

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

All redactions on this page are pursuant to (b)(6) & (b)(7)(c).

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

1. REGISTRATION NO.

16-R-0003

FORM APPROVED  
OMB NO 0579-0036

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

Wesleyan University  
North College - High Street  
Middletown CT 06459  
ATTN: [REDACTED]

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)

SITE:001 - Shanklin Laboratories  
257 Hall Atwater,  
Middletown CT 06459-0170  
Contact: [REDACTED]

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

A.	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 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).	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					

NO COVERED ANIMALS USED

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)**

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

DATE SIGNED

10-2-00

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. REGISTRATION NO.

FORM APPROVED  
OMB NO 0579-0036

All redactions on this page are pursuant to (b)(6) & (b)(7)(c).

ANNUAL REPORT OF RESEARCH FACILITY  
(TYPE OR PRINT)

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

16-R-0004, Cust Id 50

JOHN B. PIERCE LABORATORY, INC.  
290 CONGRESS AVENUE  
NEW HAVEN, CT 06519

DEC - 4

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

FACILITY LOCATIONS (Sites)

The John B. Pierce Laboratory

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

A.	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	0	0	0	0
5. Cats	0	0	0	0	0
6. Guinea Pigs	0	18	0	0	18
7. Hamsters	0	0	282	0	282
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 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)

DATE SIGNED

11/28/00

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

**1. REGISTRATION NO.**

FORM APPROVED  
OMB NO. 0579-0036

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

HARTFORD HOSPITAL  
80 SEYMOUR STREET  
P.O. BOX 5037  
HARTFORD, CT 06102

**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

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

## **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)

I certify that the above is true, correct, and complete /7 U.S.C. Section 214

**OFFICIAL (Type or Print)**

DATE SIGNED

1904 f. 200

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

All redactions on this page are pursuant to (b)(6) & (b)(7)(c).

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

1. REGISTRATION NO.	FORM APPROVED OMB NO 0579-0036
2. HEADQUARTERS RESEARCH FACILITY <i>includ</i>	tered with USDA,
16-R-0010, Cust Id 467	
ALEXION PHARMACEUTICALS, INC. 25 SCIENCE PARK, SUITE 360 BOX 15 NEW HAVEN, CT 06511	

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

## **FACILITY LOCATIONS (Sites)**

## University of Connecticut

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

## **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)**

DATE SIGNED

11/16/00

(AUG 91)

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

ANNUAL REPORT OF RESEARCH FACILITY  
(TYPE OR PRINT)

1. REGISTRATION NO.

16-R-0011

FORM APPROVED  
OMB NO 0579-0036

2. HEADQUARTERS RESEARCH FACILITY (Name and Address, as registered with USDA,  
inc'

16-R-0011, Cust Id 43

UNIVERSITY OF HARTFORD  
200 BLOOMFIELD AVENUE  
WEST HARTFORD, CT 06117

DEC - 4 2000

3. REPORTING FACILITY (List all locations where animals were housed or used in actual research.  
sheets if necessary)

is. Attach additional

FACILITY LOCATIONS (Sites)

Dana Hall Room 318

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

A.	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	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 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 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)

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

DATE SIGNED

11/28/00

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

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

**1. REGISTRATION NO.:**

**2. HEA** 16-R-0012, Cust Id 470

FORM APPROVED  
OMB NO. 0579-0036

stered with USDA.

BAYER CORPORATION  
400 MORGAN LN  
WEST HAVEN, CT 06516

**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)**

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

## **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)**

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.R.C. OR INSTITUTIONAL OFFICIAL: \_\_\_\_\_

**DATE SIGNED**

10/20/00

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

**1. REGISTRATION NO.**

FORM APPROVED  
OMB NO. 0570-0036

HSDA

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

**2. HEADQUARTERS**

TRINITY COLLEGE  
300 SUMMIT STREET  
HARTFORD, CT 06106

**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)**

# Chemistry Department

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

A.	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.
4. Dogs					TOTAL NO. OF ANIMALS
5. Cats					(Cols. C + D + E)
6. Guinea Pigs	0	18			18
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 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)**

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

SIGNATURE OF C.E.O. OR INSTITUTIONAL OFFICIAL	NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL <i>(Type or Print)</i>	DATE SIGNED
		9/27/00

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. REGISTRATION NO.

FORM APPROVED  
OMB NO. 0579-0036

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

All redactions on this page are pursuant to (b)(6) & (b)(7)(c).

2. HEADQ  
include 16-R-0017, Cust Id 39

CONNECTICUT COLLEGE  
270 MOHEGAN AVENUE  
NEW LONDON, CT 06320

ed with USDA,  
NOV 16 2000

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)

Psychology Department, Bill Hall  
Connecticut College

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	No regulated laboratory species				
White-footed mouse (field study)	124				

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)**

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

SIGNATURE (Type or Print)

DATE SIGNED

Nov 13,  
2000

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. REGISTRATION NO.

16-R-0025

FORM APPROVED  
OMB NO. 0579-0036

ed with USDA,

ANNUAL REPORT OF RESEARCH FACILITY  
(TYPE OR PRINT)

2. HEADQUARTERS RESEARCH FACILITY  
include 2

16-R-0025, Cust Id 44

UNIVERSITY OF CONNECTICUT HEALTH CENTER  
263 FARMINGTON AVENUE  
FARMINGTON, CT 06032

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 Connecticut Health Center  
263 Farmington Avenue  
Farmington, CT 06032

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	0	0	0	0
5. Cats	2	0	30	0	30
6. Guinea Pigs	10	0	200	0	200
7. Hamsters	9	0	293	0	293
8. Rabbits	6	0	162	0	162
9. Non-human Primates	1	0	2	0	2
10. Sheep	0	0	0	0	0
11. Pigs	0	0	32	0	32
12. Other Farm Animals					
13. Other Animals					
14. Gerbil	0	0	38	0	38
15. Chinchilla	0	0	3	0	3

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)

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

DATE SIGNED

11/14/00

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

OCT 18 2000

ANNUAL REPORT OF RESEARCH FACILITY  
(TYPE OR PRINT)

1. REGISTRATION NO.

2. H 16-R-0026, Cust Id 46

QUINNIPAC COLLEGE University  
MT. CARMEL AVENUE  
P.O. BOX 125  
HAMDEN, CT 06518

FORM APPROVED  
OMB NO. 0579-0036

gistered with USDA.

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)

Vivarium- Buckman Center

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

A.	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. (Cols. C + D + E)
4. Dogs	0	2	2		4
5. Cats	0	4	0		4
6. Guinea Pigs					
7. Hamsters	0	0	30		30
8. Rabbits	0	6	0		6
9. Non-human Primates					
10. Sheep					
11. Pigs					
12. Other Farm Animals					
13. Other Animals					
Gerbils	0	0	30		30

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)

SIGNAT

OFFICIAL (Type or Print)

DATE SIGNED

10/06/00

APHIS

(AUG 91)

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

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

**1. REGISTRATION NO.**

2. HEA' 16-R-0028. Cust Id 35

FORM APPROVED  
OMB NO. 0579-0036

stered with USDA.

**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)**

Site#1 150 Glover Ave. Norwalk, CT	
Site #2 165 McDermott Ave. North Haven, CT	

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

## **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)**

**SIGN**

Save or Print)

**DATE SIGNED**

10-30-00

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. REGISTRATION NO:

FORM APPROVED  
OMB NO 0579-0036

2. HEADQU/ include Z 16-R-0031, Cust Id 56  
[REDACTED]

*[Signature]* with USDA,

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

SEA RESEARCH FOUNDATION, INC.  
55 COOGAN BOULEVARD  
MYSTIC, CT 06355

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)

Mystic Aquarium

55 Coogan Blvd.

Mystic, CT 06355

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

A.	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					
Marine Mammals.					
Beluga whale	0	3	0	0	3
Bottlenose dolphin	0	3	0	0	3
Steller sea lion	0	7	0	0	7
No. Fur seal	0	13	0	0	13
Calif. sea lion	0	1	0	0	1
Harbor seal	0	9	0	0	9

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)**

DATE SIGNED

6 Nov 00

**UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE**

NOV 13 200

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

<p><b>1. REGISTRATION NO.</b> <b>16-R-0040</b></p>	<p>FORM APPROVED OMB NO. 0579-0036</p>
<p><b>2. HEADQUARTERS RESEARCH FACILITY</b> (Name and Address, as registered with USDA, include Zip Code)</p> <p>16-R-0040, Cust Id 10301  <span style="background-color: black; color: black;">[REDACTED]</span>  <b>NORTHWESTERN C T COMMUNITY COLLEGE</b>  <b>PARK PLACE EAST</b>  <b>WINSTED, CT 06098</b></p>	

3. REPORTING FACILITY (List all locations where animals were housed or used in actual research, testing, sheets if necessary) *111-120-AU-1*

#### **FACILITY LOCATIONS (Sites)**

- See 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 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	—	3	—	—	3
6. Guinea Pigs	—	5	—	—	5
7. Hamsters	—	—	—	—	—
8. Rabbits	—	2	1	—	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 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)**

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** *James M. Qualls*

**DATE SIGNED**

10|26|00

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. REGISTRATION NO.

FORM APPROVED  
OMB NO 0579-0036

2. HEIS  
incl 16-R-0008, Cust Id 52

Registered with USDA

(b)(6), (b)(7)(c)  
UNIVERSITY OF CONNECTICUT  
RESEARCH FOUNDATION, BOX U-193  
BOX 14100, HARTFORD, CONNECTICUT 06141  
STORRS, CT 06269 - 2086

ANNUAL REPORT OF RESEARCH FACILITY  
(TYPE OR PRINT)

14/2000

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)

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

A.	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	0	0	0	0
5. Cats	0	35	0	0	35
6. Guinea Pigs	24	60	5	0	65
7. Hamsters	80	100	0	0	100
8. Rabbits	44	176	46	2	224
9. Non-human Primates	0	0	0	0	0
10. Sheep	0	0	0	0	0
11. Pigs	42	103	0	0	103
12. Other Farm Animals					
Dairy Cattle	0	45	0	0	45
13. Other Animals					
Mole Rats	300	100	0	0	100

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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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

11/8/00  
*[Signature]*

Replaces VS FORM 18-23 (OCT 88), which is obsolete

APH  
(AUG 91)

PART 1 - HEADQUARTERS

October 16, 2000

USDA Registration No. 16-R-0008  
Annual Report  
October 1, 1999 - September 30, 2000

Exemption from AWA Standards

Adult male Siberian hamsters are maintained with nursing females. This is an IACUC-approved exemption from the USDA AWA standards (9 CFR Part 3, Subpart B, sec. 3.28). The USDA standards do not differentiate the hamster species. Unlike the more common Syrian hamsters, male Siberian hamsters have been observed to assist the females in maintaining the nest by retrieving pups. Some species of rodents are known to pair bond. Siberian hamsters have experienced weight loss and other signs of depression when separated from their mates. If an adult male Siberian hamster is removed and returned later, fighting often occurs. Routine husbandry for Siberian hamster is described in an IACUC-approved Standard Operating Procedure (January 1996).

Column E Explanation

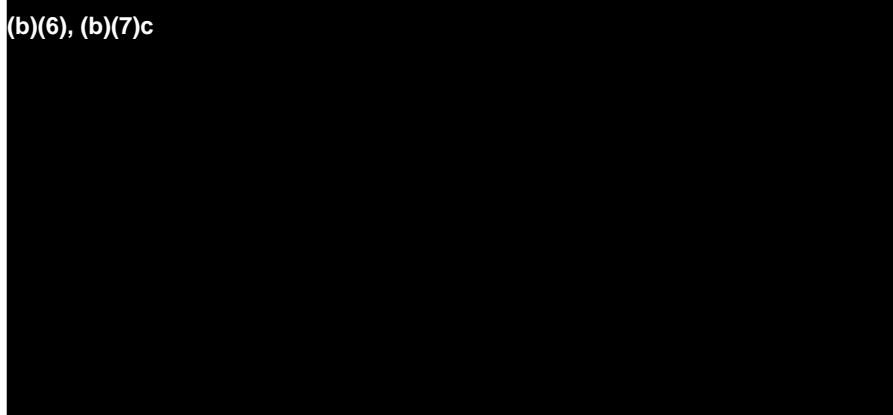
2 Rabbits

USDA Inspection Report – 03-27/28-00

Section 2.31(d)(1)(vii) IACUC: protocol YCS0201 noted post-op to be under the care of the attending veterinarian. The attending veterinarian was never told of the surgery or the problems with the procedure. Two rabbits had surgery spinal hemisections. Rabbit #8 had surgery on 03-11-00, records are sparse in relation to care, on 03-17-00 animal noted to have weaker hindlimb reflexes. On 03-19-00 animal noted not responding to hindlimb pinches. #8 was put to sleep on 03-20-00. The attending veterinarian was never notified of this animal.

On 03-16-00 animal #6 had same surgery as #8. Again animal post-op records are sparse. On 03-27-00 I observed this animal (#6) and it could not stand on its hindlimbs. This animal had a sore on its back and was lying in a small amount of feces in a standard slat floor cage. This animal was seen by the attending veterinarian for the first time on 03-27-00 during the USDA inspection. This animal was put down on 03-28-00.

(b)(6), (b)(7)c



UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

**1. REGISTRATION NO.**

FORM APPROVED  
OMB NO. 0570-0036

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

2. HEAT 16-R-0029, Cust Id 55  
*instit*

BOEHRINGER INGELHEIM PHARMACEUTICALS, INC.  
900 RIDGEURY ROAD  
P.O. BOX 368  
RIDGEFIELD, CT 06877

**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)**

175 Briar Ridge Road, Ridgefield, CT 06877	Osage Research Primates, LLC
Bartons West End Farms Inc.	Oxford, NJ

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

## **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)**

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** *(Name, Title, Address)*

DATE SIGNED

10/25/60

The 93 dogs assigned to column E of this report were included in toxicology or safety assessment procedures in which, to meet Food and Drug Administration requirements under Good Laboratory Practice regulations (21 CFR 58.120, 43 CFR 60013) a limited number of animals must be exposed to test compound dose levels toxic to the animal. Clinical signs produced by some test compounds at toxic dose levels may be distressful or painful to the animal, if only transiently. To intercede prematurely would invalidate the procedure, requiring its repetition and the consequent use of more animals.

The 100 guinea pigs assigned to column E of this report were included in toxicology or safety assessment procedures in which, to meet Food and Drug Administration requirements under Good Laboratory Practice regulations (21 CFR 58.120, 43 CFR 60013) positive control animals must be sensitized, then challenged by intradermal injection resulting in a transient inflammatory response, which may be distressful or painful to the animals albeit for a strictly limited period. To intercede prematurely would invalidate the procedure, requiring its repetition and the consequent use of more animals.

The 44 rabbits assigned to column E of this report were used for hyperimmunization procedures in which adjuvant associated with the antigen of interest produced localized discomfort typical of a subacute inflammatory reaction. The lesions were treated topically to minimize discomfort, and in all cases the least irritating adjuvant was employed that would not have necessitated the use of additional animals. The use of systemic anti-inflammatory drugs would have been counter productive to the objective of antibody production and necessitated the use of more animals.

Primates assigned to column E of this report were used in various toxicology/safety assessment procedures, pharmacologic studies of the inflammatory response or evaluation of the immunomodulatory effects of test compounds.

108 primates (cynomolgus macaques and squirrel monkeys) were employed as models for immune mechanisms or of inflammation when other species (rodents, swine) proved inappropriate. The animals were studied during the early stages of the syndrome before clinical signs become severe. Discomfort is attenuated through the use of analgesic drugs but, because an inflammatory condition is induced and clinical signs may appear, it is anticipated that the monkeys may potentially experience the discomfort which human beings feel during the analogous condition.

123 primates (rhesus macaques) were included in toxicology or safety assessment procedures in which, to meet Food and Drug Administration requirements under Good Laboratory Practice regulations (21 CFR 58.120, 43 CFR 60013) a limited number of animals must be exposed to test compound at dose levels toxic to the animal. Clinical signs produced by some test compounds at toxic levels may be distressful or painful to the animal, if only transiently. To intercede prematurely would invalidate the procedure under the cited regulations, requiring repetition of the study and the consequent use of more animals.

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. REGISTRATION NO.

FORM APPROVED  
OMB NO 0579-0036

2. HEADQUARTERS RESEARCH FACILITY /Name and Address, as registered with USDA,  
inclu 16-R-0039, Cust Id 61

C T AGRICULTURE EXPERIMENT STATION, THE  
123 HUNTINGTON STREET  
BOX 1106  
NEW HAVEN, CT 06504

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

Attach additional

FACILITY LOCATIONS (Sites)

123 Huntington Street, New Haven(Slate Bldg.)	Kenwood Aven., Hamden, CT(Lockwood Farm-Insectory)
123 Huntington Stewwr, New Haven(Britton Bldg)	

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

A.	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 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).	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 (Col. C + D + E)
4. Dogs					
5. Cats					
6. Guinea Pigs		2			2
7. Hamsters	6		13	6	25
8. Rabbits		4			4
9. Non-human Primates					
10. Sheep					
11. Pigs					
12. Other Farm Animals					
13. Other Animals					
White-footed mouse			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.
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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 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.
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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

11-7-00

CT 88), which is obsolete.)

APH

(AUG 31)

Race

Annual Report of Research Facility

Column E Explanation Form

1. Registration Number: 16-R-0039
2. Number of animals used in this study: 6
3. Species of animals used in this study: Hamster
4. Explanation of procedure producing pain and/or distress:

Nymphs of *Ixodes scapularis*, potentially infected with West Nile Virus (WNV) were allowed to feed on uninfected hamsters. Hamsters were kept for 6 to 10 days after ticks had fed and monitored for evidence of infection with WNV. The animals were euthanized with carbon dioxide or methoxyflurane if they showed signs of distress caused by viral infection.

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.

The use of pain relieving drugs could mask clinical evidence of infection with WNV in the hamster. Clinical evidence of disease includes weakness, tremors, and roughened fur; salivation and conjunctivitis occur infrequently; and rarely partial paralysis of one or more extremities. To minimize pain and/or distress, animals were euthanized if they showed signs of viral infection.

6. What, if any, federal regulations require this procedure? None.

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. REGISTRATION NO.  
16-R-0001

FORM APPROVED  
OMB NO. 0570-0036

DEC 1 1 97

F with USDA

RAB

ANNUAL REPORT OF RESEARCH FACILITY  
(TYPE OR PRINT)

2. HEADQUARTERS REPORTING UNIT  
Include ZI 16-R-0001, Cust Id 48

YALE UNIVERSITY  
P.O. BOX 208003  
NEW HAVEN, CT 06520

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.	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 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).	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	2		75		75
5. Cats	10		48		48
6. Guinea Pigs	12	264	117		381
7. Hamsters		314	327		641
8. Rabbits	14	635	604	64	1303
9. Non-human Primates	126	65	60		125
10. Sheep		3			3
11. Pigs	5	2	60		62
12. Other Farm Animals-GOAT			6		6
OTHER- Chinchilla			10		10
13. Other Animals -Ferret	9	125			125
Gerbil		2			2
Opossum		2			2
Peromyscus	66	28			28

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.
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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  
(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

11/29/00

REC

## FACILITY SITES LISTING

Licensee/Registrant Name: Animal Research Facilities, Yale UniversityLicense/Registration Number: 16-R-001

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

Site No.: 1 Name/Department: Yale Animal Resources CenterAddress: P.O. Box 208003New Haven, CT 06520-8003Building: Laboratory of Epidemiology and Public HealthFloor/Room: 8th and 9th floor

Contact Person: \_\_\_\_\_ Phone No.:

Site No.: 1 Name/Department: Yale Animal Resources CenterAddress: 48 Old Amity RoadBethany, CT 06525Building: Amity Animal Research FacilityFloor/Room: Buildings A, B, C

Contact Person: \_\_\_\_\_ Phone No.:

Site No.: 1 Name/Department: Yale Animal Resources CenterAddress: 34 Park StreetNew Haven, CT 06510Building: Connecticut Mental Health CenterFloor/Room: 3rd floor

Contact Person: \_\_\_\_\_ Phone No.:

FACILITY SITES LISTING

Licensee/Registrant Name: Animal Research Facilities, Yale University

License/Registration Number: 16-R-001

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Site No.: 1 Name/Department: Yale Animal Resources Center  
Address: P.O. Box 208003  
New Haven, CT 06520-8003  
Building: Sterling Hall of Medicine  
Floor/Room: Ground floor B and I Wing, 4th floor  
Contact Person: \_\_\_\_\_ Phone No.: \_\_\_\_\_

Site No.: 1 Name/Department: Yale Animal Resources Center  
Address: P.O. Box 208003  
New Haven, Ct 06520-8003  
Building: Laboratory for Surgery, Obstetrics and Gynecology  
Floor/Room: Sub-basement, basement, 5  
Contact Person: \_\_\_\_\_ Phone No.: \_\_\_\_\_

Site No.: 1 Name/Department: Yale Animal Resources Center  
Address: P.O. Box 208003  
New Haven, CT 06520-8003  
Building: Laboratory of Clinical Investigation  
Floor/Room: Basement  
Contact Person: \_\_\_\_\_ Phone No.: \_\_\_\_\_

FACILITY SITES LISTING

Licensee/Registrant Name: Animal Research Facilities, Yale University

License/Registration Number: 16-R-001

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Site No.: 1 Name/Department: Yale Animal Resources Center

Address: 10 Hillhouse Avenue

New Haven, CT 06520

Building: Dunham Laboratory

Floor/Room: 2nd and 3rd floors

Contact Person \_\_\_\_\_ Phone No.: \_\_\_\_\_

Site No.: 1 Name/Department: Yale Animal Resources Center

Address: 165 Prospect Street

New Haven, CT 06520

Building: Osborne Memorial Laboratories

Floor/Room: 5th floor

Contact Person: \_\_\_\_\_ Phone No.: \_\_\_\_\_

Site No.: 1 Name/Department: Yale Animal Resources Center

Address: 295 Congress Avenue

New Haven, CT 06510

Building: Boyer Center for Molecular Medicine

Floor/Room: Basement

Contact Person: \_\_\_\_\_ Phone No.: \_\_\_\_\_

## FACILITY SITES LISTING

Licensee/Registrant Name: Animal Research Facilities, Yale UniversityLicense/Registration Number: 16-R-001

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

Site No.: 1 Name/Department: Yale Animal Resources CenterAddress: 184 Liberty StreetNew Haven, CT 06510Building: Yale Psychiatric InstituteFloor/Room: 4th floor

Contact Person: \_\_\_\_\_ Phone No.: \_\_\_\_\_

Site No.: 1 Name/Department: VA CT, Health Care SystemsAddress: 950 Campbell AvenueWest Haven, CT 06516Building: TwoFloor/Room: 7th Floor

Contact Person: \_\_\_\_\_ Phone No.: \_\_\_\_\_

Site No.: \_\_\_\_\_ Name/Department: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Building: \_\_\_\_\_

Floor/Room: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Phone No.: \_\_\_\_\_

**Environmental Enhancement to Promote Psychological Well-being**

Six Chlorocebus aethiops underwent multiple surgeries to assess central nervous system therapeutics. These animals were individually housed and isolated from other nonhuman primates during a portion of the studies to prevent potential occupational health and animal health exposures inherent to the therapeutics used. Environmental enrichment was enhanced to compensate for the lack of audio or visual contact with other animals. Animals were monitored daily by the investigator(s) and veterinary staffs for pain, discomfort, distress, and overall body condition by the veterinary and investigator staffs. No complications were detected.

**Feeding**

Four rabbits underwent food regulation and water treatment to produce a chronic acidotic model. Animals were monitored, by the investigator(s) and veterinary staffs, daily for pain, discomfort, distress, hydration and overall body condition. No adverse effects were detected.

Thirty-six Macaca mulatta underwent food regulation to facilitate training to learn and/or perform complex tasks. Animals were given a reduced daily ration of monkey chow supplemented by rewards earned during testing. Animals were monitored, by the investigator(s) and veterinary staffs, daily for health status, growth rate, and hydration and weighed weekly. Animals are returned to full feed when not on study.

**Watering**

Two Macaca fascicularis, three Macaca nemestrina, and sixteen Macaca mulatta underwent water regulation to facilitate training to learn and perform complex tasks. Water regulation has been used as a principal reinforcement for learning and memory research in primates by many laboratories. Fluid intake is sufficient to maintain the animal's health and well being for animals. This objective is accomplished by 1) permitting the animal to earn fluids to satiety each day during behavioral training and testing, 2) providing *ad libitum* chow and treats(animal's favorite fruits), 3) returning the animal to *ad libitum* fluids when not on study, and 4) monitoring health status and adequate hydration daily by both investigator and veterinary staffs.

**Post-procedural Pain and Distress**

Sixty-four rabbits were listed in category E as an outcome of the distress associated with acclimation to restraint boxes used for behavioral response measurements. Animals were monitored for pain, discomfort, distress, and overall body condition by the investigator staffs during periods of restraint. Animals used in future studies will undergo a modified acclimation procedure to further minimize distress.

**Multiple Major Survival Surgery**

Eight Chlorocebus aethiops underwent an initial major surgery followed by an interrelated surgery to assess novel central nervous systems therapies. Animals were monitored daily for pain, discomfort, distress, and overall body condition by the veterinary and investigator staffs.

Three timed pregnant Macaca mulatta underwent hysterotomies (multiple) in accordance with the approval granted by the USDA on December 29, 1994. A copy of the USDA's approval is attached.

Two Macaca fascicularis underwent two major survival surgeries. Animals were used for electrophysiological recordings. Each animal is used in an experiment no more than once every three weeks for a maximum of five procedures, after which they receive a one month rest. Multiple surgeries are required to obtain multiple observations to reduce variation in responses due to differences between animals. Animals are monitored daily by the veterinary and investigator staffs for pain, discomfort and distress as well as overall body condition.

One cat, three Saimiri sciureus, and three Macaca fascicularis underwent multiple survival surgeries. Animals undergo one to four survival surgeries and one non-survival surgery. Animals are rested at least five days between surgeries. Multiple surgeries were required to facilitate adequate data collection from each animal. Animals were monitored daily for pain, discomfort, distress, and overall body condition by the veterinary and investigator staffs. No adverse complications were detected.

#### **Exercise for Dogs**

Two dogs, used in a study requiring the use of radioisotopes, were housed in cages that met the space requirements for housing but not exercise. The animals were restricted from exercise for a five-day period to prevent potential exposure and contamination to the environment and personnel. Animals were monitored daily for pain, discomfort, distress, and overall body condition by the veterinary and investigator staffs.

#### **Explanation for IACUC Approved Exceptions to Institutional Requirements**

##### **Exercise for Dogs**

Standard caging used for dogs is greater than two times the USDA required floor space. However, the institutional policy requires that all dogs receive exercise regardless of floor space. Nine dogs underwent a modified institutional exercise program(IACUC approved), based on veterinary recommendation and the potential for interference with research objectives. Animals were monitored daily for pain, discomfort, distress, and overall body condition by the veterinary and investigator staffs.