

SEMIANNUAL REPORT

ANIMAL CARE AND USE  
PROGRAM REVIEW AND FACILITY INSPECTION  
OF THE

NIDDK

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October 2019

**Section A – Site Visits & Program Review**

- 1) Inspections of the NIDDK animal facilities (AF), satellite holding facilities (SF), USDA-defined study areas for regulated species (SA) and areas where any surgical manipulations (Surg) are performed (as applicable) were conducted as indicated below:

Location	Type	Date	ACUC Members	
Redacted by agreement	AF	9/18/2019	Redacted by agreement	St Claire
	SF	9/18/2019		St Claire
	SF	9/18/2019		St Claire
	AF	9/20/2019	Redacted by agreement	St Claire
	AF	9/20/2019		St Claire

- 2) Visits by at least one member of the ACUC to all remaining areas where animal activities were performed were conducted. These visits occurred during the previous six months and findings and corrective actions are described in this or the previous semiannual report.
- 3) The following document(s) was/were used as the basis for review of the animal care and use program:
- 4) The program review was conducted in the following manner:

	Program Review Process
✓	Full committee member review for <i>ALL</i> of the review, i.e. the documents/resources listed in A3) are included in the meeting packet and reviewed at a fully convened meeting
	Full committee and subcommittee review, i.e. the documents/resources listed in A3) are assigned to various members who review their parts/sections and then they discuss their reviews with the full committee for a final review/approval
	Designated member review, i.e. the documents/resources listed in A3) are assigned to various members who review their parts/sections and then report back to the full committee the results of their designated review
	Other, please describe:

**Section B – Regulatory Compliance:**

Except as noted in Section F below, the facilities and program are in full compliance with the Public Health Service Policy, the Animal Welfare Act Regulations and the Guide, which were

used as the basis for this evaluation.

### **Section C – Program Changes:**

The following administrative and procedural changes have occurred since the program was last evaluated

#### **1) Administrative/Procedural Changes: N/A**

#### **2) Key Personnel Changes - ACUC Chair, ACUC Attending Vet, APD, or Program Manager:**

Role (ACUC Chair, ACUC AV, IC APD, or IC Animal Program Manager)	Name	Action (joined or departed)
N/A	N/A	N/A

#### **3) Animal Facility/Area Changes: N/A**

Facility Type (AF/SF)	Location	Action (opened, closed, under renovation, etc.)
N/A	N/A	N/A

### **Section D – Guide Departures & USDA Exceptions:**

Departures from the standards of the *Guide* and exceptions to the USDA *Animal Welfare Act Regulations*, which have been approved by the Animal Care and Use Committee, include the following:

#### **1. Departures from the Guide:**

<b>Guide Departures</b>	<b>Justification (scientific, veterinary, or animal welfare)</b>
<i>Extended staples removal past 10 days</i>	<i>Scientific-To reduce stress and risk of abortion after embryo transplantation</i>
<i>Holding mice for up to 7 days at 39.20 F</i>	<i>Scientific-To study brown fat metabolism</i>
<i>Extended cage changing frequency 2 weeks or up to 3 weeks.</i>	<i>Veterinary-Only to be activated in the case of an emergency or disaster circumstance that disrupts supplies or staff being able to provide full services</i>

#### **2. Exceptions to the AWAR:**

<b>Species</b>	<b>9CFR title/section</b>	<b>Description and Rationale</b>
N/A	N/A	N/A

### **Section E – Previous Deficiencies & Plans:**

The committee validated that the plans and schedules for deficiencies noted during the previous **NIDDK** program review, and facilities and laboratory inspections were achieved within the time intervals projected on the previous semiannual report.

**Section F – Current Deficiencies & Plans:**

Deficiencies found *over the past 6 months* during NIDDK program review, facility inspections, and laboratory inspections, are as follows:

	Deficiency	<sup>1</sup> M/S	Location	Correction Plan	Responsible Party	Scheduled Completion Date (mm/dd/yy)	<sup>2</sup> Status: C/P
1	Open bottle of saline	M	Redacted by agreement	Remove and replace	Animal Facility Staff	10/30/2019	C
2	Tubes not labeled with drug name or expiration date	M		Remove and replace	Animal Facility Staff	10/30/2019	C
3	No beginning weight on charcoal canister	M		Weigh charcoal canister	Animal Facility Staff	10/30/2019	C
4	Down Draft table needs to be checked past due	M		Contact Safety to check	Veterinary Staff	10/30/ 2019	C
4	Expired eye drops			Removed bottles	Animal Facility Staff	10/30/2019	C
5	Down draft table past due for safety check	M		Contact safety to check	Veterinary Staff	10/30/2019	C
6	Down draft table past due for safety check	M		Contact safety to check	Veterinary Staff	10/30/2019	C

<sup>1</sup>M=minor; S=significant<sup>2</sup>C=corrected; P=pending**Section G – Reportable Events:**

PHS Policy (i.e. OLAW) reportable events that occurred in the last 6 months or that are still awaiting final disposition are as follows:

SA 1 <sup>st</sup> noted	Description of event	Status
	Failure to follow correct surgical procedures	Letter to OLAW
	Failure to replace feed after weighing of feed	Letter to OLAW

**Section H – Shared & Central Facilities:**

This semiannual report also encompasses review and oversight of animals and animal activities which were present or occurred in shared or central facilities. Deficiencies were noted and transmitted directly to the facility, and if necessary, to the responsible Animal Care and Use Committee. These reviews were conducted as indicated below:

Building	Date	ACUC Members
Redacted by agreement	10/25/2019	Redacted by [redacted] St Claire
	9/19/2019	Redacted by [redacted] Noguchi, [redacted] St Claire
	9/17/2019	Redacted by [redacted] St. Claire
	9/19/2019	Redacted by [redacted] St Claire
	9/19/2019	Redacted by agreement St Claire
	9/16/2019	Redacted by agreement St Claire
	9/20/2019	Redacted by [redacted] St. Claire, [redacted] [redacted] agreement
	9/19/2019	Redacted by [redacted] St. Claire

### **Section I – Minority Report**

There is not a minority report filed with this semiannual report.

**NIDDK ACUC Member Signatures:**

Connie Noguchi

Digitally signed by Connie Noguchi  
Date: 2019.10.28 10:17:41 -04'00'

Constance T. Noguchi, Ph.D., Chair

Redacted by agreement

Redacted by agreement

Mark B. Foster St  
Claire -S

Digitally signed by Mark B. Foster  
St Claire -S  
Date: 2019.10.28 09:44:07 -04'00'

Mark B. St. Claire, D.V.M.,  
Attending Veterinarian

**(Revised - 09/2019)**

Assurance#: A-4149-01

Date: October 31, 2019

## Institutional Animal Care &amp; Use Committee Roster

Member Name	Degree/Credentials	Position Title	PHS Policy Membership Role	New Member
Constance T. Noguchi	PhD	Section Chief	Chair	<input type="checkbox"/>
Mark B Foster St Claire	DVM, MS, DACLAM	Animal Program Director	Attending Veterinarian	<input type="checkbox"/>
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ACUC Chair Mailing Address &amp; Phone #:

Redacted by agreement

Attending Vet Phone #:

Redacted by agreement

**NATIONAL INSTITUTES OF HEALTH**  
**Facilities and Animal Species Inventory Table**  
**Assurance Number: A-4149-01**

**IC Name:** National Institute of Diabetes and Digestive and Kidney Diseases

**Fall Semiannual Report Submission Date: October 31, 2019**

Spring Program Review Date(s):	4/17/19					
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Fall Program Review Date(s):	10/31/19					
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Bldg/Area/Rm	Facility Insp. Date(s) Spring / Fall		AF/SF; Gross Sq. Ft.	Species Housed			Average Daily Inventory		
Redacted by agreement	9/18/2019		AF,3700	1 mouse	2 Rat	3 frog	1 2,843	2 22	3 2
				4	5	6	4	5	6
	9/20/2019		AF, 1200	1 mouse	2	3	1 1,149	2	3
				4	5	6	4	5	6
	9/20/2019		AF, 800	1 mouse	2	3	1 1,981	2	3
				4	5	6	4	5	6
	9/18/2019		SF,600	1	2	3	1 20	2	3
				4	5	6	4	5	6
	9/18/2019		SF240	1 mouse	2	3	1 12	2	3
				4	5	6	4	5	6

## Semiannual Report Attachment 3 Supplemental Information Fall 2019

**Instructions:** Submit the following information with your Fall 2019 Semiannual Report as a separate file called IC SI F19.

**NOTE: *Guide* Exceptions (new addition to IC REP S19, section D):** a new column has been added asking for the *Guide* citation for Exceptions (*Guide* chapter, section, and page number).

### 1. Number of approved Animal Study Proposals (ASPs) as of 31 October 2019:

Provide the total number of active/approved ASPs as of the 31 October 2019 cutoff date.

58

### 2. Performance standards:

Provide a description of ACUC approved performance standards. For additional information and examples, see the “Guide Departures & Performance Standards” document developed by OACU.

As for deviation from the Guide, the ACUC has approved a cold adaptation protocol which includes gradual reduction of Ta to 39.2° F(4°C) for 7 days in the metabolic chambers.

Animals utilize multiple mechanisms to adapt to cold, including formation of thermogenically active brown fat-like cells, called beige, within white fat depots in response to chronic cold exposure. Brown and beige fat depots have been recently found in adult people but in much smaller quantities than in rodents. It has been proposed that induction of beige/brown adipocyte differentiation and pharmacological activation of these cells will increase energy expenditure in people and might be used as a therapy for treatment of obesity. Since beiging of fat occurs only during chronic cold exposure, to study the underlying mechanisms mice are exposed to cold for a week (Cohen et al. Cell 156, 304-316, 2014; Kong et al Cell 158, 69-83, 2014). For these experiments only mice which can maintain body temperature during acute cold tolerance test are maintained at 4C. The mice are EW implanted with e-mitters and temperature is monitored on the individual mice and gradually adapted to cold by reducing environmental temperature by 2°C/day (20°C-18°C-14°C-12°C-10°C-8°C until 4C). **Guide: Chapter 3,Environment, Housing and Management page 43.**