

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE  <b>ANNUAL REPORT OF RESEARCH FACILITY</b> (TYPE OR PRINT)	<b>1. REGISTRATION NO.</b> 14-F-0002	<b>CUSTOMER NO.</b> 446	FORM APPROVED OMB NO. 0579-0036
<b>2. HEADQUARTERS RESEARCH FACILITY</b> (Name and Address, as registered with USDA, include Zip Code)  U.S.ARMY RESEARCH INSTITUTE OF ENVIRONMENTAL MEDICINE 15 KANSAS STREET, BLDG 42 NATICK, MA 01760			

**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)
U.S. ARMY RESEARCH INSTITUTE OF MEDICINE NATICK, MA 01760

**REPORT OF ANIMALS USED BY OR UNDER CONTROL OF RESEARCH FACILITY** (Attach additional sheets if necessary 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 in these animals and the reasons such drugs were not used must be attached to this report)	F. TOTAL NO. OF ANIMALS  (Cols. C + D + E)
4. Dogs					
5. Cats					
6. Guinea Pigs					
7. Hamsters					
8. Rabbits					
9. Non-Human Primates					
10. Sheep					
11. Pigs					
12. Other Farm Animals					
13. Other Animals					

**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 the 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 provision of adequate veterinary care and to oversee the adequacy of other aspects of animal care and use.

<b>CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL</b> (Chief Executive Officer or Legally Responsible Institutional official) I certify that the above is true, correct, and complete (7 U.S.C. Section 2143)		
SIGNATURE OF C.E.O. OR INSTITUTIONAL OFFICIAL	NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL (Type or Print)	DATE SIGNED
		11/17/2004

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 14-F-0009  
CUSTOMER NUMBER: 463

FORM APPROVED  
OMB NO. 0579-0036

**ANNUAL REPORT OF RESEARCH FACILITY**  
( TYPE OR PRINT )

Usda Human Nutrition Res Ctr At Tufts U  
711 Washington Street  
Boston, MA 02111

NOV 26 2004

Telephone: (617) -556-3200

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

FACILITY LOCATIONS ( Sites ) - See Attached Listing

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

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal 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 an 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 wh the use of appropriate anesthetic, analgesic, or tranquiliz drugs would have adversely affected the procedures, res or interpretation of the teaching, research, experiments, surgery, or tests. ( An explanation of the procedures producing pain or distress in these animals and the reas such drugs were not used must be attached to this report	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
4. Dogs					
5. Cats					
6. Guinea Pigs					
7. Hamsters			22		22
8. Rabbits	2				2
9. Non-human Primates					
10. Sheep					
11. Pigs					
12. Other Farm Animals					
13. Other Animals					
mice	1090	3905	764	89	4753
rats	105	791	590	279	1660
ferrets			43		43

**ASSURANCE STATEMENTS**

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- 4) The attending veterinarian for this research facility has appropriate authority to ensure the provision 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 or Legally Responsible Institutional Official )

SIGNATURE OF C.E.O. OR INSTITUTIONAL OFFICIAL	NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL ( Type or Print )	DATE SIGNED 11/27/04
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*EG*

June 13, 2003

TO: Animal Care and Use Committee  
FROM: (b)(6), (b)(7)(C)  
RE: Category E Animal Use, Protocol RO-25

We propose to continue to use the adjuvant arthritis (AA) model of inflammatory cachexia to better understand how to prevent and reverse cachexia due to chronic illness. We have previously shown that this model is a unique and useful model of cytokine-mediated cachexia (Roubenoff et al., *Arthritis & Rheumatism*, 1997; 40: 534-539). Unfortunately, the animals exposed to AA develop painful joint swelling that lasts for 7-14 days, and is comparable to what humans with rheumatoid arthritis experience. We plan to minimize the impact of this by treating the animals in most of the study groups with a centrally-acting melanocortin receptor-4 antagonist that we hope will prevent much of the inflammatory response. Thus, 20 of the 50 animals will experience pain not relieved by treatment. However, we cannot perform the experiment without these controls. As always, animals will be under the supervision of the Center veterinarian, and any animals experiencing untoward distress will be removed from the study and euthanized. Fortunately, in our experience over seven years with this model, we have not seen this occur in any animal, and do not anticipate it in this study either. If you have any questions, please do not hesitate to contact either of us.

To: (b)(6), (b)(7)(C)

Re: Category E mice in protocol RO#24

May 21, 2003

Dear (b)(6), (b)(7)(C)

Our protocol RO-24 entitled "Recovery from turpentine-induced loss of muscle mass in IGF-I transgenic mice" addresses the question of whether local expression of IGF-I accelerates the recovery from inflammation-associated muscle injury. This line of research pertains to the mission of the NEPS laboratory, i.e., the understanding and alleviation of physiological or pathological processes leading to sarcopenia, wasting and cachexia.

In RO-24, turpentine will be delivered subcutaneously in one of the hindlimbs of wild type and IGF-I transgenic mice. Unfortunately, turpentine injection, although not lethal, results in a sterile abscess that causes pain. This pain is comparable to that felt by humans with a thigh abscess. We anticipate the abscess to be maximal 16 days after injection, and to gradually shrink thereafter. Unfortunately, the pain will not be alleviated by pain killers, as these drugs may induce changes in the levels of muscle cytokines, one of the major endpoints of this study.

A previous study using turpentine (protocol RO-17) has already advanced our understanding of inflammation-mediated cachexia, with application to such diverse clinical situations as rheumatoid arthritis and aging. Because sub-clinical inflammation is a recognized feature of human aging, the proposed experiments are germane to the issue of age-related changes in protein catabolism, inflammation, and immune responses.

Sincerely yours,

(b)(6), (b)(7)(C)

NOV 26 2004



United States Department of Agriculture  
Human Nutrition Research Center on Aging  
At Tufts University

November 10, 2004

Elizabeth Goldentyer, D.V.M.  
Regional Director - Animal Care  
APHIS  
Eastern Regional Office  
920 Main Campus Drive  
Suite 200  
Raleigh, NC 27606-5213  
Reference: USDA Annual Report (Registration No.: 14-F-0009)

Dear Dr. Goldentyer:

The enclosed documents represent the U.S.D.A. Human Nutrition Research Center on Aging at Tufts University's (HNRCA) "Annual Report of Research Facilities" for the Federal fiscal year, October 1, 2003 through September 30, 2004. Aspects of this report that require comment are:

1) Animals reported under Category E:

a) Sarcopenia was induced in eighty nine (89) mice by the subcutaneous injection of sterile turpentine into the hind limbs of the mice to evaluate if the cytokines involved in cachexia are the same as those of sarcopenia (namely TNF, IL-1 and IL-6) in an effort to understand and potentially alleviate the physiological or pathological processes leading to sarcopenia, wasting and cachexia. The letter of justification for category E research was submitted with the IACUC animal protocol and is attached.

b) Mild arthritis was induced in two-hundred sixty nine (269) rats as an animal model of arthritis. Body composition, cytokine production and measurements of physiological aging were made before, during and after the development of the inflammatory process. Animals that developed arthritis experienced pain/distress analogous to the human rheumatoid arthritis situation.

(b)(6), (b)(7)(C)

rt, please do not hesitate to contact me.

711 Washington Street  
Boston, Massachusetts 02111  
FAX: 617-556-3344

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 14-F-0010  
CUSTOMER NUMBER: 645

FORM APPROVED  
OMB NO. 0579-0036

**ANNUAL REPORT OF RESEARCH FACILITY**  
( TYPE OR PRINT )

National Marine Fisheries Service Aquarium  
166 Water Street  
Woods Hole, MA 02543

Telephone: (508) -495-2229

DEC 01 2004

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

FACILITY LOCATIONS ( Sites ) - See Attached Listing

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

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal 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 in these animals and the reasons such drugs were not used must be attached to this report )	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
4. Dogs	0				
5. Cats	0				
6. Guinea Pigs	0				
7. Hamsters	0				
8. Rabbits	0				
9. Non-human Primates	0				
10. Sheep	0				
11. Pigs	0				
12. Other Farm Animals	0				
13. Other Animals					
Harbor seal (Phoca vitulina)	2	2	teaching only		2

**ASSURANCE STATEMENTS**

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- 4) The attending veterinarian for this research facility has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of other aspects of animal care and use.

\_\_\_\_\_  
QUARTERS RESEARCH FACILITY OFFICIAL  
or Legally Responsible Institutional Official )

DATE SIGNED  
11/2/04

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE  <b>ANNUAL REPORT OF RESEARCH FACILITY</b> (TYPE OR PRINT)	<b>1. REGISTRATION NO.</b> 14-R-0003	<b>CUSTOMER NO.</b> 100	<b>FORM APPROVED</b> OMB NO. 0579-0036
<b>2. HEADQUARTERS RESEARCH FACILITY</b> (Name and Address, as registered with USDA, include Zip Code)  DANA-FARBER CANCER INSTITUTE 44 BINNEY ST ONE JIMMY FUND WAY BOSTON, MA 02115			
<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)

ANIMAL RESOURCES FACILITY BOSTON, MA 02215	TULANE REGIONAL PRIMATE CENTER COVINGTON, LA 70433
MD ANDERSON CANCER CENTER BASTROP, TX	MILLBROOK/IMMUNOSERV AMHERST, MA 01004-0562

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

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4. Dogs					
5. Cats					
6. Guinea Pigs					
7. Hamsters					
8. Rabbits					
9. Non-Human Primates					
10. Sheep					
11. Pigs					
12. Other Farm Animals					
13. Other Animals					

**ASSURANCE STATEMENTS**

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<b>CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL</b> (Chief Executive Officer or Legally Responsible Institutional official) I certify that the above is true, correct, and complete (7 U.S.C. Section 2143)		
SIGNATURE OF C.E.O. OR INSTITUTIONAL OFFICIAL	NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL (Type or Print)	DATE SIGNED
		11/17/2004

**APHIS Form 7023 Additional Reported Sites**

The following additional sites have been reported by the facility. The reported sites have not been verified by APHIS and have been provided by the facility solely for completeness of the APHIS Form 7023 Annual Reporting submission.

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Registration Number: 14-R-0003  
Customer Number: 100  
Facility: DANA-FARBER CANCER INSTITUTE  
44 BINNEY ST  
ONE JIMMY FUND WAY  
BOSTON, MA 02115

---

Add Louis B. Mayer Building  
5th floor  
Michael Redstone Building  
Delete 3b and 3c.



UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 14-R-0004  
CUSTOMER NUMBER: 101

FORM APPROVED  
OMB NO. 0579-0036

**ANNUAL REPORT OF RESEARCH FACILITY**  
( TYPE OR PRINT )

Pine Acres Rabbitry/Farm  
299 E. Main Street  
Norton, MA 02766

Telephone: (508) -285-7391

*NOV 26 2004*

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

FACILITY LOCATIONS ( Sites ) - See Attached Listing

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

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal 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 an 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 wh the use of appropriate anesthetic, analgesic, or tranquiliz drugs would have adversely affected the procedures, res or interpretation of the teaching, research, experiments, surgery, or tests. ( An explanation of the procedures producing pain or distress in these animals and the reas such drugs were not used must be attached to this report	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
4. Dogs	<i>31</i>	<i>-</i>	<i>118</i>		<i>118</i>
5. Cats					
6. Guinea Pigs					
7. Hamsters					
8. Rabbits	<i>108</i>	<i>-</i>	<i>1741</i>		<i>1741</i>
9. Non-human Primates					
10. Sheep	<i>46</i>	<i>-</i>	<i>27</i>		<i>27</i>
11. Pigs	<i>63</i>	<i>-</i>	<i>197</i>		<i>197</i>
12. Other Farm Animals					
<i>Goats</i>	<i>1</i>	<i>-</i>	<i>11</i>		<i>11</i>
13. Other Animals					
<i>u Pposuns</i>	<i>1</i>				

**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 rese teaching, testing, surgery, or experimentation were followed by this research facility.
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- 4) The attending veterinarian for this research facility has appropriate authority to ensure the provision 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 or Legally Responsible Institutional Official )

SIGNATURE OF C.E.O. OR INSTITUTIONAL OFFICIAL

NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL ( Type or Print )

DATE SIGNED

*11/21/04*

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 14-R-0009  
CUSTOMER NUMBER: 105

FORM APPROVED  
OMB NO. 0579-0036

**ANNUAL REPORT OF RESEARCH FACILITY**  
(TYPE OR PRINT)

Boston University Medical School  
715 Albany Street, W-707  
Boston, MA 02118

Telephone: (617)-638-4089

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

FACILITY LOCATIONS ( Sites ) - See Attached Listing

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

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4. Dogs	0	0	0	0	0
5. Cats	0	0	40	0	40
6. Guinea Pigs	0	0	7	0	7
7. Hamsters	0	0	4	0	4
8. Rabbits	0	90	203	0	293
9. Non-human Primates	13	0	86	0	99
10. Sheep	0	0	6	0	6
11. Pigs	0	0	45	0	45
12. Other Farm Animals	0	0	0	0	0
13. Other Animals					
Chinchillas	0	0	225	0	225
Ferrets	0	0	2	0	2

**ASSURANCE STATEMENTS**

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CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL  
Chief Executive Officer or Legally Responsible Institutional Official )

NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL ( Type or Print )

DATE SIGNED

11/23/04

(which is obsolete.)

NOV 30 2004

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 14-R-0010  
CUSTOMER NUMBER: 106

FORM APPROVED  
OMB NO. 0579-0036

**ANNUAL REPORT OF RESEARCH FACILITY**  
( TYPE OR PRINT )

Schepens Eye Research Institute, The  
20 Staniford Street  
Boston, MA 02114

Telephone: (617)-912-0100

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

FACILITY LOCATIONS ( Sites ) - See Attached Listing

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

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4. Dogs	0	0	0	0	0
5. Cats	0	0	0	0	0
6. Guinea Pigs	1	0	0	0	0
7. Hamsters	0	0	0	0	0
8. Rabbits	2	40	52	0	92
9. Non-human Primates	0	0	0	0	0
10. Sheep	0	0	0	0	0
11. Pigs	0	0	0	0	0
12. Other Farm Animals	0	0	0	0	0
13. Other Animals					

**ASSURANCE STATEMENTS**

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**CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL**  
( Chief Executive Officer or Legally Responsible Institutional Official )

NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL ( Type or Print )

DATE SIGNED

11/29/04

NOV 01 2004

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 14-R-0013  
CUSTOMER NUMBER: 99

FORM APPROVED  
OMB NO. 0579-0036

**ANNUAL REPORT OF RESEARCH FACILITY**

(TYPE OR PRINT)

- 1) Center for Biomedical Research Building  
720 Cambridge St., Boston, MA 02135
- 2) Pine Acres Rabbitry/Farm  
299 E. Main St., Norton, MA 02766

St. Elizabeth'S Medical Center Of Boston  
736 Cambridge Street  
Boston, MA 02135

Telephone: (617)-789-3189

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

FACILITY LOCATIONS ( Sites ) - See Attached Listing

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

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal 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, res or interpretation of the teaching, research, experiments, surgery, or tests. ( An explanation of the procedures producing pain or distress in these animals and the reason such drugs were not used must be attached to this report	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
4. Dogs	0	0	0	0	0
5. Cats	0	0	0	0	0
6. Guinea Pigs	0	0	0	0	0
7. Hamsters	0	0	0	0	0
8. Rabbits	4	0	1	0	1
9. Non-human Primates	0	0	0	0	0
10. Sheep	0	0	0	0	0
11. Pigs	0	0	42	0	42
12. Other Farm Animals	0	0	0	0	0
13. Other Animals					
Rats	92	0	811	0	811
Mice	1,800	0	1,968	0	1,968
Ferrets	0	0	8	0	8

**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 provision of adequate veterinary care and to oversee the adequacy of other aspects of animal care and use.

CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL  
( Chief of Executive Officer or Legally Responsible Institutional Official )

SIGNATURE

NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL ( Type or Print )

DATE SIGNED

APHIS  
( 8 )

( This is obsolete. )

*11/27/04*

This report is required by law (7 USC 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 21.

See attached form for additional information.

Emergency Report Control #41

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE  <b>ANNUAL REPORT OF RESEARCH FACILITY</b> ( TYPE OR PRINT )	1. CERTIFICATE NUMBER: 14-R-0014 CUSTOMER NUMBER: 108	FORM APPROVED OMB NO 05/9-0036
	General Hospital Corporation Massachusetts General Hospital 32 Fruit Street Boston, MA 02114  Telephone: (617) 724-2733 (617) 726-9718	
REPORTING FACILITY ( List all locations where animals were housed or used in animal research, testing, or experimentation, or held for these purposes. Attach additional sheets if necessary )		

FACILITY LOCATIONS ( Sites ) See Attached Listing

**REPORT OF ANIMALS USED BY OR UNDER CONTROL OF RESEARCH FACILITY ( Attach additional sheets if necessary or use APHIS Form 2023A )**

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal being bred, conditioned, or held for use in teaching, testing, research, or surgery but not 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 pain or distress in 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 in these animals and the reason such drugs were not used must be attached to this report )	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
1 Dogs			22		22
2 Cats					0
3 Guinea Pigs		2			2
4 Mice		1	14	9	24
5 Rabbits			237		237
6 Non-human Primates			43		43
7 Sheep			179		179
8 Pigs	301	8	449		758
9 Other Farm Animals					
10 Other Animals					

**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 test, 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 and an 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.
- The attending veterinarian for this research facility has appropriate authority to ensure the provision 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 or Legally Responsible Institutional Official )

NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL: \_\_\_\_\_ / Title or Post  
 DATE SIGNED: **11/30/04**

**Annual Report of Research Facility  
Column E Explanation**

**For the period October 1, 2003-September 30, 2004**

1. Registration Number: 14-R-0014
2. Number of animals used in the study in the reporting period: 9
3. Species (common name) of animals used in the study: *Mesocricetus auratus* (Syrian hamster)
4. Explanation of the procedure producing pain or distress: Animals were injected with potentially debilitating amounts of bacterial endotoxin and monitored for evidence of clinical signs. Some animals were administered a novel monoclonal antibody prior to endotoxin administration to see if such pre-treatment would ameliorate the effects of endotoxin.
5. Scientific justification as to why pain or distress could not be relieved, plus methods or means used to determine that pain or distress would interfere with test results: No anti-inflammatory drugs could be used since they would interfere with the pro-inflammatory effects of endotoxin. No opioid analgesics could be used since they depress mobility and locomotion, two important parameters used to determine the level of endotoxin effect. The study did provide that severe depression was observed in less than 90 minutes after the high dose of endotoxin was administered, affected animals will be euthanized to avoid further pain or distress.  
  
Animals that appear ill (ruffled fur, self-isolation, inability to take food or water) will be removed from the study and euthanized. All animals euthanized no longer than 90 minutes after endotoxin injection.
6. Federal regulations (if any) that require this procedure: N/A

OK

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 14-R-0014  
CUSTOMER NUMBER: 108

FORM APPROVED  
OMB NO. 0579-0036

**ANNUAL REPORT OF RESEARCH FACILITY**  
(TYPE OR PRINT)

General Hospital Corporation  
Massachusetts General Hospital  
32 Fruit Street  
Boston, MA 02114

DEC 01 2004

Telephone: (617) 724-2733  
(617) 726-9718

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

FACILITY LOCATIONS (Sites) - See Attached Listing

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

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal 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 in these animals and the reason such drugs were not used must be attached to this report)	F. TOTAL NUMBER OF ANIMALS (COLUMNS C + D + E)
4 Dogs			22		22
5 Cats					0
6 Guinea Pigs		2			2
7 Hamsters		1	10	13	24
8 Rabbits			237		237
9 Non-human Primates			43		43
10 Sheep			179		179
11 Pigs	301	8	449		758
12 Other Farm Animals					
13 Other Animals					

**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 an 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 provision 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 or Legally Responsible Institutional Official)

NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL (Type or Print)

DATE SIGNED  
11/30/04

58

**Annual Report of Research Facility  
Reporting Facility Locations**

**For the period October 1, 2003-September 30, 2004**

Registration Number: 14-R-0014

Customer Number: 108

General Hospital Corporation

32 Fruit Street

Boston, MA 02114

Reporting Facilities:

1. Boston Campus, 32 Fruit Street, Boston, MA 02114 (County: Suffolk)
2. Charlestown Campus, 149 Thirteenth Street *and* 114 Sixteenth Street, Charlestown, MA 02129 (County: Suffolk)
3. 150 South Huntington Avenue, Boston, MA 02130 (County: Suffolk)
4. 822 Blackmer Road, Southbridge, MA 01550 (County: Worcester)
5. 299 East Main Street, Norton, MA 02766 (County: Bristol)
6. 241 Ballardvale Street, Wilmington, MA 01887 (County: Middlesex)
7. One Pine Hill Drive, Southborough, MA 01772 (County: Worcester)



**Annual Report of Research Facility  
Column E Explanation**

**For the period October 1, 2003-September 30, 2004**

1. Registration Number: 14-R-0014
2. Number of animals used in the study in the reporting period: 13
3. Species (common name) of animals used in the study: *Cricetulus migratorius*  
(Armenian hamster)
4. Explanation of the procedure producing pain or distress: Animals were injected with potentially debilitating amounts of bacterial endotoxin and monitored for evidence of clinical signs. Some animals were administered a novel monoclonal antibody prior to endotoxin administration to see if such pre-treatment would ameliorate the effects of endotoxin.
5. Scientific justification as to why pain or distress could not be relieved, plus methods or means used to determine that pain or distress would interfere with test results: No anti-inflammatory drugs could be used since they would interfere with the pro-inflammatory effects of endotoxin. No opioid analgesics could be used since they depress mobility and locomotion, two important parameters used to determine the level of endotoxin effect. The study did provide that severe depression was observed in less than 90 minutes after the high dose of endotoxin was administered, affected animals will be euthanized to avoid further pain or distress.

Animals that appear ill (ruffled fur, self-isolation, inability to take food or water) will be removed from the study and euthanized. All animals euthanized no longer than 90 minutes after endotoxin injection.

ing clinical signs used to that were monitored to determine activity ir activity would interfere with This in a mouse model; the mouse model displayed a possibly unique interfering phenomenon that requires this be performed in another rodent in order to more closely mimic the human response to endotoxin.

6. Federal regulations (if any) that require this procedure:

Agency:

CFR:

**Annual Report of Research Facility  
Animal Welfare Act Exceptions Approved by the IACUC**

**For the period October 1, 2003-September 30, 2004**

Registration Number: 14-R-0014

Customer Number: 108

General Hospital Corporation  
32 Fruit Street  
Boston, MA 02114

Exception: The Transplantation Biology Research Center periodically houses pigs transplanted with organs or pigs that serve as fetal tissue donors and that weigh between 100-130 Kg. Those pigs are kept in the largest pens available that provide only 25 square feet of floor space. This cage floor area is considered adequate for conventional pigs up to but not exceeding 100 Kg, according to the "Guide for the Care and Use of Laboratory Animals" (National Research Council, 1996). Staff veterinarians from the Center for Comparative Medicine reviewed this situation with the Principal Investigator and examined the pigs in question. No adverse effects were observed regarding the health of these animals. The Principal Investigator then requested an exception to cage space recommendations listed in the "Guide", and the Subcommittee on Research Animal Care (SRAC, the IACUC for the institution) granted the exception. The SRAC finds that pigs over 100 Kg body weight to be sufficiently comfortable in these pens and are able to assume all normal body positions without complications.

(b)(6), (b)(7)(C)

**From:** (b)(6), (b)(7)(C)  
**Sent:** Tuesday, December 07, 2004 12:25 PM  
**To:** Elizabeth J. Goldentyer DVM (E-mail)  
**Cc:** (b)(6), (b)(7)(C)  
**Subject:** amended Annual Report

Dear Dr. Goldentyer:

Changes in our most recent Annual Report are necessary based on corrected data from one hamster protocol, as listed below:

- Number of hamsters in Category D is increased from 10 to 14;
- Number of hamsters in Category E is decreased from 13 to 9;
- Genus and species of hamster used was *Mesocricetus auratus* (Syrian hamster) rather than *Cricetus migratorius* (Armenian hamster) as originally reported.

I am faxing to your attention the corrected Annual Report of Research Facility (Form 7023) and Column E Explanation page for the file (General Hospital Corporation/Massachusetts General Hospital, Certificate Number 14-R-0014, Customer Number 108).

Please contact me at your convenience if you have any questions or if additional actions are required.

Best regards,

(b)(6), (b)(7)(C)

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 14-R-0016  
CUSTOMER NUMBER: 110

FORM APPROVED  
OMB NO. 0579-0038

**ANNUAL REPORT OF RESEARCH FACILITY**  
( TYPE OR PRINT )

L C F Foundation, Inc.  
Lahey Medical Center  
41 Mall Road  
Burlington, MA 01805

OCT 12 2004

Telephone: (781)-744-1439

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

FACILITY LOCATIONS ( Sites ) - See Attached Listing

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

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal 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 an 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 wh the use of appropriate anesthetic, analgesic, or tranquiliz drugs would have adversely affected the procedures, res or interpretation of the teaching, research, experiments, surgery, or tests. ( An explanation of the procedures producing pain or distress in these animals and the reasr such drugs were not used must be attached to this report	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
4. Dogs	0	0	0	0	0
5. Cats	0	0	0	0	0
6. Guinea Pigs	0	0	0	0	0
7. Hamsters	0	0	0	0	0
8. Rabbits	0	0	0	0	0
9. Non-human Primates	0	0	0	0	0
10. Sheep	0	0	0	0	0
11. Pigs	0	0	4	0	4
12. Other Farm Animals					
Goats	0	0	3	0	3
13. Other Animals	0	0	0	0	0

**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 rees 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 ap 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 Inc 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 provision 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 or Legally Responsible Institutional Official )

NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL ( Type or Print )

DATE SIGNED

10-5-04

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE  <b>ANNUAL REPORT OF RESEARCH FACILITY</b> ( TYPE OR PRINT )	1. CERTIFICATE NUMBER: 14-R-0017 CUSTOMER NUMBER: 112	FORM APPROVED OMB NO. 0579-0036
Boston University Charles River Campus 5 Cummington Street Boston, MA 02215  Telephone: (617) -353-2463		

DEC 27 2004

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

Lab Animal Care Facility

FACILITY LOCATIONS ( Sites ) - See Attached Listing

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

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal 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 an 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 wh the use of appropriate anesthetic, analgesic, or tranquiliz drugs would have adversely affected the procedures, res or interpretation of the teaching, research, experiments, surgery, or tests. ( An explanation of the procedures producing pain or distress in these animals and the reaso such drugs were not used must be attached to this report	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
4. Dogs	NA				
5. Cats	NA				
6. Guinea Pigs	Ø	2	Ø	Ø	2
7. Hamsters	NA				
8. Rabbits	NA				
9. Non-human Primates	NA				
10. Sheep	NA				
11. Pigs	NA				
12. Other Farm Animals	NA				
13. Other Animals					
Bats	Ø	Ø	115	Ø	115
Ferrets	5	Ø	45	Ø	45
Gerbils	3	2	8	Ø	10

**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 rese 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 ap 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 inc 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 provision 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 or Legally Responsible Institutional Official )		
SIG	NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL ( Type or Print )	DATE SIGNED 12/15/04

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 14-R-0018  
CUSTOMER NUMBER: 114

FORM APPROVED  
OMB NO. 0579-0036

**ANNUAL REPORT OF RESEARCH FACILITY**  
( TYPE OR PRINT )

Massachusetts Institute Of Technology  
Office Of Sponsored Programs  
77 Massachusetts Avenue  
Cambridge, MA 02139

DEC 01 2004

Telephone: (617) -253-2492

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

FACILITY LOCATIONS ( Sites ) - See Attached Listing

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

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not ye used for such purposes.	C. Number of animals upon which teaching, research, experiments, or tests were conducted involving no pain, distress, or use o 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 an 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 wh the use of appropriate anesthetic, analgesic, or tranquiliz drugs would have adversely affected the procedures, res or interpretation of the teaching, research, experiments, surgery, or tests. ( An explanation of the procedures producing pain or distress in these animals and the reas such drugs were not used must be attached to this report	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
4. Dogs					0
5. Cats					0
6. Guinea Pigs			10		10
7. Hamsters			24		24
8. Rabbits			148		148
9. Non-human Primates			84		84
10. Sheep					0
11. Pigs			18		18
12. Other Farm Animals					0
13. Other Animals	Ferrets		60		60

**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 rest 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 ap 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 inr 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 provision 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 or Legally Responsible Institutional Official )

SIC

NAME & TITLE OF C.F.O. OR INSTITUTIONAL OFFICIAL ( Type or Print )

DATE SIGNED

11/29/04

APH

T 88), which is obsolete.)

Address of research buildings on the MIT Campus where animals are housed.

1. Building 56, 8<sup>th</sup> floor  
20 Ames Street  
Cambridge, MA 02139
2. Building 68, Sub-basement  
20 Ames Street  
Cambridge, MA 02139
3. Building E17/18, 6<sup>th</sup> floor  
400 Ames Street  
Cambridge, MA 02139
4. Building E25, basement  
400 Ames Street  
Cambridge, MA 02139

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 14-R-0019  
CUSTOMER NUMBER: 107

FORM APPROVED  
OMB NO. 0579-0036

**ANNUAL REPORT OF RESEARCH FACILITY**  
(TYPE OR PRINT)

2. HEADQUARTERS RESEARCH FACILITY  
Harvard Medical School  
Ctr. for Animal Resources & Comparative Medicine  
665 Huntington Avenue  
Boston, MA 02115  
Telephone: 617-432-1289

DEC 01 2004

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**

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

A. Animals Covered By The Animal Welfare Regulations  12. &/OR 13. Other (List by Species)	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. Numbers 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 in these animals and the reasons such drugs were not used must be attached to this report.)	F. TOTAL NO. OF ANIMALS  (Cols. C + D + E)
4. Dogs			16		16
5. Cats			87		87
6. Guinea Pigs			65		65
7. Hamsters		75	81		156
8. Rabbits	1	115	254		369
9. Non-human Primates	1577	18	600		618
10. Sheep			26		26
11. Pigs		6	185		191
12. Other Farm Animals					
Goat			6		6
13. Other Animals					
Ferrets			19		19
Birds (wild caught)					
Mice (deer)					

**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 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.
- The attending veterinarian for this research facility has appropriate authority to ensure the provision 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 or Legally Responsible Institutional Official)

SIGNATURE OF C.E.O. OR INSTITUTIONAL OFFICIAL	NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL	DATE SIGNED  11/30/04
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## FACILITY SITES LISTING

Licensee/Registrant Name: Harvard Medical School  
Center for Animal Resources & Comparative Medicine  
License/Registration Number: 14-R-019

Please list below all sites that house animals under the above registration number. Be sure to include all requested information. Do not leave any spaces blank. If lines do not apply, please mark it N/A. If you have more than three (3) sites, please copy this form as many times as needed before filling in the sites.

Site No.: 1 Name/Department: Center for Animal Resources  
& Comparative Medicine (ARCM)  
Address: Boston MA 02115

(a) Building(s): ARCM/Central - HSPH/Bldgs. I&II  
665 Huntington Avenue  
Floor/Room: Ground and Basement Levels  
Contact Person: [REDACTED]  
Phone Number: [REDACTED]

(b) Building(s): ARCM/Seeley G. Mudd Building and Division of  
Surgery  
250 Longwood Avenue  
Floor/Room: Lower Level  
Contact Person: [REDACTED]  
Phone Number: [REDACTED]  
Contact Person: [REDACTED]  
Phone Number: [REDACTED]

(c) Building(s): ARCM/Warren Alpert Building  
200 Longwood Avenue  
Floor/Room: Lower Level  
Contact Person: [REDACTED]  
Phone Number: [REDACTED]

(d) Building: ARCM/Harvard Institutes of Medicine  
77 Avenue Louis Pasteur  
Floor/Room: Lower Level  
Contact Person: [REDACTED]  
Phone Number: [REDACTED]

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Site No.: 17 Name/Department: New England Regional Primate Research Center  
Address: One Pine Hill Drive  
Southboro, MA 01772  
Building(s): Main Building and Three Out Buildings  
Floor/Room: Basement and Ground Floors  
Contact Person: [REDACTED]  
Phone Number: [REDACTED]

### FACILITY SITES LISTING

Licensee/Registrant Name: Harvard Medical School  
Center for Animal Resources & Comparative Medicine  
License/Registration Number: 14-R-019

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Please list below all sites that house animals under the above registration number. Be sure to include all requested information. Do not leave any spaces blank. If lines do not apply, please mark it N/A. If you have more than three (3) sites, please copy this form as many times as needed before filling in the sites.

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Site No.: 18 Name/Department: ARCM/Thorn (satellite)  
USDA Registration No.: 14-R-092  
Address: 20 Shattuck Street, Boston MA 02115  
Building: Thorn Building  
Floor/Room: 15th Floor  
Contact Person: [REDACTED]  
Phone Number: [REDACTED]

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Site No.: 21 Name/Department: Pine Acres Rabbitry/Farm (satellite - swine/dog housing only)  
USDA Registration No: 14-B-52  
Address: 299 East Main Street, Norton MA 02766  
Building: Main Building  
Floor/Room: First Floor  
Contact Person: [REDACTED]  
Phone Number: [REDACTED]

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NOV 23 2004

See attached form for additional information.

Interagency Report Control No. *152*

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 14-R-0020  
CUSTOMER NUMBER: 117

FORM APPROVED  
OMB NO. 0579-0036

**ANNUAL REPORT OF RESEARCH FACILITY**  
(TYPE OR PRINT)

Childrens Hospital The  
John Enders Pediatric Research  
300 Longwood Avenue  
Enders 146  
Boston, MA 02115

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

FACILITY LOCATIONS ( Sites ) - See Attached Listing

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

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not ye used for such purposes.	C. Number of animals upon which teaching, research, experiments, or tests were conducted involving no pain, distress, or use o 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 an 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 wh the use of appropriate anesthetic, analgesic, or tranquiliz drugs would have adversely affected the procedures, res or interpretation of the teaching, research, experiments, surgery, or tests. ( An explanation of the procedures producing pain or distress in these animals and the reas such drugs were not used must be attached to this report	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
4. Dogs	0	0	2	0	2
5. Cats	0	0	0	0	0
6. Guinea Pigs	0	0	0	0	0
7. Hamsters	0	0	0	0	0
8. Rabbits	0	25	329	6	360
9. Non-human Primates	0	0	0	0	0
10. Sheep	0	0	24	0	24
11. Pigs	0	0	101	0	101
12. Other Farm Animals					
Fowl	0	0	686	0	686
13. Other Animals					

**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 rese 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 ap 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 inc 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 provision 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 or Legally Responsible Institutional Official )

SIGNATURE OF C.E.O. OR INSTITUTIONAL OFFICIAL	NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL ( Type or Print )	DATE SIGNED <i>11-22-04</i>
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*EG*

Investigator: (b)(6), (b)(7)(C)

Protocol: Cardiac Hypertrophy and Surgical Ischemia

Species: Rabbits

Number of animals used: 128

Number of animals which underwent unalleviated pain and distress: 3

The purpose of this study is to determine the effects of pressure overload hypertrophy induced at birth and changes in cardiac glucose metabolism. There are multiple agents that are then administered in pursuit of evaluation of them in relationship to cardiac hypertrophy.

The study involves anesthetizing the 7-10 day old animals and performing a left thoracotomy. The ductal ligament is then identified and banded. The incision is then closed with prolene sutures and the animals recovered. Analgesics are administered in the immediate postoperative period. Over the course of several weeks the animal will then develop cardiac hypertrophy and receive different drug regimens. At the conclusion of the study they are euthanized and the heart is isolated for histopathological evaluation.

These animals reflect a clinical model of children with a congenital anomaly of the heart and its associated clinical disease. The majority of animals develop secondary signs such as increased respiratory effort and reduced activity gradually and are euthanized prior to significant distress. Our staff has been involved in these studies for 9 years and have been thoroughly trained in the recognition of early indicators of the moribund state. In these 3 cases the animals developed dramatic clinical disease quickly, which resulted in subsequent heart failure and death. At no time are analgesics or supportive care measures withheld when clinical illness is recognized.

In working closely with the investigator we have been able to improve our ability to identify early indicators of disease and remove animals from study before significant illness is present. Our goal is to continually reduce this number and hopefully eliminate these situations.

Investigator: (b)(6), (b)(7)(C)

Protocol: Correlative Imaging of Tumor Angiogenesis and the Effects of Antiangiogenesis Agents

Species: Rabbits

Number of animals used: 21

Number of animals which underwent unalleviated pain and distress: 3

The purpose of this study is to evaluate the role of 2 proven imaging techniques as a monitor of angiogenesis and tumor growth in a tumor model that simulated tumors in newborns. The two imaging modalities utilized are MRI and Ultrasound and the two angiogenic agents are TNP-470 and TNP-470 in combination with thalidomide.

The study involves anesthetizing the rabbits and performing a small midline laparotomy. The liver is identified and V2 Carcinoma cells are then implanted in various lobes of the liver. The animals are then recovered and either imaged as controls without any treatment or imaged with one of the two treatment regimens listed above. The groups were to be studied over a course of three weeks.

In these 3 cases the animals developed metastatic carcinomatosis in which the animals appeared clinically normal and then abruptly went off food and died within 12 hours. These animals were monitored by the veterinary technical staff daily and also by a member of the investigative staff daily. In addition they were imaged weekly to evaluate the progression of tumor growth as well as secondary clinical abnormalities such as ascites and metastasis. On post mortem examination of these animals it was clear that the metastatic nature of the tumor cells was significant and that they were rapidly dividing. The loss of these three animals was attributed to the implantation techniques and it was determined that there needed to be some modifications to both the procedure and the follow up care.

The first modification was that the tumor cells needed to be better encapsulated for implantation. The surgeon agreed to change gloves between tumor cell collection and reimplantation and placed smaller amounts of tumor cell in more deeply seeded pockets of the liver lobes. The second modification was that there needed to be increased post operative monitoring which was accomplished by having the veterinary technical staff evaluate the animals at the beginning and end of every day. The final modification was that radiographic imaging would be utilized more frequently in any animals exhibiting clinical illness and followed by immediate euthanasia if the illness correlated with increased tumor production. These modifications allowed us to eliminate the loss of any additional animals. The remainder of the the 21 animals utilized were successfully treated, imaged and euthanized.

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 14-R-0022  
CUSTOMER NUMBER: 119

FORM APPROVED  
OMB NO. 0579-0036

**ANNUAL REPORT OF RESEARCH FACILITY**  
( TYPE OR PRINT )

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

Telephone: (617) -573-3178

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

FACILITY LOCATIONS ( Sites ) - See Attached Listing

**REPORT OF ANIMALS USED BY OR UNDER CONTROL OF RESEARCH FACILITY ( Attach additional sheets if necessary 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 ye	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, a	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 in these animals and the reasons such drugs were not used must be attached to	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
4. Dogs			0		0
5. Cats			42		42
6. Guinea Pigs			108		108
7. Hamsters			0		0
8. Rabbits			157		157
9. Non-human Primate			10		10
10. Sheep			0		0
11. Pigs			0		0
12. Other Farm Animals			0		0
13. Other Animals					
Chinchillas			18		18

**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 provision of adequate veterinary care and to oversee the adequacy of other aspects of animal care and

**CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL**  
( Chief Executive Officer or Legally Responsible Institutional Official )

	NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL ( Type or Print	DATE SIGNED <i>11/30/04</i>
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which is obsolete.

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 14-R-0025  
CUSTOMER NUMBER: 121

FORM APPROVED  
OMB NO. 0579-0036

**ANNUAL REPORT OF RESEARCH FACILITY**  
(TYPE OR PRINT)

Holyoke Community College  
Veterinary & Animal Science  
303 Homestead Avenue  
Holyoke, MA 01040

SEP 27 2004

Telephone: (413)-538-7000

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

*Holyoke Community College Kennel +  
MRB Building*

FACILITY LOCATIONS ( Sites ) - See Attached Listing

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

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not 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 as 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 tranquiliz drugs would have adversely affected the procedures, res or interpretation of the teaching, research, experiments, surgery, or tests. ( An explanation of the procedures producing pain or distress in these animals and the reason such drugs were not used must be attached to this report	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
4. Dogs		6	4		10
5. Cats		4	6		10
6. Guinea Pigs		2			2
7. Hamsters		0			
8. Rabbits		6			6
9. Non-human Primates					
10. Sheep					
11. Pigs					
12. Other Farm Animals					
13. Other Animals					

**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 res teaching, testing, surgery, or experimentation were followed by this research facility.
- 2) Each principal investigator has considered alternatives to painful procedures.
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- 4) The attending veterinarian for this research facility has appropriate authority to ensure the provision 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 or Legally Responsible Institutional Official )

NAME & TITLE OF CEO OR INSTITUTIONAL OFFICIAL ( Type or Print )

DATE SIGNED

*9/20/04*

OCT 26 2004

This report is required by law (7 USC 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 21:

See attached form for additional information.

Interagency Report Control No. *gta*

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 14-R-0029  
CUSTOMER NUMBER: 125

FORM APPROVED  
OMB NO. 0579-0036

**ANNUAL REPORT OF RESEARCH FACILITY**  
(TYPE OR PRINT)

New England Aquarium  
177 Milk Street  
Boston, MA 02110

Telephone: (617) -973-5200

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

Marine Mammal Department  
Central Wharf, Boston FACILITY LOCATIONS (Sites) - See Attached Listing

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

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal 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 tranquiliz drugs would have adversely affected the procedures, res or interpretation of the teaching, research, experments, surgery, or tests. ( An explanation of the procedures producing pain or distress in these animals and the reas such drugs were not used must be attached to this report	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
4. Dogs					
5. Cats					
6. Guinea Pigs					
7. Hamsters					
8. Rabbits					
9. Non-human Primates					
10. Sheep					
11. Pigs					
12. Other Farm Animals					
13. Other Animals					
California sea lions	4	2	0	0	2
California sea otters	2	2	0	0	2
Harbor seals	7	2	0	0	2

**ASSURANCE STATEMENTS**

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- 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 provision 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 or Legally Responsible Institutional Official )

DATE SIGNED

10/20/04

(is obsolete.)



UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 14-R-0030  
CUSTOMER NUMBER: 126

FORM APPROVED  
OMB NO. 0579-0036

**ANNUAL REPORT OF RESEARCH FACILITY**  
( TYPE OR PRINT )

Brandeis University  
Office Of Sponsored Programs  
Grant, Contract & Patent Admin  
P.O. Box 9110  
Mail Stop 116  
Waltham, MA 02254

NOV 05 2004

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

FACILITY LOCATIONS ( Sites ) - See Attached Listing

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

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal 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 an 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 wh the use of appropriate anesthetic, analgesic, or tranquiliz drugs would have adversely affected the procedures, res or interpretation of the teaching, research, experiments, surgery, or tests. ( An explanation of the procedures producing pain or distress in these animals and the reas such drugs were not used must be attached to this report	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
4. Dogs					0
5. Cats					0
6. Guinea Pigs					0
7. Hamsters	637	0	0	0	637
8. Rabbits	0	7	0	0	7
9. Non-human Primates					0
10. Sheep					0
11. Pigs					0
12. Other Farm Animals					0
13. Other Animals					
Gerbils	0	32	0	0	32
Gray Squirrels	0	0	46	0	46

**ASSURANCE STATEMENTS**

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**CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL**  
( Chief Executive Officer or Legally Responsible Institutional Official )

SIG: \_\_\_\_\_

NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL ( Type or Print )

DATE SIGNED

11/2/04

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(which is obsolete.)

**DCT 1 9 2004**

See attached form for additional information.

Interagency Report Control No. *dp*

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 14-R-0031  
CUSTOMER NUMBER: 127

FORM APPROVED  
OMB NO. 0579-0036

**ANNUAL REPORT OF RESEARCH FACILITY**  
( TYPE OR PRINT )

Acambis Inc  
38 Sidney Street  
Cambridge, MA 02139

Telephone: (617) -761-4200

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

FACILITY LOCATIONS ( Sites ) - See Attached Listing

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

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal 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 in these animals and the reasons such drugs were not used must be attached to this report )	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
4. Dogs					
5. Cats					
6. Guinea Pigs					
7. Hamsters			384		384
8. Rabbits			3		3
9. Non-human Primates					
10. Sheep					
11. Pigs					
12. Other Farm Animals					
13. Other Animals					

**ASSURANCE STATEMENTS**

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CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL  
( Chief Executive Officer or Legally Responsible Institutional Official )

SIGNATURE OF C

NAME & TITLE OF CEO OR INSTITUTIONAL OFFICIAL ( Type or Print )

DATE SIGNED

10/14/04

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 14-R-0032  
CUSTOMER NUMBER: 514

FORM APPROVED  
OMB NO. 0579-0036

**ANNUAL REPORT OF RESEARCH FACILITY**  
( TYPE OR PRINT )

Shriners Burns Institute  
Shriners Hospitals For Children  
51 Blossom Street  
Boston, MA 02114

DEC 13 2004

Telephone: (617)-371-4900

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

FACILITY LOCATIONS ( Sites ) - See Attached Listing

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

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal 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 in these animals and the reason such drugs were not used must be attached to this report )	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
4. Dogs					
5. Cats					
6. Guinea Pigs					
7. Hamsters					
8. Rabbits					
9. Non-human Primates					
10. Sheep					
11. Pigs					
12. Other Farm Animals					
13. Other Animals					
					0

**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, testing, surgery, or experimentation were followed by this research facility.
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CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL  
( Chief Executive Officer or Legally Responsible Institutional Official )

NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL (Type or Print)

DATE SIGNED  
11/29/04

DEC 01 2004

*[Handwritten signature]*

This report is required by law (7 USC 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 211.

See attached form for additional information.

Interagency Report Control No.:

<p>UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE</p> <p><b>ANNUAL REPORT OF RESEARCH FACILITY</b> ( TYPE OR PRINT )</p>	<p>1. CERTIFICATE NUMBER: 14-R-0035 CUSTOMER NUMBER: 130</p>	<p>FORM APPROVED OMB NO. 0579-0038</p>
<p>University Of Massachusetts Medical School 55 Lake Avenue North Worcester, MA 01655</p> <p>Telephone: (508)-856-5416</p>		

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

FACILITY LOCATIONS ( Sites ) - See Attached Listing

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

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal 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 in these animals and the reason such drugs were not used must be attached to this report )	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
4. Dogs	0	0	26	0	26
5. Cats	0	0	5	0	5
6. Guinea Pigs	0	534	1294	641	2469
7. Hamsters	0	164	1153	319	1636
8. Rabbits	0	229	321	0	550
9. Non-human Primates	10	18	0	16	44
10. Sheep	0	0	0	0	0
11. Pigs	0	63	50	0	113
12. Other Farm Animals	0	0	0	0	0
	0	0	0	0	0
13. Other Animals	0	0	0	0	0
<u>Cotton Rats</u>	0	93	0	0	93

**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 an 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 provision of adequate veterinary care and to oversee the adequacy of other aspects of animal care and use.

<p>SIGNATURE</p>	<p>EADQUARTERS RESEARCH FACILITY OFFICIAL ( or Legally Responsible Institutional Official )</p>	
	<p>( NAME &amp; TITLE OF C.F.O. OR INSTITUTIONAL OFFICIAL ( Type or Print )</p>	<p>DATE SIGNED 11/29/04</p>

APHIS I  
(A...)

*[Handwritten initials]*

**Registration Number: 14-R-0035**

Sites for USDA Certificate No. 14-R-0035

1. University of Massachusetts Medical School  
55 Lake Avenue North  
Worcester, MA 01655
2. Massachusetts Biologic Laboratories  
University of Massachusetts Medical School  
305 South Street  
Jamaica Plain, MA 02130

**Registration Number: 14-R-0035**

**Species: Guinea Pigs**

**Total numbers of guinea pigs in Cat E: 189 + 88 + 254 + 110 = 641**

1. Guinea Pigs: 189

Procedure

The MLD (minimum lethal dose) Test – Diphtheria Toxin is used to quantify the toxin activity of each batch of diphtheria toxin manufactured at MBL and intended for use in the production of diphtheria toxoid vaccines. It is used as one measure of toxin potency. The test uses three guinea pigs; each is given a different dose (the doses are 1, 3, and 5 ml) of a diluted diphtheria toxin preparation. The dilution of the toxin is based on an in vitro measurement of toxin antigenicity versus a standardized anti-serum to diphtheria toxin. Guinea pigs are observed twice daily for symptoms of diphtheria intoxication or death for up to five days after inoculation. The FDA requirement for diphtheria toxin intended for use in the manufacture of diphtheria toxoid vaccine is that the minimum volume of toxin needed to kill a guinea pig within 4 days of injection into the animal corresponds to a value of  $\geq 400$  MLD/ml of toxin. Each batch of diphtheria toxin intended for use in MBL vaccine manufacturing must meet this toxicity requirement.

Scientific justification why pain or distress could not be reduced or eliminated

Guinea pigs inoculated with a sufficient amount of toxin will exhibit symptoms of diphtheria toxicity or possibly death by the 96-hour endpoint of the assay. However, symptoms alone cannot be used as an endpoint to assess assay validity or toxin potency. Any use of pain-relieving drugs would interfere with the results of the assay.

Federal regulation required

The FDA requires that each lot of Diphtheria toxin pass the Minimum Lethal Dose criteria as described in the NIH Minimum Requirements: Section 1.3, 4<sup>th</sup> revision dated March 1, 1947 before it can be released for further manufacturing to produce vaccine.

2. Guinea Pigs: 88

Procedure

The Immunoglobulin Diphtheria Potency Test is used to measure the amount of antibody to diphtheria toxin (anti-toxin) in human immunoglobulin preparations. The FDA requires that any immunoglobulin released and distributed for human use have no less than 2 antitoxin units/ml. Guinea pigs are used in the test. The control is a known amount of a standard diphtheria toxin mixed with an FDA reference anti-toxin unit/ml; the test is a known amount of standard diphtheria toxin mixed with the immunoglobulin under test. Both mixtures are incubated for one to six hours so that the antibody can neutralize the

## **Registration Number: 14-R-0035**

effects of the toxin. The mixtures are injected subcutaneously into two guinea pigs each. The two animals injected with the mixture of the standard diphtheria toxin and FDA reference anti-toxin must die within 96 hours. The two animals injected with the mixture of immunoglobulin product and a standard diphtheria toxin must survive longer than 96 hours indicating the presence of at least 2 anti-toxin units/ml. Each lot of vaccine manufactured by MBL must pass the Immunoglobulin Diphtheria Potency Test, as described in 21CFR 640.104, before it can be released for distribution.

### Scientific justification why pain or distress could not be reduced or eliminated.

If there is not enough anti-toxin present to neutralize the toxin in the mixtures, the animals will die from the effects of diphtheria toxin. The test is designed so that the controls will die within 96 hours and the test animals will survive longer. Four to five days after injection of the immune globulin-toxin mixture all survivors are euthanized. Pain relieving drugs can not be used because they may interfere with the detection of diphtheria intoxication symptoms or with the time of death used as the endpoint in the assay.

### Federal regulation required

The only test for diphtheria potency accepted by the FDA for immune globulin, intramuscular, intended for human use is the animal model described in NIH Minimum Requirements: Diphtheria Antitoxin, 2<sup>nd</sup> revision, Jan. 18, 1946 and 21CFR 640.104. Anti-diphtheria potency of immune globulin lots is most accurately measured by using guinea pigs to test the ability of the immune globulin to neutralize diphtheria toxin.

## 3. Guinea Pigs: 254

### Procedure

The Diphtheria Potency Test for Vaccines is performed on all lots of vaccine intended for use in humans. A group of eight guinea pigs is immunized subcutaneously with 0.5 mL of vaccine or 2.0 ml of its precursor toxoid. Four weeks after immunization blood is drawn intracardially from anesthetized animals. The sera from all animals are pooled and dilutions of the serum pool are incubated in-vitro with a known amount of diphtheria toxin. The ability of antibodies in the guinea pig serum pool to neutralize the toxin is measured by injecting the toxin: serum mixtures intraperitoneally into pairs from another group of guinea pigs. The potencies of the vaccine and its precursor toxoid are calculated from the highest serum pool dilution that protects guinea pigs from death. Each lot of vaccine manufactured by MBL must pass the potency requirement in order for it to be released for distribution.

### Scientific justification why pain or distress could not be reduced or eliminated

## Registration Number: 14-R-0035

Guinea pigs inoculated with toxin: antiserum mixtures must be observed for symptoms of diphtheria toxicity or death at the 96-hour end point of the assay. Pain is minimized in any animals inoculated with the toxin-antiserum mixtures by allowing the test period to extend only long enough to observe the animals at the 96-hr time point required by the test, and by observing the animals for symptoms of toxicity or death twice daily during the test. Any use of pain-relieving drugs may interfere with the results of the assay.

### Federal regulation required

The FDA requires that each lot of diphtheria vaccine pass the animal protection potency test described in the NIH Minimum Requirements: Section 3.3, 4<sup>th</sup> Revision dated March 1, 1947, NIH Minimum Requirements: Tetanus and Diphtheria Toxoids Combined Precipitated Adsorbed (For Adult Use), Section 3.2, dated August 25, 1953, and NIH Minimum Requirements: Tetanus and Diphtheria Toxoids Combined Precipitated Adsorbed (For Adult Use), Amendment No1, dated November 28, 1956 before the lot can be released for distribution.

## 4. Guinea Pigs: 110

### Procedure

The MLD (minimum lethal dose) Test – Tetanus Toxin is used to quantify the toxin activity of each batch of tetanus toxin manufactured at MBL and intended for use in the production of tetanus toxoid vaccines. It is used as one measure of toxin potency. The test uses guinea pigs that are inoculated subcutaneously with diluted tetanus toxin. The inoculated animals are observed for 120 hours. The data are the time intervals between inoculation and death. From this time period the potency of each batch of tetanus toxin is calculated and expressed as the MLD. The dilution of the toxin used to inoculate each animal is based on an in vitro measurement of toxin antigenicity versus a standardized anti-serum to tetanus toxin. The data obtained from the test are used to show the potency of each batch of tetanus toxin produced and to show that the purity of the toxin meets the criteria established in the NIH (FDA) guidelines for tetanus toxoid vaccines

### Provide scientific justification why pain or distress could not be reduced or eliminated.

Guinea pigs inoculated with a sufficient amount of toxin with exhibit symptoms of tetanus toxicity or death during the 120-hour time period of the assay. Symptoms alone, however, cannot be used as an endpoint to assess assay validity or toxin potency. The MBL product license for tetanus/diphtheria vaccine, contain an assay to measure toxin activity by its MLD in guinea pigs. The MLD is calculated according to the monogram published by J. Ipsen, Arch. Exptl. Pharmokol. 197:836-889 (1941). Thus, MLD is dependent on the time of death. The cited procedure did not use pain-relieving drugs. Any use of pain-relieving drugs would interfere with the results of the assay because 1)



**Registration Number: 14-R-0035**

the test cited in the product license did not use them, and 2) drug use may alter the time-of-death and, thus, the MLD determination.

Federal regulation required

The test is performed according to the NIH Minimum Requirements for Tetanus Toxoid, 4<sup>th</sup> revision, dated December 15, 1952. It is a requirement of MBL's product license for the manufacture and distribution of tetanus/diphtheria vaccine. The tetanus potency test is required by 21CFR610.10. A review of the Code of Federal Regulations, revised April 1, 2004, indicates that the test is required for each lot of vaccine intended for human use. No alternative method is available.

**Species: Hamsters**

**Total Number in Cat E: 319**

Procedure

*Clostridium difficile* is a gram positive anaerobic bacillus which is responsible for antibiotic-associated diarrhea diseases infecting up to 20% of individuals admitted to hospital. *Clostridium difficile* elaborates two toxins, Toxin A and Toxin B. Hamsters are challenged with *C. difficile* bacteria. Using this animal model we have developed a human monoclonal antibody directed against Toxin A that, in combination with polyclonal sera reactive to Toxin B, can protect 80-100% of hamsters from death associated with *Clostridium difficile*. The main goal of this study is to raise polyclonal serum to multiple fragments of the Toxin B molecule and test this serum in the hamster challenge model in order to inform our decision as to which antigen to choose for use in our anti-toxin B monoclonal antibodies.

Provide scientific justification why pain or distress could not be reduced or eliminated

The disease induced by these bacteria results in death of the hamster. Death is mediated by destruction of the animal intestine as well as systemic toxicity. We intend to monitor the animals at least two times a day to detect signs of disease such as diarrhea, inactivity, and weight loss. Animals exhibiting these features will be euthanized as to alleviate pain associated with the disease. Once overt symptoms appear in the animal, death usually occurs within 12 hours. As such, euthanasia is preferable to the administration of analgesics. We have designated all animals as Category E except those which are not given the disease (i.e., controls). These control animals are listed as Category C.

Federal regulation required

None.

**Registration Number: 14-R-0035**

**Species: Nonhuman Primates**

**Total Number in Cat E: 16**

Procedure

These studies involve the Magnetic Resonance Imaging (MRI) of the conscious marmoset. In primates, body movement has been shown to obscure and sometimes even mimic changes in signals that correspond to neuronal activation. In MRI studies, there must be a device to immobilize the head and body of the animal without restricting the animals' vital functions. The overall intent is to facilitate the acquisition of neuroimages that will enhance our understanding of the neuronal circuitry involved in the stress response.

The stress caused by immobilization and noise from the MR scanner in a fully conscious animal is a major concern. We therefore adapt animals to the imaging procedures (and measure basal levels of hormones and resting levels of autonomic activity) in order to isolate the stress-mediated changes in brain activity from those of interest.

Scientific justification why distress cannot be relieved

This non-invasive in vivo method of neuroimaging in awake animals is designed to change our current imagery of the brain from either a static entity (as seen with most neurochemical measurements) or a low activation of dynamic system in an anesthetized state (as seen with current MRI or PET measurements), to a real time 3-D physiologically functioning unit. Therefore, to accomplish this work in the non-anesthetized animal, and to stop body movement signals (as described above) we provide restraint in a specially made apparatus to minimize the stress to the animal.

Federal regulation required

None

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. REGISTRATION NO.  
14-R-0036

CUSTOMER NO.  
515

FORM APPROVED  
OMB NO. 0579-0036

**ANNUAL REPORT OF RESEARCH FACILITY**  
(TYPE OR PRINT)

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

UNIVERSITY OF MASSACHUSETTS AT AMHERST  
ANIMAL CARE OFFICE 512 GOODSELL BUILDING  
AMHERST, MA 01003

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)

UNIVERSITY OF MASSACHUSETTS AT AMH  
AMHERST, MA 01003

REPORT OF ANIMALS USED BY OR UNDER CONTROL OF RESEARCH FACILITY (Attach additional sheets if necessary 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 in these animals and the reasons such drugs were not used must be attached to this report)	F. TOTAL NO. OF ANIMALS (Cols. C + D + E)
4. Dogs					
5. Cats					
6. Guinea Pigs					
7. Hamsters	55	45	502		547
8. Rabbits		13			13
9. Non-Human Primates		11			11
10. Sheep		22			22
11. Pigs		12			12
12. Other Farm Animals					
cow		9			9
13. Other Animals					
Virginia opossum		21	2		23
beaver			19		19
deer mouse		13			13

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 the 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 provision 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 or Legally Responsible Institutional official)  
I certify that the above is true, correct, and complete (7 U.S.C. Section 2143)

SIGNATURE OF C.E.O. OR INSTITUTIONAL OFFICIAL

NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL (Type or Print)

DATE SIGNED

11/23/2004

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. REGISTRATION NO. 14-R-0036  
CUSTOMER NO. 515

FORM APPROVED  
OMB NO. 0579-0036

**CONTINUATION SHEET FOR ANNUAL REPORT  
OF RESEARCH FACILITY  
(TYPE OR PRINT)**

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

UNIVERSITY OF MASSACHUSETTS AT AMHERST  
ANIMAL CARE OFFICE 512 GOODELL BUILDING  
AMHERST, MA 01003

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

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 in these animals and the reasons such drugs were not used must be attached to this report)	F. TOTAL NO. OF ANIMALS (Cols. C + D + E)
goat		27			27
horse		5			5
warthog		3			3
jackel		1			1
Mongolian gazelle		35			35
American marten			37		37
fisher		41			41
raccoon		57	15		72
snowshoe hair		37			37
red squirrel		8			8
black bear		1			1
skunk		1	20		21
star nosed mole		4			4
meadow vole		9			9
eastern chipmunk		25			25
bat		20			20
mouse lemur			60		60
leopard			8		8
brown hyena			6		6

**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 the 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 provision 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 or Legally Responsible Institutional official)

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

SIGNATURE OF C.E.O. OR INSTITUTIONAL OFFICIAL	NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL (Type or Print)	DATE SIGNED
		11/23/2004

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

<b>1. REGISTRATION NO.</b> 14-R-0036	<b>CUSTOMER NO.</b> 515	<b>FORM APPROVED</b> OMB NO. 0579-0036
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### CONTINUATION SHEET FOR ANNUAL REPORT OF RESEARCH FACILITY (TYPE OR PRINT)

**2. HEADQUARTERS RESEARCH FACILITY** (Name and Address, as registered with USDA, include Zip Code)  
UNIVERSITY OF MASSACHUSETTS AT AMHERST  
ANIMAL CARE OFFICE 512 GOODELL BUILDING  
AMHERST, MA 01003

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

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 in these animals and the reasons such drugs were not used must be attached to this report)	F. TOTAL NO. OF ANIMALS (Cols. C + D + E)
african wildcat		3			3
siberian hamster	213	20	57		77
gerbil	20		157		157
prarie vole	819	282	234		516
short tail shrew		327			327
masked shrew		144			144
red-backed vole		88			88
hairy tailed mole		7			7

**ASSURANCE STATEMENTS**

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(Chief Executive Officer or Legally Responsible Institutional official)  
I certify that the above is true, correct, and complete (7 U.S.C. Section 2143)

SIGNATURE OF C.E.O. OR INSTITUTIONAL OFFICIAL	NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL (Type or Print)	DATE SIGNED
		11/23/2004

**APHIS Form 7023 Additional Reported Sites**

The following additional sites have been reported by the facility. The reported sites have not been verified by APHIS and have been provided by the facility solely for completeness of the APHIS Form 7023 Annual Reporting submission.

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Registration Number: 14-R-0036  
Customer Number: 515  
Facility: UNIVERSITY OF MASSACHUSETTS AT AMHERST  
ANIMAL CARE OFFICE 512 GOODELL BUILDING  
AMHERST, MA 01003

---

**Central Animal Care Facility**

Univ. of MA

Amherst, MA 01003

Tobin Hall

Univ. of MA

Amherst, MA 01003

Bartlett Hall

Univ. of MA

Amherst, MA 01003

Morrill Science 2 South

Univ. of MA

Amherst, MA 01003

Morrill Science 4 North

Univ. of MA

Amherst, MA 01003

Thayer Laboratory

Univ. of MA

Amherst, MA 01003

Hadley Livestock Facility

Univ. of MA

Amherst, MA 01003

South Deerfield Livestock Facility

Univ. of MA

S. Deerfield, MA 01373

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 14-R-0038  
CUSTOMER NUMBER: 132

FORM APPROVED  
OMB NO. 0579-0036

**ANNUAL REPORT OF RESEARCH FACILITY**  
( TYPE OR PRINT )

Williams College  
P.O. Box 624  
Williamstown, MA 01267  
  
Telephone: (413)-597-4352

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

FACILITY LOCATIONS ( Sites ) - See Attached Listing

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

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4. Dogs					0
5. Cats					0
6. Guinea Pigs					0
7. Hamsters					0
8. Rabbits					0
9. Non-human Primates					0
10. Sheep					0
11. Pigs					0
12. Other Farm Animals					0
13. Other Animals					0

**ASSURANCE STATEMENTS**

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CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL  
( Chief Executive Officer or Legally Responsible Institutional Official )

NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL ( Type or Print )

DATE SIGNED

11/29/04

**OCT 19 2004**

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE  <b>ANNUAL REPORT OF RESEARCH FACILITY</b> ( TYPE OR PRINT )	1. CERTIFICATE NUMBER: 14-R-0041 CUSTOMER NUMBER: 133	FORM APPROVED OMB NO. 0579-0036
Becker College 61 Sever Street Worcester, MA 01609  Telephone: (508)-791-9241		

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

FACILITY LOCATIONS ( Sites ) - See Attached Listing 955 Main St.  
Leicester, MA 01524

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

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal 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 an 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 wh the use of appropriate anesthetic, analgesic, or tranquiliz drugs would have adversely affected the procedures, res or interpretation of the teaching, research, experiments, surgery, or tests. ( An explanation of the procedures producing pain or distress in these animals and the reasr such drugs were not used must be attached to this report	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
4. Dogs		8	23		31
5. Cats		2	15		17
6. Guinea Pigs		1	11		12
7. Hamsters		0	0		0
8. Rabbits		0	6		6
9. Non-human Primates		0	0		0
10. Sheep		0	0		0
11. Pigs		0	0		0
12. Other Farm Animals		0	0		0
13. Other Animals		0	0		0

**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 rese 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 ap 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 inc 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 provision 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 or Legally Responsible Institutional Official )		
SI	NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL ( Type or Print )	DATE SIGNED  10/13/04

AP ( ), which is obsolete.)



UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE  <b>ANNUAL REPORT OF RESEARCH FACILITY</b> ( TYPE OR PRINT )	1. CERTIFICATE NUMBER: 14-R-0042 CUSTOMER NUMBER: 122	FORM APPROVED OMB NO. 0579-0036
Cytogen Research & Development Inc 89 Bellevue Hill Road West Roxbury, MA 02132  Telephone: (617) -325-7774		

OCT 13 2004

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

FACILITY LOCATIONS ( Sites ) - See Attached Listing

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

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal 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 an 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 wh the use of appropriate anesthetic, analgesic, or tranquiliz drugs would have adversely affected the procedures, res or interpretation of the teaching, research, experiments, surgery, or tests. ( An explanation of the procedures producing pain or distress in these animals and the reasc such drugs were not used must be attached to this report	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
4. Dogs					
5. Cats					
6. Guinea Pigs					
7. Hamsters	879	23	0	0	23
8. Rabbits					
9. Non-human Primates					
10. Sheep					
11. Pigs					
12. Other Farm Animals					
13. Other Animals	Chinese and Armenian hamsters only				

**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 rese 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 ap 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 inc 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 provision 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 or Legally Responsible Institutional Official )

SIGNATURE OF CEO OR INSTITUTIONAL OFFICIAL

NAME & TITLE OF CEO OR INSTITUTIONAL OFFICIAL ( Type or Print )

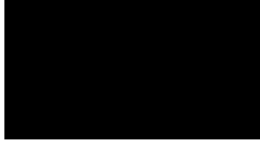
DATE SIGNED

10/5/04

Site: 001

Brandeis University  
Foster Animal Facility  
215 South Street  
Waltham, MA 02254  
County: Middlesex

Contact Person:



NE

Site: 002

Cytogen Research and Development, Inc.  
RECORDS ONLY  
89 Bellevue Hill Road  
West Roxbury, MA 02132-6423  
County: Suffolk

Contact Person:



NE

NOV 30 2004

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 14-R-0047  
CUSTOMER NUMBER: 455

FORM APPROVED  
OMB NO. 0579-0036

**ANNUAL REPORT OF RESEARCH FACILITY**  
( TYPE OR PRINT )

Ariad Pharmaceuticals, Inc.  
26 Landsdowne Street  
Cambridge, MA 02139

Telephone: (617)-494-0400

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

FACILITY LOCATIONS ( Sites ) - See Attached Listing

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

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal 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 an 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 wh the use of appropriate anesthetic, analgesic, or tranquiliz drugs would have adversely affected the procedures, res or interpretation of the teaching, research, experiments, surgery, or tests. ( An explanation of the procedures producing pain or distress in these animals and the reasc such drugs were not used must be attached to this report	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
4. Dogs	0				0
5. Cats	0				0
6. Guinea Pigs	0				0
7. Hamsters	0				0
8. Rabbits	0				0
9. Non-human Primates	0				0
10. Sheep	0				0
11. Pigs	0				0
12. Other Farm Animals	0				0
13. Other Animals	0				0

**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 rest 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 ap 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 inc 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 provision 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 or Legally Responsible Institutional Official )

IONAL OFFICIAL

NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL ( Type or Print )

DATE SIGNED

Nov 27, 2004

This report is required by law (7 USC 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 21:

See attached form for additional information.

Interagency Report Control No.:

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 14-R-0056  
CUSTOMER NUMBER: 475

FORM APPROVED  
OMB NO. 0579-0036

**ANNUAL REPORT OF RESEARCH FACILITY**  
( TYPE OR PRINT )

EPIX Pharmaceuticals Inc.  
67 Rogers Street  
Cambridge, MA 02142-1118

Telephone: (617)-250-6000

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

EPIX Pharmaceuticals Inc. FACILITY LOCATIONS ( Sites ) - See Attached Listing  
Animal Facility & Pharmacology Lab - 65 Rogers Street

**REPORT OF ANIMALS USED BY OR UNDER CONTROL OF RESEARCH FACILITY ( Attach additional sheets if necessary 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 in these animals and the reasons such drugs were not used must be attached to this report ).	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
4. Dogs	0	0	0	0	0
5. Cats	0	0	0	0	0
6. Guinea Pigs	0	0	0	0	0
7. Hamsters	0	0	0	0	0
8. Rabbits	0	0	62	0	62
9. Non-human Primates	0	0	0	0	0
10. Sheep	0	0	0	0	0
11. Pigs	0	0	0	0	0
12. Other Farm Animals	0	0	0	0	0
13. Other Animals	0	0	0	0	0

**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, 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 an 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 provision 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 or Legally Responsible Institutional Official )

{ NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL. ( Type or Print )

{ DATE SIGNED

13/0

NOV 22 2004

See attached form for additional information.

Interagency Report Control No. *gpr*

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 14-R-0061  
CUSTOMER NUMBER: 136

FORM APPROVED  
OMB NO. 0579-0036

**ANNUAL REPORT OF RESEARCH FACILITY**  
( TYPE OR PRINT )

Smith College  
Clark Science Center/Smith College  
Northampton, MA 01063

Telephone: (413)-585-3959

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

FACILITY LOCATIONS ( Sites ) - See Attached Listing

**Site listed above**

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

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not ye used for such purposes.	C. Number of animals upon which teaching, research, experiments, or tests were conducted involving no pain, distress, or use o pain-relieving drugs.	D. Number of animals upon which experiments, teaching, research, surgery, or tests were conducted involving pain or distress to the animals an 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 wh the use of appropriate anesthetic, analgesic, or tranquiliz drugs would have adversely affected the procedures, res or interpretation of the teaching, research, experiments, surgery, or tests. ( An explanation of the procedures producing pain or distress in these animals and the reas such drugs were not used must be attached to this report	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
4. Dogs					
5. Cats					
6. Guinea Pigs					
7. Hamsters		72	11		83
8. Rabbits					
9. Non-human Primates					
10. Sheep					
11. Pigs					
12. Other Farm Animals					
13. Other Animals					
<b>Ferrets</b>		3	20		23
<b>Deer Mice</b>		69			69

**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 rese teaching, testing, surgery, or experimentation were followed by this research facility.
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- 4) The attending veterinarian for this research facility has appropriate authority to ensure the provision 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 or Legally Responsible Institutional Official )

NAME & TITLE OF CEO OR INSTITUTIONAL OFFICIAL ( Type or Print )

DATE SIGNED

11/19/04

), which is obsolete.)

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 14-R-0062  
CUSTOMER NUMBER: 534

FORM APPROVED  
OMB NO. 0579-0036

**ANNUAL REPORT OF RESEARCH FACILITY**  
(TYPE OR PRINT)

Millbrook Immunoserv  
P.O. Box 513  
Amherst, MA 01004

OCT 06 2004

Telephone: (413)-253-5083

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

FACILITY LOCATIONS ( Sites ) - See Attached Listing

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

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal 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 an 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 wh the use of appropriate anesthetic, analgesic, or tranquiliz drugs would have adversely affected the procedures, res or interpretation of the teaching, research, experiments, surgery, or tests. ( An explanation of the procedures producing pain or distress in these animals and the reas such drugs were not used must be attached to this report	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
4. Dogs					
5. Cats					
6. Guinea Pigs					
7. Hamsters					
8. Rabbits	542	153	15		168
9. Non-human Primates					
10. Sheep					
11. Pigs	4				
12. Other Farm Animals					
Goats	82				
13. Other Animals					

**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 rese teaching, testing, surgery, or experimentation were followed by this research facility.
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- The attending veterinarian for this research facility has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of other aspects of animal care and use.

CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL  
( Legally Responsible Institutional Official )

NAME & TITLE OF C.F.O. OR INSTITUTIONAL OFFICIAL (Type or Print)

DATE SIGNED

10/1/04

CERTIFICATE NUMBER: 14-R-0062

CUSTOMER NUMBER: 534

3. REPORTING FACILITY (Animal locations)

Rabbits: Rabbit Breeding Facility (1210)  
Rabbit Research Facility (1380 Lab)

Pigs: Research Pig Facility (Bldg 2)

Goats: Research Goat Facility (Granby)

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 14-R-0065  
CUSTOMER NUMBER: 628

FORM APPROVED  
OMB NO. 0579-0036

**ANNUAL REPORT OF RESEARCH FACILITY**  
( TYPE OR PRINT )

Tufts University  
School Of Veterinary Medicine  
200 Westboro Road Bldg. 17  
North Grafton, MA 01536

NOV 24 2004

Telephone: (508) -839-7992

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

FACILITY LOCATIONS ( Sites ) - See Attached Listing

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

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not 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 in these animals and the reason such drugs were not used must be attached to this report )	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
Dogs	0	0	25	0	25
Cats	0	0	0	0	0
Guinea Pigs	0	2	70	0	72
Hamsters	0	4	0	0	4
Rabbits	0	2	2	5	9
Non-human Primates	0	0	0	0	0
Sheep	0	68	117	28	213
Pigs	0	40	31	710	781
Other Farm Animals					
llama	0	1	0	0	1
horse	0	0	18	0	18
Other Animals					
woodchuck	0	0	10	0	10
goat	0	0	186	0	186
cattle	0	51	14	8	73
minipig	0	70	0	0	70
wild mouse	0	234	0	31	265
gerbil	0	42	0	0	42

**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, testing, surgery, or experimentation were followed by this research facility.
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- 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 an 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 provision 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 or Legally Responsible Institutional Official )

SIGNATURE OF C.E.O. OR INSTITUTIONAL OFFICIAL

NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL ( Type or Print )

DATE SIGNED

11/23/04

EG



NOV 24 2004



TUFTS UNIVERSITY  
School of Veterinary Medicine

Division of Teaching and Research Resources

Tufts University School of Veterinary Medicine  
North Grafton, Massachusetts  
2004 Annual Report of Research Facility  
Registration Number: 14-R-0065

Explanation for Column E:

Calves and piglets were used to produce large numbers of oocysts of *Cryptosporidium parvum* and other species of *Cryptosporidium* for use in several research programs. Cell culture techniques do not produce significant numbers of organisms necessitating the *in vivo* model for propagation. Four days after oral inoculation, the animal develops diarrhea and begins to shed oocysts. For approximately 10 days during collection of oocysts, the animal may experience discomfort and distress caused by a self-limiting diarrhea. During this time, the animals are closely monitored at least 3 times daily and usually maintain normal appetite, activity levels, and hydration status. Animals may receive fluid therapy to maintain hydration. Animals are euthanized approximately 10 days after the onset of clinical signs as the level of oocyst shedding wanes. Since shedding of large numbers of oocysts is dependent upon the development of diarrhea, antidiarrheal agents and motility modifiers cannot be administered to the animals. Although not expected, animals developing significant signs of distress, including dehydration, depression, or anorexia are euthanized immediately.

Piglets were also used to study various enteric pathogens including microsporidia, cryptosporidia, *Escherichia coli*, *Clostridium difficile*, and *Candida albicans*. Piglets may develop moderate diarrhea after oral inoculation and experience discomfort or distress for the duration of the 7-21 day experiment. Antidiarrheal treatments cannot be administered in order to study the progression of disease but piglets may receive fluid therapy to maintain hydration. Animals are monitored at least 3 times per day and those developing significant signs of distress, including dehydration, depression, or anorexia are euthanized immediately.

Species: Swine Number: 210

Species: Cattle Number: 8

Infant rabbit kits were used for the passage and propagation of *Cryptosporidium* sp. In an effort to obtain rabbits relatively free of anti-cryptosporidial antibodies and minimize maternal stress, the PI obtains pregnant rabbits 1-2 weeks prior to parturition. One week following parturition, the kits are orally inoculated with *Cryptosporidium* sp. and kept with the mother. Kits may develop diarrhea and experience abdominal discomfort or distress. Kits are monitored at least twice daily and those developing significant signs of distress including dehydration, depression, or anorexia are euthanized immediately.

Species: Rabbit Number: 5

Lamb/kid castration and tail docking is performed by students during the clinical skills course as part of the routine management, husbandry and veterinary practices of the farm. Although it is recognized that lambs/kids probably experience more than minimal or momentary pain and distress, current standard agricultural practices do not utilize anesthetics or analgesics for these procedures. The purpose of this Clinical Skills Course is to train competent veterinarians in the procedures that they will be expected to perform in practice. Since these procedures are expected to be performed without anesthetics and analgesics, exposure to these procedures in veterinary school is critical. All of the current veterinary textbooks and the Sheep Production Handbook produced by the American Sheep Industry Association, Inc. provide instruction on these procedures without anesthesia or analgesia. The "Ag Guide" produced by FASS also allows these procedures to be performed without anesthesia or analgesia prior to 14 days of age. In the TUSVM sheep flock and goat herd, these procedures are performed within 7 days of age. These procedures are demonstrated by the instructors and may be voluntarily performed by students. Only one attempt is allowed under the direct supervision of the instructor who intervenes if problems occur. Methods of castration may include elastration, emasculator, and the preferred method, surgical castration. Methods of tail docking may include elastration, emasculator, and hot iron cautery (preferred).  
Species: Sheep      Number: 28      Species: Goat      Number: 0

Piglet castration and tail docking is performed by students during the clinical skills course as part of the routine management, husbandry and veterinary practices of the farm. Although it is recognized that the piglets probably experience more than minimal or momentary pain and distress, current standard agricultural practices do not utilize anesthetics or analgesics for these procedures. The purpose of this Clinical Skills Course is to train competent veterinarians in the procedures that they will be expected to perform in practice. Since these procedures are expected to be performed without anesthetics and analgesics, exposure to these procedures in veterinary school is critical. All of the current veterinary textbooks and the Swine Care Handbook produced by the National Pork Board provide instruction on these procedures without anesthesia or analgesia. The "Ag Guide" produced by FASS also allows these procedures to be performed without anesthesia or analgesia prior to 14 days of age. In the TUSVM Swine Unit, these procedures are performed within 7 days of age. These procedures are demonstrated by the instructors and may be voluntarily performed by students. Only one attempt is allowed under the direct supervision of the instructor who intervenes if problems occur. Methods of castration may include elastration, emasculator, and the preferred method, surgical castration. Methods of tail docking may include elastration, emasculator, and hot iron cautery (preferred).  
Species: Swine      Number: 500

Wild mice were captured using snap trapping. It is possible that animals may not die immediately when snap trapped, or may be captured by a limb or tail. Accordingly, such an animal may suffer during the 8 overnight hours before traps are checked. Drugs could not be administered during this time because the traps are not attended. Any animal that is not dead when snap traps are checked will be immediately killed by halothane exposure. During the course of the PI's work, he kept a detailed record of the prevalence of such animals, in addition to comparisons of the efficacy of snap traps as opposed to live traps when the two methods are simultaneously used. During the first year, 31 animals were caught by snap trapping and there was no evidence that the animals had not been killed instantly (e.g. trap displaced more than a few inches; animal snapped other than across the spine).  
Species: Wild Mice      Number: 31

NOV 24 2004



TUFTS UNIVERSITY  
School of Veterinary Medicine

Division of Teaching and Research Resources

Tufts University School of Veterinary Medicine  
North Grafton, Massachusetts  
2004 Annual Report of Research Facility  
Registration Number: 14-R-0065

Summary of Exceptions to the regulations and standards:

(b)(6), (b)(7)(C) #G413-01 Physiologic Effects of Lung Volume Reduction in Sheep w/Experimental Homogeneous or Heterogeneous Emphysema

Exception from housing size recommendations. Sheep recovering from surgical lung volume reduction are housed in the clinical hospital wards to provide the additional post-operative monitoring required. The pens available are slightly smaller than NIH *Guide* recommended size but still allow the full range of normal movement. These sheep may remain in these pens for a period of 2-4 weeks depending on their recovery.

(b)(6), (b)(7)(C) #G631-04 Laboratory Maintenance of the Life Cycles of Ticks and the Pathogens They Transmit

Exceptions from housing size recommendations, cage changing schedules and separation of litters from general cage population. White footed mice are gregarious, particularly during the winter months, and the PI's experience suggest that keeping 4-6 mice (one male and several females) in a shoebox cage or 12-18 mice of mixed sex allows for sufficient breeding with intrinsic regulation of the numbers of offspring produced. In this manner, the PI produces only enough for adequate turnover of the colony, but does not experience breeding that needs frequent culling. In addition, the PI finds that cleaning cages less frequently (one cage change every 2-3 weeks) enhances breeding, probably because of pheromone marking of the cage. Finally, although gravid females could be separated, the PI has found that such litters survive less frequently than do those allowed to remain with the other mice.

\*No mice were used under this protocol this year.

(b)(6), (b)(7)(C)

#G506-03 Production of Cryptosporidium sp. Oocysts in Calves

Exception from housing size recommendation. Initially calves will be housed in a large pen containing wood shavings. Within 24 hours of arrival at TUSVM, calves will be inoculated orally with *Cryptosporidium* sp. oocysts. Following inoculation, calves will be monitored daily for fecal shedding of oocysts. Once calves begin shedding oocysts (usually 3-5 days following inoculation), they will be transferred to a free-standing stanchion. These stanchions are 5'x2' with a raised grate flooring to facilitate placement of pans for collection of feces containing the oocysts. Calves typically shed *Cryptosporidium* sp. oocysts for up to 2 weeks following inoculation. The adverse effect of the stanchion is that the calf is unable to ambulate freely, but generally, the stanchion is well-tolerated. Non-standard housing (indoors within a free-standing stanchion) is required to facilitate collection of oocysts present in feces and reducing risk of infection of personnel.

(b)(6), (b)(7)(C)

#G507-03 Gnotobiotic Piglet Model of E. coli Infection

#G469-02 Immunosuppressed Gnotobiotic Piglet Model of Gastrointestinal *Enterocytozoon bieneusi* Infection

#G432-02 Stx-Specific Human Monoclonal Antibodies for HUS Prophylaxis

#G505-03 Gnotobiotic Piglet Model of Cryptosporidiosis

Exception from housing size recommendations. Piglets are housed for up to 4 weeks in gnotobiotic isolators in sectioned pens or individual cages to allow manipulation and monitoring of individual piglets during the study. Piglets are able to move freely and assume normal postures within the limited space. Non-standard housing (in pens/cages within isolators) is required to maintain gnotobiotic status, facilitate collection of oocysts present in feces, and reduce the risk of infection of personnel.

(b)(6), (b)(7)(C)

#G543-03 In Vivo Axial Dynamization of Canine Tibial Fractures Using the Securos External Skeletal Fixation System

Exception from canine exercise requirement. Dogs in this bilateral osteotomy study were exempted from the canine exercise requirement for 4-8 week post-operatively to allow sufficient healing from surgery. This is standard clinical treatment following this type of surgery. Dogs were returned to the normal exercise program when clinically appropriate.

(b)(6), (b)(7)(C)

#G383-01 Sustained Coronary Stenosis and Hibernating Myocardium

Lighting and veterinary care. The exemption for the lighting standard and veterinary care for winter woodchucks placed in the hibernaculum will be required. In order to induce the hibernating state, the woodchucks must be in a completely dark, quiet, cool (38-42°F) environment without food during the months of October through February. The majority of animals placed in the hibernaculum will have a telemetry system implanted which will allow us to record ECG, temperature and aortic pressure each day. Hibernation will be

confirmed by a recorded heart rate less than 20 beats per minute and a temperature less than 12°C sustained for 2-3 days. For the few animals which may not have telemetry system, animals will be considered hibernating if there is no response when blown upon for 2 consecutive visits (2-3 days apart) at which time they will be removed from the experimental studies. No woodchuck will remain in the hibernaculum longer than 40 days. The duration of time spent in the hibernaculum prior to confirmation of hibernation for previous studies has been from 2-5 weeks. The duration to hibernation has significantly decreased following the use of telemetry and improvements in the hibernaculum i.e. quieter cooling unit and low-flow air system.

Additionally, it is also very important for the animals to not feel threatened or a need to defend themselves. Because of this only limited access should be permitted inside the hibernaculum. The animals will be visually examined using a red light and provide fresh water every 2-3 days while they are in the hibernaculum.

In the past, the PI has had good luck with animals entering the hibernating state using these recommended methods. When the woodchucks are in the hibernaculum, they curl up in their hay and are difficult to assess without blowing on them. The hibernating state is very delicate and the woodchucks will not enter hibernation if intruded upon at frequent intervals. The use of large, ceramic water bowls and telemetry provide both fresh water and objective health status information without unwarranted disturbance which may delay or prevent entrance into the hibernating state and paradoxically increase morbidity, mortality or experimental failure.

\*No hibernating woodchucks were used this year.

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 14-R-0066  
CUSTOMER NUMBER: 721

FORM APPROVED  
OMB NO. 0579-0036

**ANNUAL REPORT OF RESEARCH FACILITY**  
( TYPE OR PRINT )

Embryotech Laboratories Inc  
323 Andover Street  
Wilmington, MA 01887

Telephone: (978)-658-4600

SEP 30 2004

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

FACILITY LOCATIONS ( Sites ) - See Attached Listing

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

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not ye 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 an 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 wh the use of appropriate anesthetic, analgesic, or tranquiliz drugs would have adversely affected the procedures, res or interpretation of the teaching, research, experiments, surgery, or tests. ( An explanation of the procedures producing pain or distress in these animals and the reas such drugs were not used must be attached to this report	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
4. Dogs					
5. Cats					
6. Guinea Pigs					
7. Hamsters	565	1489			1489
8. Rabbits					
9. Non-human Primates					
10. Sheep					
11. Pigs					
12. Other Farm Animals					
13. Other Animals					

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 res 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 ap 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 inr 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 provision 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 or Legally Responsible Institutional Official )

FFICIAL

or Print )

DATE SIGNED

9 27 04

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 14-R-0068  
CUSTOMER NUMBER: 137

FORM APPROVED  
OMB NO. 0579-0036

**ANNUAL REPORT OF RESEARCH FACILITY**  
( TYPE OR PRINT )

Worcester Polytechnic Institute  
100 Institute Road  
Worcester, MA 01609

Telephone: (508) -831-5000

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

*WPI Animal Facility, Salisbury Labs 313-319*

FACILITY LOCATIONS ( Sites ) - See Attached Listing

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

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not 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 an 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 wh the use of appropriate anesthetic, analgesic, or tranquiliz drugs would have adversely affected the procedures, res or interpretation of the teaching, research, experiments, surgery, or tests. ( An explanation of the procedures producing pain or distress in these animals and the reas such drugs were not used must be attached to this report	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
4. Dogs	0	0	0	0	0
5. Cats	0	0	0	0	0
6. Guinea Pigs	0	0	0	0	0
7. Hamsters	0	0	0	0	0
8. Rabbits	0	0	0	0	0
9. Non-human Primates	0	0	0	0	0
10. Sheep	0	0	0	0	0
11. Pigs	0	0	0	0	0
12. Other Farm Animals	0	0	0	0	0
13. Other Animals					
<i>Rats</i>	0	0	192	0	192
<i>Mice</i>	0	0	25	0	25

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 res teaching, testing, surgery, or experimentation were followed by this research facility.
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- 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 ap 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 inc 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 provision 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 or Legally Responsible Institutional Official )

SIGNATURE OF C.E.O. OR INSTITUTIONAL OFFICIAL

NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL (Type or Print)

DATE SIGNED

11/30/04

8), which is obsolete.)

OCT 18 2004

See attached form for additional information.

Interagency Report Control No.:

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 14-R-0071  
CUSTOMER NUMBER: 128

FORM APPROVED  
OMB NO. 0579-0036

**ANNUAL REPORT OF RESEARCH FACILITY**  
( TYPE OR PRINT )

Joslin Diabetes Center, Inc.  
Elliott P. Joslin Research Lab  
One Joslin Place  
Boston, MA 02215

Telephone: (617) -732-2474

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

FACILITY LOCATIONS ( Sites ) - See Attached Listing

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

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not ye used for such purposes.	C. Number of animals upon which teaching, research, experiments, or tests were conducted involving no pain, distress, or use o 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 an 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 wh the use of appropriate anesthetic, analgesic, or tranquiliz drugs would have adversely affected the procedures, res or interpretation of the teaching, research, experiments, surgery, or tests. ( An explanation of the procedures producing pain or distress in these animals and the reas such drugs were not used must be attached to this report	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
4. Dogs	0	0			0
5. Cats	0	0			0
6. Guinea Pigs	0	0			0
7. Hamsters	0	0			0
8. Rabbits	0	0			0
9. Non-human Primates	0	0			0
10. Sheep	0	0			0
11. Pigs	0	0			0
12. Other Farm Animals	0	0			0
13. Other Animals	0	0			0

**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 rese 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 ap 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 inc brief explanation of the exceptions, as well as the species and number of animals affected.
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**CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL**  
( Chief Executive Officer or Legally Responsible Institutional Official )

\_\_\_\_\_  
OFFICIAL

\_\_\_\_\_  
NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL ( Type or Print )

DATE SIGNED

10/11/04



UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 14-R-0074  
CUSTOMER NUMBER: 756

FORM APPROVED  
OMB NO. 0579-0036

**ANNUAL REPORT OF RESEARCH FACILITY**  
( TYPE OR PRINT )

~~GTC Biotherapeutics~~ GTC Biotherapeutics  
175 Crossing Blvd  
Framingham, MA 01701  
  
Telephone: (508) -620-9700

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

FACILITY LOCATIONS ( Sites ) - See Attached Listing

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

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not 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 an 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 wh the use of appropriate anesthetic, analgesic, or tranquiliz drugs would have adversely affected the procedures, res or interpretation of the teaching, research, experiments, surgery, or tests. ( An explanation of the procedures producing pain or distress in these animals and the reas such drugs were not used must be attached to this report	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
4. Dogs					
5. Cats					
6. Guinea Pigs					
7. Hamsters					
8. Rabbits					
9. Non-human Primates					
10. Sheep					
11. Pigs					
12. Other Farm Animals					
Goats	1082		658		658
13. Other Animals					

**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 res teaching, testing, surgery, or experimentation were followed by this research facility.
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CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL  
or Legally Responsible Institutional Official )

SIGNATURE

NAME & TITLE OF CEO OR INSTITUTIONAL OFFICIAL ( Type or Print )

DATE SIGNED

*10-18-04*

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

<b>1. REGISTRATION NO.</b> 14-R-0079	<b>CUSTOMER NO.</b> 760	<b>FORM APPROVED</b> OMB NO. 0579-0036
<b>2. HEADQUARTERS RESEARCH FACILITY</b> (Name and Address, as registered with USDA, include Zip Code)  MILLENNIUM PHARMACEUTICALS INC 40 LANDSDOWNE ST CAMBRIDGE, MA 02139		

**ANNUAL REPORT OF RESEARCH FACILITY**  
(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 necessary.)

**FACILITY LOCATIONS/sites**

MILLENNIUM PHARMACEUTICALS CAMBRIDGE, MA 02142	
MILLENNIUM PHARMACEUTICALS SAN FRANCISCO, CA 94080	

**REPORT OF ANIMALS USED BY OR UNDER CONTROL OF RESEARCH FACILITY** (Attach additional sheets if necessary 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 in these animals and the reasons such drugs were not used must be attached to this report)	F. TOTAL NO. OF ANIMALS  (Cols. C + D + E)
4. Dogs					
5. Cats					
6. Guinea Pigs	42	86	377		463
7. Hamsters					
8. Rabbits					
9. Non-Human Primates					
10. Sheep					
11. Pigs					
12. Other Farm Animals					
13. Other Animals					

**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 the 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 provision 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 or Legally Responsible Institutional official)  
I certify that the above is true, correct, and complete (7 U.S.C. Section 2143)

<b>SIGNATURE OF C.E.O. OR INSTITUTIONAL OFFICIAL</b>	<b>NAME &amp; TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL</b> (Type or Print)	<b>DATE SIGNED</b>  11/23/2004
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NOV 30 2004

This report is required by law (7 USC 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 21:

See attached form for additional information.

Interagency Report Control No. *015*

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE  <b>ANNUAL REPORT OF RESEARCH FACILITY</b> ( TYPE OR PRINT )	1. CERTIFICATE NUMBER: 14-R-0081 CUSTOMER NUMBER: 139	FORM APPROVED OMB NO. 0579-0036
University Of Massachusetts Lowell Research Foundation 600 Suffolk Street 2nd Floor South Lowell, MA 01854		

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

Office of Research Services  
 198 Riverside Street, Olsen Hall, Room 618, Lowell, MA 01854  
 FACILITY LOCATIONS ( Sites ) - See Attached Listing

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

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not ye used for such purposes.	C. Number of animals upon which teaching, research, experiments, or tests were conducted involving no pain, distress, or use o 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 an 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 wh the use of appropriate anesthetic, analgesic, or tranquiliz drugs would have adversely affected the procedures, res or interpretation of the teaching, research, experiments, surgery, or tests. ( An explanation of the procedures producing pain or distress in these animals and the reas such drugs were not used must be attached to this report	F. TOTAL NUMBER OF ANIMALS ( C + D + E )
4. Dogs	0	0	0	0	0
5. Cats	0	0	0	0	0
6. Guinea Pigs	0	0	0	0	0
7. Hamsters	0	0	95	0	95
8. Rabbits	0	0	0	0	0
9. Non-human Primates	0	0	0	0	0
10. Sheep	0	0	0	0	0
11. Pigs	0	0	0	0	0
12. Other Farm Animals	0	0	0	0	0
13. Other Animals	0	0	0	0	0

**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 res teaching, testing, surgery, or experimentation were followed by this research facility.
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- 4) The attending veterinarian for this research facility has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of other aspects of animal care and use.

CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL _____ (ive Officer or Legally Responsible Institutional Official )	DATE SIGNED 11/29/04
_____ ( NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL ( Type or Print )	

AI \_\_\_\_\_ (delete)

Facility Location

University of Massachusetts Lowell  
Office of Research Services  
198 Riverside Street  
Olsen Hall, Room 618  
Lowell, MA 01854

County: Middlesex

Phone: 978 934-2830

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 14-R-0083  
CUSTOMER NUMBER: 705

FORM APPROVED  
OMB NO. 0579-0036

**OCT 18 2004**  
**ANNUAL REPORT OF RESEARCH FACILITY**  
(TYPE OR PRINT)

New England College Of Optometry  
424 Beacon Street  
Boston, MA 02115

Telephone: (617)-236-6227

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

FACILITY LOCATIONS ( Sites ) - See Attached Listing

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

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not ye 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 an for which appropriate anesthetic, analgesic, or tranquilizing drugs were used.	E. Number of animals upon which teaching, expernents, research, surgery or tests were conducted involving accompanying pain or distress to the animals and for wh the use of appropriate anesthetic, analgesic, or tranquiliz drugs would have adversely affected the procedures, res or interpretation of the teaching, research, experiments, surgery, or tests. ( An explanation of the procedures producing pain or distress in these animals and the reas such drugs were not used must be attached to this report	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
4. Dogs					
5. Cats					
6. Guinea Pigs					
7. Hamsters					
8. Rabbits					
9. Non-human Primates	17	0	28	0	28
10. Sheep					
11. Pigs					
12. Other Farm Animals					
/ Chicks	1	0	205	0	205
13. Other Animals					
/ Rats	0	0	780	0	780

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 rese 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 ap 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 inc 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 provision 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 or Legally Responsible Institutional Official )

SIGNATURE OF C.E.O. OR INSTITUTIONAL OFFICIAL

DATE SIGNED

10/12/04

NOV 24 2004

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 14-R-0084  
CUSTOMER NUMBER: 141

FORM APPROVED  
OMB NO. 0579-0036

ANNUAL REPORT OF RESEARCH FACILITY  
( TYPE OR PRINT )

Tufts University  
Associate Provost For Research  
Institutional Official- Ballou Hall  
Medford, MA 02155

Telephone: (617) -627-3417

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

FACILITY LOCATIONS ( Sites ) - See Attached Listing

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

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal 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 in these animals and the reason such drugs were not used must be attached to this report )	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
4. Dogs	0	0	0	0	0
5. Cats	0	0	0	0	0
6. Guinea Pigs	0	0	0	0	0
7. Hamsters	0	0	0	0	0
8. Rabbits	0	0	0	0	0
9. Non-human Primates	0	34	0	0	34
10. Sheep	0	0	0	0	0
11. Pigs	0	0	0	0	0
12. Other Farm Animals	0	0	0	0	0
13. Other Animals <i>gerbils</i>	0	0	45	0	45

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, 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 an 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 provision 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 or Legally Responsible Institutional Official )

CIAL

[NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL ( Type or Print )

DATE SIGNED

11.22.04

-23 (OCT 88), which is obsolete.)

**Tufts University Medford campus locations approved for animal use (unregulated species included in location report)**

Centralized Housing Facilities and Laboratories

Bacon

Dana

Barnum

**Changes to be reported for the USDA Annual Report for  
Tufts University Medford Campus (2004)**

1. Please note that the contact information has changed to:

Vice Provost for Research  
Institutional Official  
Tufts University  
Ballou Hall  
Medford, MA 02155

2. A new Attending Veterinarian was appointed on November 1, 2004

[REDACTED]  
Director, Division of Laboratory Animal Medicine  
NEMC #112  
Boston, MA 02111

3. A new IACUC Chair was appointed on November 1, 2004

[REDACTED]  
Assistant Professor  
Department of Biology  
Medford, MA 02155



UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE  <b>ANNUAL REPORT OF RESEARCH FACILITY</b> ( TYPE OR PRINT )	1. CERTIFICATE NUMBER: 14-R-0086 CUSTOMER NUMBER: 142	FORM APPROVED OMB NO. 0579-0036
Biotek Inc 21-C Olympia Avenue Woburn, MA 01801  Telephone: (781)-938-0938		

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

FACILITY LOCATIONS ( Sites ) - See Attached Listing

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

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal 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 an 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 wh the use of appropriate anesthetic, analgesic, or tranquiliz drugs would have adversely affected the procedures, res or interpretation of the teaching, research, experiments, surgery, or tests. ( An explanation of the procedures producing pain or distress in these animals and the reaso such drugs were not used must be attached to this report	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
4. Dogs					
5. Cats					
6. Guinea Pigs					
7. Hamsters					
8. Rabbits		42	48		90
9. Non-human Primates					
10. Sheep					
11. Pigs					
12. Other Farm Animals					
13. Other Animals					

**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 rese 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 ap 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 inc 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 provision 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 or Legally Responsible Institutional Official )		
SIGNATURE OF C.E.O. OR INSTITUTIONAL OFFICIAL	[NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL ( Type or Print )	DATE SIGNED
		10/7/04

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 14-R-0089  
CUSTOMER NUMBER: 516

FORM APPROVED  
OMB NO. 0579-0036

**ANNUAL REPORT OF RESEARCH FACILITY**  
(TYPE OR PRINT)

Boston Biomedical Research Institute  
64 Grove Street  
Watertown, MA 02472  
  
Telephone: (617)-658-7807

NOV 22 2004

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

FACILITY LOCATIONS ( Sites ) - See Attached Listing

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

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not 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, res or interpretation of the teaching, research, experiments, surgery, or tests. ( An explanation of the procedures producing pain or distress in these animals and the reason such drugs were not used must be attached to this report	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
4. Dogs					
5. Cats					
6. Guinea Pigs					
7. Hamsters					
8. Rabbits	10				10
9. Non-human Primates					
10. Sheep					
11. Pigs					
12. Other Farm Animals					
13. Other Animals					
ferrets	94				94

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 (IACUC). A summary of all such exceptions to the standards and regulations be specified and explained by the principal investigator and an 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 provision 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 or Legally Responsible Institutional Official )

SIGNATURE OF C.E.O. OR INSTITUTIONAL OFFICIAL

NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL ( Type or Print )

DATE SIGNED

11/16/04

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 14-R-0090  
CUSTOMER NUMBER: 134

FORM APPROVED  
OMB NO. 0579-0036

**ANNUAL REPORT OF RESEARCH FACILITY**  
( TYPE OR PRINT )

Mount Ida College  
777 Dedham Street  
Newton, MA 02459

NOV 30 2004

Telephone: (617) -928-4545

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

FACILITY LOCATIONS ( Sites ) - See Attached Listing

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

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal 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 an 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 wh the use of appropriate anesthetic, analgesic, or tranquiliz drugs would have adversely affected the procedures, res or interpretation of the teaching, research, experiments, surgery, or tests. ( An explanation of the procedures producing pain or distress in these animals and the reaso such drugs were not used must be attached to this report	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
4. Dogs			37		37
5. Cats			25		25
6. Guinea Pigs					
7. Hamsters			15		15
8. Rabbits			9		9
9. Non-human Primates					
10. Sheep					
11. Pigs					
12. Other Farm Animals					
13. Other Animals					

**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 res 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 ap 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 inc 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 provision 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 or Legally Responsible Institutional Official )

AL	NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL ( Type or Print )	DATE SIGNED 11/29
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Customer ID and Site Address:

ID: 134

777 Dedham Street  
Newton Centre, MA 02459  
County: Middlesex

Telephone  
(617) 928-4545

3. Reporting Facility

Facility Locations (Sites)

Mount Ida College  
Kennel Building  
777 Dedham Street  
Newton Centre, MA 02459

Mount Ida College  
Laboratory Animal Care Facility  
777 Dedham Street  
Newton Centre, MA 02459

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE Number: 14-R-0092  
CUSTOMER NUMBER: 144

FORM APPROVED  
OMB NO. 0579-0036

**ANNUAL REPORT OF RESEARCH FACILITY**  
(TYPE OR PRINT)

2. HEADQUARTERS RESEARCH FACILITY  
Brigham & Women's Hospital  
10 Brookline Place  
Research Administration  
Brookline, MA 02445  
Telephone: 617-525-3160

DEC 01 2004

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**

**REPORT OF ANIMALS USED BY OR UNDER CONTROL OF RESEARCH FACILITY (Attach additional sheets if necessary 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. Numbers 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 in these animals and the reasons such drugs were not used must be attached to this report.)	F. TOTAL NO. OF ANIMALS (Cols. C + D + E)
4. Dogs	0	0	0	0	0
5. Cats	0	0	0	0	0
6. Guinea Pigs	0	0	10	0	10
7. Hamsters	0	10	130	0	140
8. Rabbits	1	136	239	0	375
9. Non-human Primates	0	0	0	0	0
10. Sheep	0	0	4	0	4
11. Pigs	0	0	158	0	158
12. Other Farm Animals	0	0	0	0	
Goat	0	0	6	0	6
13. Other Animals	0	0	0	0	
	-	-	-	-	-

**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 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.
- The attending veterinarian for this research facility has appropriate authority to ensure the provision 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 or Legally Responsible Institutional Official)

SIGNATURE OF C.E.O. OR INSTITUTIONAL OFFICIAL	NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL	DATE SIGNED 11/30/04
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## FACILITY SITES LISTING

Licensee/Registrant Name: Brigham & Women's Hospital

License/Registration Number: **14-R-0092**

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Please list below all sites that house animals under the above registration number. Be sure to include all requested information. Do not leave any spaces blank. If lines do not apply, please mark it N/A. If you have more than three (3) sites, please copy this form as many times as needed before filling in the sites.

---

Site No.: 1 Name/Department: Center for Animal Resources & Comparative Medicine (ARCM)  
at Brigham & Women's Hospital  
Address: Boston, MA 02115

(1) Building: ARCM/Thorn Building - 20 Shattuck Street  
Floor/Room: 20 Shattuck Street - 16th Floor  
Contact Person: [REDACTED]  
Phone Number: [REDACTED]

(2) Building: ARCM/Longwood Medical Research Center (LMRC)  
Floor/Room: 220 Longwood Avenue - Ground Level  
Contact Person: [REDACTED]  
Phone Number: [REDACTED]

(3) Building: ARCM/Massachusetts College of Pharmacy (MCP)  
Floor/Room: One Palace Road - Lower Level  
Contact Person: [REDACTED]  
Phone Number: [REDACTED]

---

Site No.: 3 Name/Department: Pine Acres Rabbitry/Farm (SATELLITE)  
USDA Registration No: **14-B-0052**  
Address: 299 East Main Street, Norton MA 02766  
Building: Main Building  
Floor/Room: First Floor  
Contact Person: [REDACTED]  
Phone Number: [REDACTED]

---

## FACILITY SITES LISTING

Licensee/Registrant Name: Brigham & Women's Hospital

License/Registration Number: 14-R-092

---

Please list below all sites that house animals under the above registration number. Be sure to include all requested information. Do not leave any spaces blank. If lines do not apply, please mark it N/A. If you have more than three (3) sites, please copy this form as many times as needed before filling in the sites.

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Site No.:	4	Name/Department:	HMS/ARCM - Seeley G. Mudd (SATELLITE)
		USDA Registration No.:	<b>14-R-019</b>
		Address:	250 Longwood Avenue, Boston MA 02115
		Building:	Seeley G. Mudd Building
		Floor/Room:	Basement Level
		Contact Person:	[REDACTED]
		Phone Number:	[REDACTED]

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UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. REGISTRATION NO. 14-R-0094	CUSTOMER NO. 145	FORM APPROVED OMB NO. 0579-0036
2. HEADQUARTERS RESEARCH FACILITY (Name and Address, as registered with USDA, include Zip Code)		
WELLESLEY COLLEGE SCIENCE CENTER 106 CENTRAL STREET WELLESLEY, MA 02481		

**ANNUAL REPORT OF RESEARCH FACILITY**  
(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 necessary.)

FACILITY LOCATIONS(sites)

WELLESLEY COLLEGE  
WELLESLEY, MA 02481

REPORT OF ANIMALS USED BY OR UNDER CONTROL OF RESEARCH FACILITY (Attach additional sheets if necessary 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 in these animals and the reasons such drugs were not used must be attached to this report)	F. TOTAL NO. OF ANIMALS (Cols. C + D + E)
4. Dogs					
5. Cats					
6. Guinea Pigs					
7. Hamsters					
8. Rabbits			2		2
9. Non-Human Primates					
10. Sheep					
11. Pigs					
12. Other Farm Animals					
13. Other Animals					

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 the 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 provision 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 or Legally Responsible Institutional official)  
I certify that the above is true, correct, and complete (7 U.S.C. Section 2143)

SIGNATURE OF C.E.O. OR INSTITUTIONAL OFFICIAL	NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL (Type or Print)	DATE SIGNED
		11/30/2004



*luc*

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 14-R-0101  
CUSTOMER NUMBER: 147

FORM APPROVED  
OMB NO. 0579-0036

**ANNUAL REPORT OF RESEARCH FACILITY**  
( TYPE OR PRINT )

Toxikon Corporation  
15 Wiggins Ave  
Bedford, MA 01730

NOV 29 2004

Telephone: (781)-275-3330

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

FACILITY LOCATIONS ( Sites ) - See Attached Listing

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

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not 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 in these animals and the reasons such drugs were not used must be attached to this report )	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
4. Dogs	0	120	15	0	135
5. Cats	0	0	0	0	0
6. Guinea Pigs	0	14138	0	0	14138
7. Hamsters	0	72	0	0	72
8. Rabbits	0	768	1384	0	2152
9. Non-human Primates	0	0	0	0	0
10. Sheep	0	0	0	0	0
11. Pigs	0	39	23	0	62
12. Other Farm Animals	0	0	0	0	0
13. Other Animals	0	0	0	0	0

**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, testing, surgery, or experimentation were followed by this research facility.
- 2) Each principal investigator has considered alternatives to painful procedures.
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- 4) The attending veterinarian for this research facility has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of other aspects of animal care and use.

CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL  
( or Legally Responsible Institutional Official )

NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL ( Type or Print )

DATE SIGNED

11/23/04

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE  <b>ANNUAL REPORT OF RESEARCH FACILITY</b> ( TYPE OR PRINT )	1. CERTIFICATE NUMBER: 14-R-0112 CUSTOMER NUMBER: 152	FORM APPROVED OMB NO. 0579-0036
Whitehead Institute For Biomedical Research Nine Cambridge Center Cambridge, MA 02142  Telephone: (617) -258-5104		

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

FACILITY LOCATIONS ( Sites ) - See Attached Listing

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

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal 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 an 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 wh the use of appropriate anesthetic, analgesic, or tranquiliz drugs would have adversely affected the procedures, res or interpretation of the teaching, research, experiments, surgery, or tests. ( An explanation of the procedures producing pain or distress in these animals and the reasc such drugs were not used must be attached to this report	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
4. Dogs					0
5. Cats					0
6. Guinea Pigs					0
7. Hamsters					0
8. Rabbits					0
9. Non-human Primates					0
10. Sheep					0
11. Pigs					0
12. Other Farm Animals					0
13. Other Animals					0

**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 rese 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 ap 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 inc 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 provision 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 or Legally Responsible Institutional Official )

SIGNATURE (

[ NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL ( Type or Print )

DATE SIGNED

*11/19/04*

Customer ID and Site Address:

ID: 152

Nine Cambrige Center  
Cambridge, MA 02142  
County: Middlesex

Telephone

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 14-R-0114  
CUSTOMER NUMBER: 1792

FORM APPROVED  
OMB NO. 0579-0036

**ANNUAL REPORT OF RESEARCH FACILITY**  
(TYPE OR PRINT)

Mount Holyoke College  
Biology Department 50 College Street  
South Hadley, MA 01075

Telephone: (413) -538-2149

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

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FACILITY LOCATIONS ( Sites ) - See Attached Listing

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

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not ye used for such purposes.	C. Number of animals upon which teaching, research, experiments, or tests were conducted involving no pain, distress, or use o 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 an 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 wh the use of appropriate anesthetic, analgesic, or tranquilz drugs would have adversely affected the procedures, res or interpretation of the teaching, research, experiments, surgery, or tests. ( An explanation of the procedures producing pain or distress in these animals and the reas such drugs were not used must be attached to this report	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
4. Dogs	0	0	0	0	0
5. Cats	0	0	0	0	0
6. Guinea Pigs	0	8	0	0	8
7. Hamsters	0	0	0	0	0
8. Rabbits	0	0	0	0	0
9. Non-human Primates	0	0	0	0	0
10. Sheep	0	0	0	0	0
11. Pigs	0	0	0	0	0
12. Other Farm Animals	0	0	0	0	0
13. Other Animals	0	0	0	0	0

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 rese 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 ap 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 in 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 provision 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 or Legally Responsible Institutional Official )

IL \_\_\_\_\_ (NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL (Type or Print)

DATE SIGNED

11/3/04

DEC 03 2004

*oe*

This report is required by law (7 USC 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

Set reverse side for additional information

Interagency Report Control No 0180-00A-AN

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE  <b>ANNUAL REPORT OF RESEARCH FACILITY</b> (TYPE OR PRINT)	1. REGISTRATION NO. <div style="text-align: center; font-size: 1.2em;">14-R-0119</div>	FORM APPROVED OMB NO. 0579-0036
2. HEADQUARTERS RESEARCH FACILITY (Name and Address, as registered with USDA include Zip Code) <div style="text-align: center;">                     Marine Biological Laboratory                      7 Mbl Street                      Woods Hole, MA 02543                      Telephone: (508)-289-7480                 </div>		
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)

ACF, 15 North Street, Woods Hole, MA  <div style="text-align: center;">02543</div>	Customer Number: 143
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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. 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 in those animals and the reasons such drugs were not used must be attached to this report)	F. TOTAL NO OF ANIMALS (Cols. C + D + E)
4. Dogs					
5. Cats					
6. Guinea Pigs					
7. Hamsters	20		20		
8. Rabbits	4		4		
9. Non-human Primates					
10. Sheep					
11. Pigs					
12. Other Farm Animals					
13 Other Animals					
Chicks	100		100		
Zebra finch	78		78		

**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 provision of adequate veterinary care and to oversee the adequacy of other aspects of animal care and use.

<b>CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL</b> (Chief Executive Officer or Legally Responsible Institutional Official) I certify that the above is true, correct, and complete (7 U.S.C. Section 2143).		
SIGNATURE OF CEO OR INSTITUTIONAL OFFICIAL	NAME & TITLE OF CEO OR INSTITUTIONAL OFFICIAL (Type or Print)	DATE SIGNED  <div style="text-align: center; font-size: 1.2em;">12/1/04</div>

NOV 30 2004

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 14-R-0123  
CUSTOMER NUMBER: 154

FORM APPROVED  
OMB NO. 0579-0036

**ANNUAL REPORT OF RESEARCH FACILITY**  
(TYPE OR PRINT)

Genzyme Corporation  
One Kendall Square  
Building 1400  
Cambridge, MA 02139

Telephone: (617)-252-7500

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

FACILITY LOCATIONS ( Sites ) - See Attached Listing

**REPORT OF ANIMALS USED BY OR UNDER CONTROL OF RESEARCH FACILITY ( Attach additional sheets if necessary 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	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, a	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 in these animals and the reasons such drugs were not used must be attached to	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
4. Dogs					
5. Cats					
6. Guinea Pigs		6	306		312
7. Hamsters					
8. Rabbits			371		371
9. Non-human Primate					
10. Sheep					
11. Pigs			25		25
12. Other Farm Animals					
Goats			37		37
13. Other Animals					

**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.
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CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL  
( Chief Executive Officer or Legally Responsible Institutional Official )

int

DATE SIGNED

11/24/04

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 14-R-0126  
CUSTOMER NUMBER: 155

FORM APPROVED  
OMB NO. 0579-0036

ANNUAL REPORT OF RESEARCH FACILITY  
(TYPE OR PRINT)

Advanced Magnetics, Inc.  
61 Mooney Street  
Cambridge, MA 02138

DEC 10 2004

Telephone: (617)-497-2070

1 OCT 03 - 31 DEC 03

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

FACILITY LOCATIONS (Site) - See Attached Listing

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

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal 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 tranquiliz drugs would have adversely affected the procedures, res or interpretation of the teaching, research, experiments, surgery, or tests. (An explanation of the procedures producing pain or distress in these animals and the reason such drugs were not used must be attached to this report)	F. TOTAL NUMBER OF ANIMALS (COLUMNS C + D + E)
4. Dogs	0	0	0	0	0
5. Cats	0	0	0	0	0
6. Guinea Pigs	0	0	0	0	0
7. Hamsters	0	0	0	0	0
8. Rabbits	0	0	0	0	0
9. Non-human Primates	0	0	0	0	0
10. Sheep	0	0	0	0	0
11. Pigs	0	0	0	0	0
12. Other Farm Animals	0	0	0	0	0
13. Other Animals	0	0	0	0	0

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 res teaching, testing, surgery, or experimentation were followed by this research facility.
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CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL  
(Chief Executive Officer or Legally Responsible Institutional Official)

NAME

DATE SIGNED

12/7/04

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

<b>1. REGISTRATION NO.</b> 14-R-0134	<b>CUSTOMER NO.</b> 518	<b>FORM APPROVED</b> OMB NO. 0579-0036
<b>2. HEADQUARTERS RESEARCH FACILITY</b> (Name and Address, as registered with USDA, include Zip Code)		
EISAI RESEARCH INSTITUTE OF BOSTON, INC. 4 CORPORATE DRIVE ANDOVER, MA 01810		

**ANNUAL REPORT OF RESEARCH FACILITY**  
(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 necessary.)

**FACILITY LOCATIONS (sites)**

EISAI RESEARCH INSTITUTE ANDOVER, MA 01810	
EISAI RESEARCH INSTITUTE WILMINGTON, MA 01877	

**REPORT OF ANIMALS USED BY OR UNDER CONTROL OF RESEARCH FACILITY** (Attach additional sheets if necessary 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 in these animals and the reasons such drugs were not used must be attached to this report)	F. TOTAL NO. OF ANIMALS  (Cols. C + D + E)
4. Dogs					
5. Cats					
6. Guinea Pigs					
7. Hamsters					
8. Rabbits					
9. Non-Human Primates					
10. Sheep					
11. Pigs					
12. Other Farm Animals					
13. Other Animals					

**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.
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- 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 the 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 provision 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 or Legally Responsible Institutional official)  
I certify that the above is true, correct, and complete (7 U.S.C. Section 2143)

<b>SIGNATURE OF C.E.O. OR INSTITUTIONAL OFFICIAL</b>	<b>NAME &amp; TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL</b> (Type or Print)	<b>DATE SIGNED</b>  11/16/2004
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UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 14-R-0138  
CUSTOMER NUMBER: 1664

FORM APPROVED  
OMB NO. 0579-0036

**ANNUAL REPORT OF RESEARCH FACILITY**  
( TYPE OR PRINT )

Beth Israel Deaconess Medical Center  
330 Brookline Avenue  
Boston, MA 02215

NOV 26 2004

Telephone: (617)-667-4922

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

FACILITY LOCATIONS ( Sites ) - See Attached Listing

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

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal 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 an 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 wh the use of appropriate anesthetic, analgesic, or tranquiliz drugs would have adversely affected the procedures, res or interpretation of the teaching, research, experiments, surgery, or tests. ( An explanation of the procedures producing pain or distress in these animals and the reas such drugs were not used must be attached to this report	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
4. Dogs	0	5	7	0	12
5. Cats	0	0	0	0	0
6. Guinea Pigs	0	1	6	0	7
7. Hamsters	0	0	0	174	174
8. Rabbits	0	28	53	0	81
9. Non-human Primates	0	0	2	0	2
10. Sheep	0	1	50	0	51
11. Pigs	0	6	172	0	178
12. Other Farm Animals					
13. Other Animals					
Woodchucks	0	0	2	0	2

**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 rese teaching, testing, surgery, or experimentation were followed by this research facility.
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CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL  
( Chief Executive Officer or Legally Responsible Institutional Official )

NAME & TITLE OF CEO OR INSTITUTIONAL OFFICIAL ( Type or Print )

DATE SIGNED

which is obsolete.)

11/18/04

## Optional Column E Explanation Form

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:** 14-R-0138
2. **Number** 174 **of animals used in this study.**
3. **Species (common name)** hamsters **of animals used in this study.**
4. **Explain the procedure producing pain and/or distress.**  
Syrian Golden Hamsters weighing 100-200 gm will be given a single injection of clindamycin (1-5mg) and will then be allowed to become passively infected with *Clostridium difficile* from the environment.
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 question 6 below)  
*Clostridium difficile* administration following clindamycin injection (a nosocomial infection mimicking model) is used to induce an inflammatory reaction in the cecum. It is thus expected that animals will experience a certain level of discomfort. However, we do not plan to provide animals with antispasmodic drugs because this may inhibit the clearance of the organism from the intestine and may worsen the colitis (George et al., Gastroenterology 79:366, 1980; Pothoulakis and LaMont, Gastroenterology Clinics of North America, 22:623-627, 1993). In addition, we do not plan to use other forms of pain relief since it may affect the responses we measure (e.g. degree of inflammation and diarrhea). However, animals will be monitored three times/daily and if any sign of severe distress (extended periods (6 days) of weight loss progressing to an emaciated state, anorexia for 24-48 hours, prolonged lethargy (> 3 days), signs of paralysis, skin erosions or trauma, hunched posture, distended abdomen) are observed, the animals will be immediately euthanized.
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):**  
  
**Agency** \_\_\_\_\_ **CFR** \_\_\_\_\_

The Animal Facilities at Beth Israel Deaconess Medical Center are located at the following addresses:

Research North – 99 Brookline Ave., Boston, MA

21-27 Burlington – 21-27 Burlington Ave., Boston, MA

Slosberg-Landay – 330 Brookline Ave., Boston, MA

Research East – 41 Louis Pasteur, Boston, MA

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

<b>1. REGISTRATION NO.</b> 14-R-0140	<b>CUSTOMER NO.</b> 1724	<b>FORM APPROVED</b> OMB NO. 0579-0036
<b>2. HEADQUARTERS RESEARCH FACILITY</b> (Name and Address, as registered with USDA, include Zip Code)  NITROMED INC 125 SPRING STREET LEXINGTON, MA 02421		

**ANNUAL REPORT OF RESEARCH FACILITY**  
(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 necessary.)

**FACILITY LOCATIONS (sites)**

NITROMED INC  
BEDFORD, MA 01730

**REPORT OF ANIMALS USED BY OR UNDER CONTROL OF RESEARCH FACILITY** (Attach additional sheets if necessary 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 in these animals and the reasons such drugs were not used must be attached to this report)	F. TOTAL NO. OF ANIMALS (Cols. C + D + E)
4. Dogs					
5. Cats					
6. Guinea Pigs					
7. Hamsters					
8. Rabbits					
9. Non-Human Primates					
10. Sheep					
11. Pigs					
12. Other Farm Animals					
13. Other Animals					

**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.
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**CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL**  
(Chief Executive Officer or Legally Responsible Institutional official)  
I certify that the above is true, correct, and complete (7 U.S.C. Section 2143)

SIGNATURE OF C.E.O. OR INSTITUTIONAL OFFICIAL	NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL (Type or Print)	DATE SIGNED 11/09/2004
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**APHIS Form 7023 Additional Reported Sites**

The following additional sites have been reported by the facility. The reported sites have not been verified by APHIS and have been provided by the facility solely for completeness of the APHIS Form 7023 Annual Reporting submission.

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Registration Number: 14-R-0140  
Customer Number: 1724  
Facility: NITROMED INC  
125 SPRING STREET  
LEXINGTON, MA 02421

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NITROMED INC  
125 SPRING STREET  
LEXINGTON, MA 02421

NOV 12 2004

See attached form for additional information.

Interagency Report Control No. *JP*

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 14-R-0141  
CUSTOMER NUMBER: 1767

FORM APPROVED  
OMB NO. 0579-0036

**ANNUAL REPORT OF RESEARCH FACILITY**  
(TYPE OR PRINT)

Antigenics Inc  
3 Forbes Road  
Lexington, MA 02420

Telephone: (781)-674-4400

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

FACILITY LOCATIONS ( Sites ) - See Attached Listing

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

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not ye used for such purposes.	C. Number of animals upon which teaching, research, experiments, or tests were conducted involving no pain, distress, or use o 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 an for which appropriate anesthetic, analgesic, or tranquiizing 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 wh the use of appropriate anesthetic, analgesic, or tranquiliz drugs would have adversely affected the procedures, res or interpretation of the teaching, research, experiments, surgery, or tests. ( An explanation of the procedures producing pain or distress in these animals and the reasc such drugs were not used must be attached to this report	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
4. Dogs					
5. Cats					
6. Guinea Pigs	150	60	6		66
7. Hamsters					
8. Rabbits					
9. Non-human Primates					
10. Sheep					
11. Pigs					
12. Other Farm Animals					
13. Other Animals					

**ASSURANCE STATEMENTS**

- 1) Professionally acceptable standards governing the care, treatment, and use of animals, including appropriate use of anesthetic, analgesic, and tranquiizing drugs, prior to, during, and following actual rese 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 ap 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 inc 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 provision 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 or Legally Responsible Institutional Official )

NAME OF HEADQUARTERS RESEARCH FACILITY OFFICIAL

DATE SIGNED

11/09/04

NOV 26 2004

*CPW*

This report is required by law (7 USC 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.

See reverse side for additional information.

Interagency Report Control No 0180-DOA-AN

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE  <b>ANNUAL REPORT OF RESEARCH FACILITY</b> (TYPE OR PRINT)	<b>1. REGISTRATION NO.</b> 14-R-0143	<b>CUSTOMER NO.</b> 1788	<b>FORM APPROVED</b> OMB NO. 0579-0036
<b>2. HEADQUARTERS RESEARCH FACILITY</b> (Name and Address, as registered with USDA, include Zip Code)  VERTEX PHARMACEUTICALS, INC. 130 WAVERLY STREET CAMBRIDGE, MA 02139 (617) 577-6607			

**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  
 130 Waverly Street, Cambridge, MA

**REPORT OF ANIMALS USED BY OR UNDER CONTROL OF RESEARCH FACILITY** (Attach additional sheets if necessary 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 in these animals and the reasons such drugs were not used must be attached to this report)	F. TOTAL NO. OF ANIMALS (Cols. C + D + E)
4. Dogs					
5. Cats					
6. Guinea Pigs	0	0	0	0	0
7. Hamsters					
8. Rabbits					
9. Non-Human Primates					
10. Sheep					
11. Pigs					
12. Other Farm Animals					
13. Other Animals					

**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 the 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 provision of adequate veterinary care and to oversee the adequacy of other aspects of animal care and use.

<b>CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL</b> (Chief Executive Officer or Legally Responsible Institutional official) certify that the above is true, correct, and complete (7 U.S.C. Section 2143)		
SIGNATURE	NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL (Type or Print)	DATE SIGNED  11/24/04

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE  <b>ANNUAL REPORT OF RESEARCH FACILITY</b> ( TYPE OR PRINT )	1. CERTIFICATE NUMBER: 14-R-0144 CUSTOMER NUMBER: 1799	FORM APPROVED OMB NO. 0579-0036
Charles River Laboratories Inc 251 Ballardvale St Wilmington, MA 01887  Telephone: (508) -658-6000		

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

FACILITY LOCATIONS ( Sites ) - See Attached Listing

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

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not ye used for such purposes.	C. Number of animals upon which teaching, research, experiments, or tests were conducted involving no pain, distress, or use o 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 an 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 wh the use of appropriate anesthetic, analgesic, or tranquiliz drugs would have adversely affected the procedures, res or interpretation of the teaching, research, experiments, surgery, or tests. ( An explanation of the procedures producing pain or distress in these animals and the reas such drugs were not used must be attached to this report	F. TOTAL NUMBER OF ANIMALS  ( COLUMNS C + D + E )
4. Dogs	180	1922	981	83	2896
5. Cats					
6. Guinea Pigs	208	5599	1781	1	7381
7. Hamsters	62	2117	1251	5	3373
8. Rabbits	394	6664	655	37	7356
9. Non-human Primates	2687	2238	1572		3810
10. Sheep			14		14
11. Pigs	13	483	1175	1	1639
12. Other Farm Animals					
Cattle			6		6
Goats			9		9
13. Other Animals					
Gerbils		210	24		234
Ferrets		65		1	66

**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 rese 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 ap 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 inc 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 provision 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 or Legally Responsible Institutional Official )		
SIGNATURE OF C.E.O. OR INSTITUTIONAL OFFICIAL	NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL ( Type or Print )	DATE SIGNED  11/24/2004

*QAN*



<b>Site #</b>	<b>Address</b>	<b>Telephone</b>
002	Charles River Laboratories, Inc. - Raleigh 401 S New Hope Road Raleigh, NC 27610 0511 County: WAKE	919-231-0511
003	Charles River DDS - Worcester 236 Blackmer Road Southbridge, MA 01550 0511 County: WORCESTER	508-765-9580
005	Sierra Biomedical DDS - Reno 587 Dunn Circle Sparks, NV 89431 County: WASHOE	775-331-2201
013	Charles River DDS - Worcester 57 Union Street Worcester, MA 01608 County: WORCESTER	508-890-0100
014	Charles River DDS - Argus 905 Sheehy Drive Bldg. A Horsham, PA 19044 County: MONTGOMERY	215-443-8710
016	Charles River DDS - Arkansas 100 E. Boone Street Redfield, AR 72132 County: JEFFERSON	501-397-2540
017	Charles River DDS - Ohio 553 N. Broadway Street. Spencerville, OH 45887 County: ALLEN	419-647-4196
018	Charles River – BRF 205 Almeda-Genoa Road Houston, TX County: HARRIS	713-433-5846
019	Charles River ISS 803 Prospect Avenue Osceola, WI 54020 County: POLK	715-294-4371

## Preface:

Animals placed in Column "E" in this report were utilized in Contract Research Facilities (listed above) belonging to Charles River Laboratories (CRL). These animals were enrolled in studies undertaken for product registration purposes based on regulatory guidelines of the FDA 21 CFR 312.23 for pharmacology and toxicology studies and the Red Book. Guidance for study design and conduct also conformed with recommendations by the International Conference on Harmonization Guidelines. This guidance includes Part VII, DHHS, FDA, International Conference on Harmonization; Guidance on non-clinical safety studies for the conduct of human clinical trial for pharmaceuticals, Federal Register, Vol. 62, #227, November 25, 1997.

Depending upon the nature of the compound, certain other regulations and guidelines promulgated by the FDA, EPA, TSCA, FIFRA and the OECD also apply and are listed in the Applicable Guidelines/Regulations section below.

Animals could be placed in Category "E" both prospectively and retrospectively. Retrospective diagnosis of pain or distress was made by the Attending Veterinarian in conjunction with the Study Director. In order to insure that under reporting did not occur, the magnitude and duration of clinical signs were considered in making the diagnosis of pain or distress as was the length of time between the development of clinical signs and actions such as discontinuation of compound administration, administration of therapeutic measures that may or may not have included the use of analgesics or euthanasia. Animals that were moribund or had any clinical signs of sufficient magnitude to warrant early termination from the study (moribund euthanasia) were included only if there was, in the opinion of the Attending Veterinarian, a delay in conducting euthanasia in order to acquire additional data or if there was a failure in treatment regimens to resolve the condition. Animals showing any clinical of acute toxicity, even though they were mild or were not specifically related to pain or distress, were included if the animal was maintained on study following the development of such signs for more than a reasonable period of time for the signs to resolve (usually less than 24 hours) without the initiation of treatment to relieve the signs or to address the possible presence of pain or if the animal was not euthanized at that time. Any animals placed in Category "E" prospectively were assigned at the time of IACUC protocol review and were not re-categorized.

# IACUC-APPROVED EXCEPTIONS TO REGULATIONS AND STANDARDS

## Charles River DDS – Worcester (Worcester, MA – 003)

The IACUC and the Attending Veterinarian must approve exemptions from non-human primate social housing and dog exercise activities. Monitoring of these animals during the period that they are exempted is performed by the technical staff with oversight from the Veterinary Staff to ensure that the animals do not exhibit stereotypic behaviors that are detrimental to their overall health and well-being. The following exceptions to standards/regulations were approved by the IACUC during this reporting period.

Species: Macaca sp. (Cynomolgus and/or Rhesus)

Number: 245

All animals were on metabolism and pharmacokinetics studies. Pair housing, environmental enrichment devices inside the cage and/or dietary restrictions (no fruit peels or peanut shells) were withheld after dose administration for 1-13 days during sample collection. External stimuli such as radios, televisions, and conspecific visualization, olfactory and auditory stimulation were provided. Environmental enrichment devices were allowed outside the cage.

Species: Macaca sp. (Cynomolgus)

Number: 9

All animals were on a metabolism and pharmacokinetics study. Pair housing was exempted after dose administration for 42-168 days during sample collection. External stimuli such as radios, televisions, and conspecific visualization, olfactory and auditory stimulation were provided.

Species: Macaca sp. (Cynomolgus)

Number: 260

All animals were on toxicology, pharmacology or surgical studies. Pair housing, environmental enrichment devices inside the cage and/or dietary restrictions (no fruit peels or peanut shells) were withheld after dose administration for 6-90 days during sample collection. External stimuli such as radios, televisions, and conspecific visualization, olfactory and auditory stimulation were provided. Environmental enrichment devices were allowed outside the cage.

Species: Macaca sp. (Cynomolgus)

Number: 150

All animals were on toxicology or pharmacology studies. Pair housing, environmental enrichment devices inside the cage and/or dietary restrictions (no fruit peels or peanut shells) were withheld after dose administration for 197-302 days during sample collection. External stimuli such as radios, televisions, and conspecific visualization, olfactory and auditory stimulation were provided. Environmental enrichment devices were allowed outside the cage.

Species: Canis familiaris (Dog)

Number: 195

All animals were on metabolism and pharmacokinetics studies. Pair housing and/or exercise were withheld after dose administration for 2-12 days during sample collection. The square footage of the caging met all requirements for housing the animals, however, it did not meet the additional space needs to eliminate the requirement for exercise outside of the cage. The animals were observed daily for signs of distress from lack of exercise during the exemption period. No animals were noted to be adversely affected during this period.

Species: Canis familiaris (Dog)

Number: 420

All animals were on toxicology or pharmacology studies. Pair housing and/or exercise were exempted after dose administration for 2-36 days during sample collection. The square footage of the caging met all requirements for housing the animals, however, it did not meet the additional space needs to eliminate the requirement for exercise outside of the cage. The animals were observed daily for signs of distress from lack of exercise during the exemption period. No animals were noted to be adversely affected during this period.

Species: Canis familiaris (Dog)

Number: 6

All animals were on a telemetry study. Pair housing and exercise were exempted after dose administration for 106 days during sample collection. The square footage of the caging met all requirements for housing the animals, however, it did not meet the additional space needs to eliminate the requirement for exercise outside of the cage. The animals were observed daily for signs of distress from lack of exercise during the exemption period. No animals were noted to be adversely affected during this period.

## REVIEW OF CATETORY "E" STUDIES

The following studies have been listed in Category "E" based upon the guidelines stated in the preface at the beginning of this report. Studies classified into Category "E" were conducted at Charles River Laboratories Horsham, PA (Site # 014) and Redfield, AK (Site # 016) facilities. The study designs that resulted in certain animals being placed retrospectively into Category "E" were required by federal regulations and guidelines listed in the applicable regulations/guidelines section below. For the purpose of this report studies have been given a unique number that corresponds to the actual study number. For reasons of confidentiality, actual study numbers are not presented but are available to the USDA for on-site inspection or report follow-up. Category "E" explanations/details are listed separately for each study at each of the two sites.

### CHARLES RIVER DDS- ARGUS (Horsham, PA - 014)

**Study: #1**

**Animals:** 5 rabbits in high and mid-dose groups

**Type of Study:** Oral-dose range developmental toxicology in pregnant rabbits

**Guidelines/Regulations:**

Redbook 2000 Toxicological Principles for the Safety Assessment of Food Ingredients, November 2003

Part VII, DHHS, FDA, International Conference on Harmonization; Guidance on Non-Clinical Safety Studies for the Conduct of Human Clinical Trial For Pharmaceuticals, Federal Register, Vol. 62, #227, November 25, 1997

**\*See Applicable Regulations Section**

**Diagnosis:** Distress

**Signs contributing to the diagnosis:** Mild progressive weight loss, anorexia short duration, nasal discharge, excessive salivation

**Disposition:** Found dead; the duration of premonitory signs resulted in the classification.

**Study: #2**

**Animals:** 2 rabbits (1 each in low and mid-dose groups)

**Type of Study:** Oral developmental toxicity in pregnant rabbits

**Guidelines/Regulations:**

Redbook 2000 Toxicological Principles for the Safety Assessment of Food Ingredients, November 2003

Part VII, DHHS, FDA, International Conference on Harmonization; Guidance on Non-Clinical Safety Studies for the Conduct of Human Clinical Trial For Pharmaceuticals, Federal Register, Vol. 62, #227, November 25, 1997

**\*See Applicable Regulations Section**

**Diagnosis:** Distress

**Signs contributing to the diagnosis:** Mild progressive weight loss, anorexia, dehydration, abortion

**Disposition:** Euthanized; the duration of the premonitory signs resulted in classification.

**Study: #3**

**Animals:** 1 rabbit in high-dose group

**Type of Study:** IV dose-range developmental toxicity study in pregnant rabbits

**Guidelines/Regulations:**

Redbook 2000 Toxicological Principles for the Safety Assessment of Food Ingredients, November 2003

Part VII, DHHS, FDA, International Conference on Harmonization; Guidance on Non-Clinical Safety Studies for the Conduct of Human Clinical Trial For Pharmaceuticals, Federal Register, Vol. 62, #227, November 25, 1997

**\*See Applicable Regulations Section**

**Diagnosis:** Distress

**Signs contributing to the diagnosis:** Weight loss, decrease food intake, ataxia, vocalization

**Disposition:** Found dead; the extent and duration of premonitory signs resulted in the classification.

**Study: #4**

**Animals:** 1 rabbit in mid-dose group

**Type of Study:** Oral range-finding toxicity study in pregnant rabbits

**Guidelines/Regulations:**

Redbook 2000 Toxicological Principles for the Safety Assessment of Food Ingredients, November 2003

Part VII, DHHS, FDA, International Conference on Harmonization; Guidance on Non-Clinical Safety Studies for the Conduct of Human Clinical Trial For Pharmaceuticals, Federal Register, Vol. 62, #227, November 25, 1997

**\*See Applicable Regulations Section**

**Diagnosis:** Distress

**Signs contributing to the diagnosis:** Progressive moderate weight loss, anorexia, scant feces, abortion

**Disposition:** Euthanized; duration of the premonitory signs resulted in the classification.

**Study: #5**

**Animals:** 5 rabbits in high-dose group

**Type of Study:** Oral dose-range developmental toxicity study

**Guidelines/Regulations:**

Redbook 2000 Toxicological Principles for the Safety Assessment of Food Ingredients, November 2003

Part VII, DHHS, FDA, International Conference on Harmonization; Guidance on Non-Clinical Safety Studies for the Conduct of Human Clinical Trial For Pharmaceuticals, Federal Register, Vol. 62, #227, November 25, 1997

**\*See Applicable Regulations Section**

**Diagnosis:** Distress

**Signs contributing to the diagnosis:** Moderate progressive weight loss, scant/loose feces, un-groomed haircoat

**Disposition:** Found dead; duration and extent of premonitory signs resulted in the classification.

**Study: #6**

**Animals:** 4 rabbits in high and mid-dose groups

**Type of Study:** Oral embryo-fetal toxicity study in pregnant rabbits

**Guidelines/Regulations:**

Redbook 2000 Toxicological Principles for the Safety Assessment of Food Ingredients, November 2003

Part VII, DHHS, FDA, International Conference on Harmonization; Guidance on Non-Clinical Safety Studies for the Conduct of Human Clinical Trial For Pharmaceuticals, Federal Register, Vol. 62, #227, November 25, 1997

**\*See Applicable Regulations Section**

**Diagnosis:** Distress

**Signs contributing to the diagnosis:** Moderate to progressive weight loss, scant feces, abortion (3 or 4 animals)

**Disposition:** 1 animal found dead and 3 euthanized following abortion. The duration and extent of premonitory signs resulted in the classification.

**Study: #7**

**Animals:** 1 rabbit in high-dose group

**Type of Study:** Subcutaneous developmental toxicity study

**Guidelines/Regulations:**

Redbook 2000 Toxicological Principles for the Safety Assessment of Food Ingredients, November 2003

Part VII, DHHS, FDA, International Conference on Harmonization; Guidance on Non-Clinical Safety Studies for the Conduct of Human Clinical Trial For Pharmaceuticals, Federal Register, Vol. 62, #227, November 25, 1997

**\*See Applicable Regulations Section**

**Diagnosis:** Distress

**Signs contributing to the diagnosis:** Moderate, progressive weight loss, anorexia, scant feces

**Disposition:** Found dead. The duration and extent of premonitory signs resulted in the classification.

**Study: #8**

**Animals:** 2 rabbits in high and mid-dose groups

**Type of Study:** Oral range-finding toxicity study in pregnant rabbits

**Guidelines/Regulations:**

Redbook 2000 Toxicological Principles for the Safety Assessment of Food Ingredients, November 2003

Part VII, DHHS, FDA, International Conference on Harmonization; Guidance on Non-Clinical Safety Studies for the Conduct of Human Clinical Trial For Pharmaceuticals, Federal Register, Vol. 62, #227, November 25, 1997

**\*See Applicable Regulations Section**

**Diagnosis:** Gavage error/accident with aspiration; distress

**Signs contributing to the diagnosis:** Weight loss (mild and progressive), rales, labored breathing, scant feces, 1 rabbit aborted

**Disposition:** 1 animal found dead and 1 euthanized following abortion. The duration and extent of premonitory signs resulted in the classification.



**Study:** #9

**Animals:** 1 rabbit in high-dose group

**Type of Study:** Percutaneous dose-range finding developmental toxicity study

**Guidelines/Regulations:**

Redbook 2000 Toxicological Principles for the Safety Assessment of Food Ingredients, November 2003

Part VII, DHHS, FDA, International Conference on Harmonization; Guidance on Non-Clinical Safety Studies for the Conduct of Human Clinical Trial For Pharmaceuticals, Federal Register, Vol. 62, #227, November 25, 1997

**\*See Applicable Regulations Section**

**Diagnosis:** Mild to moderate pain

**Signs contributing to the diagnosis:** Erythrema, induration, vocalization when touched, moderate progressive weight loss.

**Disposition:** Euthanized; the extent of premonitory signs resulted in the classification.

**Studies:** #10 & 11

**Animals:** 5 hamsters

**Type of Study:** Intranasal administration (under anesthesia) tissue tropism study

**Guidelines/Regulations:**

Redbook 2000 Toxicological Principles for the Safety Assessment of Food Ingredients, November 2003

Part VII, DHHS, FDA, International Conference on Harmonization; Guidance on Non-Clinical Safety Studies for the Conduct of Human Clinical Trial For Pharmaceuticals, Federal Register, Vol. 62, #227, November 25, 1997

**\*See Applicable Regulations Section**

**Diagnosis:** Distress and probable pain

**Signs contributing to the diagnosis:** Corneal trauma, weight loss associated with mechanical obstruction of water supply by animals, ptosis, dehydration.

**Disposition:** 1 animal found dead and 4 euthanized. Duration of signs and involvement of eyes support classification.

**Study:** #12

**Animals:** 1 ferret

**Type of Study:** Acute intravenous toxicity study

**Guidelines/Regulations:**

Redbook 2000 Toxicological Principles for the Safety Assessment of Food Ingredients, November 2003

Part VII, DHHS, FDA, International Conference on Harmonization; Guidance on Non-Clinical Safety Studies for the Conduct of Human Clinical Trial For Pharmaceuticals, Federal Register, Vol. 62, #227, November 25, 1997

**\*See Applicable Regulations Section**

**Diagnosis:** Distress

**Signs contributing to the diagnosis:** Vomiting, ataxia, tremors, soft feces, lethargy, progressive debilitation.

**Disposition:** Found dead. Duration and extent of signs supports the classification.

**Study:** #13

**Animals:** 1 Guinea Pig in high-dose group

**Type of Study:** Oral abortion/resorption study

**Guidelines/Regulations:**

Redbook 2000 Toxicological Principles for the Safety Assessment of Food Ingredients, November 2003

Part VII, DHHS, FDA, International Conference on Harmonization; Guidance on Non-Clinical Safety Studies for the Conduct of Human Clinical Trial For Pharmaceuticals, Federal Register, Vol. 62, #227, November 25, 1997

**\*See Applicable Regulations Section**

**Diagnosis:** Distress

**Signs contributing to the diagnosis:** Mild progressive weight loss, decreased food intake, un-groomed hair coat, decreased core temperature, decreased activity

**Disposition:** Found dead. Duration and extent of signs supports the classification.

**Study: #14**

**Animals:** 2 dogs in high-dose group

**Type of Study:** IV administration for dose-range toxicity

**Guidelines/Regulations:** .

Redbook 2000 Toxicological Principles for the Safety Assessment of Food Ingredients, November 2003

Part VII, DHHS, FDA, International Conference on Harmonization; Guidance on Non-Clinical Safety Studies for the Conduct of Human Clinical Trial For Pharmaceuticals, Federal Register, Vol. 62, #227, November 25, 1997

**\*See Applicable Regulations Section**

**Diagnosis:** Distress

**Signs contributing to the diagnosis:** Tremors of prolonged and substantial severity that lasted 24 hours.

**Disposition:** Euthanized when failed to self resolve.

**Study: #15**

**Animals:** 10 dogs in high-dose group

**Type of Study:** 14 day oral administration study for determining acute toxicity

**Guidelines/Regulations:**

Redbook 2000 Toxicological Principles for the Safety Assessment of Food Ingredients, November 2003

Part VII, DHHS, FDA, International Conference on Harmonization; Guidance on Non-Clinical Safety Studies for the Conduct of Human Clinical Trial For Pharmaceuticals, Federal Register, Vol. 62, #227, November 25, 1997

**\*See Applicable Regulations Section**

**Diagnosis:** Distress

**Signs contributing to the diagnosis:** Weight loss (moderate), vomiting associated with gastric upset (dosing related), some dehydration and decreased food intake.

**Disposition:** Euthanized at end of study; the duration and extent of clinical signs justifies classification.

**Study:** #16

**Animals:** 2 dogs in a high dose group

**Type of Study:** Acute oral toxicity study

**Guidelines/Regulations:**

Redbook 2000 Toxicological Principles for the Safety Assessment of Food Ingredients, November 2003

Part VII, DHHS, FDA, International Conference on Harmonization; Guidance on Non-Clinical Safety Studies for the Conduct of Human Clinical Trial For Pharmaceuticals, Federal Register, Vol. 62, #227, November 25, 1997

**\*See Applicable Regulations Section**

**Diagnosis:** Distress

**Signs contributing to the diagnosis:** Severe ataxia and labored breathing.

**Disposition:** Died within 24 hours of dosing.

**Study:** #17

**Animals:** 1 dog

**Type of Study:** 28 day mid-range oral toxicity study

**Guidelines/Regulations:**

Redbook 2000 Toxicological Principles for the Safety Assessment of Food Ingredients, November 2003

Part VII, DHHS, FDA, International Conference on Harmonization; Guidance on Non-Clinical Safety Studies for the Conduct of Human Clinical Trial For Pharmaceuticals, Federal Register, Vol. 62, #227, November 25, 1997

**\*See Applicable Regulations Section**

**Diagnosis:** Distress associated with dosing error

**Signs contributing to the diagnosis:** Severe coughing, severe progressive respiratory signs including labored breathing and shortness of breath

**Disposition:** Euthanized within 24 hours; severity and duration of signs support classification.

**Study: #18**

**Animals:** 12 dogs

**Type of Study:** Long-term cyclic IV administration toxicity study.

**Guidelines/Regulations:**

Redbook 2000 Toxicological Principles for the Safety Assessment of Food Ingredients, November 2003

Part VII, DHHS, FDA, International Conference on Harmonization; Guidance on Non-Clinical Safety Studies for the Conduct of Human Clinical Trial For Pharmaceuticals, Federal Register, Vol. 62, #227, November 25, 1997

**\*See Applicable Regulations Section**

**Diagnosis:** Distress

**Signs contributing to the diagnosis:** Moderate progressive weight loss, redness and swelling of head and ears; discontinued dosing on all that showed signs

**Disposition:** 2 animals euthanized; remaining 10 had remission of signs following cessation of dosing therefore maintained until termination of study; severity and duration of signs prompted classification.

**Study: #19**

**Animals:** 6 dogs

**Type of Study:** Acute IV toxicity study

**Guidelines/Regulations:**

Redbook 2000 Toxicological Principles for the Safety Assessment of Food Ingredients, November 2003

Part VII, DHHS, FDA, International Conference on Harmonization; Guidance on Non-Clinical Safety Studies for the Conduct of Human Clinical Trial For Pharmaceuticals, Federal Register, Vol. 62, #227, November 25, 1997

**\*See Applicable Regulations Section**

**Diagnosis:** Distress

**Signs contributing to the diagnosis:** Vomiting, tremors and ataxia (all signs graded as moderate to severe); discontinued dosing when signs appeared and more persistent.

**Disposition:** Held until end of study without further dosing then euthanized; duration and severity of signs supported classification.

**Study:** #20

**Animals:** 2 dogs in high-dose group

**Type of Study:** Toxicity Study

**Guidelines/Regulations:**

Redbook 2000 Toxicological Principles for the Safety Assessment of Food Ingredients, November 2003

Part VII, DHHS, FDA, International Conference on Harmonization; Guidance on Non-Clinical Safety Studies for the Conduct of Human Clinical Trial For Pharmaceuticals, Federal Register, Vol. 62, #227, November 25, 1997

**\*See Applicable Regulations Section**

**Diagnosis:** Distress

**Signs contributing to the diagnosis:** Moderate to severe vomiting and tremors; discontinued dosing when signs appeared and were persistent.

**Disposition:** Held until end of study without further dosing when euthanized; duration and severity of signs supported classification.

**Study:** #21

**Animals:** 48 dogs in mid and high-dose groups

**Type of Study:** Chronic IV cyclic dosing toxicity study

**Guidelines/Regulations:**

Redbook 2000 Toxicological Principles for the Safety Assessment of Food Ingredients, November 2003

Part VII, DHHS, FDA, International Conference on Harmonization; Guidance on Non-Clinical Safety Studies for the Conduct of Human Clinical Trial For Pharmaceuticals, Federal Register, Vol. 62, #227, November 25, 1997

**\*See Applicable Regulations Section**

**Diagnosis:** Distress

**Signs contributing to the diagnosis:** Moderate to severe ulcerative dermatitis with lymph node enlargement, weight loss and decreased activity; animals treated topically and systemically in an effort to alleviate signs with no success; analgesics contraindicated given potential interference with compound actions.

**Disposition:** Animals euthanized when therapy for signs was unsuccessful; duration and severity of signs supported classifications.

**Study:** #22

**Animals:** 1 pig in high-dose group

**Type of Study:** Acute IV toxicity study

**Guidelines/Regulations:**

Redbook 2000 Toxicological Principles for the Safety Assessment of Food Ingredients, November 2003

Part VII, DHHS, FDA, International Conference on Harmonization; Guidance on Non-Clinical Safety Studies for the Conduct of Human Clinical Trial For Pharmaceuticals, Federal Register, Vol. 62, #227, November 25, 1997

**\*See Applicable Regulations Section**

**Diagnosis:** Distress

**Signs contributing to the diagnosis:** Severe lethargy, labored breathing, ataxia

**Disposition:** Euthanized; the duration and severity of signs led to the classification.

**Study:** #23

**Animals:** 5 rabbits in high-dose group

**Type of Study:** IV and subcutaneous acute toxicity study

**Guidelines/Regulations:**

Redbook 2000 Toxicological Principles for the Safety Assessment of Food Ingredients, November 2003

Part VII, DHHS, FDA, International Conference on Harmonization; Guidance on Non-Clinical Safety Studies for the Conduct of Human Clinical Trial For Pharmaceuticals, Federal Register, Vol. 62, #227, November 25, 1997

**\*See Applicable Regulations Section**

**Diagnosis:** Distress

**Signs contributing to the diagnosis:** Prolonged vocalization following administration and upon touch near area of administration and elsewhere on body; reactions subsided over one hour but reappeared with each dosing; animals continued through study period.

**Disposition:** Euthanized at end of study; cyclic painful episodes support the classification.

**Study:** #24

**Animals:** 1 rabbit in high-dose group

**Type of Study:** Acute IV toxicity study

**Guidelines/Regulations:**

Redbook 2000 Toxicological Principles for the Safety Assessment of Food Ingredients, November 2003

Part VII, DHHS, FDA, International Conference on Harmonization; Guidance on Non-Clinical Safety Studies for the Conduct of Human Clinical Trial For Pharmaceuticals, Federal Register, Vol. 62, #227, November 25, 1997

**\*See Applicable Regulations Section**

**Diagnosis:** Distress

**Signs contributing to the diagnosis:** Severe labored breathing, prostration, no remission of signs over time.

**Disposition:** Euthanized; severity and duration of signs support classification.

**Study:** #25

**Animals:** 8 rabbits in low, mid and high-dose groups

**Type of Study:** Acute dermal toxicity study

**Guidelines/Regulations:**

Redbook 2000 Toxicological Principles for the Safety Assessment of Food Ingredients, November 2003

Part VII, DHHS, FDA, International Conference on Harmonization; Guidance on Non-Clinical Safety Studies for the Conduct of Human Clinical Trial For Pharmaceuticals, Federal Register, Vol. 62, #227, November 25, 1997

**\*See Applicable Regulations Section**

**Diagnosis:** Distress

**Signs contributing to the diagnosis:** Moderate to severe dermal irritation, erythema, hyperemia, and induration.

**Disposition:** Euthanized after first dose.



## Applicable Regulations/Guidelines

The following are applicable guidelines and regulations covering the conduct of studies at all Charles River Laboratory Contract Research Facilities (listed above).

- Redbook 2000 Toxicological Principles for the Safety Assessment of Food Ingredients, November 2003.
- PART VII, DHHS, FDA, International Conference on Harmonization; Guidance on Non-Clinical Safety Studies for the Conduct of Human Clinical Trial For Pharmaceuticals, Federal Register, Vol. 62, No. 227, Nov 25, 1997
- EPA Health Effects Test Guidelines OPPTS 870.3050, 28-Day Oral Toxicity in Rodents, July 2000
- EPA Health Effects Test Guidelines OPPTS 870.3150, 90-Day Oral Toxicity in Non-Rodents, August 1998
- EPA Health Effects Test Guidelines OPPTS 870.3100, 90-Day Oral Toxicity in Rodents, August 1998
- EPA Health Effects Test Guidelines OPPTS 870.4100, Chronic Toxicity, August 1998
- EPA Health Effects Test Guidelines OPPTS 870.3500, Preliminary Developmental Toxicology Screen, March 1994
- EPA Health Effects Test Guidelines OPPTS 870.3600, Inhalational Developmental toxicity Study March 1994
- EPA Health Effects Test Guidelines OPPTS 870.3700, Prenatal Developmental Toxicity Study, August 1995
- EPA Health Effects Test Guidelines OPPTS 870.3800, Reproduction and Fertility Effects, August 1995
- OECD Guideline for the Testing Of Chemicals, Repeated Dose 90-day Oral Toxicity Studies in Non-Rodents, 409, September 1998
- OECD Guideline for the Testing Of Chemicals, Repeated Dose 90-day Oral Toxicity Studies in Rodents, 408, September 1998
- OECD Guideline for the Testing Of Chemicals, Repeated Dose 28-day Oral Toxicity Studies in Rodents, 407, July 1995

*gpa*

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 14-R-0145  
CUSTOMER NUMBER: 1802

FORM APPROVED  
OMB NO. 0578-0036

**ANNUAL REPORT OF RESEARCH FACILITY**  
(TYPE OR PRINT)

U C B Research Inc  
840 Memorial Drive  
Cambridge, MA 02139  
Telephone: (617) -547-0033

NOV 24 2004

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

FACILITY LOCATIONS ( Sites ) - See Attached Listing

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

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal 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 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 in these animals and the reason such drugs were not used must be attached to this report)	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
4. Dogs					
5. Cats					
6. Guinea Pigs		2,716	134		2,850
7. Hamsters					
8. Rabbits					
9. Non-human Primates					
10. Sheep					
11. Pigeons					
12. Other Farm Animals					
13. Other Animals					

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, 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 an 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 provision 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 or Legally Responsible Institutional Official )

SIGNATURE OF C.E.O. OR INSTITUTIONAL OFFICIAL

NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL ( Type or Print )

DATE SIGNED

11/23/04

OCT 18 2004

*Yor*

This report is required by law (7 USC 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 21:

See attached form for additional information.

Interagency Report Control No.:

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE  <b>ANNUAL REPORT OF RESEARCH FACILITY</b> ( TYPE OR PRINT )	1. CERTIFICATE NUMBER: 14-R-0148 CUSTOMER NUMBER: 9446	FORM APPROVED OMB NO. 0579-0036
Davinci Biomedical Research Products Inc 20 Maple St Po Box 1125 South Lancaster, MA 01561  Telephone: (978) -368-3477		

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

FACILITY LOCATIONS ( Sites ) - See Attached Listing

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

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal 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 an 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 wh the use of appropriate anesthetic, analgesic, or tranquiliz drugs would have adversely affected the procedures, res or interpretation of the teaching, research, experiments, surgery, or tests. ( An explanation of the procedures producing pain or distress in these animals and the reas: such drugs were not used must be attached to this report	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
4. Dogs			73		73
5. Cats					
6. Guinea Pigs					
7. Hamsters					
8. Rabbits			17		17
9. Non-human Primates					
10. Sheep			56		56
11. Pigs			97		97
12. Other Farm Animals					
Bovine			4		4
13. Other Animals					

**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 rese 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 ap 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 inc 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 provision of adequate veterinary care and to oversee the adequacy of other aspects of animal care and use.

<b>CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL</b> ( Chief Executive Officer or Legally Responsible Institutional Official )			
SIGN	FICIAL	NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL ( Type or Print )	DATE SIGNED
			10-2

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. REGISTRATION NO. 14-R-0151	CUSTOMER NO. 11236	FORM APPROVED OMB NO. 0579-0036
2. HEADQUARTERS RESEARCH FACILITY (Name and Address, as registered with USDA, include Zip Code)		
ASTRAZENECA PHARMACEUTICALS LP 35 GATEHOUSE DR WALTHAM, MA 02451		

**ANNUAL REPORT OF RESEARCH FACILITY**  
(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 necessary.)

FACILITY LOCATIONS(sites)

ASTRAZENECA  
WALTHAM, MA 02451

REPORT OF ANIMALS USED BY OR UNDER CONTROL OF RESEARCH FACILITY (Attach additional sheets if necessary 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 in these animals and the reasons such drugs were not used must be attached to this report)	F. TOTAL NO. OF ANIMALS (Cols. C + D + E)
4. Dogs					
5. Cats					
6. Guinea Pigs					
7. Hamsters					
8. Rabbits					
9. Non-Human Primates					
10. Sheep					
11. Pigs					
12. Other Farm Animals					
13. Other Animals					

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 the 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 provision 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 or Legally Responsible Institutional official)  
I certify that the above is true, correct, and complete (7 U.S.C. Section 2143)

SIGNATURE OF C.E.O. OR INSTITUTIONAL OFFICIAL	NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL (Type or Print)	DATE SIGNED
		09/22/2004

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 14-R-0152  
CUSTOMER NUMBER: 12456

FORM APPROVED  
OMB NO. 0579-0036

**ANNUAL REPORT OF RESEARCH FACILITY**  
(TYPE OR PRINT)

Gwathmey Inc  
763 Concord Ave Bldg E  
Cambridge, MA 02138

Telephone: (617) -491-0022

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

FACILITY LOCATIONS ( Sites ) - See Attached Listing

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

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal 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 in these animals and the reasons such drugs were not used must be attached to this report )	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
4. Dogs					0
5. Cats					0
6. Guinea Pigs					0
7. Hamsters					0
8. Rabbits					0
9. Non-human Primates					0
10. Sheep					0
11. Pigs					0
12. Other Farm Animals					0
13. Other Animals					
<i>We have only used rats and mice - JKG</i>					

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 provision 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 or Legally Responsible Institutional Official )

NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL (Type or Print) \_\_\_\_\_ DATE SIGNED *11/17/04*

(date.)



This report is required by law (7 USC 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 211

additional information.

*John*

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE  <b>ANNUAL REPORT OF RESEARCH FACILITY</b> (TYPE OR PRINT)	1. CERTIFICATE NUMBER: 14-R-0153 CUSTOMER NUMBER: 471	FORM APPROVED OMB NO. 0579-0038
	Sera Source Inc P.O. Box 58 58 S. Royalston Road Royalston, MA 01368  Telephone: (978) -249-0974	

DEC 06 2004

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

Site 1, Bld 1

FACILITY LOCATIONS ( Sites ) - See Attached Listing

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

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal 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 in these animals and the reason such drugs were not used must be attached to this report )	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
4. Dogs					
5. Cats					
6. Guinea Pigs					
7. Hamsters					
8. Rabbits		103			103
9. Non-human Primates					
10. Sheep					
11. Pigs					
12. Other Farm Animals					
13. Other Animals					

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, 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 an 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 provision 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 or Legally Responsible Institutional Official )

SIGNATURE \_\_\_\_\_ DATE SIGNED 11/29/04

NOV 29 2004

This report is required by law (7 USC 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 21:

See attached form for additional information.

Interagency Report Control No.

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE	1. CERTIFICATE NUMBER: 14-R-0154 CUSTOMER NUMBER: 510 148	FORM APPROVED OMB NO. 0579-0036
ANNUAL REPORT OF RESEARCH FACILITY (TYPE OR PRINT)		Baystate Medical Center Springfield, Massachusetts 01199

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

FACILITY LOCATIONS ( Sites ) - See Attached Listing

REPORT OF ANIMALS USED BY OR UNDER CONTROL OF RESEARCH FACILITY ( Attach additional sheets if necessary 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 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 in 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 in these animals and the reason such drugs were not used must be attached to this report.	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
1. Dogs	0	0	0	0	0
2. Cats	0	0	0	0	0
3. Guinea Pigs	0	0	0	0	0
4. Hamsters	0	0	0	0	0
5. Rabbits	0	0	0	0	0
6. Nonhuman Primates	0	0	0	0	0
7. Sheep	0	0	0	0	0
8. Pigs	0	0	62	0	62
9. Other Farm Animals	0	0	0	0	0
10. Other Animals	0	0	0	0	0

**ASSURANCE STATEMENTS**

- The facility is in compliance with applicable 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, testing, surgery, or experimentation were followed by this research facility.
- The principal investigator has considered alternatives to painful procedures.
- The facility is in compliance with 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 Animal Care and Use Committee (ACUC). A summary of all such exceptions is attached to the annual report, in addition to identifying the IACUC-approved exceptions, this summary includes a description 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 provision of adequate veterinary care and to oversee the adequacy of other aspects of animal care and use.

CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL (Name and Title of Legally Responsible Institutional Official)	
_____ NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL (Type or Print)	DATE SIGNED 11/24/04



UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 14-R-0155  
CUSTOMER NUMBER: 13275

FORM APPROVED  
OMB NO. 0579-0036

**ANNUAL REPORT OF RESEARCH FACILITY**  
( TYPE OR PRINT )

Massachusetts College Of Pharmacy & Health  
179 Longwood Ave  
Boston, MA 02115

Telephone: (617)-732-2942

*DEC 01 2004*

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

FACILITY LOCATIONS ( Sites ) - See Attached Listing

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

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not ye used for such purposes.	C. Number of animals upon which teaching, research, experiments, or tests were conducted involving no pain, distress, or use o 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 an 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 wh the use of appropriate anesthetic, analgesic, or tranquiliz drugs would have adversely affected the procedures, res or interpretation of the teaching, research, experiments, surgery, or tests. ( An explanation of the procedures producing pain or distress in these animals and the reasi such drugs were not used must be attached to this report	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
4. Dogs	NA				
5. Cats	NA				
6. Guinea Pigs	NA				
7. Hamsters	0	0	1017	0	1017
8. Rabbits	NA				
9. Non-human Primates	NA				
10. Sheep	NA				
11. Pigs	NA				
12. Other Farm Animals	NA				
13. Other Animals	NA				

**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 rest 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 ap 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 inc 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 provision 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 or Legally Responsible Institutional Official )

[NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL ( Type or Print )

DATE SIGNED

11/23/04

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

NOV 30 2004

ANNUAL REPORT OF RESEARCH FACILITY  
( TYPE OR PRINT )

1. CERTIFICATE NUMBER: 14-R-0156  
CUSTOMER NUMBER: 749

FORM APPROVED  
OMB NO. 0579-0036

Capralogics, Inc.  
235 Czeski Road  
Hardwick, MA 01037

Telephone: (413)-477-6612

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

FACILITY LOCATIONS ( Sites ) - See Attached Listing

REPORT OF ANIMALS USED BY OR UNDER CONTROL OF RESEARCH FACILITY ( Attach additional sheets if necessary 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 in these animals and the reasons such drugs were not used must be attached to this report ).	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
4. Dogs	0				
5. Cats	0				
6. Guinea Pigs	0				
7. Hamsters	0				
8. Rabbits	2		463		465
9. Non-human Primates	0				
10. Sheep	3	1	5		9
11. Pigs	0				
12. Other Farm Animals	60		60		120
13. Other Animals	70				

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 an 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 provision 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 or Legally Responsible Institutional Official )

SIC

NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL ( Type or Print )

DATE SIGNED

11/26/04

API

88), which is obsolete.)

( AUG 91 )

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 14-R-0157  
CUSTOMER NUMBER: 14167

FORM APPROVED  
OMB NO. 0579-0036

**ANNUAL REPORT OF RESEARCH FACILITY**  
( TYPE OR PRINT )

Cell Signaling Technology, Inc.  
166 B Cummings Center  
Beverly, MA 01915

Telephone: (978) -867-2300

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

FACILITY LOCATIONS ( Sites ) - See Attached Listing

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

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal 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, res or interpretation of the teaching, research, experiments, surgery, or tests. ( An explanation of the procedures producing pain or distress in these animals and the reason such drugs were not used must be attached to this report	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
4. Dogs	0	0	0	0	
5. Cats	0	0	0	0	
6. Guinea Pigs	0	0	0	0	
7. Hamsters	0	0	0	0	
8. Rabbits	0	0	282	0	282
9. Non-human Primates	0	0	0	0	
10. Sheep	0	0	0	0	
11. Pigs	0	0	0	0	
12. Other Farm Animals	0	0	0	0	
13. Other Animals	0	0	0	0	

**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 an 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 provision 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 or Legally Responsible Institutional Official )

NAME & TITLE OF CEO OR INSTITUTIONAL OFFICIAL ( Type or Print )

DATE SIGNED

11/10/04

OCT 27 2004

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 14-R-0159  
CUSTOMER NUMBER: 16296

FORM APPROVED  
OMB NO. 0579-0036

**ANNUAL REPORT OF RESEARCH FACILITY**  
( TYPE OR PRINT )

Bristol-Myers Squibb Medical Imaging, Inc  
331 Treble Cove Road  
North Billerica, MA 01862  
  
Telephone: (800)-362-2668

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

331 Treble Cove Road  
N. Billerica MA 01862

FACILITY LOCATIONS ( Sites ) - See Attached Listing

Building 500

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

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal 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 an 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 wh the use of appropriate anesthetic, analgesic, or tranquiliz drugs would have adversely affected the procedures, res or interpretation of the teaching, research, experiments, surgery, or tests. ( An explanation of the procedures producing pain or distress in these animals and the reas such drugs were not used must be attached to this report	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
4. Dogs					0
5. Cats					0
6. Guinea Pigs					0
7. Hamsters					0
8. Rabbits	9	191			200
9. Non-human Primates	2	2	0	0	4
10. Sheep					0
11. Pigs					0
12. Other Farm Animals					0
13. Other Animals					

**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 rese 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 ap 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 inx 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 provision 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 or Legally Responsible Institutional Official )

NAME & TITLE OF CEO OR INSTITUTIONAL OFFICIAL ( Type or Print )

DATE SIGNED

10/26/04

OCT 12 2004

This report is required by law (7 USC 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 211

See attached form for additional information.

Interagency Report Control No. *sp*

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 14-R-0160  
CUSTOMER NUMBER: 10943

FORM APPROVED  
OMB NO. 0579-0036

**ANNUAL REPORT OF RESEARCH FACILITY**  
( TYPE OR PRINT )

Tga Sciences, Inc.  
47 Hall Street  
Medford, MA 02155

Telephone: (781)-393-6910

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

FACILITY LOCATIONS ( Sites ) - See Attached Listing

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

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal 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 tranquiliz drugs would have adversely affected the procedures, res or interpretation of the teaching, research, experiments, surgery, or tests. ( An explanation of the procedures producing pain or distress in these animals and the reason such drugs were not used must be attached to this report	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
4. Dogs	0				0
5. Cats	0				0
6. Guinea Pigs	0				0
7. Hamsters	0				0
8. Rabbits	0				0
9. Non-human Primates	0				0
10. Sheep	0				0
11. Pigs	0				0
12. Other Farm Animals	0				0
13. Other Animals	0				0

**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 an 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 provision 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 or Legally Responsible Institutional Official )

S

OFFICIAL ( Type or Print )

DATE SIGNED

93009

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 14-R-0161  
CUSTOMER NUMBER: 1658

FORM APPROVED  
OMB NO. 0579-0036

**ANNUAL REPORT OF RESEARCH FACILITY**  
( TYPE OR PRINT )

Tranxenogen, Inc.  
800 Boston Turnpike  
Shrewsbury, MA 01545

NOV 23 2004

Telephone: (508)-842-5036

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

800 Boston Turnpike

FACILITY LOCATIONS ( Sites ) - See Attached Listing

Shrewsbury MA 01545

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

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal 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 an 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 wh the use of appropriate anesthetic, analgesic, or tranquiliz drugs would have adversely affected the procedures, res or interpretation of the teaching, research, experiments, surgery, or tests. ( An explanation of the procedures producing pain or distress in these animals and the reas such drugs were not used must be attached to this report	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
4. Dogs	0	0	0	0	0
5. Cats	0	0	0	0	0
6. Guinea Pigs	0	0	0	0	0
7. Hamsters	0	0	0	0	0
8. Rabbits	0	0	0	0	0
9. Non-human Primates	0	0	0	0	0
10. Sheep	0	0	0	0	0
11. Pigs	0	0	0	0	0
12. Other Farm Animals	0	0	0	0	0
13. Other Animals					

**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 rest 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 ap 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 inc brief explanation of the exceptions, as well as the species and number of animals affected.
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CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL  
( Chief Executive Officer or Legally Responsible Institutional Official )

SIGNATURE OF C.E.O. OR INSTITUTIONAL OFFICIAL

NR

DATE SIGNED

11/15/04

NOV 19 2004

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 14-R-0164  
CUSTOMER NUMBER: 21373

FORM APPROVED  
OMB NO. 0579-0036

**ANNUAL REPORT OF RESEARCH FACILITY**  
( TYPE OR PRINT )

Novartis Institutes For Biomedical Research Inc  
400 Technology Square  
Cambridge, MA 02139

Telephone: (615)-551-9778

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

FACILITY LOCATIONS ( Sites ) - See Attached Listing

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

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal 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 an 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 wh the use of appropriate anesthetic, analgesic, or tranquiliz drugs would have adversely affected the procedures, res or interpretation of the teaching, research, experiments, surgery, or tests. ( An explanation of the procedures producing pain or distress in these animals and the reas such drugs were not used must be attached to this report	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
4. Dogs					
5. Cats					
6. Guinea Pigs					
7. Hamsters		308	115		423
8. Rabbits					
9. Non-human Primates					
10. Sheep					
11. Pigs					
12. Other Farm Animals					
13. Other Animals					

**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 rese 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 ap 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 inc 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 provision 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 or Legally Responsible Institutional Official )

SIGNATURE	NAME & TITLE OF CEO OR INSTITUTIONAL OFFICIAL ( Type or Print )	DATE SIGNED 11/17/04
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UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 14-R-0165  
CUSTOMER NUMBER: 10803

FORM APPROVED  
OMB NO. 0579-0036

**ANNUAL REPORT OF RESEARCH FACILITY**  
( TYPE OR PRINT )

Paratek  
75 Kneeland St  
Boston, MA 02111

NOV 22 2004

Telephone: (617) -275-0040

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

FACILITY LOCATIONS ( Sites ) - See Attached Listing

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

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal 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, res or interpretation of the teaching, research, experiments, surgery, or tests. ( An explanation of the procedures producing pain or distress in these animals and the reason such drugs were not used must be attached to this report	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
4. Dogs					
5. Cats					
6. Guinea Pigs			41*		41
7. Hamsters			20		20
8. Rabbits					
9. Non-human Primates					
10. Sheep					
11. Pigs					
12. Other Farm Animals					
13. Other Animals					
*PLEASE NOTE: 41 GUINEA PIGS ORDERED - 1 ARRIVED AT FACILITY DEAD & PARTLY CANNIBALIZED IN SHIP. CRATE ONLY 40 ANIMALS ACTUALLY USED IN STUDY.					

**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 an 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 provision 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 or Legally Responsible Institutional Official )



OCT 1 2004

See attached form for additional information.

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 14-R-0166  
CUSTOMER NUMBER: 22137

FORM APPROVED  
OMB NO. 0579-0036

ANNUAL REPORT OF RESEARCH FACILITY  
(TYPE OR PRINT)

Microbia Inc  
320 Bent St  
Cambridge, MA 02141

OCT 1 2004

OCT 1 5 2004

Telephone: (617)-621-8396

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

FACILITY LOCATIONS ( Sites ) - See Attached Listing

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

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not ye used for such purposes.	C. Number of animals upon which teaching, research, experiments, or tests were conducted involving no pain, distress, or use o 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 an 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 wh the use of appropriate anesihetic, analgesic, or tranquiliz drugs would have adversely affected the procedures, res or interpretation of the teaching, research, experiments, surgery, or tests. ( An explanation of the procedures producing pain or distress in these animals and the reast such drugs were not used must be attached to this report	F. TOTAL N OF ANI ( COLL C + D
4. Dogs					
5. Cats					
6. Guinea Pigs					
7. Hamsters	11	128 tissue Harv. Anesthesia	500 Anesthesia		1111
8. Rabbits					
9. Non-human Primates					
10. Sheep					
11. Pigs					
12. Other Farm Animals					
13. Other Animals					

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 ac teaching, testing, surgery, or experimentation were followed by this research facility.
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CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL  
( Chief Executive Officer or Legally Responsible Institutional Official )

SIGNATURE OF CEO OR INSTITUTIONAL OFFICIAL

NAME & TITLE OF CEO OR INSTITUTIONAL OFFICIAL (Type or Print)

DATE  
9/31

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3 (OCT 88), which is obsolete.)

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 14-R-0167  
CUSTOMER NUMBER: 23918

FORM APPROVED  
OMB NO 0579-0036

**ANNUAL REPORT OF RESEARCH FACILITY**  
( TYPE OR PRINT )

Biomedical Research Models Inc  
67 Millbrook St  
Worcester, MA 01606  
  
Telephone: (508) -459-7544

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

FACILITY LOCATIONS ( Sites ) - See Attached Listing

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

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal 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 an 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 wh the use of appropriate anesthetic, analgesic, or tranquiliz drugs would have adversely affected the procedures, res or interpretation of the teaching, research, experiments, surgery, or tests. ( An explanation of the procedures producing pain or distress in these animals and the reast such drugs were not used must be attached to this report	F. TOTAL NUMBER OF ANIMALS ( COLUMNS C + D + E )
4. Dogs					
5. Cats					
6. Guinea Pigs					
7. Hamsters					
8. Rabbits	2	0 ( none )	1	0 ( none )	3
9. Non-human Primates					
10. Sheep					
11. Pigs					
12. Other Farm Animals					
13. Other Animals					

**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 rese teaching, testing, surgery, or experimentation were followed by this research facility.
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- 4) The attending veterinarian for this research facility has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of other aspects of animal care and use.

CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL  
( Type or Print )  
\_\_\_\_\_  
Officer or Legally Responsible Institutional Official )

NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL ( Type or Print )

DATE SIGNED

9/21/06



SEP 24 2004

Biomedical Research Models, Inc.

67 Millbrook Street  
Worcester, MA 01606  
www.biomere.com

Telephone: (508) 459-7544  
Fax: (508) 459-7548

Customer No: 23918  
Certificate No: 14-R-0167  
September 21, 2004

United States Department of Agriculture  
920 Main Campus Drive, Suite 200  
Raleigh, NC 27606-5213

RE: Annual Report

The BRM facility that held USDA certified animals (rabbits, N=3) for the 2003- 2004 year was:

10 New Bond Street  
Worcester, MA 01606

The following BRM animal facilities contained no USDA certified animals:

67 Millbrook Street, Suite 522  
Worcester, MA 01606

500 West Boylston Street  
Worcester, MA 01606

3601 Main Street  
Springfield, MA 01107

Sincerely,

NOV 12 2004

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. REGISTRATION NO. 14-R-0168	CUSTOMER NO. 26617	FORM APPROVED OMB NO. 0579-0036
2. HEADQUARTERS RESEARCH FACILITY (Name and Address, as registered with USDA, include Zip Code)  BIOMODELS AND AFFILIATES 277 LINDEN ST SUITE 201 WELLESLEY, MA 02482 (781) 235-3808		

**ANNUAL REPORT OF RESEARCH FACILITY**  
(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 necessary.)

FACILITY LOCATIONS(sites)

300 TECHNOLOGY SQUARE, CAMBRIDGE, MA, 02139

REPORT OF ANIMALS USED BY OR UNDER CONTROL OF RESEARCH FACILITY (Attach additional sheets if necessary 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 in these animals and the reasons such drugs were not used must be attached to this report)	F. TOTAL NO. OF ANIMALS (Cols. C + D + E)
4. Dogs					
5. Cats					
6. Guinea Pigs					
7. Hamsters	0	0	78	0	78
8. Rabbits					
9. Non-Human Primates					
10. Sheep					
11. Pigs					
12. Other Farm Animals					
13. Other Animals					

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 the 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 provision 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 or Legally Responsible Institutional official)

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

OFFICIAL	NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL (Type or Print)	DATE SIGNED
		11/10/04

DEC 07 2004

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UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. REGISTRATION NO.  
14-V-0001 652

FORM APPROVED  
OMB NO. 0579-0036

ANNUAL REPORT OF RESEARCH FACILITY  
(TYPE OR PRINT)

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

Dept. of Veterans Affairs Ntnl  
810 Vermont Ave NW  
Washington DC 20420

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)

518 VA Medical Center  
200 Springs Rd.  
Bedford, MA 01730

REPORT OF ANIMALS USED BY OR UNDER CONTROL OF RESEARCH FACILITY (Attach additional sheets if necessary 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 in these animals and the reasons such drugs were not used must be attached to this report).	F. TOTAL NO. OF ANIMALS (Cols. C + D + E)
4. Dogs	0				
5. Cats	0				
6. Guinea Pigs			15		15
7. Hamsters	0				
8. Rabbits	0				
9. Non-human Primates	0				
10. Sheep	0				
11. Pigs	0				
12. Other Farm Animals	0				
13. Other Animals					

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 provision of adequate veterinary care and to oversee the adequacy of other aspects of animal care and use.

CERTIFICATION BY HEADQUARTER RESEARCH FACILITY OFFICIAL  
(Chief Executive Officer or Legally Responsible Institutional Official)

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

SIGNATURE OF C.E.O. OR INSTITUTIONAL OFFICIAL

NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL (Type or Print)

DATE SIGNED

11/3/04

DEC 07 2004

This report is required by law (7 USC 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.

See reverse side for additional information.

Interagency Report Control No. 0180-DOA-AN

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. REGISTRATION NO.

14-V-003

653

FORM APPROVED  
OMB NO. 0579-0036

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

Dept. of Veterans Affairs National  
Headquarters  
810 Vermont Avenue, NW  
Washington, DC 20420

ANNUAL REPORT OF RESEARCH FACILITY  
(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 necessary.)

FACILITY LOCATIONS (Sites)

525 VA Medical Center

940 Belmont Street (Brockton Division)  
Brockton, MA 02301

1400 VFW Parkway (West Roxbury Division)  
West Roxbury, MA 02132

REPORT OF ANIMALS USED BY OR UNDER CONTROL OF RESEARCH FACILITY (Attach additional sheets if necessary 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 in these animals and the reasons such drugs were not used must be attached to this report).	F. TOTAL NO. OF ANIMALS (Cols. C + D + E)
4. Dogs					
5. Cats			2 (BR Div)		2
6. Guinea Pigs		10 (WR Div)			10
7. Hamsters					
8. Rabbits			9 (WR Div)		9
9. Non-human Primates					
10. Sheep					
11. Pigs		3 (WR Div)			3
12. Other Farm Animals					
13. Other Animals					
Opossums		7 (WR Div)			7
Rats		124 (BR)	1129 (WR Div) 586 (BR Div)		WR 1129 BR 710
Mice		219 (WR)	138 (WR Div) 14 (BR Div)		WR 357 BR 14

ASSURANCE STATEMENTS

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- 4) The attending veterinarian for this research facility has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of other aspects of animal care and use.

CERTIFICATION BY HEADQUARTERS  
(Chief Executive Officer or Le...)

I certify that the above is true, c...

SIGNATURE OF C.E.O. OR INSTITUTIONAL OFFICIAL

DATE SIGNED

11/10/04

DEC 07 2004

FORM

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. REGISTRATION NO.

14-V-004 651

FORM APPROVED  
OMB NO. 0579-0036

ANNUAL REPORT OF RESEARCH FACILITY  
(TYPE OR PRINT)

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

Department of Veterans Affairs Central Office  
810 Vermont Avenue, NW  
Washington, DC 20420

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)

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4. Dogs			8		8
5. Cats			0		
6. Guinea Pigs			0		
7. Hamsters			130		130
8. Rabbits			14		14
9. Non-human Primates			0		
10. Sheep			0		
11. Pigs			0		
12. Other Farm Animals					
13. Other Animals					
Rats			36		36
Mice			1514		1514

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.
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CERTIFICATION BY HEADQ

(Chief Executive Officer or

I certify that the above is true

SIGNATURE OF C.E.O. OR INSTITUTIONAL OFFICIAL

DATE SIGNED

*[Signature]*