

SEMIANNUAL REPORT

ANIMAL CARE AND USE
PROGRAM REVIEW AND FACILITY INSPECTION
OF THE

NIDDK

April 2020

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	3/05/2020	Redacted by agreement	St Claire
	SF	3/05/2020		St Claire
	SF	3/05/2020		St Claire
	AF	3/05/2020		St Claire
	AF	3/05/2020		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:

Guide Departures	Justification (scientific, veterinary, or animal welfare)
<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:

Species	9CFR title/section	Description and Rationale
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	¹ M/S	Location	Correction Plan	Responsible Party	Scheduled Completion Date (mm/dd/yy)	² Status: C/P
1	(b)(5)						

¹M=minor; S=significant²C=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 st noted	Description of event	Status
	Failure to amend ASP for injection of chemical in mice	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	3/05/2020	Redacted by agreement (approved as ad hoc qualified inspector)
	2/25/2020	Redacted by agreement (approved as ad hoc qualified inspector)
	2/26/2020	Redacted by agreement approved as ad hoc qualified inspector
	2/26/2020	Redacted by agreement (approved as ad hoc qualified inspector)
	2/26/2020	Redacted by agreement (approved as ad hoc qualified inspector)
	12/06/19	Redacted by agreement approved as ad hoc qualified inspector

Section I – Minority Report

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

NIDDK ACUC Member Signatures:

Constance T.
Noguchi -S

Digitally signed by Constance T.
Noguchi -S
Date: 2020.04.20 12:58:53 -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: 2020.04.20 07:57:24 -04'00'

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

(Revised - 09/2019)

Semiannual Report Attachment 3

Supplemental Information

Spring 2020

Instructions: Submit the following information with your Spring 2020 Semiannual Report as a separate file called IC SI S20.

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 39.2o F(4oC) 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 2oC/day (20oC-18oC-14oC-12oC-10oC-8oC until 4C). Guide: Chapter 3,Environment, Housing and Management page 43.

Veterinary Verification & Consultation:

If your IC has a VVC policy, please include a copy with your semiannual report submission. Attached

Animal Adoption:

If applicable, please provide the number of animals adopted from your IC by species.

If your IC has an adoption policy, please include a copy with your semiannual report submission.

n/a

April 30, 2020

Assurance#: A-4149-01

Date:

4/30/2020

Institutional Animal Care & 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"/>
Redacted by agreement				<input type="checkbox"/>
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ACUC Chair Mailing Address & 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

Spring Semiannual Report Submission Date: April 30, 2020

Spring Program Review Date(s):	4/15/20					
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Fall Program Review Date(s):						
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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	3/05/2020		AF,3700	1 mouse	2 Rat	3	1 2,843	2 20	3
				4	5	6	4	5	6
	3/05/2020		AF, 1200	1 mouse	2	3	1 1,149	2	3
				4	5	6	4	5	6
	3/05/2020		AF, 800	1 mouse	2	3	1 1,981	2	3
				4	5	6	4	5	6
	3/05/2020		SF,600	1	2	3	1 20	2	3
				4	5	6	4	5	6
	3/05/2020		SF240	1 mouse	2	3	1 12	2	3
				4	5	6	4	5	6

NIDDK Lab Visits - attachment 2
Spring/Fall 2020 Survival Procedures

[illegible]

Spring/Fall 2019 Survival Procedures

[illegible]