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 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

This report is required by law (7 U.S.C. 2143). Failure to report according to the regulations can result in an order to cease and desist and to be subject to penalties as provided for in Section 2150.

Interagency Report Control No. 0180-DOA-AN

Fiscal Year: 2009

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE

ANNUAL REPORT OF RESEARCH FACILITY

(TYPE OR PRINT)

REGISTRATION NUMBER: 23-R-0088

Customer Number: 350

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

Monell Chemical Senses Center 3500 Market Street Philadelphia, PA 19104

Telephone: (215) 519 4710

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

(b)(2)High, (b)(7)f

A.  Animals Covered By The Animal Welfare Regulations	B.  Number of animals being bred, conditioned, or held for use in leaching, 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.)	TOTAL NUMBER OF ANIMALS (Cols. C + D + E)
4. Dogs	N/A	N/A	N/A	N/A	N/A
5. Cats	N/A	N/A	N/A	N/A	N/A
6. Guinea Pigs	N/A	N/A	N/A	N/A	N/A
7. Hamsters	N/A	N/A	N/A	N/A	N/A
8. Rabbits	N/A	N/A	N/A	N/A	N/A
9. Non-human Primates	N/A	N/A	N/A	N/A	N/A
10. Sheep	N/A	N/A	N/A	N/A	N/A
11. Pigs	N/A	N/A	N/A	N/A	N/A
12. Other Farm Animals	N/A	N/A	N/A	N/A	N/A
13. Other Animals					
House Musk	0	0	90	164	254
Shrew					

## 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.))   certify that the above is true, correct, and complete (7 U.S.C. Saction 2143).	
SIGNATUR	I was the tricere on to the seal	DATE SIGNED
	(b)(6), (b)(7)c	11/25/09
	(b)(6), (b)(7)c	

APHIS FORM / UZ3 AUG 2009



## Column E Explanation

This form is intended as an aid to completing the Column E explanation. It is not an official form and its use is voluntary. Names, addresses, protocols, veterinary care programs, and the like, are not required as part of an Explanation. A Column E explanation must be written so as to be understood by lay persons as well as scientists.

- 1 Registration Number: 23-R-0088
- 2. Number 164 of animals used in this study.
- 3. Species (common name) House Musk Shrews of animals used in the study.
- 4. Explain the procedure producing pain and/or distress.

Shrews (~30 g, adults) were tested with cisplatin and nicotine to induce vomiting. These agents are injected intraperitoneally or subcutaneously. Although emesis is an uncomfortable experience, the emetic responses to visceral toxins in this species are not constant. For example, with a chemotherapy agent, like cisplatin, emesis is produced at a frequency of ~15 times over four hours and with nicotine ~20 times over 30 minutes.

Provide scientific justification why pain and/or distress could not relieved. State methods or means used to determine that pain and/or distress relief would interfere with test results. (For Federally mandated testing, see item 6 below)

Although emesis is an uncomfortable experience, the emetic responses in this species are not constant and are not associated with vocalizations, a frequent sign of pain and distress in this species. Anesthetics and analgesics interfere with the neural circuitry of the emetic responses and are not used in these experiments because this would make the data impossible to interpret. For example, opioids have suppressive and stimulatory effects on the emetic circuitry and anesthetics lead to a general decrease in neural activity and behavioral responses.

6. 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):