According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB control number. The valid OMB control numbers for this information collection are 0579-0036 and 0579-0486. The time required to complete this information collection is estimated to average 2 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

OMB APPROVED 0579-0036, 0579-0486

This report is required by law (7 U.S.C. 2143 and 9 C.F.R. § 2.36). Failure to report according to the regulations can result in an order to cease and desist.

Interagency Report Control No. 0180-DOA-AN

Fiscal Year: 2024

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE

ANNUAL REPORT OF RESEARCH FACILITY

(TYPE OR PRINT)

Customer Number:

1. REGISTRATION NUMBER:

52-R-0124 493

2. HEADQUARTERS RESEARCH FACILITY (Name and Address, as registered with USDA, include 7/D Code)

Virginia Commonwealth University (Box 980568) 800 East Leigh Street Biotech One Suite 3000 Richmond, VA 23298

Telephone: (804)828-6587

3. REPORTING FACILITY (List all locations where animals were housed or used in actual research, testing, teaching, or experimentation, or held for these purposes. Attach additional sheets if necessary.)

FACILITY LOCATIONS (Sites) See Attached Listing

Building 1

				sary or use APHIS FORM 7023A.)	
A. Animals Covered By The Animal Welfare Regulations	B. Number of animals being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not yet used for such purposes.	C. Number of animals upon which teaching, research, experiments, or tests were conducted involving no pain, distress, or use of pain-relieving drugs.	D. Number of animals upon which experiments, teaching, research, surgery, or tests were conducted involving accompanying pain or distress to the animals and for which appropriate anesthetic, analgesic, or tranquilizing drugs were used.	E. Number of animals upon which teaching, experiments, research, surgery, or tests were conducted involving accompanying pain or distress to the animals and for which the use of appropriate anesthetic, analgesic, or tranquilizing drugs would have adversely affected the procedures, results, or interpretation of the teaching, research, experiments, surgery, or tests. (An explanation of the procedures producing pain or distress on these animals and the reasons such drugs were not used must be attached to this report.)	F. TOTAL NUMBER OF ANIMALS (Cols. C + D + E)
4. Dogs					
5. Cats					
6. Guinea Pigs	0	6	0	0	6
7. Hamsters					
8. Rabbits	0	0	191	0	191
9. Non-human Primates					
10. Sheep					
11. Pigs	0	0	20	0	20
12. Other Farm Animals					
13. Birds					
14. Other Mammals					
Peromyscus californicus	35	11	0	252	263
ASSURANCE STATEMENT					

ASSURANCE STATEMENTS

- 1.) Professionally acceptable standards governing the care, treatment, and use of animals, including appropriate use of anesthetic, analgesic, and tranquilizing drugs, prior to, during, and following actual research, teaching, testing, surgery, or experimentation were followed by this research facility.
- 2.) Each principal investigator has considered alternatives to painful procedures.
- 3.) This facility is adhering to the standards and regulations under the Act, and it has required that exceptions to the standards and regulations be specified and explained by the principal investigator and approved by the Institutional Animal Care and Use Committee (IACUC). A summary of all such exceptions is attached to this annual report. In addition to identifying the IACUC approved exceptions, this summary includes a brief explanation of the exceptions, as well as the species and number of animals affected.
- 4.) The attending veterinarian for this research facility has appropriate authority to ensure the provisions of adequate veterinary care and to oversee the adequacy of other aspects of animal care and use.

CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL

(Chief Executive Officer (C.E.O.) or Legally Responsible Institutional Official (I.O.))

NAME AND TITLE OF C.E.O. OR I.O. (Type or Print)

I certify that the above is true, correct, and complete (7 U.S.C. Section 2143).

11/21/2024

DATE SIGNED

SIGNATUR	D5cWSlgned·by:	
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APHIS Form 7023 Site Addendum for FY: 2024

Registration Number: 52-R-0124

Customer ID Number: 493

Facility Business Address Information: Virginia Commonwealth University (Box 980568)800 East Leigh Street Biotech One Suite 3000,

Richmond, VA 23298

Telephone: (804)828-6587

Facilities Site(s) Address Information: 1101 E. Marshall Street, Richmond, VA 23298-5008

Site Codes: Building 1

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0579-0036. The time required to complete this information collection is estimated to average .5 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

OMB APPROVED 0579-0036 Interagency Report Control No. 0180-DOA-AN

Fiscal year: 2024

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Annual Report of Research Facility Column E Explanation

(TYPE OR PRINT)

This information is required by law (7 U.S.C. 2143 and 9 C.F.R. §2.36).	Failure to report according to the regulations can result in an order to
cease an	nd desist.

1. REGISTRATION NUMBER 52-R-0124	2. Research Facility Headquarters address Virginia Commonwealth University (Box 980568) 800 East Leigh Street Biotech One Suite 3000 Richmond, VA 23298			
3. Number of animals used in the study. 252	4. Species (common name) of animals used in the study. Peromyscus californicus			

- 5. Explain the procedure producing pain and distress.
 - a) Mice are separated from their bonded mate for 10 days.
 - b) Animals are euthanized without the assistance of anesthetics or analgesics via rapid decapitation by trained and experienced animal researchers.
- 6. Provide the scientific justification for not providing the appropriate anesthetics, analgesics, or tranquilizing drugs during procedures where the animal experienced accompanying pain or distress greater than momentary or slight.
- a) The central hypothesis of the study is that social bond disruption alters mitochondrial metabolism and immune function. Therefore, separation from the bonded mate is essential to the study. Neither anesthetics nor analgesics could be applied for the 10 days of separation without compromising the integrity of the study.
- b) The primary outcome of the research is to study mitochondrial function which is impacted by the use of anesthetic drugs at the time of tissue collection. As such, use of these drugs would compromise the research outcomes and limit interpretability.
- 7. What, if any, Federal regulations require this procedure? Cite the agency, the Code of Federal Regulations (CFR) title number, and the specific section number (e.g., APHIS, 9 CFR 113, 102):

NA

Agency	CFR