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. 51-F-0001

FORM APPROVED OMB NO. 0579-0036

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

Uniformed Services of the Health Sciences USUHS

4301 Jones Bridge Road Bethesda, MD 20814-4799

NOV 1 7 1999

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)

Department of Laboratory Animal Medicine

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	17	0	17
5. Cats	0	0	. 0	0	0
6. Guinea Pigs	0	0	0	12	12
7. Hamsters	0	0	5	0	5
8. Rabbits	0	0	6	0	6
9. Non-human Primates	0	0	0	0	0
10. Sheep	0	0	26	0	26
11. Pigs	0	0	575	0	575
12. Other Farm Animals					
Goats	0	0	104	0	104
13. Other Animals					
Ferrets	0	88	37	0	125
Gerbils	0	3	0	0	3
Sand Rats	84	201	57	0	258

- 1). Professionally acceptable standards governing the care, treatment, and use of animals, including approriate 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 HEADQUARTES THE EARCH FACILITY OFFICIAL
CERTIFICATION BY HEADQUARTES AS EARCH FACILITY OFFICIAL (Chief Executive Officer or Legally Residual Institutional Official) 1 certify that the above is true, correct 100 (2007) (U.S.C. Section 2143).
I certify that the above is true, correct (100 fee, 7 U.S.C. Section 2143).

DATE SIGNED

SIGNATURE OF C.E.O. OR INSTITUTIONAL OFFICIAL

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: 51-F-0001

NOV 1 7 1999

- 2. Number 12 of animals used in this study.
- 3. Species Guinea Pig of animals used in this study.
- 4. Explain the procedure producing pain and/or distress. Sereny Test
- 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 value of the Sereny test lies in the fact it is an immunocompetent, live animal model for Shigella invasion, multiplication and spread. Analgesics are immunosuppressive. The immunocompromised nature of the animal after analgesic treatment can alter progression of the inflammation, which is, provoked by the bacterial challenge and compromise the validity of the test.

The use of analgesic agents actually has an adverse effect on the health of the animals if reduced weight gain, lethargy and suppression of the self-grooming behavior are considered as indicators. The general lethargy of the animals, which leads to a decrease in their normal grooming behavior, has a significant impact on the Sereny test. Opioid sedation of the animals and decreased grooming behavior causes a significant buildup of exudate around the eye during the course of a positive reaction. These effect seals the eye shut, and the animal can no longer voluntarily open the eye, it is impossible for the investigator to visually assess the extent of conjunctivitis. In order to do so the eye must be physically opened by the investigator to examine the infected cornea and conjunctiva.

POC:

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

Uniformed Services of the Health Services