acceptable						None		Ida Washington	
LSB	2150B	Supply Closet		Acceptable						None		Ida Washington	
LSB	2150C	Hallway	Rodent	Acceptable						None		Ida Washington	
LSB	2150C1	Housing	Rodent	Acceptable						None	hood due	Ida Washington	
LSB	2150C2	Housing	Rodent	Acceptable						None		Ida Washington	
LSB	2150C3	Janitor Closet	None	Acceptable						None		Ida Washington	
LSB	2150C4	Housing	Rodent	Acceptable						None		Ida Washington	
LSB	2150C5	Housing	Rodent	Acceptable						None		Ida Washington	
LSB	4217A/4217A1	Satellite Housing	Fish	Acceptable						None		Gary Marsat	
LSB	4231B	Satellite Housing	Fish	Acceptable						None		Sadie Bergeron	
LSB	Loading Dock	Loading Dock		Acceptable						None		Ida Washington	
JW Ruby	Multi Purpose Building	Building used for horse shows	Horses	Acceptable							New building to inspection list.	Crystal Smith	
JW Ruby	Barn (Housing)	Barn (Housing)	Horses	Acceptable						None	Needs new protocol number listed on poster in barn	Crystal Smith	
JW Ruby	Indoor arena (No housing)	Indoor arena (No housing)	Horses	Acceptable						None	Very clean	Crystal Smith	
JW Ruby	Outdoor arena (No housing)	Outdoor arena (No housing)	Horses	Acceptable						None		Crystal Smith	
JW Ruby	Education Center/Pharmacy	Education Center/Pharmacy	Horses	Acceptable						None	All supplies up to date; need to place a sticker on the refrigerator "human food only"	Crystal Smith	Refrigerator stickers sent. Ak
JW Ruby	Horse Pastures 1-3	Horse Pastures 1-3	Horses	Acceptable						None	Electric checked weekly - will start recording testing (Mike)	Crystal Smith	
JW Ruby	Shop/office	Shop/office	None	Acceptable						None	Replace all contact sheets with updated information	Rodney Kiser	

JW Ruby	Pike Side Facility	Pike Side Facility	Cattle	Acceptable						None	No fire extinguishers in building.	Rodney Kiser	
JW Ruby	Pastures	Pastures	Cattle	Acceptable						None	Camp Dawson will start using a hay field for parachute dri ls- no animals will be in the field	Rodney Kiser	
Inhalation	HSC-N 4040A	Procedure - Inhalation		Acceptable						None	Eye wash station needs to be checked weekly and log sheet kept up to date.	Timothy Nurkiewicz	
Inhalation	HSC-N 4040B	Inhalation Facility and Housing	Rodent	Acceptable						None	None	Ida Washington	
Inhalation	HSC-N 4040C	Procedure - Inhalation		Acceptable						None	None	Timothy Nurkiewicz	
Inhalation	HSC-N 4040D	Procedure - Inhalation		Acceptable						None	None	Timothy Nurkiewicz	
Inhalation	HSC-N 4040E	Procedure - Inhalation		Acceptable						None	None	Timothy Nurkiewicz	
HSC	HSC 1	General Facility	All	Acceptable							F-air canisters should be placed vertically and off of the table surface to be effective. They should not be used while horizontal.	Ida Washington	New F/AIR baskets have been ordered for anesthesia machines in facility. (IW)
HSC	V-301	AFA Procedure	Rodent	Acceptable						None	Fume hood out of service - flow too high; ensure sign is visible	Ida Washington	
HSC	V-305	AFA Housing	Rodent	Acceptable						None	None	Ida Washington	
HSC	V-306	AFA Housing	Rodent	Acceptable						None	None	Ida Washington	
HSC	V-308	AFA Housing	Rodent	Acceptable						None	None	Ida Washington	
HSC	V-310	AFA Housing	Rodent	Acceptable						None	None	Ida Washington	
HSC	V-311	AFA Housing	Rodent	Acceptable						None	None	Ida Washington	
HSC	V-901	AFA Housing	Rodent	Acceptable						None	Improper PPE	Ida Washington	
HSC	V-903	AFA Housing	Rodent	Acceptable						None	None	Ida Washington	
HSC	V-210	Exterior service area for the TACF/Barrier		Acceptable						None	None	Ida Washington	
HSC	V-211	Autoclave for the TACF/Barrier		Acceptable						None	None	Ida Washington	
HSC	V-212	Pass-through for the TACF/Barrier	Rodent	Acceptable						None	None	Ida Washington	
HSC	V-213	Interior service area for the TACF/Barrier		Acceptable						None	None	Ida Washington	
HSC	V-601	Hallway		Acceptable						None	None	Ida Washington	
HSC	V-602	Housing	Rodent	Acceptable						None	Temperature/humidity logs are electronic. AHT will call any issues in to supervisor.	Ida Washington	
HSC	V-603	Housing	Rodent	Acceptable						None	None	Ida Washington	
HSC	V-604	Core: TACF Laboratory space	Rodent	Acceptable						None	CO2 monitor may need to be placed to detect any potential leaks in response to earlier event.	Peter Mathers	
HSC	V-605	Quarantine	Rodent	Acceptable						None	None	Ida Washington	
HSC	V-610	Barrier Procedure Room	Rodent	Acceptable						None	F-Air canister needs to remain upright during use but be off of the table surface. An apparatus may need to be purchased in order to achieve this.	Ida Washington	
HSC	V-611	Barrier Housing	Rodent	Acceptable						None	Feed room	Ida Washington	
HSC	V-612	Barrier Necropsy	Rodent	Acceptable						None	None	Ida Washington	
HSC	V-613	Barrier Housing	Rodent	Acceptable						None	None	Ida Washington	
HSC	V-614	Barrier Housing	Rodent	Acceptable						None	None	Ida Washington	
HSC	V-615	Barrier Housing	Rodent	Acceptable						None	None	Ida Washington	
HSC	V-617	Barrier Housing	Rodent	Acceptable						None	No animals housed	Ida Washington	
HSC	Loading Dock	Loading Dock	All	Acceptable						None	None	Ida Washington	
HSC	G-200	Storage		Acceptable						None	None	Ida Washington	
HSC	G-241A	Storage		Acceptable						None	None	Ida Washington	
HSC	G-241B	Storage		Acceptable						None	None	Ida Washington	
HSC	G-228	Laboratory	Rodent	Acceptable						None	None	Travis Knuckles	
HSC	G-192	Storage		Acceptable						None	None	Ida Washington	
HSC	G-197	OLAR training room	All	Acceptable						None	F-Air canister needs to be upright and elevated to work properly	Ida Washington	
HSC	G-198	OLAR Imaging	All	Acceptable						None	None	Ida Washington	

HSC	G-199	OLAR veterinary treatment area		Acceptable						None	None	Ida Washington	
HSC	G-204	Use: TBD (Under construction)		Acceptable						None	Not suitable for housing at this time.	Ida Washington	
HSC	G-205	Clean cage storage		Acceptable						None	None	Ida Washington	
HSC	G-207	Feed Room		Acceptable						None	What about special diet management?	Ida Washington	
HSC	V-105	ABSL-2 procedure	Rodent	Acceptable						None	None	Ida Washington	
HSC	V107	ABSL-2 housing	Rodent	Acceptable						None	keep a copy of ACUC protocol in room	Ida Washington	
HSC	V-109	ABSL-2 housing	Rodent	Acceptable						None	None	Ida Washington	
HSC	V-111	Chemical Hazard Housing	Rodent	Acceptable						None	None	Ida Washington	
HSC	V-112	Temporary ABSL-2 Storage		Acceptable						None	None	Ida Washington	
HSC	V-120	Bedding/Autoclave		Acceptable						None	None	Ida Washington	
HSC	V-128	Dirty Side		Acceptable						None	None	Ida Washington	
HCA	V-502	HCA Housing	Rodent	Acceptable						None	No animals at this time	Alexandra Elliott	
HCA	V-505	HCA Autoclave		Acceptable						None	None	Alexandra Elliott	
HCA	V-506	HCA PPE Doffing Area		Acceptable						None	None	Alexandra Elliott	
HCA	V-507	HCA Storage		Acceptable						None	None	Alexandra Elliott	
HCA	V-508	HCA Shower/Exit area		Acceptable						None	None	Alexandra Elliott	
Farms		Any transport vehicle(s)	Any transport vehicle(s)	All	Acceptable					None	None	Benjamin Walsh	
FARF	104	Supply Hallway	Surgeon Prep (USDA)	None	Acceptable					None	None	Robert Goodman	
FARF	104A	Surgery (USDA)	Sheep	Acceptable						None	None	Ida Washington	
FARF	104B	Surgery (USDA)	Sheep	Acceptable						None	None	Ida Washington	
FARF	106E	Cooler		Acceptable						None	None	Ida Washington	
FARF	106E	Cooler		Acceptable						None	None	Ida Washington	
FARF	108A	Service area	None	Acceptable						None	Inspected as part of EH&S annual safety audit.	Ida Washington	
FARF	109	Surgery Prep (USDA)	Sheep	Acceptable						None	If anesthetic equipment must be shared it is recommended that each PI have their own tubes for surgery.	Ida Washington	
FARF	110	Necropsy	Sheep	Acceptable						None	None	Ida Washington	
FARF	Pasture	Pasture	Sheep	Acceptable						None	Pipe sticking up in ground by building is now covered. Electric cords from fans in enclosures are exposed to weather - FM needs to put electric in this area (work order needed).	Ida Washington	
FARF	Loading dock	Food/supplies delivery	None	Acceptable						None	None	Ida Washington	
FARF	Loading Pad	Animal delivery	Sheep	Acceptable						None	None	Ida Washington	
ESC	BMRC 141	Core: Stroke Surgical Room	Rodent	Acceptable						None	None	James Simpkins	
AMIF	G-229A	Core: AMIF main hallway	Rodent	Acceptable						None	None	Karen Martin	
AMIF	G-229B	Core: AMIF Vivo AMIF	Rodent	Acceptable						None	None	Karen Martin	
AMIF	G-229D	Core: AMIF Procedure Room	Rodent	Acceptable						None	None	Karen Martin	
AMIF	G-229E	Core: AMIF Irradiator/Sky Scan Room	Rodent	Acceptable						None	None	Karen Martin	
AMIF	G-229F	Core: Laboratory	Rodent	Acceptable						None	None	Timothy Eubank	
AMIF	G-229G	Core: AMIF IVIS Room	Rodent	Acceptable						None	None	Karen Martin	
Agronomy	Main Barn	Main Barn	Sheep	Acceptable						None	Signage should be placed either on the barn or at the pens with protocol info.	Benjamin Walsh	
Agronomy	West Barn	West Barn	Llamas/Sheep	Acceptable						None	None	Benjamin Walsh	
Agronomy	Pasture	Pasture(s)	Llamas/Sheep	Acceptable						None	Recently completed; Inspected 5/31/2019.	Benjamin Walsh	
Agronomy	Pasture	Pasture(s)	Llamas/Sheep	Acceptable						None	Recently completed; Inspected 6/12/2019.	Benjamin Walsh	
HSC	Transport Vehicles	Used for animal transport	All	Acceptable (Both)						OLAR would like to start using the Jeep (passenger) to transport animals. Van currently transports animals and supplies.	None	Ida Washington	
Reymann Memorial	Trout House	Trout House	Fish	Did Not inspect						Must be inspected prior to use; Now belongs to DNR not WVU. Will remove from database.	None	Jerry Yates	
Organic	Chicken Coop	Chicken Coop	Poultry	Did Not inspect	Not in use					Must be inspected prior to use	None	Benjamin Walsh	

I. Semiannual Program Review Checklist ⁱ

Institutional Policies and Responsibilities

Date:

1. Animal Care and Use Program ^{NEW}		A*	M	S	C	NA
• Responsibility for animal well-being is assumed by all members of the program (<i>Guide, p 1</i>) [must]	X					
• IO has authority to allocate needed resources (<i>Guide, p 13</i>)	X					
• Resources necessary to manage program of veterinary care are provided (<i>Guide, p 14</i>) [must]	X					
• Sufficient resources are available to manage the program, including training of personnel in accord with regulations and the <i>Guide</i> (<i>Guide, pp 11, 15</i>)	X					
• Program needs are regularly communicated to IO by AV and/or IACUC (<i>Guide, p 13</i>)	X					
• Responsibilities for daily animal care and facility management are assigned to specific individual(s) when a full-time veterinarian is not available on site (<i>Guide, p 14</i>) [must]						X
• Inter-institutional collaborations are described in formal written agreements (<i>Guide, p 15</i>)	X					
• Written agreements address responsibilities, animal ownership, and IACUC oversight (<i>Guide, p 15</i>)	X					
2. Disaster Planning and Emergency Preparedness ^{NEW}		A*	M	S	C	NA
• Disaster plans for each facility to include satellite locations are in place (<i>Guide, p 35, p 75</i>) [must]	X					
• Plans include provisions for euthanasia (<i>Guide, p 35</i>) [must]	X					
• Plans include triage plans to meet institutional and investigators' needs (<i>Guide, p 35</i>)	X					
• Plans define actions to prevent animal injury or death due to HVAC or other failures (<i>Guide, p 35</i>)	X					
• Plans describe preservation of critical or irreplaceable animals (<i>Guide, p 35</i>)	X					
• Plans include essential personnel and their training (<i>Guide, p 35</i>)	X					
• Animal facility plans are approved by the institution and incorporated into overall response plan (<i>Guide, p 35</i>)	X					
• Law enforcement and emergency personnel are provided a copy and integration with overall plan is in place (<i>Guide, p 35</i>)	X					
3. IACUC ^{NEW}		A*	M	S	C	NA
• Meets as necessary to fulfill responsibilities (<i>Guide, p 25</i>) [must]	X					
• IACUC Members named in protocols or with conflicts recuse themselves from protocol decisions (<i>Guide, p 26</i>) [must]	X					
• Continuing IACUC oversight after initial protocol approval is in place (<i>Guide, p 33</i>)	X					
• IACUC evaluates the effectiveness of training programs (<i>Guide, p 15</i>)	X					
4. IACUC Protocol Review - Special Considerations		A*	M	S	C	NA
• 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 (<i>Guide, p 27</i>)	X					
• For pilot studies, a system to communicate with the IACUC is in place (<i>Guide, p 28</i>)	X					
• For genetically modified animals, enhanced monitoring and reporting is in place (<i>Guide, p 28</i>)	X					
• Restraint devices are justified in the animal use protocols (<i>Guide, p 29</i>) [must]	X					
• Alternatives to physical restraint are considered (<i>Guide, p 29</i>)	X					
• Period of restraint is the minimum to meet scientific objectives (<i>Guide, p 29</i>)	X					
• Training of animals to adapt to restraint is provided (<i>Guide, p 29</i>)	X					
• Animals that fail to adapt are removed from study (<i>Guide, p 29</i>)	X					
• Appropriate observation intervals of restrained animals are provided (<i>Guide, p 29</i>)	X					
• Veterinary care is provided if lesions or illness result from restraint (<i>Guide, p 30</i>) [must]	X					

• Explanations of purpose and duration of restraint are provided to study personnel (<i>Guide, p 30</i>)	X				
• Multiple surgical procedures on a single animal are justified and outcomes evaluated (<i>Guide, p 30</i>)	X				
• Major versus minor surgical procedures are evaluated on a case-by-case basis (<i>Guide, p 30</i>)		X			
• Multiple survival procedure justifications in non-regulated species conform to regulated species standards (<i>Guide, p 30</i>)	X				
• Animals on food/fluid restriction are monitored to ensure nutritional needs are met (<i>Guide, p 31</i>)	X				
• Body weights for food/fluid restricted animals are recorded at least weekly (<i>Guide, p 31</i>)	X				
• Daily written records are maintained for food/fluid restricted animals (<i>Guide, p 31</i>)	X				
• Pharmaceutical grade chemicals are used , when available, for animal-related procedures (<i>Guide, p 31</i>)	X				
• Non-pharmaceutical grade chemicals are described, justified, and approved by IACUC (<i>Guide, p 31</i>)	X				
• Investigators conducting field studies know zoonotic diseases, safety issues, laws and regulations applicable in study area (<i>Guide, p 32</i>)	X				
• Disposition plans are considered for species removed from the wild (<i>Guide, p 32</i>)	X				
• Toe-clipping only used when no alternative, performed aseptically and with pain relief (<i>Guide, p 75</i>)	X				

5. IACUC Membership and Functions A* M S C NA

• IACUC is comprised of at least 5 members, appointed by CEO (PHS Policy, IV.A.3.)	X				
• Members include a veterinarian, a scientist, a nonscientist, and a nonaffiliated non-lab animal user (<i>Guide, p 24</i>) ⁱⁱ	X				
• IACUC authority and resources for oversight and evaluation of institution's program are provided (<i>Guide, p 14</i>)	X				
• IACUC conducts semiannual evaluations of institutional animal care and use program (PHS Policy, IV.B.)	X				
• Conducts semiannual inspections of institutional animal facilities (PHS Policy, IV.B.)	X				
• IACUC organizationally reports to the Institutional Official (PHS Policy, IV.A.1.b.)	X				
• Methods for reporting and investigating animal welfare concerns are in place (<i>Guide, p 23</i>) [must]	X				
• Reviews and investigates concerns about animal care and use at institution ⁱⁱⁱ (PHS Policy, IV.B.)	X				
• Procedures are in place for review, approval, and suspension of animal activities ^{iv} (PHS Policy, IV.B.)	X				
• Procedures are in place for review and approval of significant changes to approved activities (PHS Policy, IV.B.)	X				
• Policies are in place for special procedures (e.g., genetically modified animals, restraint, multiple survival surgery, food and fluid regulation, field investigations, agricultural animals) (<i>Guide, p 27-32</i>)	X				
• Requests for exemptions from major survival surgical procedure restrictions are made to USDA/APHIS ^v (<i>Guide, p 30</i>) [must]					X

6. IACUC Training NEW A* M S C NA

• All IACUC members should receive:					
o Formal orientation to institution's program (<i>Guide, p 17</i>)	X				
o Training on legislation, regulations, guidelines, and policies (<i>Guide, p 17</i>)	X				
o Training on how to inspect facilities and labs where animal use or housing occurs (<i>Guide, p 17</i>)	X				
o Training on how to review protocols as well as evaluate the program (<i>Guide, p 17</i>)	X				
o Ongoing training/education (<i>Guide, p 17</i>)	X				

7. IACUC Records and Reporting Requirements^{vi} A* M S C NA

• Semiannual report to the IO (PHS Policy, IV.B.)					
o Submitted to IO every 6 months	X				
o Compiles program review and facility inspection(s) results (includes all program	X				

I. Semiannual Program Review Checklist ⁱ

Institutional Policies and Responsibilities

Date:

1. Animal Care and Use Program ^{NEW}		A*	M	S	C	NA
• Responsibility for animal well-being is assumed by all members of the program (<i>Guide, p 1</i>) [must]	X					
• IO has authority to allocate needed resources (<i>Guide, p 13</i>)	X					
• Resources necessary to manage program of veterinary care are provided (<i>Guide, p 14</i>) [must]	X					
• Sufficient resources are available to manage the program, including training of personnel in accord with regulations and the <i>Guide</i> (<i>Guide, pp 11, 15</i>)	X					
• Program needs are regularly communicated to IO by AV and/or IACUC (<i>Guide, p 13</i>)	X					
• Responsibilities for daily animal care and facility management are assigned to specific individual(s) when a full-time veterinarian is not available on site (<i>Guide, p 14</i>) [must]						X
• Inter-institutional collaborations are described in formal written agreements (<i>Guide, p 15</i>)	X					
• Written agreements address responsibilities, animal ownership, and IACUC oversight (<i>Guide, p 15</i>)	X					
2. Disaster Planning and Emergency Preparedness ^{NEW}		A*	M	S	C	NA
• Disaster plans for each facility to include satellite locations are in place (<i>Guide, p 35, p 75</i>) [must]	X					
• Plans include provisions for euthanasia (<i>Guide, p 35</i>) [must]	X					
• Plans include triage plans to meet institutional and investigators' needs (<i>Guide, p 35</i>)	X					
• Plans define actions to prevent animal injury or death due to HVAC or other failures (<i>Guide, p 35</i>)	X					
• Plans describe preservation of critical or irreplaceable animals (<i>Guide, p 35</i>)	X					
• Plans include essential personnel and their training (<i>Guide, p 35</i>)	X					
• Animal facility plans are approved by the institution and incorporated into overall response plan (<i>Guide, p 35</i>)	X					
• Law enforcement and emergency personnel are provided a copy and integration with overall plan is in place (<i>Guide, p 35</i>)	X					
3. IACUC ^{NEW}		A*	M	S	C	NA
• Meets as necessary to fulfill responsibilities (<i>Guide, p 25</i>) [must]	X					
• IACUC Members named in protocols or with conflicts recuse themselves from protocol decisions (<i>Guide, p 26</i>) [must]	X					
• Continuing IACUC oversight after initial protocol approval is in place (<i>Guide, p 33</i>)	X					
• IACUC evaluates the effectiveness of training programs (<i>Guide, p 15</i>)	X					
4. IACUC Protocol Review - Special Considerations		A*	M	S	C	NA
• 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 (<i>Guide, p 27</i>)	X					
• For pilot studies, a system to communicate with the IACUC is in place (<i>Guide, p 28</i>)	X					
• For genetically modified animals, enhanced monitoring and reporting is in place (<i>Guide, p 28</i>)	X					
• Restraint devices are justified in the animal use protocols (<i>Guide, p 29</i>) [must]	X					
• Alternatives to physical restraint are considered (<i>Guide, p 29</i>)	X					
• Period of restraint is the minimum to meet scientific objectives (<i>Guide, p 29</i>)	X					
• Training of animals to adapt to restraint is provided (<i>Guide, p 29</i>)	X					
• Animals that fail to adapt are removed from study (<i>Guide, p 29</i>)	X					
• Appropriate observation intervals of restrained animals are provided (<i>Guide, p 29</i>)	X					
• Veterinary care is provided if lesions or illness result from restraint (<i>Guide, p 30</i>) [must]	X					

• Explanations of purpose and duration of restraint are provided to study personnel (<i>Guide, p 30</i>)	X				
• Multiple surgical procedures on a single animal are justified and outcomes evaluated (<i>Guide, p 30</i>)	X				
• Major versus minor surgical procedures are evaluated on a case-by-case basis (<i>Guide, p 30</i>)		X			
• Multiple survival procedure justifications in non-regulated species conform to regulated species standards (<i>Guide, p 30</i>)	X				
• Animals on food/fluid restriction are monitored to ensure nutritional needs are met (<i>Guide, p 31</i>)	X				
• Body weights for food/fluid restricted animals are recorded at least weekly (<i>Guide, p 31</i>)	X				
• Daily written records are maintained for food/fluid restricted animals (<i>Guide, p 31</i>)	X				
• Pharmaceutical grade chemicals are used , when available, for animal-related procedures (<i>Guide, p 31</i>)	X				
• Non-pharmaceutical grade chemicals are described, justified, and approved by IACUC (<i>Guide, p 31</i>)	X				
• Investigators conducting field studies know zoonotic diseases, safety issues, laws and regulations applicable in study area (<i>Guide, p 32</i>)	X				
• Disposition plans are considered for species removed from the wild (<i>Guide, p 32</i>)	X				
• Toe-clipping only used when no alternative, performed aseptically and with pain relief (<i>Guide, p 75</i>)	X				

5. IACUC Membership and Functions A* M S C NA

• IACUC is comprised of at least 5 members, appointed by CEO (PHS Policy, IV.A.3.)	X				
• Members include a veterinarian, a scientist, a nonscientist, and a nonaffiliated non-lab animal user (<i>Guide, p 24</i>) ⁱⁱ	X				
• IACUC authority and resources for oversight and evaluation of institution's program are provided (<i>Guide, p 14</i>)	X				
• IACUC conducts semiannual evaluations of institutional animal care and use program (PHS Policy, IV.B.)	X				
• Conducts semiannual inspections of institutional animal facilities (PHS Policy, IV.B.)	X				
• IACUC organizationally reports to the Institutional Official (PHS Policy, IV.A.1.b.)	X				
• Methods for reporting and investigating animal welfare concerns are in place (<i>Guide, p 23</i>) [must]	X				
• Reviews and investigates concerns about animal care and use at institution ⁱⁱⁱ (PHS Policy, IV.B.)	X				
• Procedures are in place for review, approval, and suspension of animal activities ^{iv} (PHS Policy, IV.B.)	X				
• Procedures are in place for review and approval of significant changes to approved activities (PHS Policy, IV.B.)	X				
• Policies are in place for special procedures (e.g., genetically modified animals, restraint, multiple survival surgery, food and fluid regulation, field investigations, agricultural animals) (<i>Guide, p 27-32</i>)	X				
• Requests for exemptions from major survival surgical procedure restrictions are made to USDA/APHIS ^v (<i>Guide, p 30</i>) [must]					X

6. IACUC Training NEW A* M S C NA

• All IACUC members should receive:					
o Formal orientation to institution's program (<i>Guide, p 17</i>)	X				
o Training on legislation, regulations, guidelines, and policies (<i>Guide, p 17</i>)	X				
o Training on how to inspect facilities and labs where animal use or housing occurs (<i>Guide, p 17</i>)	X				
o Training on how to review protocols as well as evaluate the program (<i>Guide, p 17</i>)	X				
o Ongoing training/education (<i>Guide, p 17</i>)	X				

7. IACUC Records and Reporting Requirements^{vi} A* M S C NA

• Semiannual report to the IO (PHS Policy, IV.B.)					
o Submitted to IO every 6 months	X				
o Compiles program review and facility inspection(s) results (includes all program	X				

and facility deficiencies)					
o Includes minority IACUC views	X				
o Describes IACUC-approved departures from the <i>Guide</i> or PHS Policy and the reasons for each departure ^{vii}	X				
o Distinguishes significant from minor deficiencies	X				
o Includes a plan and schedule for correction for each deficiency identified ^{viii}	X				
• Reports to OLAW (PHS Policy, IV.F.)					
o Annual report to OLAW documents program changes, dates of the semiannual program reviews and facility inspections and includes any minority views	X				
o Promptly advises OLAW of serious/ongoing <i>Guide</i> deviations or PHS Policy noncompliance (NOT-OD-05-034)	X				
o Institute must promptly advise OLAW of any suspension of an animal activity by the IACUC (NOT-OD-05-034)	X				
• Reports to U.S. Department of Agriculture (USDA) or Federal funding agency ^{ix}					
o Annual report to USDA contains required information including all exceptions/exemptions	X				
o Reporting mechanism to USDA is in place for IACUC-approved exceptions to the regulations and standards	X				
o Reports are filed within 15 days for failures to adhere to timetable for correction of significant deficiencies	X				
o Promptly reports suspensions of activities by the IACUC to USDA and any Federal funding agency	X				
• Records (PHS Policy, IV.E.)					
o IACUC meeting minutes and semiannual reports to the IO are maintained for 3 years	X				
o Records of IACUC reviews of animal activities include all required information ^x	X				
o Records of IACUC reviews are maintained for 3 years after the completion of the study	X				

8. Veterinary Care (See also next section - Veterinary Care)

	A*	M	S	C	NA
• An arrangement for veterinarian(s) with training or experience in lab animal medicine is in place including backup veterinary care ^{xi}	X				
• Veterinary access to all animals is provided (<i>Guide</i> , p 14) [must]	X				
• Direct or delegated authority is given to the veterinarian to oversee all aspects of animal care and use (<i>Guide</i> , p 14) [must]	X				
• Veterinarian provides consultation when pain and distress exceeds anticipated level in protocol (<i>Guide</i> , p 5) [must]	X				
• Veterinarian provides consultation when interventional control is not possible (<i>Guide</i> , p 5) [must]	X				
• If part time /consulting veterinarian, visits meet programmatic needs (<i>Guide</i> , p 14)					N/A
• Regular communication occurs between veterinarian and IACUC (<i>Guide</i> , p 14)	X				
• Veterinarian(s) have experience and training in species used (<i>Guide</i> , p 15) [must]	X				
• Veterinarian(s) have experience in facility administration/management (<i>Guide</i> , p 15)	X				

9. Personnel Qualifications and Training

	A*	M	S	C	NA
• All personnel are adequately educated, trained, and/or qualified in basic principles of laboratory animal science. Personnel included: [must]					
o Veterinary/other professional staff (<i>Guide</i> , p 15-16)	X				
o IACUC members (<i>Guide</i> , p 17)	X				
o Animal care personnel (<i>Guide</i> , p 16)	X				
o Research investigators, instructors, technicians, trainees, and students (<i>Guide</i> , pp 16-17)	X				
• Continuing education for program and research staff provided to ensure high quality care and reinforce training (<i>Guide</i> , pp 16-17)	X				
• Training is available prior to starting animal activity (<i>Guide</i> , p 17)	X				
• Training is documented (<i>Guide</i> , p 15)	X				
• Training program content includes: (<i>Guide</i> , p 17)					
o Methods for reporting concerns (<i>Guide</i> , p 17)	X				
o Humane practices of animal care (e.g., housing, husbandry, handling) ^{xii}	X				
o Humane practices of animal use (e.g., research procedures, use of anesthesia,	X				

12. Investigating & Reporting Animal Welfare Concerns ^{NEW}						A*	M	S	C	NA
• Methods for investigating and reporting animal welfare concerns are established (<i>Guide, p 23</i>) [must]						X				
• Reported concerns and corrective actions are documented (<i>Guide, p 24</i>)						X				
• Mechanisms for reporting concerns are posted in facility and at applicable website with instructions (<i>Guide, p 24</i>)						X				
○ Includes multiple contacts (<i>Guide, p 24</i>)						X				
○ Includes anonymity, whistle blower policy, nondiscrimination and reprisal protection (<i>Guide, p 24</i>)						X				

* **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

Date:

1. Clinical Care and Management ^{NEW}	A*	M	S	C	NA
• Veterinary program offers high quality of care and ethical standards (<i>Guide, p 105</i>) [must]	X				
• Veterinarian provides guidance to all personnel to ensure appropriate husbandry, handling, treatment, anesthesia, analgesia, and euthanasia (<i>Guide, p 106</i>)	X				
• Veterinarian provides oversight to surgery and perioperative care (<i>Guide, p 106</i>)	X				
• Veterinary care program is appropriate for program requirements (<i>Guide, pp 113-114</i>)	X				
• Veterinarian(s) is familiar with species and use of animals and has access to medical and experimental treatment records (<i>Guide, p 114</i>)	X				
• Procedures to triage and prioritize incident reports are in place (<i>Guide, p 114</i>)	X				
• Procedures are in place to address:					
o Problems with experiments to determine course of treatment in consultation with investigator (<i>Guide, p 114</i>)	X				
o Recurrent or significant health problems with the IACUC and documentation of treatments and outcomes (<i>Guide, p 114</i>)	X				
o Veterinary review and oversight of medical and animal use records (<i>Guide, p 115</i>)	X				
• Procedures established for timely reporting of animal injury, illness, or disease (<i>Guide, p 114</i>) [must]	X				
• Procedures established for veterinary assessment, treatment, or euthanasia (<i>Guide, p 114</i>) [must]	X				
• Veterinarian is authorized to treat, relieve pain, and/or euthanize (<i>Guide, p 114</i>) [must]	X				
2. Animal Procurement and Transportation/Preventive Medicine	A*	M	S	C	NA
• Procedures for lawful animal procurement are in place (<i>Guide, p 106</i>) [must]	X				
• Sufficient facilities and expertise are confirmed prior to procurement (<i>Guide, p 106</i>)	X				
• Procurement is linked to IACUC review and approval (<i>Guide, p 106</i>)	X				
• Random source dogs and cats are inspected for identification (<i>Guide, p 106</i>)					X
• Population status of wildlife species is considered prior to procurement (<i>Guide, p 106</i>)	X				
• Appropriate records are maintained on animal acquisition (<i>Guide, p 106</i>)	X				
• Animal vendors are evaluated to meet program needs and quality (<i>Guide, p 106</i>)	X				
• Breeding colonies are based on need and managed to minimize numbers (<i>Guide, p 107</i>)	X				
• Procedures for compliance with animal transportation regulations, including international requirements, are in place (<i>Guide, p 107</i>) [must]	X				
• Transportation is planned to ensure safety, security and minimize risk (<i>Guide, p 107</i>)	X				
• Movement of animals is planned to minimize transit time and deliveries are planned to ensure receiving personnel are available (<i>Guide, pp 107-108</i>)	X				
• Appropriate loading and unloading facilities are available (<i>Guide, p 109</i>)	X				
• Environment at receiving site is appropriate (<i>Guide, p 109</i>)	X				
• Policies in place on separation by species, source, and health status (<i>Guide, pp 109, 111-112</i>)	X				
• Procedures in place for quarantine to include zoonoses prevention (<i>Guide, p 110</i>)	X				
• Quarantined animals from different shipments are handled separately or physically separated (<i>Guide, p 110</i>)	X				
• Procedures in place for stabilization/acclimation (<i>Guide, pp 110-111</i>)	X				
• Policies in place for isolation of sick animals (<i>Guide, p 112</i>)	X				
• Program is in place for surveillance, diagnosis, treatment and control of disease to include daily observation (<i>Guide, p 112</i>)	X				
• Diagnostic resources are available for preventive health program (<i>Guide, p 112</i>)	X				
3. Surgery	A*	M	S	C	NA
• Surgical outcomes are assessed and corrective changes instituted (<i>Guide, p 115</i>)	X				
• Researchers have appropriate training to ensure good technique (<i>Guide, p 115</i>) [must]	X				

• Pre-surgical plans are developed and include veterinary input (e.g., location, supplies, anesthetic and analgesic use, peri-operative care, recordkeeping) (<i>Guide</i> , p 116)	X				
• Aseptic surgery is conducted in dedicated facilities or spaces, unless exception justified and IACUC approved (<i>Guide</i> , p 116)	X				
• Surgical procedures including laparoscopic procedures are categorized as major or minor (<i>Guide</i> , pp 117-118)	X				
• For nonsurvival surgery, the site is clipped, gloves are worn and instruments and area are clean (<i>Guide</i> , p 118)	X				
• Aseptic technique is followed for survival surgical procedures (<i>Guide</i> , pp 118-119)	X				
• Effective procedures for sterilizing instruments and monitoring expiration dates on sterile packs are in place (<i>Guide</i> , p 119)		X			
• Procedures for monitoring surgical anesthesia and analgesia are in place (<i>Guide</i> , p 119)	X				
• For aquatic species, skin surfaces are kept moist during surgical procedures (<i>Guide</i> , p 119)	X				
• Post-operative monitoring and care are provided by trained personnel and documented (e.g., thermoregulation, physiologic function, analgesia, infection, removal of skin closures) (<i>Guide</i> , pp 119-120)	X				

4. Pain, Distress, Anesthesia and Analgesia

A* M S C NA

• Guidelines for assessment and categorization of pain, distress and animal wellbeing are provided during training (<i>Guide</i> , p 121)	X				
• Selection of analgesics and anesthetics is based on professional veterinary judgment (<i>Guide</i> , p 121)	X				
• Painful procedures are monitored to ensure appropriate analgesic management (<i>Guide</i> , p 122)	X				
• Nonpharmacologic control of pain is considered as an element of postprocedural care (<i>Guide</i> , p 122)	X				
• Procedures are in place to assure antinociception before surgery begins (<i>Guide</i> , p 122) [must]	X				
• Guidelines for selection and use of analgesics and anesthetics are in place and regularly reviewed and updated (<i>Guide</i> , p 122)	X				
• Special precautions for the use of paralytics are in place to ensure anesthesia ^{xiv} (<i>Guide</i> , p 122)	X				

5. Euthanasia

A* M S C NA

• Methods are consistent with AVMA Guidelines on Euthanasia unless approved by the IACUC (<i>Guide</i> , p 123)	X				
• Standardized methods are developed and approved by the veterinarian and IACUC that avoid distress and consider animal age and species (<i>Guide</i> , pp 123-124)	X				
• Training is provided on appropriate methods for each species and considers psychological stress to personnel (<i>Guide</i> , p 124)	X				
• Procedures and training are in place to ensure death is confirmed (<i>Guide</i> , p 124) [must]	X				

6. Drug Storage and Control **NEW**

A* M S C NA

• Program complies with federal regulations for human and veterinary drugs (<i>Guide</i> , p 115) [must]	X				
• Drug records and storage procedures are reviewed during facility inspections (<i>Guide</i> , p 115)	X				
• Procedures are in place to ensure all drugs are used within expiration date (<i>Guide</i> , p 122) [must]		X			
• Anesthetics and analgesics are acquired, stored, and their use and disposal are recorded legally and safely (<i>Guide</i> , p 122)	X				

* **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:

Semiannual Checklist

v3/8/2012

8

and facility deficiencies)					
o Includes minority IACUC views	X				
o Describes IACUC-approved departures from the <i>Guide</i> or PHS Policy and the reasons for each departure ^{vii}	X				
o Distinguishes significant from minor deficiencies	X				
o Includes a plan and schedule for correction for each deficiency identified ^{viii}	X				
• Reports to OLAW (PHS Policy, IV.F.)					
o Annual report to OLAW documents program changes, dates of the semiannual program reviews and facility inspections and includes any minority views	X				
o Promptly advises OLAW of serious/ongoing <i>Guide</i> deviations or PHS Policy noncompliance (NOT-OD-05-034)	X				
o Institute must promptly advise OLAW of any suspension of an animal activity by the IACUC (NOT-OD-05-034)	X				
• Reports to U.S. Department of Agriculture (USDA) or Federal funding agency ^{ix}					
o Annual report to USDA contains required information including all exceptions/exemptions	X				
o Reporting mechanism to USDA is in place for IACUC-approved exceptions to the regulations and standards	X				
o Reports are filed within 15 days for failures to adhere to timetable for correction of significant deficiencies	X				
o Promptly reports suspensions of activities by the IACUC to USDA and any Federal funding agency	X				
• Records (PHS Policy, IV.E.)					
o IACUC meeting minutes and semiannual reports to the IO are maintained for 3 years	X				
o Records of IACUC reviews of animal activities include all required information ^x	X				
o Records of IACUC reviews are maintained for 3 years after the completion of the study	X				

8. Veterinary Care (See also next section - Veterinary Care)

A* M S C NA

• An arrangement for veterinarian(s) with training or experience in lab animal medicine is in place including backup veterinary care ^{xi}	X				
• Veterinary access to all animals is provided (<i>Guide</i> , p 14) [must]	X				
• Direct or delegated authority is given to the veterinarian to oversee all aspects of animal care and use (<i>Guide</i> , p 14) [must]	X				
• Veterinarian provides consultation when pain and distress exceeds anticipated level in protocol (<i>Guide</i> , p 5) [must]	X				
• Veterinarian provides consultation when interventional control is not possible (<i>Guide</i> , p 5) [must]	X				
• If part time /consulting veterinarian, visits meet programmatic needs (<i>Guide</i> , p 14)					N/A
• Regular communication occurs between veterinarian and IACUC (<i>Guide</i> , p 14)	X				
• Veterinarian(s) have experience and training in species used (<i>Guide</i> , p 15) [must]	X				
• Veterinarian(s) have experience in facility administration/management (<i>Guide</i> , p 15)	X				

9. Personnel Qualifications and Training

A* M S C NA

• All personnel are adequately educated, trained, and/or qualified in basic principles of laboratory animal science. Personnel included: [must]					
o Veterinary/other professional staff (<i>Guide</i> , p 15-16)	X				
o IACUC members (<i>Guide</i> , p 17)	X				
o Animal care personnel (<i>Guide</i> , p 16)	X				
o Research investigators, instructors, technicians, trainees, and students (<i>Guide</i> , pp 16-17)	X				
• Continuing education for program and research staff provided to ensure high quality care and reinforce training (<i>Guide</i> , pp 16-17)	X				
• Training is available prior to starting animal activity (<i>Guide</i> , p 17)	X				
• Training is documented (<i>Guide</i> , p 15)	X				
• Training program content includes: (<i>Guide</i> , p 17)					
o Methods for reporting concerns (<i>Guide</i> , p 17)	X				
o Humane practices of animal care (e.g., housing, husbandry, handling) ^{xii}	X				
o Humane practices of animal use (e.g., research procedures, use of anesthesia,	X				

pre- and post-operative care, aseptic surgical techniques and euthanasia (<i>Guide, p 17</i>) ^{xiii}					
o Research/testing methods that minimize numbers necessary to obtain valid results (PHS Policy, <i>IV.A.1.g.</i>)	X				
o Research/testing methods that minimize animal pain or distress (PHS Policy, <i>IV.A.1.g.</i>)	X				
o Use of hazardous agents, including access to OSHA chemical hazard notices where applicable (<i>Guide, p 20</i>)	X				
o Animal care and use legislation (<i>Guide, p 17</i>)	X				
o IACUC function (<i>Guide, p 17</i>)	X				
o Ethics of animal use and Three R's (<i>Guide, p 17</i>)	X				

10. Occupational Health and Safety of Personnel

	A*	M	S	C	NA
• Program is in place and is consistent with federal, state, and local regulations (<i>Guide, p 17</i>) [must]	X				
• Program covers <i>all</i> personnel who work in laboratory animal facilities (<i>Guide, p 18</i>)	X				
• Changing, washing, and showering facilities are available as appropriate (<i>Guide, p 19</i>)	X				
• Hazardous facilities are separated from other areas and identified as limited access (<i>Guide, p 19</i>)	X				
• Personnel training is provided based on risk (e.g., zoonoses, hazards, personal hygiene, special precautions, animal allergies) (<i>Guide, p 20</i>)	X				
• Personal hygiene procedures are in place (e.g., work clothing, eating/drinking/smoking policies) (<i>Guide, p 20</i>)	X				
• Procedures for use, storage, and disposal of hazardous biologic, chemical, and physical agents are in place (<i>Guide, p 21</i>)	X				
• Personal Protective Equipment for the work area is appropriate and available (<i>Guide, p 21</i>)	X				
• Program for medical evaluation and preventive medicine for personnel includes:					
o Pre-exposure evaluation including health history (<i>Guide, p 22</i>)	X				
o Immunizations as appropriate (e.g., rabies, tetanus) and tests as appropriate (<i>Guide, p 22</i>)	X				
o Zoonosis surveillance as appropriate (e.g., Q-fever, tularemia, Hantavirus, plague) (<i>Guide, p 23</i>)	X				
o Procedures for reporting and treating injuries, including accidents, bites, allergies, etc. (<i>Guide, p 23</i>)	X				
o Promotes early diagnosis of allergies including preexisting conditions (<i>Guide, p 22</i>)	X				
o Considers confidentiality and other legal factors as required by federal, state and local regulations (<i>Guide, p 22</i>) [must]	X				
o If serum samples are collected, the purpose is consistent with federal and state laws (<i>Guide, p 22</i>) [must]	X				
• Waste anesthetic gases are scavenged (<i>Guide, p 21</i>)	X				
• Hearing protection is provided in high noise areas (<i>Guide, p 22</i>)	X				
• Respiratory protection is available when performing airborne particulate work (<i>Guide, p 22</i>)	X				
• Special precautions for personnel who work with nonhuman primates, their tissues or body fluids include:					
o Tuberculosis screening provided for all exposed personnel (<i>Guide, p 23</i>)					X
o Training and implementation of procedures for bites, scratches, or injuries associated with macaques (<i>Guide, p 23</i>)					X
o PPE is provided including gloves, arm protection, face masks, face shields, or goggles (<i>Guide, p 21</i>)					X
o Injuries associated with macaques are carefully evaluated and treatment implemented (<i>Guide, p 23</i>)					X
• Occupational safety and health of field studies is reviewed by OSH committee or office (<i>Guide, p 32</i>)	X				

11. Personnel Security NEW

	A*	M	S	C	NA
• Preventive measures in place include pre-employment screening, and physical and IT security (<i>Guide, p 23</i>)	X				

12. Investigating & Reporting Animal Welfare Concerns ^{NEW}						A*	M	S	C	NA
• Methods for investigating and reporting animal welfare concerns are established (<i>Guide, p 23</i>) [must]						X				
• Reported concerns and corrective actions are documented (<i>Guide, p 24</i>)						X				
• Mechanisms for reporting concerns are posted in facility and at applicable website with instructions (<i>Guide, p 24</i>)						X				
○ Includes multiple contacts (<i>Guide, p 24</i>)						X				
○ Includes anonymity, whistle blower policy, nondiscrimination and reprisal protection (<i>Guide, p 24</i>)						X				

* **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

Date:

1. Clinical Care and Management ^{NEW}	A*	M	S	C	NA
• Veterinary program offers high quality of care and ethical standards (<i>Guide, p 105</i>) [must]	X				
• Veterinarian provides guidance to all personnel to ensure appropriate husbandry, handling, treatment, anesthesia, analgesia, and euthanasia (<i>Guide, p 106</i>)	X				
• Veterinarian provides oversight to surgery and perioperative care (<i>Guide, p 106</i>)	X				
• Veterinary care program is appropriate for program requirements (<i>Guide, pp 113-114</i>)	X				
• Veterinarian(s) is familiar with species and use of animals and has access to medical and experimental treatment records (<i>Guide, p 114</i>)	X				
• Procedures to triage and prioritize incident reports are in place (<i>Guide, p 114</i>)	X				
• Procedures are in place to address:					
o Problems with experiments to determine course of treatment in consultation with investigator(<i>Guide, p 114</i>)	X				
o Recurrent or significant health problems with the IACUC and documentation of treatments and outcomes (<i>Guide, p 114</i>)	X				
o Veterinary review and oversight of medical and animal use records (<i>Guide, p 115</i>)	X				
• Procedures established for timely reporting of animal injury, illness, or disease (<i>Guide, p 114</i>) [must]	X				
• Procedures established for veterinary assessment, treatment, or euthanasia (<i>Guide, p 114</i>) [must]	X				
• Veterinarian is authorized to treat, relieve pain, and/or euthanize (<i>Guide, p 114</i>) [must]	X				
2. Animal Procurement and Transportation/Preventive Medicine	A*	M	S	C	NA
• Procedures for lawful animal procurement are in place (<i>Guide, p 106</i>) [must]	X				
• Sufficient facilities and expertise are confirmed prior to procurement (<i>Guide, p 106</i>)	X				
• Procurement is linked to IACUC review and approval (<i>Guide, p 106</i>)	X				
• Random source dogs and cats are inspected for identification (<i>Guide, p 106</i>)					X
• Population status of wildlife species is considered prior to procurement (<i>Guide, p 106</i>)	X				
• Appropriate records are maintained on animal acquisition (<i>Guide, p 106</i>)	X				
• Animal vendors are evaluated to meet program needs and quality (<i>Guide, p 106</i>)	X				
• Breeding colonies are based on need and managed to minimize numbers (<i>Guide, p 107</i>)	X				
• Procedures for compliance with animal transportation regulations, including international requirements, are in place (<i>Guide, p 107</i>) [must]	X				
• Transportation is planned to ensure safety, security and minimize risk (<i>Guide, p 107</i>)	X				
• Movement of animals is planned to minimize transit time and deliveries are planned to ensure receiving personnel are available (<i>Guide, pp 107- 108</i>)	X				
• Appropriate loading and unloading facilities are available (<i>Guide, p 109</i>)	X				
• Environment at receiving site is appropriate (<i>Guide, p 109</i>)	X				
• Policies in place on separation by species, source, and health status (<i>Guide, pp 109, 111-112</i>)	X				
• Procedures in place for quarantine to include zoonoses prevention (<i>Guide, p 110</i>)	X				
• Quarantined animals from different shipments are handled separately or physically separated (<i>Guide, p 110</i>)	X				
• Procedures in place for stabilization/acclimation (<i>Guide, pp 110-111</i>)	X				
• Policies in place for isolation of sick animals (<i>Guide, p 112</i>)	X				
• Program is in place for surveillance, diagnosis, treatment and control of disease to include daily observation (<i>Guide, p 112</i>)	X				
• Diagnostic resources are available for preventive health program (<i>Guide, p 112</i>)	X				
3. Surgery	A*	M	S	C	NA
• Surgical outcomes are assessed and corrective changes instituted (<i>Guide, p 115</i>)	X				
• Researchers have appropriate training to ensure good technique (<i>Guide, p 115</i>) [must]	X				

• Pre-surgical plans are developed and include veterinary input (e.g., location, supplies, anesthetic and analgesic use, peri-operative care, recordkeeping) (<i>Guide, p 116</i>)	X				
• Aseptic surgery is conducted in dedicated facilities or spaces, unless exception justified and IACUC approved (<i>Guide, p 116</i>)	X				
• Surgical procedures including laparoscopic procedures are categorized as major or minor (<i>Guide, pp 117-118</i>)	X				
• For nonsurvival surgery, the site is clipped, gloves are worn and instruments and area are clean (<i>Guide, p 118</i>)	X				
• Aseptic technique is followed for survival surgical procedures (<i>Guide, pp 118-119</i>)	X				
• Effective procedures for sterilizing instruments and monitoring expiration dates on sterile packs are in place (<i>Guide, p 119</i>)		X			
• Procedures for monitoring surgical anesthesia and analgesia are in place (<i>Guide, p 119</i>)	X				
• For aquatic species, skin surfaces are kept moist during surgical procedures (<i>Guide, p 119</i>)	X				
• Post-operative monitoring and care are provided by trained personnel and documented (e.g., thermoregulation, physiologic function, analgesia, infection, removal of skin closures) (<i>Guide, pp 119-120</i>)	X				

4. Pain, Distress, Anesthesia and Analgesia

A* M S C NA

• Guidelines for assessment and categorization of pain, distress and animal wellbeing are provided during training (<i>Guide, p 121</i>)	X				
• Selection of analgesics and anesthetics is based on professional veterinary judgment (<i>Guide, p 121</i>)	X				
• Painful procedures are monitored to ensure appropriate analgesic management (<i>Guide, p 122</i>)	X				
• Nonpharmacologic control of pain is considered as an element of postprocedural care (<i>Guide, p 122</i>)	X				
• Procedures are in place to assure antinociception before surgery begins (<i>Guide, p 122</i>) [must]	X				
• Guidelines for selection and use of analgesics and anesthetics are in place and regularly reviewed and updated (<i>Guide, p 122</i>)	X				
• Special precautions for the use of paralytics are in place to ensure anesthesia ^{xiv} (<i>Guide, p 122</i>)	X				

5. Euthanasia

A* M S C NA

• Methods are consistent with AVMA Guidelines on Euthanasia unless approved by the IACUC (<i>Guide, p 123</i>)	X				
• Standardized methods are developed and approved by the veterinarian and IACUC that avoid distress and consider animal age and species (<i>Guide, pp 123-124</i>)	X				
• Training is provided on appropriate methods for each species and considers psychological stress to personnel (<i>Guide, p 124</i>)	X				
• Procedures and training are in place to ensure death is confirmed (<i>Guide, p 124</i>) [must]	X				

6. Drug Storage and Control **NEW**

A* M S C NA

• Program complies with federal regulations for human and veterinary drugs (<i>Guide, p 115</i>) [must]	X				
• Drug records and storage procedures are reviewed during facility inspections (<i>Guide, p 115</i>)	X				
• Procedures are in place to ensure all drugs are used within expiration date (<i>Guide, p 122</i>) [must]		X			
• Anesthetics and analgesics are acquired, stored, and their use and disposal are recorded legally and safely (<i>Guide, p 122</i>)	X				

* **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:

Semiannual Checklist

v3/8/2012

8