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|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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. |  | <b>OMB APPROVED</b><br>0579-0036<br>Exp.: 10/31/2018                                                                                                                                                                               |
| 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<br>No. 0180-DOA-AN                                                                                                                                                                                      |
| <b>UNITED STATES DEPARTMENT OF AGRICULTURE</b><br><b>ANIMAL AND PLANT HEALTH INSPECTION SERVICE</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  | <b>1. REGISTRATION NUMBER</b><br>14-R-0018                                                                                                                                                                                         |
| <b>ANNUAL REPORT OF RESEARCH FACILITY</b><br>(TYPE OR PRINT)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  | <b>2. HEADQUARTERS RESEARCH FACILITY</b> (Name, address, and telephone number as registered with USDA, include ZIP Code)<br><br>MASSACHUSETTS INSTITUTE OF TECHNOLOGY<br>77 MASSACHUSETTS AVENUE, 3-234<br><br>CAMBRIDGE, MA 02139 |
| <b>3. REPORTING FACILITY</b> (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)**

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**REPORT OF ANIMALS USED BY OR UNDER CONTROL OF RESEARCH FACILITY** (Attach additional sheets, if necessary, or use APHIS FORM 7023A.)

| A.<br><br>Animals Covered By<br>The Animal<br>Welfare Regulations | B.<br><br>Number of animals<br>being bred,<br>conditioned, or held<br>for use in teaching,<br>testing, experiments,<br>research, or surgery<br>but not yet used for<br>such purposes. | C.<br><br>Number of animals<br>upon which<br>teaching, research,<br>experiments, or<br>tests were<br>conducted involving<br>no pain, distress, or<br>use of pain-relieving<br>drugs. | D.<br><br>Number of animals upon<br>which experiments,<br>teaching, research,<br>surgery, or tests were<br>conducted involving<br>accompanying pain or<br>distress to the animals<br>and for which<br>appropriate anesthetic,<br>analgesic, or<br>tranquilizing drugs were<br>used. | E.<br><br>Number of animals upon which teaching,<br>experiments, research, surgery, or tests were<br>conducted involving accompanying pain or<br>distress to the animals and for which the use of<br>appropriate anesthetic, analgesic, or<br>tranquilizing drugs would have adversely<br>affected the procedures, results, or<br>interpretation of the teaching, research,<br>experiments, surgery, or tests. (An explanation<br>of the procedures producing pain or distress on<br>these animals and the reasons such drugs<br>were not used must be attached to this report.) | F.<br><br>TOTAL NUMBER<br>OF ANIMALS<br><br>(Cols. C + D + E) |
|-------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|
| 4. Dogs                                                           | 0                                                                                                                                                                                     | 0                                                                                                                                                                                    | 0                                                                                                                                                                                                                                                                                   | 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 0                                                             |
| 5. Cats                                                           | 0                                                                                                                                                                                     | 0                                                                                                                                                                                    | 0                                                                                                                                                                                                                                                                                   | 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 0                                                             |
| 6. Guinea Pigs                                                    | 12                                                                                                                                                                                    | 0                                                                                                                                                                                    | 74                                                                                                                                                                                                                                                                                  | 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 74                                                            |
| 7. Hamsters                                                       | 0                                                                                                                                                                                     | 2                                                                                                                                                                                    | 34                                                                                                                                                                                                                                                                                  | 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 36                                                            |
| 8. Rabbits                                                        | 10                                                                                                                                                                                    | 2                                                                                                                                                                                    | 60                                                                                                                                                                                                                                                                                  | 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 62                                                            |
| 9. Non-human Primates                                             | 51                                                                                                                                                                                    | 20                                                                                                                                                                                   | 75                                                                                                                                                                                                                                                                                  | 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 95                                                            |
| 10. Sheep                                                         | 0                                                                                                                                                                                     | 0                                                                                                                                                                                    | 0                                                                                                                                                                                                                                                                                   | 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 0                                                             |
| 11. Pigs                                                          | 0                                                                                                                                                                                     | 16                                                                                                                                                                                   | 14                                                                                                                                                                                                                                                                                  | 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 30                                                            |
| 12. Other Farm Animals                                            |                                                                                                                                                                                       |                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                               |
| 13. Other Animals                                                 | 0                                                                                                                                                                                     | 12                                                                                                                                                                                   | 16                                                                                                                                                                                                                                                                                  | 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 28                                                            |
|                                                                   |                                                                                                                                                                                       |                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                               |
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**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.))**

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

|  |                                   |
|--|-----------------------------------|
|  | <b>DATE SIGNED</b><br>06-FEB-2015 |
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OMB APPROVED  
0579-0036

Interagency Report Control  
No. 0180-DOA-AN

Fiscal Year 2014

1. REGISTRATION NUMBER  
14-R-0018

**2. HEADQUARTERS RESEARCH FACILITY** (Name, address, and telephone number as registered with USDA, include ZIP Code)

MASSACHUSETTS INSTITUTE OF TECHNOLOGY  
77 MASSACHUSETTS AVENUE, 3-234

CAMBRIDGE, MA 02139

## REPORT OF ANIMALS USED BY OR UNDER CONTROL OF RESEARCH FACILITY (Attach additional sheets if necessary or use this form.)

[illegible]

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06-FEB-2015