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OMB APPROVED
0579-0036

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.

Interagency Report Control
No 0180-DOA-AN

Fiscal Year: 2009

UNITED STATES DEPARTMENT OF AGRICULTURE
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

ANNUAL REPORT OF RESEARCH FACILITY
(TYPE OR PRINT)

REGISTRATION NUMBER: 57-R-0003

Customer Number: 896

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

Emory University
Woodruff Hlth Sciences Ctr, 1440 Clifton Rd Ne
Atlanta, GA 30322

Telephone: (404) 727 3889

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. Number of animal 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 (Cols. C + D + E)
4. Dogs	0	2	17	0	19
5. Cats	0	0	0	0	0
6. Guinea Pigs	0	17	100	273	390
7. Hamsters	0	0	6	0	6
8. Rabbits	0	41	377	0	418
9. Non-human Primates	1764	472	1811	0	2283
10. Sheep	0	0	27	0	27
11. Pigs	0	0	338	0	338
12. Other Farm Animals	0	0	0	0	0
13. Other Animals					
VOLES	312	618	95	30	743
GERBILS	0	3	11	0	14

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

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

DATE SIGNED

11/30/2009

NP 12/21/2009

DEC 01 2009

Registration Number: 57-R-0003

Customer ID Number: 896

Facility Business Address Information:

Emory University
Woodruff Hlth Sciences Ctr, 1440 Clifton Rd Ne
Atlanta, GA 30322

Telephone: (404) 727 3889

Facilities Site(s) Address Information:

Site Code(s):

002

(b)(2)High, (b)(7)f

Assigned Inspector: Christopher Nichols

003

(b)(2)High, (b)(7)f

Assigned Inspector: Christopher Nichols

004

(b)(2)High, (b)(7)f

Assigned Inspector: Christopher Nichols

001

(b)(2)High, (b)(7)f

Assigned Inspector: Christopher Nichols

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Year 2009 10/1/08 – 9/30/09

Annual Report for Research Facilities, Emory University, Atlanta, GA Certificate Number: 57-R-0003

Attachment 2 to APHIS Form 7023

Annual Report to USDA
Facility Locations
Additional Site Addresses for Customer 896

Emory University

(b)(2)High, (b)(7)f

Exceptions to Regulations and Standards

Use of Restraint Devices: Animals will be restrained for reasons of safety and scientific need. The type and length of restraint that is required for the research has been scientifically justified and then reviewed and approved by the Emory IACUC.

The IACUC reviewed and approved the use of restraint for the following protocols:

Protocol #	Name of Study	# Animals Reported
072-2009Y	Functional imaging of medial temporal lobe activity in awake primates: Inactivation, memory and emotion	1 rhesus
076-2007Y	Development of Reversible Inactivation Technique for the Study of Higher Cognitive Functions in Monkeys	1 rhesus
079-2007Y	PET Neuroimaging and Cocaine Neuropharmacology in Monkeys; PET in conscious monkeys	39 rhesus
081-2007Y	Regulation of motor function in Parkinson's disease; Effects of Cannabinoid Antagonists in the MPTP primate model of Parkinson's disease; Early cognitive deficits in Parkinson's disease: Functional and Morphological Evidence from non human primate model to patients with Parkinson's Disease	10 rhesus
095-2008Y	Development of a reversible deactivation, via cooling, technique to study higher cognitive functions in monkeys	2 rhesus
109-2009Y (070-2006Y)	Behavioral, neural and endocrine effects of differential rearing history in rhesus monkeys	6 rhesus
144-2007Y	Development of Medial Temporal Lobe Functions	20 rhesus
153-2008Y	Oxytocin and Nonhuman Primate Social Behavior	7 rhesus
167-2009Y	Glutamate receptors: Novel targets for Parkinson's disease therapy	7 rhesus
173-2008Y	Neural Control of Visual-Vestibular Behavior	5 rhesus
178-2008Y	Local Field Potentials in the Basal Ganglia	3 rhesus
195-2008Y	Visual Processing and Smooth Eye Movements & Novel Immunotoxin and IGF Therapy for Strabismus	6 rhesus
204-2008Y	Neuronal Synchronization in the Medial Temporal Lobe and Memory Formation	6 rhesus
207-2007Y	Genetic Inhibition of BDNF Receptor in Macaque Amygdala	3 rhesus
207-2008Y	Neural Mechanisms for Smooth Pursuit Adaptation	2 rhesus
212-2006Y	GABA-B Receptors and Parkinson's Disease	1 rhesus
217-2006Y	Function of Dopamine in the Primate Substantia Nigra	3 rhesus
260-2008Y	Hippocampal Control of Working Memory: Inactivation and PET in Monkeys	3 rhesus
264-2007Y	Binocular Coordination of Eye Movements; Surgical treatment of Strabismus in Juvenile Monkeys	10 rhesus
267-2008Y	Developing a Nonhuman Primate Model of Alzheimer's Disease	1 rhesus
305-2008Y	Cocaine Use and Monoamine Function in Nonhuman Primates; Monoamine Transporters and Nonhuman Primate Cocaine Use	34 squirrel monkeys

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Social Enrichment: Animals are exempted from normal social enrichment for various periods of time as needed to conduct the experiments. The reasons for the exemptions from social enrichment and the length of time that animals are exempted have been scientifically justified and then reviewed and approved by the Emory IACUC.

The IACUC granted exemptions from social housing to allow singly housed animals for the following protocols:

Protocol #	Name of Study	# Animals Reported
005-2008Y	Transplant Tolerance in Non-Human Primates	98 rhesus
013-2009Y	Neural Correlates of Primate Action and Emotion Perception	5 chimps
027-2009Y	Infant Immunoprophylaxis Against A primate Lentivirus	13 pigtailed 15 rhesus
061-2007Y	SHIV Transmission through Oral Versus Other Mucosae	13 rhesus
062-2008Y	Peripartum Changes in Monoamine Activity	1 rhesus
067-2008Y	Does CRH Receptor Antagonism Reduce Self-Injurious Behavior and Improve Gastrointestinal Health in Rhesus Macaques	9 rhesus
068-2007Y	Relationship Between Serum and CSF Drug Levels and Central D2 Occupancy for Two Atypical Antipsychotics	2 rhesus
072-2009Y	Functional imaging of medial temporal lobe activity in awake primates: Inactivation, memory and emotion	1 rhesus
076-2007Y	Development of Reversible Inactivation Technique for the Study of Higher Cognitive Functions in Monkeys	1 rhesus
079-2007Y	PET Neuroimaging and Cocaine Neuropharmacology in Monkeys; PET in conscious monkeys	39 rhesus
081-2007Y	Regulation of motor function in Parkinson's disease; Effects of Cannabinoid Antagonists in the MPTP primate model of Parkinson's disease; Early cognitive deficits in Parkinson's disease: Functional and Morphological Evidence from non human primate model to patients with Parkinson's Disease	10 rhesus
088-2007Y	Evaluation of anti-HIV Interventions for the Prevention of SHIV Transmission in Pig-tailed Macaques	22 rhesus
093-2008Y	Morphine, Innate Immunity and Early SIV Neuropathogenesis	4 rhesus
094-2007Y	Neuropsychology of Primate Social Cognition	8 rhesus
095-2008Y	Development of a reversible deactivation, via cooling, technique to study higher cognitive functions in monkey	2 rhesus
098-2008Y	Pre-Clinical Non-human Primate Islet Allograft Transplantation Model for Tolerance Induction Testing with CTLA-4-Ig (Abatacept), LFA-3-Ig (Alefacept), and Sirolimus	26 rhesus
112-2007Y	Orbitofrontal-limbic ontogeny and early dysfunction; The integration of multisensory social cues and its neural basis in monkeys	16 rhesus
114-2008Y	Immune Activation and AIDS Pathogenesis in SIV-infected Non-Human Primates	8 sooty
119-2007Y	Use of Osteoinductive Factors (DBM) to Enhance Spine Fusion / Osteotech	6 rhesus
142-2007Y	Project 3: Attenuated Listeria Vectors as an AIDS Vaccine in Macaques	23 rhesus
142-2008Y	Innate Immunity and Affects of Macrophage Depletion in SIV-Infected Non-Human Primates	1 rhesus

Continued from previous page		
144-2007Y	Development of Medial Temporal Lobe Functions	10 rhesus
149-2007Y	PD-1 Blockade as a Therapy for SIV/AIDS	20 rhesus
153-2008Y	Oxytocin and Nonhuman Primate Social Behavior	3 rhesus
167-2009Y	Glutamate Receptors: Novel Targets for Parkinson's Disease Therapy	7 rhesus
173-2008Y	Neural Control of Visual-Vestibular Behavior	5 rhesus
176-2007Y	Determinants of Vaccine-Induced Memory T Cell Development	21 rhesus
177-2006Y	Poxvirus Immunity and DNA/MVA HIV Vaccines	4 rhesus
178-2008Y	Local Field Potentials in the Basal Ganglia	3 rhesus
192-2007Y	Creating a Non-Human Primate Model of Graft-Versus Host Disease: Determining Mechanism and Assessing Novel Therapeutics	18 rhesus
195-2008Y	Visual Processing and Smooth Eye Movements & Novel Immunotoxin and IGF Therapy for Strabismus	15 rhesus
198-2008Y	Non-Human Primate Models of Malarial Anemia	17 rhesus
203-2007Y	Development of a Monkey Dystonia Model	3 rhesus
208-2007Y	Non-human Primate Renal Transplantation as a Pre-clinical model for testing Genzyme 29155 for Allospecific Tolerance Induction	4 rhesus
212-2006Y	GABA-B Receptors and Parkinson's Disease	2 rhesus
213-2006Y	The Thalamostriatal System as a Target for Tourette's Syndrome	1 rhesus
217-2006Y	Function of Dopamine in the Primate Substantia Nigra	2 rhesus
224-2007Y	Modulating HIV Immunity with Dendritic Cells	40 rhesus
240-2008Y	Immune Function and Biodefense in Children, Elderly and Immunocompromised Populations; Project 3	21 rhesus
242-2007Y	Neurology of Memory in the Non Human Primate	12 cynos
247-2007Y	Early Innate Immune Response in Dengue Virus Infection	3 rhesus
254-2007Y	Studies of the natural SIV infection of sooty mangabeys	2 sooty 15 rhesus
255-2008Y	Focal Alzheimer APP Transgene Expression in Rhesus Macaques	2 rhesus
256-2008Y	Molecular Evolution of Multiply Deleted SIV in Vivo	10 rhesus
259-2007Y	Molecular Mechanisms of Antigenic Variation in Malaria	14 rhesus
260-2007Y	PD-1 Ligand Blockade as a therapy for SIV	22 rhesus
260-2008Y	Hippocampal Control of Working Memory: Inactivation and PET in Monkeys	3 rhesus
261-2008Y	Vaccination Against Mucosal HIV Clade C Transmission	72 rhesus
264-2007Y	Binocular Coordination of Eye Movements; Surgical treatment of Strabismus in Juvenile Monkeys	10 rhesus
285-2008Y	Memory and Regulatory T Cells Following T Cell Depletion in Transplantation	13 rhesus
305-2008Y	Cocaine Use and Monoamine Function in Nonhuman Primates; Monoamine Transporters and Nonhuman Primate Cocaine Use	34 squirrel monkey

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Food/Water Restriction: The following protocols had some type of food or water restriction. Food and/or water would be withheld because of the scientific needs of the research being conducted. The food and/or water restriction have been scientifically justified in the IACUC protocol and then reviewed and approved by the Emory IACUC.

The IACUC granted exceptions for food/water restriction for the following protocols:

Protocol #	Name of Study	# Animals Used
004-2006Y	Effects of Viewing Distance on Eye Growth and Refractive Development	8 rhesus
094-2007Y	Neuropsychology of Primate Social Cognition	8 rhesus
153-2008Y	Oxytocin & Nonhuman Primate Social Behavior	7 rhesus
204-2008Y	Neuronal Synchronization in the Medial Temporal Lobe and Memory Formation	6 rhesus
207-2008Y	Neural Mechanisms for Smooth Pursuit Adaptation	2 rhesus

Summary of Studies (Animal) Listed in Column E

Prairie vole pups were used to test maternal behavior. Replacement of pups by objects or anesthetized pups would not trigger the appropriate maternal responses from the adult subjects. The animals were under continuous observation during the test. The IACUC reviewed and approved this Class E procedure for the following protocols:

Protocol #	Name of Study	# Animals Used
060-2007Y	Oxytocin and Social Attachment	30 voles

The study below was reviewed and approved by the IACUC to allow for the withholding of analgesic agents based upon the scientific justification that fever (nonsteroidal inflammatory agents) and immune function (opioids) may be inhibited.

Protocol #	Name of Study	# Animals Used
204-2007	Pichinde virus infection of guinea pigs as an animal model for Lassa fever	273 Guinea Pigs

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