

# UNIVERSITY OF CALIFORNIA

BERKELEY • DAVIS • IRVINE • LOS ANGELES • MERCED • RIVERSIDE • SAN DIEGO • SAN FRANCISCO



SANTA BARBARA • SANTA CRUZ

## INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE

Santa Barbara, CA 93106-5062

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Email: [iacuc@lifesci.ucsb.edu](mailto:iacuc@lifesci.ucsb.edu)

June 15, 2018

Prof. Joseph Incandela  
Vice Chancellor for Research

Re: Spring 2018 Semiannual Program Review and Facility Inspections

Attached is the Institutional Animal Care and Use Committee's final report for the Spring 2018 Semiannual Program Review and Facility Inspections, which was reviewed and approved by the Committee on June 15, 2018. There were no significant deficiencies associated with the Spring 2018 Program Review and Facility Inspections. Please contact the IACUC Office if there are any questions regarding the final report.

On Behalf of the Committee,

██████████

Reviewed by:

A handwritten signature in black ink, appearing to read "J. Incandela".

prof. Joseph Incandela  
Vice Chancellor for Research

Date:

August 6, 2018

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Tel: (805) 893-  
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**DATE:** June 15, 2018  
**TO:** Prof. Joseph Incandela  
Vice Chancellor for Research  
**FROM:** UCSB Institutional Animal Care and Use Committee  
**SUBJECT:** Semiannual Evaluation of Animal Care and Use Program and  
Inspection of Facilities

This represents the semiannual report of the Institutional Animal Care and Use Committee (IACUC), as required by the PHS Policy on Humane Care and Use of Laboratory Animals and as a condition of this institution's Animal Welfare Assurance on file with the Office for Laboratory Animal Welfare, and USDA Animal Welfare Regulations, 9 CFR Chapter I, subchapter A, as applicable. No minority reports were submitted for the Semiannual Program Review or Facility Inspections.

### Evaluation of the Animal Care and Use Program

The IACUC conducted its semiannual evaluation of the institution's animal care and use program on April 20, 2018, using the *Guide for the Care and Use of Laboratory Animals (Guide)*, and, as applicable, 9 CFR Chapter I, 2.31.

No deficiencies were identified during the Spring 2018 review of the animal care and use program.

### Inspection of Animal Facilities

The IACUC inspected the animal facilities on January 22, 30, 2018; February 7, 2018; April 11, 12, 13, 17, 18, 19, 24, 2018; and May 4, 9, 15, 2018 using the *Guide*, and, as applicable, 9 CFR Chapter I, 2.31.

5 minor deficiencies and no major deficiencies were identified during the inspections of the animal facilities and are described in the UCSB-IACUC Semiannual Facility Inspection Report deficiency tables. The reports also include specific plans and schedules for the correction of each deficiency.

**Please review the attached letters for details of the program and animal facilities inspections.**

### Departures from the *Guide*

The following list of projects outlines UCSB's departures from the *Guide*, and has been approved by the IACUC. All departures are reviewed annually by the IACUC, in addition to each semiannual program review and facility inspection.

1. Protocol [REDACTED]  
[REDACTED]  
**Departure:** The *Guide* (pg. 43) states "animals should be provided with adequate resources for

thermoregulation (nesting material, shelter) to avoid cold stress."

The CLAMS (Comprehensive Lab Animal Monitoring Systems) are not designed to function with a nesting and/or rigid shelter because it would inhibit the ability for monitoring the movement/activity of the mice.

2. Protocol [REDACTED]

"[REDACTED]"

Departure: The Guide (pg. 74) states "emergency veterinary care must be available after work hours, on weekends, and on holidays."

Due to the remote location of the field work, veterinary care is not available for wild fish. Instead, fish will be monitored for signs of illness, injury, or abnormal behavior until it has demonstrated normal behavior or will be euthanized if its condition deteriorates. Once normal behavior has been demonstrated, the fish will be released.

3. Protocol [REDACTED]

"[REDACTED]"

Departure: The Guide (pg. 74) states "emergency veterinary care must be available after work hours, on weekends, and on holidays."

Due to the remote location of the field work, veterinary care is not available for wild fish. Instead, fish will be monitored for signs of illness, injury, or abnormal behavior until it has demonstrated normal behavior or will be euthanized if its condition deteriorates. Once normal behavior has been demonstrated, the fish will be released.

4. Protocol [REDACTED]

"[REDACTED]"

Departure: The Guide (pg. 74) states "emergency veterinary care must be available after work hours, on weekends, and on holidays."

Due to the remote location of the field work, veterinary care is not available for wild mammals or reptiles. Instead, animals will be monitored for signs of illness, injury, or abnormal behavior until it has demonstrated normal behavior or will be euthanized if its condition deteriorates. Once normal behavior has been demonstrated, the animal will be released.

5. Protocol [REDACTED]

"[REDACTED]"

Departure: The Guide (pg. 112) states "All animals should be observed for signs of illness, injury, or abnormal behavior by a person trained to recognize such signs. As a rule, such observation should occur at least daily, but more frequent observations may be required, such as during postoperative recovery, when animals are ill or have a physical deficit, or when animals are approaching a study endpoint."

If no signs of stress occur, fish will be monitored weekly. Weekly, not daily, status checks of the experimental fish are proposed for several reasons (see protocol for reasons).

Departure: The Guide (pg. 74) states "emergency veterinary care must be available after work hours, on weekends, and on holidays."

Due to the remote location of the field work, veterinary care is not available for wild fish. Instead, fish will be monitored for signs of illness, injury, or abnormal behavior until it has demonstrated normal behavior or will be euthanized if its condition deteriorates. Once normal behavior has been demonstrated, the fish will be released.

6. Protocol [REDACTED]

"[REDACTED]"

Departure: The Guide (pg. 74) states "emergency veterinary care must be available after work hours, on weekends, and on holidays."

Due to the remote location of the field studies, veterinary care is not available for wild frogs. Instead, frogs will be monitored for signs of illness, injury, or abnormal behavior until it has demonstrated normal behavior or will be euthanized if its condition deteriorates. Once normal behavior has been demonstrated, the frog will be released.

7. Protocol [REDACTED]

“ [REDACTED] ”

Departure: The Guide (pg. 74) states “emergency veterinary care must be available after work hours, on weekends, and on holidays.”

Due to the remote location of the field studies, veterinary care is not available for wild snakes. Instead, snakes will be monitored for signs of illness, injury, or abnormal behavior until it has demonstrated normal behavior or will be euthanized if its condition deteriorates. Once normal behavior has been demonstrated, the snake will be released.

8. Protocol [REDACTED]

“ [REDACTED] ”

Departure: The Guide (pg. 74) states “emergency veterinary care must be available after work hours, on weekends, and on holidays.”

Due to the remote location of the field studies, veterinary care is not available for wild frogs. Instead, frogs will be monitored for signs of illness, injury, or abnormal behavior until it has demonstrated normal behavior or will be euthanized if its condition deteriorates. Once normal behavior has been demonstrated, the frog will be released.

9. Protocol [REDACTED]

“ [REDACTED] ”

Departure: The Guide (pg. 74) states “emergency veterinary care must be available after work hours, on weekends, and on holidays.”

Due to the remote location of the field studies, veterinary care is not available for wild salamanders. Instead, salamanders will be monitored for signs of illness, injury, or abnormal behavior until it has demonstrated normal behavior or will be euthanized if its condition deteriorates. Once normal behavior has been demonstrated, the salamander will be released.

10. Protocol [REDACTED]

“ [REDACTED] ”

Departure: The Guide (pg. 74) states “emergency veterinary care must be available after work hours, on weekends, and on holidays.”

Due to the remote location of the field work, veterinary care is not available for wild amphibians or reptiles. Instead, amphibians and reptiles will be monitored for signs of illness, injury, or abnormal behavior until it has demonstrated normal behavior or will be euthanized if its condition deteriorates. Once normal behavior has been demonstrated, the animal will be released.

11. Protocol [REDACTED]

“ [REDACTED] ”

Departure: The Guide (pg. 74) states “emergency veterinary care must be available after work hours, on weekends, and on holidays.”

Due to the remote location of the field work, veterinary care is not available for wild amphibians or reptiles. Instead, amphibians and reptiles will be monitored for signs of illness, injury, or abnormal behavior until it has demonstrated normal behavior or will be euthanized if its condition deteriorates. Once normal behavior has been demonstrated, the animal will be released.

12. Protocol [REDACTED]

“ [REDACTED] ”

Departure: The Guide (pg. 74) states “emergency veterinary care must be available after work hours, on weekends, and on holidays.”

Due to the remote location of the field studies, veterinary care is not available for wild frogs. Instead, frogs will be monitored for signs of illness, injury, or abnormal behavior until it has demonstrated normal behavior or will be euthanized if its condition deteriorates. Once normal behavior has been demonstrated, the frog will be released.

13. Protocol [REDACTED]

“ [REDACTED] ”

Departure: The Guide (pg. 74) states "emergency veterinary care must be available after work hours, on weekends, and on holidays."

Due to the remote location of the field studies, veterinary care is not available for wild amphibians. Instead, amphibians will be monitored for signs of illness, injury, or abnormal behavior until it has demonstrated normal behavior or will be euthanized if its condition deteriorates. Once normal behavior has been demonstrated, the amphibian will be released.

14. Protocol [REDACTED]

"[REDACTED]"

Departure: The Guide (pg. 74) states "emergency veterinary care must be available after work hours, on weekends, and on holidays."

Due to the remote location of the field studies, veterinary care is not available for wild frogs. Instead, frogs will be monitored for signs of illness, injury, or abnormal behavior until it has either demonstrated normal behavior or will be euthanized if its condition deteriorates. Once normal behavior has been demonstrated, the animal will be released.

15. Protocol [REDACTED]

"[REDACTED]"

Departure: The Guide (pg. 74) states "emergency veterinary care must be available after work hours, on weekends, and on holidays."

Due to the remote location of the field studies, veterinary care is not available for wild fish. Instead, fish will be monitored for signs of illness, injury, or abnormal behavior until it has demonstrated normal behavior or will be euthanized if its condition deteriorates. Once normal behavior has been demonstrated, the fish will be released.

16. Protocol [REDACTED]

"[REDACTED]"

Departure: The Guide (pg. 74) states "emergency veterinary care must be available after work hours, on weekends, and on holidays."

Due to the remote location of the field station, veterinary care is not available for wild fish. Instead, fish will be monitored for signs of illness, injury, or abnormal behavior until it has demonstrated normal behavior or will be euthanized if its condition deteriorates. Once normal behavior has been demonstrated, the fish will be released.

17. Protocol [REDACTED]

"[REDACTED]"

Departure: The Guide (pg. 74) states "emergency veterinary care must be available after work hours, on weekends, and on holidays."

Due to the remote location of the field work, veterinary care is not available for wild fish. Instead, fish will be monitored for signs of illness, injury, or abnormal behavior until it has demonstrated normal behavior or will be euthanized if its condition deteriorates. Once normal behavior has been demonstrated, the fish will be released.

18. Protocol [REDACTED]

"[REDACTED]"

Departure: The Guide (pg. 74) states "emergency veterinary care must be available after work hours, on weekends, and on holidays."

Due to the remote location of the field work, veterinary care is not available for wild fish. Instead, fish will be monitored for signs of illness, injury, or abnormal behavior until it has demonstrated normal behavior or will be euthanized if its condition deteriorates. Once normal behavior has been demonstrated, the fish will be released.

19. Protocol [REDACTED]

"[REDACTED]"

Departure: The Guide (pg. 74) states "emergency veterinary care must be available after work hours, on weekends, and on holidays."

Due to the remote location of the field work, veterinary care is not available for wild fish. Instead, fish will be monitored for signs of illness, injury, or abnormal behavior until it has demonstrated normal

behavior or will be euthanized if its condition deteriorates. Once normal behavior has been demonstrated, the fish will be released.

Departure: The Guide (pg. 34) states "Both the Health Research Extension Act and the AWA require the IACUC to inspect animal care and use facilities, including sites used for animal surgeries, every 6 months."

Due to the remote location of the field station, the IACUC will not be able to semiannually inspect the animal housing facilities.

20. Protocol [REDACTED]

"[REDACTED]"

Departure: The Guide (pg. 74) states "emergency veterinary care must be available after work hours, on weekends, and on holidays."

Due to the remote location of the field work, veterinary care is not available for wild fish. Instead any fish in distress will be released and monitored until it has either demonstrated normal behavior or will be euthanized if its condition deteriorates. Once normal behavior has been demonstrated, the animal will be released.

21. Protocol [REDACTED]

"[REDACTED]"

Departure: The Guide (pg. 74) states "emergency veterinary care must be available after work hours, on weekends, and on holidays."

Due to the remote location of the field work, veterinary care is not available for wild fish. Instead, fish will be monitored for signs of illness, injury, or abnormal behavior until it has demonstrated normal behavior or will be euthanized if its condition deteriorates. Once normal behavior has been demonstrated, the fish will be released.

Departure: The Guide (pg. 34) states "Both the Health Research Extension Act and the AWA require the IACUC to inspect animal care and use facilities, including sites used for animal surgeries, every 6 months."

Due to the remote location of the field station, the IACUC will not be able to semiannually inspect the animal housing facilities.

22. Protocol [REDACTED]

"[REDACTED]"

Departure: The Guide (pg. 74) states "emergency veterinary care must be available after work hours, on weekends, and on holidays."

Due to the remote location of the field work, veterinary care is not available for wild fish. Instead, fish will be monitored for signs of illness, injury, or abnormal behavior until it has demonstrated normal behavior or will be euthanized if its condition deteriorates. Once normal behavior has been demonstrated, the fish will be released.

Departure: The Guide (pg. 34) states "Both the Health Research Extension Act and the AWA require the IACUC to inspect animal care and use facilities, including sites used for animal surgeries, every 6 months."

Due to the remote location of the field station, the IACUC will not be able to semiannually inspect the animal housing facilities.

Departure: The Guide (pg. 106) states "the AV should provide guidance and oversight to surgery programs and perioperative care involving animals."

Due to the remote location of the field station, the AV will not be able to provide oversight for survival surgeries, including proficiency evaluations.

23. Protocol [REDACTED]

"[REDACTED]"

Departure: The Guide (pg. 74) states "emergency veterinary care must be available after work hours, on weekends, and on holidays."

Due to the remote location of the field work, veterinary care is not available for wild fish. Instead, fish

will be monitored for signs of illness, injury, or abnormal behavior until it has demonstrated normal behavior or will be euthanized if its condition deteriorates. Once normal behavior has been demonstrated, the fish will be released.



INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE

Santa Barbara, CA 93106-5062  
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MEMORANDUM

TO: Dr. Joseph Incandela, Vice Chancellor for Research  
Institutional Official

CC: [REDACTED]

FROM: UCSB INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE (IACUC)

SUBJECT: Semiannual Animal Care and Use Program Review, Spring 2018

DATE: 6/15/2018

The IACUC conducted a semiannual review of the UCSB animal care program as directed by the Public Health Services Policy and the Animal Welfare Act Regulations. In accordance with these Federal regulations and our assurance agreement with Federal granting agencies, the IACUC is required to report any areas of concern or deficiencies and to oversee corrective actions. **We are pleased to report that we did not find any areas of concern or deficiencies with the animal care program.** Please acknowledge receipt of this report by responding to the IACUC within 14 days of this notice. You may return your response via email to iacuc@lifesci.ucsb.edu. If you have any questions, please contact the IACUC Office.

For the Committee,

[REDACTED], [REDACTED]



# SEMIANNUAL FACILITY INSPECTION REPORT

Inspection Date: 4/18/2018

Facility Type: Animal Holding Facility

IACUC Members in Attendance: 002 020

Building & Room	Finding & Correction Plan	PI Response & Outcome	Covered Species	Deficiency	Correct By
<div></div> <div></div>	<p>In a covered cage the lab uses to hold its supplies in this room, multiple expired vacutainers were found.</p> <p>Remove from the room supplies and properly dispose of the expired vacutainers. Establish and maintain a procedure for identifying and removing expired medical materials from the surgery area.</p>	<p>From Post Doc on 4/26/18: I have removed and disposed of the expired bag of BD SST microtainer tubes (06/2017) in [REDACTED].</p> <p>As a procedure for identifying and removing expired medical materials from the surgery area, I will take an inventory on the 1st of each month, making sure to remove any expired collection tubes and/or reagents.</p>	No	Minor	5/16/2018
<div></div> <div></div>	<p>In the locked controlled substances drawer, a bottle of Ketaved was found that expired in March 2018.</p> <p>Properly dispose of any expired bottles of ketaved. Ensure that only non-expired drugs will be used on live animals.</p>	<p>From PI on 4/26/18: we will dispose of the ketamine properly, documenting its destruction with DEA [form] 41. The ARC has not needed to use this drug on any animals since well before the expiry date.</p>	No	Minor	5/16/2018
<div></div> <div></div>	<div></div> <p>Ensure that lab personnel understand the importance of signing off on the post-operative log and are properly re-trained.</p>	<p>From PI on 5/2/18: My laboratory has worked with the IACUC to resolve the issue pertaining to the "incomplete" post-operative log. The logs were not properly dated nor were they initialed. These deficits have now been corrected by my graduate student working with the rats in question. I have reviewed with my entire laboratory the importance of properly completing the surgery and post-operative logs and I will randomly inspect my laboratory's logs to ensure compliance.</p>	No	Minor	5/17/2018
<div></div> <div></div>	<p>While preparing a recently euthanized rat for a transcardial perfusion procedure, the TA mentioned that the scissors being used to make the incisions were difficult to use because they were not sharp enough.</p> <p>Either replace the scissors used in the student lab with a sharper pair or have the scissors professionally sharpened, prior to performing another transcardial perfusion.</p>	<p>From PI on 5/16/18: We will purchase a new pair of large scissors to facilitate the perfusion.</p>	No	Minor	6/5/2018

# SEMIANNUAL FACILITY INSPECTION REPORT

Inspection Date: 5/15/2018

Facility Type: Animal Procedure Area

IACUC Members in Attendance: 020

Building & Room	Finding & Correction Plan	PI Response & Outcome	Covered		
			Species	Deficiency	Correct By
<div></div> <div></div>	<div>During the inspection of a class section, one of this lab's research assistants was observed wearing open-toed shoes while restraining a rat for injection.</div> <div>Remind all personnel that long pants and closed-toe shoes are required in all animal procedure spaces and have them review the UCSB IACUC Guideline for Minimum Requirements for Personal Protective Equipment When Working with Research Animals.</div>	<div>From PI on 5/17/18: I have communicated directly with the personnel involved as well as reminded all of my lab personnel that proper PPE must be worn at all times when working with animals. I will also bring this up during our next lab meeting.</div>	<div>No</div>	<div>Minor</div>	<div>6/6/2018</div>