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. Interagency Report Control No. 0180-DOA-AN

OMB APPROVED 0579-0036

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.

REGISTRATION NUMBER: 14-R-0022

Fiscal Year. 2009

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Customer Number: 119

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

ANNUAL REPORT OF RESEARCH FACILITY

Massachusetts Eye And Ear Infirmary 243 Charles Street Boston, MA 02114

Telephone: (617) 573 3178

(TYPE OR PRINT)

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

FACILITY LOCATIONS (Sites) See Attached Listing

243 Charles Street, (b)(2)High, (b)(7)f Boston, MA

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.)	TOTAL NUMBER OF ANIMALS (Cols. C + D + E)
4. Dogs					0
5. Cats			15		15
6. Guinea Pigs	4		202		206
7. Hamsters			26		26
8. Rabbits			30	4	34
9. Non-human Primates	2		8		10
10. Sheep					0
11. Pigs					0
12. Other Farm Animals			*		0
13. Other Animals					
Chinchillas	4		6		10
Nile Rats	4	6			10
N. N.					

## ASSURANCE STATEMENTS

- 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.
- Each principal investigator has considered alternatives to painful procedures.
- 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 3.) and approved by the Inetitutional 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.
- 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.J.) Lordify that the above is true, correct, and complete (7 U.S.C. Section 2143).	
SIC	1	DATE SIGNED
	(b)(6), (b)(7)c	11/2/1/9
AP Comm roza		7 (/

EC 12-3-0°

## **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.

	Registration Number: 14-R-0022
2	Number of animals used in this study.
3	Species (common name) Rabbit of animals used in the study.
4	Explain the procedure producing pain and/or distress.  Electrical activity of neurons in the inferior colliculus is measured longitudinally in awake, conscious rabbits. The animal's torso is restrained during measurements for two hours using a Velcro jacket and the head is fixed into position by means of a brass head post which has been previously (30days) surgically implanted. Following head post placement (30day) a craniotomy is performed and sealed to allow for the future placement of an electrode. Although the animal is given anesthesia as well as analgesia for the surgical preparations (head post, craniotomy), is trained to accept the restraint procedure during neuronal recordings, and a local anesthetic is used when the electrodes are positioned, the potential for distress is unavoidable during restraint and repeated measurements.
5	Provide scientific justification why pain and/or distress could not be 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)  There is no alternative to performing neuronal measurements in an awake animal without withholding agents that would sedate or tranquilize them. The animals acclimatize well to the restraint and electrode measurement procedures and do not appear distressed nor uncomfortable during and after repeated measurements.
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):
	AgencyCFR

## SUMMARY OF EXCEPTION TO ANIMAL WELFARE ACT (AWA) STANDARDS

The Animal Care Committee of the Massachusetts Eye & Ear Infirmary has approved an exception to AWA standards for two protocols involving water restriction in rhesus monkeys. Three rhesus monkeys are water restricted four days a week (Tuesday to Friday) where water is given as a reward during daily behavioral training sessions. The animals are provided with free access to water *ad libitum* on the remaining three days (Friday evening to Monday afternoon). Animals on water restriction are weighed daily.