



A. Eugene Washington, M.D.
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November 26, 2008

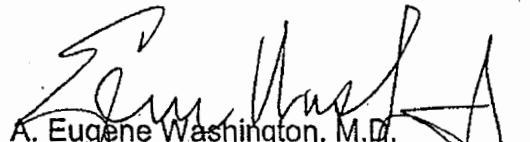
ROBERT GIBBENS, DVM
Regional Director – Animal Care
Western Region Office
USDA Animal and Plant Health Inspection Service
2150 Centre Avenue, Bldg B, Mailstop 3W11
Fort Collins, CO 80526-8117

Dear Dr. Gibbens:

RE: Annual Report Aphis Form 7023
Registration #: 93-R-0440
Customer #: 9199

I have enclosed APHIS Form 7023, which reports activities of the University of California, San Francisco (Registration Number 93-R-0440, Customer Number 9199) for the federal fiscal year of October 1, 2007 through September 30, 2008.

Per our prior communications with your office, we are reporting retrospective reclassifications of certain animals. In this report, we are retrospectively reclassifying in Column E, any non-human primate on a water regulation study that experienced over 10% weight loss and any non-human primate with Parkinson's disease that experienced over 15% weight loss relative to a pre-MPTP baseline weight.



A. Eugene Washington, M.D.
Executive Vice Chancellor and Provost
University of California, San Francisco

enclosure

cc: Chancellor J. Michael Bishop
Interim AVC and Attending Veterinarian Clifford Roberts
IACUC Chair John Taylor
IACUC Director [REDACTED] # 27619
Acting LARC Director [REDACTED] # P13

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE ANNUAL REPORT OF RESEARCH FACILITY (TYPE OR PRINT)	CERTIFICATE NUMBER: 93-R-0440 CUSTOMER NUMBER: 9199	FORM APPROVED OMB NO. 0579-0036
	University Of California, San Francisco UCSF Box [REDACTED] San Francisco, CA 94143-[REDACTED] Telephone: (415) [REDACTED]	
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)		

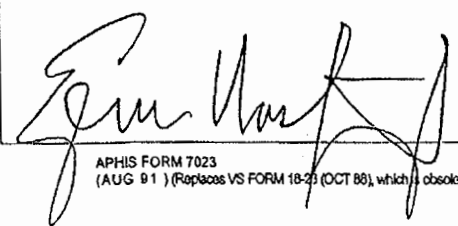
FACILITY LOCATIONS (Sites) - See Attached Listing

REPORT OF ANIMALS USED BY OR UNDER CONTROL OF RESEARCH FACILITY (Attach additional sheets if necessary or use APHIS Form 7023A 1

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 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 whom the use of appropriate anesthetic, analgesic, or tranquilize 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 those 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			8		8
5. Cats			62		62
6. Guinea Pigs		9	94		103
7. Hamsters			603		603
8. Rabbits		109	232	314	655
9. Non-human Primates			101	3	104
10. Sheep		7	16		23
11. Pigs			99		99
12. Other Farm Animals					
13. Other Animals					
- Mules		4			4
- Squirrels		2	8		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 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 appropriate 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)			
SIGNATURE OF C.E.O. OR INSTITUTIONAL OFFICIAL 	NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL A. Eugene Washington, MD Executive Vice Chancellor and Provost, UCSF	(Type ps or Print I)	DATE SIGNED 11/26/08

3. The following are the locations where regulated animals were housed or used during the year [Section 2.36(b)(4)]:

Parnassus Heights Campus
Hunters Point Campus
San Francisco General Hospital
Genentech Hall, Mission Bay Campus
QB 3, Mission Bay Campus
China Basin

Column E:

The University of California at San Francisco is committed to using laboratory animals in such a way as to minimize pain or discomfort. The Committee reviews each project and many protocols have been redesigned to meet this goal. Attached are the explanations of the procedures producing pain or distress in the animals covered by Subchapter A - Animal Welfare and reported in column E during the period 10/1/07 through 9/30/08 and the reasons anesthetic, analgesic, or tranquilizing drugs would have adversely affected the procedures, results, or interpretations of the research. Separate Optional Column E form (1) is attached.

ATTACHMENT to APHIS FORM 7023, Federal Fiscal Year 2006/2007 (93-R-0440).

Column E Explanation

1. Registration Number: 93-R-0440.

2. Number of animals used in this study. 2

3. Species (common name) of animals used in the study:

Rhesus Macaque

4. Explain the procedure producing pain and/or distress.

Two animals were Parkinsonian. These animals were assigned to a protocol that studies Parkinson's disease. At one point during the study, these two animal's weight fell below 85% of their baseline weight. This was the only occasion that their weights fell to this level during the reporting period and they are currently above 85% of baseline.

5. Provide scientific justification why pain and/or distress could not be relieved. State methods or means used to determine that pain and/or distress relief would interfere with test results. (For Federally mandated testing, see Item 6 below).

NA - Retrospective reclassification in Column E. We are reporting these animals conservatively because they lost weight to the degree noted above. There is no evidence that these animals suffered any pain or distress.

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):

NA

1. Registration Number: 93-R-0440.

2. Number of animals used in this study. 1

3. Species (common name) of animals used in the study:

Rhesus Macaque

4. Explain the procedure producing pain and/or distress.

Possibly, as a result of a research surgical manipulation, one animal developed masseter muscle fibrosis resulting in weight loss greater than 15%. The animal was managed by veterinarians to determine a diagnosis and was provided liquid diet without caloric restrictions. The animal was humanely euthanized.

5. Provide scientific justification why pain and/or distress could not be relieved. State methods or means used to determine that pain and/or distress relief would interfere with test results. (For Federally mandated testing, see Item 6 below).

NA - Retrospective reclassification in Column E. We are reporting this animal conservatively because of the weight loss to the degree noted above. At no point was veterinary treatment withheld.

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):

NA

Column E Explanation

1. Registration Number: 93-R-0440

2. Number of animals used in this study 314

3. Species (common name) of animals used in the study:

New Zealand White Rabbit

4. Explain the procedure producing pain and/or distress.

Bacterial infection, either endocarditis or bacteremia with *S. aureus* or streptococci, is established by intravenous injection of bacteria. The infection, as it is the condition under study, is not treated with specific therapy. The systemic inflammatory response that accompanies infection may or may produce distress or discomfort, depending on the clinical course of disease, which is not predictable in any individual animal. Infection accompanied by hypotension and CNS depression preclude access to food and water, which is monitored by following weight and activity level and treated with fluid administration, as needed.

5. Provide scientific justification why pain and/or distress could not be relieved. State methods or means used to determine that pain and/or distress relief would interfere with test results. (For Federally mandated testing, see Item 6 below).

It is debatable whether any of these rabbits actually experienced pain or distress from the infection itself, as in humans the studied condition is not reported as painful. Once infection is established administration of narcotics or anti-inflammatory agents is not feasible as these may either hasten death or alter the course of the condition under study. Monitoring parameters such as fever do not accurately predict outcome. Approximately 20% of animals with bacteremia

survive with no apparent ill effects other than fever and modest weight loss. About half of the rabbits manifest sufficient weight loss, are moribund or otherwise unable to access food and water and may be euthanized. Up to a quarter of rabbits die. Due to the inability to predict death in individual animals, all animals are potentially at risk for unrelieved distress and death. Accordingly, all infected animals have been classified as category E.

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):

NA

UCSF REPORTABLE IACUC-APPROVED EXCEPTIONS

Species and Numbers:

Monkey, Cynomolgus or Rhesus Macaque – 11

Reportable Exceptions – Fluid Regulation – Section 3.83

Fluids are regulated in our animals to motivate them to perform the behavioral task that allows us to investigate questions of how brain circuits generate behavior.

Please note that even these reported animals rarely, if ever, experience a situation where they are not provided potable water twice per day per AWA regulations. We voluntarily report this exception to be conservative in our reporting.

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Species and Numbers:

Monkey, Cynomolgus or Rhesus Macaque – 6

Reportable Exceptions – Fluid Regulation – Section 3.83

The goal of our research is to understand the operation of the working brain. One commonly accepted way to do this is to record the behavior of animals and the activity of single neurons during behavior. In our laboratory, and many others around the world, we accomplish this goal by training monkeys to perform simple tasks with fluid reinforcements. Eliciting good behavioral performance over a period long enough to acquire meaningful data requires strong motivation on the part of the animal. A successful, humane, and scientifically valid way to attain this level of motivation is through fluid reward.

Please note that even these reported animals rarely, if ever, experience a situation where they are not provided potable water twice per day per AWA regulations. We voluntarily report this exception to be conservative in our reporting.

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Species and Numbers

New Zealand White Rabbits – approximately 247

Cynomolgus and Rhesus Macaque Monkeys – approximately 62

Reportable Exceptions – Innovative Housing – Sections 3.56 and 3.84

In order to provide certain rabbits and nonhuman primates with enhanced physical environments, members of these species are occasionally placed into large "play cages" or "activity modules". Typically rabbits or nonhuman primates are rotated through such cages. The number of such animals varies, but is approximately 60 NHP and 100 rabbits during this reporting period. The hard surfaces of the play cages or activity modules are spot cleaned and all excreta or disease hazards removed between individuals. These enclosures are sanitized on a normal schedule. Because many of the NHP are paired housed, they constitute a single group of animals for health status. The rabbits are from an SPF vendor. The rotations are often enough that full sanitation

between individuals would require frequent dismantling of exercise cages and pens for sanitization and decrease the amount of time it is available for animal use. Individual animals would receive much less opportunity for experiencing this enhanced caging. Clearly the result would decrease this institution's efforts and ability to invoke a creative and positive animal housing experience.

This reportable exception to Section 3.56 and 3.84 of the AWA - innovative housing - was reviewed and approved by the IACUC at the April 19, 2005 convened meeting of the full committee.

Therefore, this institution reports that as it relates to sanitation between individuals, it varies from Sections 3.56 and 3.84 as they apply to rabbit play cages and NHP activity modules.