



April 12, 2005

National Institutes of Health
Bethesda, Maryland 20892

www.nih.gov

Jean Barnes
Executive Director
Primate Freedom Project
P.O. Box 1623
Fayetteville, Georgia 30214

Re: FOI Case No. 30172

Dear Ms. Barnes:

This is a final response to your June 12, 2004, Freedom of Information Act (FOIA) request addressed to Joyce McDonald, FOIA Coordinator, National Center for Research Resources (NCRR). Your letter was referred to this office because of our responsibilities under the FOIA. Department of Health and Human Service's (DHHS) policy calls for the fullest possible disclosure consistent with those requirements of administrative necessity and confidentiality recognized by the FOIA, 5 U.S.C. § 552. The implementing DHHS FOIA Regulations establish the criteria under which the FOIA is administered. See 45 C.F.R. Part 5. Copies of the FOIA and DHHS Regulations are enclosed and referred to below.

You requested copies of various documents relating to the census of all nonhuman primates currently located at Holloman Air Force Base (HAFB) in New Mexico. Specifically, you asked for the following:

- (1) Documents concerning any nonhuman primates who have been transferred to and from HAFB since June 1, 1990;
- (2) Records providing the names and addresses of the licensed persons, organizations or facilities that transferred any nonhuman primates to HAFB;
- (3) Records reflecting the destination of all primates who were transferred from Holloman since June 1, 1990;
- (4) Records concerning any nonhuman primates who have died at Holloman since June 1, 1990; and
- (5) Information pertaining to circumstances regarding any nonhuman primates assigned to HAFB that have been loaned, borrowed, sub-contracted, sold, etc., that are not currently, physically located and accounted for at HAFB in any of the categories requested referenced above since June 1, 1990.

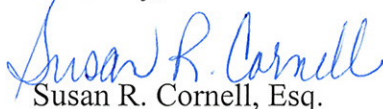
You amended your request during a March 9, 2005, telephone conversation with Ms. McDonald and agreed to accept only those portions of the Alamogordo Primate Facility (APF) Annual Reports and other APF-related records that pertain to items 1-5 of your request, for the timeframe June 2001 – October 2004. Ms. McDonald reviewed the subject records and determined that the enclosed 43 pages of records are responsive to items 1, 3, 4 and 5 of your June 12, 2004, request. As it relates to item 2, the search did not produce any responsive records.

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The enclosed records have been redacted of information that is protected from release pursuant to Exemptions 4 and 6 of the FOIA, 5 U.S.C. §§ 552(b)(4) and (b)(6) and the applicable DHHS Regulations, 45 C.F.R. §§ 5.65 and 5.67. Exemption 4 is intended to protect commercial or financial information obtained from a person that is privileged or confidential. Exemption 6 exempts from disclosure records the release of which would cause a clearly unwarranted invasion of personal privacy. You have a right to appeal this decision to deny you access to records in the agency's possession and that no records exist that would be responsive to part of your request. Should you wish to do so, you should send your appeal within 30 days of receipt of this letter to the Deputy Assistant Secretary for Public Affairs (Media), United States Department of Health and Human Services, Parklawn Building, Room 17A-46, 5600 Fishers Lane, Rockville, Maryland 20857, following the procedures outlined in Subpart C of the enclosed Regulation. Please mark both the envelope and the appeal letter "FOIA Appeal."

Provisions of the Act allow us to recover part of the cost of complying with your request. Because the cost of processing this request is below the \$25.00 minimum, there is no charge.

Sincerely,



Susan R. Cornell, Esq.

Freedom of Information Officer, NIH
Building 31, Room 5B35
9000 Rockville Pike
Bethesda, Maryland 20892

Enclosures – 43 pages
Statute
Regulations

cc: Joyce McDonald, NCRR

APPENDIX 4

ALAMOGORDO PRIMATE FACILITY
NCRR Owned Chimpanzee Deaths
June 1, 2002 - May 31, 2003

Colony Number	Name	ISIS Number	Birthdate	Date of Death	Cause of Death
CA0022	Chuck	2065	7/8/1973	6/10/2002	Cardiac disease; valvulitis and dilated cardiomyopathy.
CB0517	James	6859	1/1/1963	6/14/2002	Euthanized due to hypopituitarism; with treatment animal had inability to maintain fluid balance. Had severe dehydration and hypokalemia.
1396	Ashley	5267	7/9/1986	9/16/2002	Hemorrhagic diathesis (chronic thrombocytopenia). Death was secondary to an attack by her cagemates.
1156	Alex	3620	1/1/1966	11/6/2002	Severe systemic infection including generalized fibropurulent serositis, pyelonephritis, and prostatitis. Renal failure and probable DIC.
CA0147	Rex	6613	9/7/1986	12/30/2002	Generalized septicemia and pneumonia; secondary to hepatic and renal infection.
CB0376	Muna	4453	5/13/1982	4/1/2003	Multiple organ failure. History of chronic hepatic and renal disease.
1301	Wally	4733	7/20/1983	5/21/2003	Open; pathology report pending. Death occurred following dental extraction and recovery from anesthetic but shortly after administration of analgesic. Possible adverse drug reaction.

PROBLEM LIST

1. Clinical Case Load – Most of the animals in the colony are infected or exposed to HAV, HBV, HCV, or HIV. Many of them are also geriatric or have been housed in single cages for many years. Therefore, we have many chimpanzees that require extensive diagnostic evaluations. Several animals have chronic insidious diseases such as Amyloidosis or are chronic Hepatitis carriers. We currently have one clinician and one resident to handle the caseload. We are continuing to find medical conditions that have gone untreated for many years. Conditions such as Airsacculitis, Chronic Renal Failure, and Neoplasias continue to be discovered. We are recruiting another clinician to help with the caseload. See the Colony Census for complete details on health status and infectious state.
2. There was one animal that had a bone marrow dyscrasia that died in September. Animal # 1396 had a history of thrombocytopenia and a clotting problem. Her Thrombocytopenia was first identified 10 years ago, but no work-up was conducted until APF 2001. A bone marrow aspirate was performed earlier this year and a diagnosis of hematopoietic dysplastic syndrome was made. She was being treated for the condition and was stable. On 9/17/02, she was attacked by her cage mates and sustained a large laceration. Due to her condition she had very few platelets and was transferred to a sick care cage to be treated. Despite intensive care she died later that night. A complete necropsy was performed and several samples taken to confirm the cause of death and other medical conditions. At necropsy she had an abnormal mass near the left adrenal gland. Therefore, the Differential Diagnosis is: Myelophthistic leukemia, hematopoietic dysplastic syndrome or adrenal Neoplasia. A complete set of tissues was sent to Subcutaneous for histopathology.
3. We have received notice from AAALAC that we are a “Fully Accredited Facility” and there were no “Suggestions for Improvement”. We do need to know if NCRR will pay the annual fees directly or if CRL should have a purchase order. NIH paid the application fee.

Monthly Progress Report

Alamogordo Primate Facility
Holloman A.F.B., New Mexico
Contract Number N02~RR~1~209
June 2004

D. Rick Lee, D.V.M.
Director

Submitted to:
Kathleen Jarboe Marsden
Contracting Officer
NHLBI
National Institutes of Health
Bethesda, Maryland 20892-2759

IV. Colony Census

The APF census is 262 chimpanzees. One death occurred during June. CA0118, Shane died on June 2 of acute heart failure. A gross necropsy revealed an enlarged heart with the right side being severely dilated and the left side severely hypertrophic. Histology is pending. The attached report reflects the changes in health status of the colony members.

Monthly Progress Report

Alamogordo Primate Facility
Holloman A.F.B., New Mexico
Contract Number N02-RR-1-209
March 2004

D. Rick Lee, D.V.M.
Director

Submitted to:
Kathleen Jarboe Marsden
Contracting Officer
NHLBI
National Institutes of Health
Bethesda, Maryland 20892-2759

II. Developments in the APF Veterinary Care and Animal Husbandry Program

Animal Health Care Program: Annual physical examinations have been completed on 227 of our 263 animals. Of the 71 annual and other physical examinations conducted under sedation in March, 8 animals remained “at-risk” for serious health complications due to disease, 48 continued to be considered relatively healthy, 5 animals were added to the “at-risk” category, none were removed from the “at-risk” category, and 10 repeat examinations were performed on the same animal in the month.

Two surgical procedures were performed this month. One animal had a ureteral transposition to correct a blockage of the right ureter. Another animal had an exploratory laparotomy to diagnose an abdominal mass.

Clinical Activities for March 2004	% / Number
New Clinical Cases	44
Average daily animals getting medical treatment	25 (10%)*
Average daily animals getting special dietary supplements	33 (13%)*
Physical Exams**	71
Biopsies	3
Complete Blood Counts	72
Chemistry panels	72
Other blood tests	7
Cultures/Sensitivities	2
Urinalysis	10
X-rays	5
Dental extractions	2
Parasite examinations	49
Surgeries – see narrative	2
Necropsies	2

* Percentage of colony

** This includes animals that are sedated/anesthetized for a hands-on exam. It does not include examinations at cage side since cage side evaluations are too numerous to be counted.

Behavior and Animal Training Program: This month, 15 chimpanzees were under training. Two were under training for a heel stick for measurement of blood glucose levels. One was under training to allow stethoscopic examination. Seven were under training to voluntarily enter a transfer box, and five were being trained for urine collection. Veterinary staff members have continued to use clean urine catches to monitor kidney function in the five animals trained for urine collection. Three animals were turned over to AC staff for reinforcement of transfer box training. A total of ten animals are being reinforced by AC staff members for transfer box training.

Colony Census: The APF census is 263 chimpanzees. No additions or transfers occurred during the month. However, there were two losses to the colony. A 21-year-old male (#1303)

was found dead. Necropsy showed an enlarged heart and the cause of death is cardiac failure due to hypertrophic cardiomyopathy. In addition, an 18-year-old female (#CA0127) was euthanized due to malignant hepatocellular carcinoma and diabetes mellitus. She had been on extensive treatment for anemia of chronic disease and biopsies had been taken of the abdominal mass. The animal was humanely euthanized because the tumor was disseminated and inoperative. Histology is pending on both cases. The attached report reflects the changes in health status of the colony members.

Monthly Progress Report

**Alamogordo Primate Facility
Holloman A.F.B., New Mexico
Contract Number N02-RR-1-209
September 2004**

D. Rick Lee, D.V.M.
Director

Submitted to:
Kathleen Jarboe Marsden
Contracting Officer
NHLBI
National Institutes of Health
Bethesda, Maryland 20892-2759

IV. Colony Census

There was one medically required euthanasia performed in September. Therefore, the colony has 261 chimpanzees.

Animal ID	Name	Sex	Date of Birth	Age	Carrier	HTLV	HTLV	DOE	Notes
CB0031	Lippy	M	1967/11/28	37	carrier	positive	negative	2004/09/27	Euthanized due severe acute thromboembolism affecting the internal iliac arteries. Condition may have been secondary to existing cardiac disease. The heart appeared enlarged grossly. A cardiology consult and complete histology is pending.

The attached report reflects changes in the health status of the other colony members.

Monthly Progress Report

Alamogordo Primate Facility
Holloman A.F.B., New Mexico
Contract Number N02-RR-1-209
October 2003

D. Rick Lee, D.V.M.
Director

Submitted to:
Kathleen Jarboe Marsden
Contracting Officer
NHLBI
National Institutes of Health
Bethesda, Maryland 20892-2759

II. Developments in the APF Veterinary Care and Animal Husbandry Program

Animal Health Care Program: During the month of October we focused primarily on animals that are "at risk" for serious complications associated with health problems including those with heart disease. Our consulting cardiologist examined eight chimpanzees. Five were considered to be within normal limits and three were considered abnormal. In addition, she reviewed the successful treatment of a case of severe congestive heart disease. This animal has been treated for one year and continues to have a normal quality of life despite his major heart problems.

<u>Clinical Activities for October, 2003</u>	<u>Number</u>
New Clinical Cases	38
Physical Exams*, full	14
Physical Exams, partial	3
Biopsies	1
Complete Blood Counts	17
Chemistry panels	17
Other blood tests	3
Cultures/Sensitivities	1
Urinalysis	0
X-rays	1
Parasite examinations	14
Surgeries – wound repair	1

*This includes animals that are sedated/anesthetized for a hands-on exam. It does not include examinations at cage side. Cage side exams are too numerous to count.

Animal Training Program: During October 2003, 13 chimpanzees were under training. Two were under training for a heel stick to allow alert measurement of blood glucose levels. Six were under training to voluntarily enter a transfer box, and five were being trained for alert urine collection. A chimpanzee with congestive heart failure was added to the training program. He is being trained to allow a heel stick and to present his chest for stethoscopic or ultrasonic examination.

Colony Census: No additions or transfers occurred during the month. However, there was one death. We now have 269 chimpanzees. See attached report with animal ID and health status.

The animal #1028 appears to have died from a cardiac event. He had been evaluated by the cardiologist earlier this year for episodes of syncope and diagnosed with an untreatable ventricular arrhythmia. The pathology is pending and will probably take several months to complete all the testing.

O'Neill

Alamogordo Primate Facility (APF)
Minutes of the Animal Care and Use Committee Meeting (ACUC)
January 27, 2004

A special meeting of the APF ACUC was called to order by Dr. M. K. Izard, Chair, at 2:30 pm. Mr. [] and Drs. S. Curtis, P. Langner, and [] attended, as did Dr. R. O'Neill by phone. [] and D. Rick Lee were present as guests. Of the seven voting members, six were present, constituting a quorum.

The meeting was called to address the issue of three chimpanzee deaths that occurred on January 13 and 14, 2004. Members were reminded of the confidentiality of the proceedings [] Colony Manager, apprised the committee of the names of the animals that died (Snoy, Jerome, and Ritchie) and the location of their deaths (Building 1302, Dens 5 and 6).

Dr. Lee gave an account of the deaths. The first two animals were discovered, one in Den 5 and one in Den 6, at approximately 12:15 pm on January 13, 2004. They were Hepatitis C carriers, but otherwise healthy adult males. Dr. [] pronounced them dead at approximately 12:30 pm. The clinicians carefully examined the den, its surroundings, and the rest of the animals and animal areas at the facility. No chemical or biological agent that could have caused sudden death was found. Necropsies were performed and no obvious cause of death was determined. Samples of feed, water, forage, and tissue were collected for analysis.

Non Key Personnel

The third animal, also a Hepatitis C carrier, but otherwise a healthy adult male, was found in Den 6 in the late morning of January 14, 2004. Dr. Curtis pronounced him dead at approximately 11:30 am. Necropsy revealed no obvious cause of death. The proximity of the deaths in both time and location led to the speculation that electrocution was the cause of death. Two platforms on the common wall were found to be carrying enough voltage to cause cardiac arrest if another metal object was contacted simultaneously. Video records verified that, just before collapse, one of the chimpanzees had touched the cage mesh while sitting on a platform.

None of the other platforms in the facility were carrying voltage. A letter from the Maintenance Supervisor was presented. The two energized platforms were grounded while the source of the voltage was sought. Facility "as built" blueprints show no electricity routed through the walls. A drawing of the area's mechanical components was presented. No electrical outlets indicate the presence of electrical wires in the wall. The wall behind the platform was excavated. A bolt could be seen going through conduit that ran up inside the wall. The conduit was cut, revealing the wires inside. A picture of the bolt and conduit *in situ* was presented.

Apparently, prior to pouring the concrete walls, wiring to the lights above the dens was pulled up through the wall space inside conduit. A bolt that anchored an originally installed platform pierced the electrical conduit. The bolt was subsequently cut at the wall. The cut end of the first bolt was hidden by the edge of the platform. A second bolt was put through the wall to anchor the platforms in each den. For unknown reasons, more than ten years later, the cut end of the bolt made a connection with the platform. This resulted in a circuit from the first bolt to the platform, to the second bolt, to the platform on the other side of the wall. The switch that controlled power to the lights was disabled as soon the voltage source was discovered.

An electrical contractor assessed the affected area. A letter from the contractor was presented. The contractor recommended abandonment and removal of the existing circuit. He also recommended re-routing the existing circuit with new wire, new conduit, and a new breaker. Although removing the wall circuit is not possible, power to the circuit will be turned off permanently by the week of February 2 so there is no chance of a recurrence. Lighting throughout the facility will be moved from its current location, upgraded, and placed elsewhere by mid-March.

ACUC members unanimously agreed that these circumstances could not have been anticipated or prevented, and that APF personnel mounted an appropriate, effective, timely response to the events.

The meeting was adjourned at 3:10 pm.

M. Kay Izard .. 1/30/64
M. Kay Izard, Chair Date

ALAMOGORDO PRIMATE FACILITY

28 January 2004

Dr. James Taylor, Director
Office of Animal Care and Use
National Institutes of Health

Dear Dr. Taylor,

The Alamogordo Primate Facility's Animal Care and Use Committee (ACUC) convened on January 27, 2004 to investigate the deaths of three chimpanzees on January 13 and 14, 2004. Six voting members were present. The *ex officio* member participated by phone. Guests were a potential new ACUC member and an APF clinical veterinarian. Dr. Rick Lee, Director, presented an account of the incident, the cause of the deaths, and actions taken to prevent a reoccurrence.

Three healthy adult male chimpanzees from adjacent dens died suddenly. Necropsies, performed shortly after the time of death, did not determine an obvious cause of death. Because of the similar circumstances of the deaths and their proximity in both time and location, it was speculated that the animals were electrocuted. Two platforms on the common wall were found to be carrying enough voltage to cause cardiac arrest if another metal object were contacted simultaneously. Video records verified that, immediately before collapse, one of the chimpanzee touched the cage mesh while sitting on a platform.

None of the other platforms in the facility were carrying voltage. The two energized platforms were grounded while the source of the voltage was sought. Facility "as built" blueprints show no electricity routed through the walls. No electrical outlets indicate the presence of electrical wires in the wall. The wall behind the platform was excavated. A bolt could be seen going through conduit that ran up inside the wall. The conduit was cut, revealing the wires inside. Apparently, prior to pouring the concrete walls, wiring to the lights above the dens was pulled up through the wall space inside conduit. A bolt that anchored an originally installed platform pierced the electrical conduit. The bolt was subsequently cut at the wall. The cut end was not visible, and became covered with several layers of paint. A second bolt was put all the way through the wall to anchor the platforms in each den. For more than ten years, conditions remained the same. Then, for unknown reasons, the cut end of the bolt made a connection with the platform. This resulted in a circuit from the wires to the first bolt, to the platform, to the second bolt, to the platform on the other side of the wall. The switch that controlled power to the lights was disabled as soon the voltage source was discovered.

An electrical contractor came to the facility to assess the affected area. The contractor recommended that we abandon all wall circuits in the facility. Power to the circuit will be turned off permanently by next week so there is no chance of a reoccurrence. Lighting will be moved from its current location, upgraded, and placed elsewhere by mid-March. ACUC members unanimously agreed that these circumstances could not have been anticipated or prevented. They are satisfied that APF personnel mounted an appropriate, effective, timely response to the events.

Sincerely,

M. Kay Izard

M. Kay Izard, PhD
APF ACUC Chair

[*non-key*]
[*Personnel*]

Stephen Curtis
Stephen Curtis DVM

Paul Langner
Paul Langner, VMD

[*non-key*]
[*Personnel*]

ALAMOGORDO PRIMATE FACILITY

Dr. M. Kay Izard
IACUC Chair, APF

Maintenance Report on Electrical Short

On January 14, 2004, Dr. Lee had me test the indoor runs 5 & 6 in Building 1302 for stray voltage.

After discovering that the bedboards had voltage, I sent a maintenance person to check all of the indoor perches in the facility. There were no other electrical problems found.

To prevent this type of accident from reoccurring, I reviewed the problem with Dr. Lee and four electricians. The consensus was to ground the platforms. To make a continuous grounded platform, we will add additional bedboard material to the platforms on the dividing walls. In addition, I have a quote from Southwestern Electric to reroute switch wires so we can abandon all electrical wiring in the walls.

We are also adding auxiliary lighting to enhance the illumination in the animal areas.

I will display the conduit from the wall at the IACUC meeting to show how the short occurred.

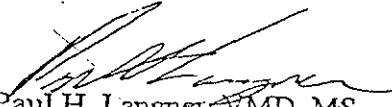
[non key
personnel]

Memorandum of Record

To: Dr Izard, IACUC Chair
From: Dr. Langner, Attending Veterinarian and Safety Officer
Date: 26 January 2004
Re: Death of Chimpanzees

This is my report of the incident involving the deaths of 3 chimpanzees on January 13th and 14th, 2004 at the APF facility. I was one of the 4 veterinarians to respond to an emergency call reporting 2 animals down in adjacent dens in building 1302 on the 13th. Both chimpanzees were non-responsive to CPR and apparently had sudden death. Their groups had just been moved back to their original dens after painting, and were observed to have a good appetite and were alert. We immediately implemented procedures to assess the whole colony and prevent any other animals from being exposed to biological or chemical agents. Necropsies were immediately performed to determine the cause of death, but no overt signs were seen. Tissue samples and stomach content for toxicologic assessment were also taken at necropsy. The next day we were continuing to investigate the incident when another chimpanzee was found non-responsive around 11:20 a.m. in the same building. While the veterinarians were performing the necropsy, the management quarantined the area and found significant stray voltage in the den sufficient to cause cardiac arrest. The necropsy results were consistent with electrocution.

As the Attending Veterinarian and Safety Officer, I can attest to the rapid and effective responses of the APF management in using all available resources to identify the cause of the deaths. In particular, the facility director provided the leadership to coordinate the staff and provide the insight to diagnose the problem. In my opinion, prompt and appropriate actions were taken to prevent injuries to additional animals in the groups. Corrective and preventative actions are underway to insure the safety of the APF colony and personnel.



Paul H. Langner, VMD, MS
DACLAM

ALAMOGORDO PRIMATE FACILITY

January 16, 2004

Dr. Izard:

This report is my account of the unfortunate sudden death of three male chimpanzees. On January 13, 2004, two animals in adjacent cages were found dead by the animal care staff. The APF veterinarians, the colony manager, and I immediately responded to a sudden death emergency in two separate but adjacent dens in Building 1302. The clinicians were sent to inspect all other animals in the colony for signs of illness or toxicity and no other animals were affected. The environment in and around the dens was also inspected for signs of hazardous chemicals, or fumes. Samples of the feed, enrichment, and water were collected.

All 4 veterinarians and several technicians immediately performed necropsies on both animals. Gross lesions did not indicate the cause of death. Histopathology and toxicology samples were obtained at necropsy to be sent for analysis. In addition to the routine night security personnel, an animal technician was assigned to monitor the colony for any signs of illness through the night. The digital record of the closed circuit video surveillance camera system was also reviewed. It appeared that the deaths were very sudden and there was no sign of pain, distress, or illness.

The next day another male chimpanzee collapsed in Den 6. The animals in the area were immediately moved to another section and the dens quarantined. Based upon the lack of signs of toxicosis or infectious disease at necropsy, the animal dens were immediately checked for stray voltage or other potential causes of sudden death. It was found that there was voltage on one platform in each of the two adjacent dens when grounded. Apparently, when the facility was built 12 years ago one of the bolts used to mount the platform to the concrete wall was accidentally placed into an electrical line. Subsequently, the chimpanzees broke off the bolts holding the platforms, and new bolts were placed through the wall to a platform on the other side of the wall. The only way electrocution could occur is for an animal to be touching either of the two platforms and another metal object concurrently while the overhead lights were on. There was no way to know that there were electrical lines in the wall since there are no outlets in the dens, and the blueprints of the facility do not show electrical wires in the walls.

All of the platforms in the facility have been tested for stray voltage and none had voltage when grounded. The crawl space above the dens was also checked for loose wires and none were found. A certified electrical contractor has reviewed the cause of the incident and is working with our staff to correct the problem. We are pursuing all avenues to assure that this does not reoccur.

ALAMOGORDO PRIMATE FACILITY

We are currently in the process of grounding all platforms by adding additional bed-board material, and disconnecting all power lines in the walls. In addition, we are upgrading the lighting and rerouting the electrical circuits. New lights will be installed for enhanced illumination of the area and the fixtures will be placed high on the wall across from the dens so that there is no electricity near the animals.

Based upon the length of time animals have been kept in these dens without incident and the lack of documented electrical line in the walls dividing the dens, this incident could not have been predicted nor prevented. We are fortunate that no other animals or personnel were injured in this accident.

Sincerely,



D. Rick Lee, DVM
Director, APF



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

National Institutes of Health
Bethesda, Maryland 20892

MAR 1 2004

TO: Stephen Potkay, V.M.D.
Director, Division of Compliance Oversight
Office of Laboratory Animal Welfare

FROM: Deputy Director for Intramural Research, NIH

SUBJECT: Animal Welfare Investigation - Assurance A4149-01

This correspondence conveys the results of an investigation by the Animal Care and Use Committee (ACUC) of the Alamogordo Primate Facility (APF), National Center for Research Resources, regarding an incident reported to your office on or about January 14. The tragic incident at the APF involved the totally accidental electrocution of three adult chimpanzees. On January 13, all three animals suddenly died and subsequent necropsies did not reveal the apparent cause(s) of those deaths. Investigation of the similarities surrounding the circumstances of their deaths, and their proximity in both time and location led to the speculation that the animals may have been electrocuted. Subsequent electrical measurements revealed voltage in only two of the resting platforms in that building. It was then discovered that an anchoring bolt securing a previously installed platform had penetrated an electrical conduit which had been unknowingly buried, approximately ten years before, in the common wall between the two animal dens. For unknown reasons, and after all these years, that old bolt made contact with an anchoring bolt securing two back-to-back resting platforms, completing the circuit, and causing voltage to flow through the resting platforms. That circuit was immediately disabled and all lighting circuitry will be moved upgraded and placed elsewhere by mid-March.

As noted in the attached 28 January APF ACUC correspondence, the incident was immediately investigated by the APF Director and the Attending Veterinarian.

At its meeting on January 27, the convened ACUC reviewed and subsequently found acceptable the corrective actions taken in conjunction with and to follow the detailed investigation.

It is my opinion that the APF ACUC took appropriate action following this incident and I also agree with the ACUC that these circumstances could not have been anticipated or prevented.

Please contact me or Dr. James F. Taylor, Director, OACU, if additional information or clarifications are required.


Michael M. Gottesman, M.D.

Attachment

cc:
Dr. IZard
Dr. Taylor
Dr. Wyatt



DEPARTMENT OF HEALTH & HUMAN SERVICES

PUBLIC HEALTH SERVICE
NATIONAL INSTITUTES OF HEALTHFOR US POSTAL SERVICE DELIVERY:

Office of Laboratory Animal Welfare
Rockledge One, Suite 360
6705 Rockledge Drive - MSC 7982
Bethesda, Maryland 20892-7982
Home Page: <http://grants.nih.gov/grants/olaw/olaw.htm>

FOR EXPRESS MAIL:

Office of Laboratory Animal Welfare
Rockledge One, Suite 360
6705 Rockledge Drive
Bethesda, Maryland 20817
Telephone: (301) 496-7163 ext 7
Facsimile: (301) 402-7065

March 5, 2004

Re: Animal Welfare Assurance
#A4149-01

Michael Gottesman, MD
Deputy Director for Intramural Research
National Institutes of Health
9000 Rockville Pike
Bethesda, MD 20892

Dear Dr. Gottesman:

The Office of Laboratory Animal Welfare (OLAW) acknowledges receipt of your March 1, 2004 memorandum concerning a reportable incident at the Alamogordo Primate Facility (APF) involving chimpanzees following up on a prior (January 15, 2004) telephone notification.

Based on the information provided, OLAW acknowledges that the APF Animal Care and Use Committee (ACUC) determined that three chimpanzees were accidentally electrocuted at the Facility. We understand that this tragic event occurred when a bolt which anchored the metal resting platforms on which they were sitting touched another bolt (remaining in the wall from a previous platform installation) which was in contact with an electrical conduit and electrified the platforms. We understand recognize that the matter was thoroughly investigated and that effective measures were taken to prevent recurrence.

The APF's resolution of this matter was consistent with the PHS Policy philosophy of monitored self-regulation. We appreciate having been informed of this unfortunate incident and find no cause for further action by this Office.

Sincerely,

Stephen Potkay, VMD
Director, Division of Compliance Oversight
Office of Laboratory Animal Welfare

cc: Dr. Kay Izard
Dr. James F. Taylor
Dr. Richard Wyatt

CRL

P.O. Box 956
Holoman A.F.B., New Mexico 88330-0956
Phone: 505-679-3800 Fax: 505-679-3541



Fax

*Told Kathleen
OK by phone
3/11/04*

To: Kathleen Marsden **From:** Dr. D. Rick Lee

Fax: 301-480-3345 **Pages:** 2

Phone: 301-435-0364 **Date:** March 10, 2004

Re: Request for funding **CC:** Dr. Ray O'Neill

Urgent **For Review** **Please Comment** **Please Reply** **Please Recycle**

Kathleen and Ray,

We have replaced the lighting in Building 1302 where the accident occurred. The new lights double the illumination and the electrical wiring is now located 10 feet away from the animal dens to prevent any possible animal contact with the conduit.

I am asking for expedited approval to repeat this upgrade in the other three buildings. Please call if you have any questions.

Thanks

If you do not receive the entire transmission, please call 505-679-3800.

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Monthly Progress Report

Alamogordo Primate Facility
Holloman A.F.B., New Mexico
Contract Number N02-RR-1-209
January 2004

D. Rick Lee, D.V.M.
Director

Submitted to:
Kathleen Jarboe Marsden
Contracting Officer
NHLBI
National Institutes of Health
Bethesda, Maryland 20892-2759

Colony Census: The APF census is 265 chimpanzees. No additions or transfers occurred during the month. There were however four deaths; one animal died from acute renal failure secondary to a hepatic abscess and three animals died as a result of accidental electrocution. Information regarding these animals follows:

Colony Number	Name	ISIS Number	Birthdate	HBV Status	HCV Status	HIV Status	Cause of Death
1493	Tyson	5631	3/27/1990	negative	positive	negative	Euthanized; Acute renal failure secondary to hepatic abscess.
1560	Snoy	5918	3/19/1993	negative	carrier	negative	Accidental electrocution.
1302	Jerome	4734	7/25/1983	negative	carrier	negative	Accidental electrocution.
1183	Ritchie	4421	8/11/1981	negative	carrier	IND	Accidental electrocution.

All reports have been made to the appropriate agencies. See attached report with animal ID and health status.

DRAFT of 10/9/03PROJECT OFFICER'S SUMMARY

The Project Officer (PO) for the Contract with CRL, and an expert in chimpanzee care and facility operations, site-visited the APF on 10/1/03 from 8:00 am until 4:00 pm. The APF staff answered all questions and provided all requested documents. Many major positive findings were noted, and a few minor suggestions for fine-tuning their operation were noted. These are enumerated below. In addition, the Project Officer stayed for the previously scheduled ACUC meeting on 10/2/03 in his role as an ex-officio member of the ACUC. The ACUC investigated the care given to 3 specific chimpanzees, and discussed ways to optimize the appropriate culture at the APF regarding reporting any occurrences of apparent animal cruelty or inadequate care, as well as performing the regularly scheduled ACUC functions such as the semiannual animal facilities inspection.

Positive Findings**General Positive Findings, of the expert as understood by the PO****Overall Program for Animal Care**

1. Facilities, SOPs, policies, and maintenance are excellent.
 2. The various systems of records are very good.
 3. Staffing levels and their qualifications and training in APF-specific procedures are excellent. In fact, the expert consultant noted that four veterinarians are probably not required during a typical day. The rate of turnover of staff is acceptable. There is a daily positive or negative entry made regarding the condition of each of the 270 chimpanzees, and veterinary care is expeditiously arranged for any chimpanzees that require it.
 4. The chimpanzee population at the APF generally has an extensive history of use in research.
 5. The mortality rate of the APF since CRL has been the contractor is acceptable, especially considering the population's characteristics.
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Records for 3 Chimpanzees

Judging from the records, the process used in identifying sick or injured animals, diagnosing the problems, and providing treatments for the 3 chimpanzees in question were acceptable. It appears that nothing should have been done that wasn't. Poor or inadequate veterinary care did not contribute to the death of the 2 chimpanzees. The third chimpanzee has fully recovered. All 3 animals had histories of previous extensive experimental procedures. None of the 3 cases required the APF to report a significant event.

Reporting

1. Two relevant and generally acceptable documents are prominently posted in all appropriate areas (Bldgs. 1301-4, the employee lounge, etc.) as required by the AWA and USDA regulations. (photocopies of the documents are attached, and consist of the August 21, 2001 memo from Dr. Gottesman about reporting in the intramural research program, and an APF-specific one page document intended for posting).
2. Senior staff members are fully aware and acknowledge that appropriate reporting of animal cruelty or inadequate care is a responsibility of every APF staff member, and that reprisals must not be taken against employees who report such events in the appropriate manner.

ACUC 10/2/03

1. Two documents related to reporting are posted in all required areas. (i.e., Bldgs. 1301-1304, employee lounge, etc.)
2. After interviewing approximately 10 randomly selected staff members and all ACUC members except [NAME] (who was absent 10/2/03), no staff members have reported to ACUC members allegations of cruelty or inadequate care.
3. Every staff member who was interviewed is knowledgeable about appropriate reporting.

Specific Positive Findings, of the expert as understood by the PO

Overall Program for Animal Care

1. Individual animal records for veterinary care, records of daily observances reporting on each cage of animals, and the book of APF SOPs and policies were examined and found to be acceptable.
2. The colony has been restructured according to viral status, with HBV, HCV and HIV as the priority order. Nine chimpanzees are HBV+ and are kept in 2 groups, 62 are HCV+ and are in 12 groups, 35 are HIV+ and are in 7 groups, and the rest of the chimpanzees are classified as clean/exposed and are in 26 groups. The most common group size is 6, with 27 groups of 6, and 3 groups of 12. None are singly housed.
3. Most of the chimpanzees have either been infected with one or more chronic viruses, and even if they were negative controls the chimpanzees have been subjected in the past to many invasive procedures such as punch biopsies of the liver and anesthetic events. These procedures are thought to contribute to long-term problems in some animals with liver and renal failure, and various blood abnormalities.
4. Although chimpanzees are generally difficult clinical subjects because they mask their symptoms, the legal standard of care described in the "Guide" is routinely exceeded for chimpanzees.

Records for 3 Chimpanzees

1. Ashley – the cause of death is uncertain, but she was noted to be sick in a timely manner and appropriate veterinary actions were taken.
2. Rex apparently died of septicemia, which was apparently disseminated from a liver abscess, possibly resulting from one of many liver punch biopsies years ago before he came to the APF.
3. Topsey is alive and well, so the form of IDA's complaint is uncertain. She did experience extensive blood loss from a minor wound of the sex skin, but there was no inattention or malpractice apparent in the records. She has long-standing blood abnormalities that cause more bleeding than would occur in a normal chimpanzee.

Negative Findings 10/1/03 – 10/2/03, of the expert as understood by the PO

1. Two documents relevant to reporting apparently differ in a minor way. The posted APF-specific instructions refer to reporting to the NIH Director of the OACU, whereas the current SOP and future policy draft refer to reporting to the NIH IO. Either one or both documents should be revised to reflect that the NIH Director of OACU in turn reports to the NIH IO (who is the NIH Deputy Director for Intramural Research). In addition, the expert consultant recommends adding a sentence to both documents that any employee who brings a non-anonymous complaint will receive feedback once the ACUC has deliberated and reached a conclusion. In addition, CRL may soon revise their world-wide policies and documentation regarding reporting.
2. In the unlikely case a significant event or deficiency occurred (e.g., an experimental protocol-related death in the non-invasive studies carried out at the APF; or a death due to failure of the HVAC, water supply or other infrastructural systems), senior APF staff or call will report the significant event or deficiency expeditiously to the Contract Project Officer, the NIH Director of OACU, and AAALAC. ~~There does not appear to be a written SOP at present that could be referred to if such an unusual occurrence happened.~~ (This would supplement and not replace the reporting of "reportable incidents" outlined in the August 21, 2001 memo from Dr. Gottesman about reporting in the intramural research program.)
3. Document IS109 regarding the operation of the APF ACUC should be reviewed. A sentence that defines a "significant deficiency" that is consistent with intramural NIH's operating definition should be added to IS109.

Overall, as noted above, many major positive findings were noted, and a few minor suggestions for fine-tuning their operation were noted.

**Report of Site Visit
To The
Alamogordo Primate Facility**

I, Thomas M. Butler, conducted a site visit to the Alamogordo Primate Facility (APF) located on Holloman Air Force Base, New Mexico on October 1, 2003. The visit was made at the request of NIH/NCRR and was to evaluate the veterinary care provided by the APF contractor. Included in the charge to me was to specifically review the cases of three identified chimpanzees that had been ill during the past year. During my visit I took a brief tour of the facility, talked to several personnel (Director, veterinary clinicians and IACUC Chair), and reviewed numerous documents (SOPs, policies, clinical records, colony management records, facility correspondence and IACUC files). My findings, suggestions and comments are described herein:

Significant Findings:

1. The veterinary care program provided by the APF was excellent. The Animal Welfare Act Regulations define "adequate veterinary care" from a legal standpoint. The American College of Laboratory Animal Medicine developed and published a position statement describing what should be included in "adequate veterinary care". The *Guide* also describes in detail what should make up a veterinary care program. In my opinion, the APF not only met all of these definitions but, in most instances, exceeded them. The institutional policies for a veterinary care program were well stated and documented, the facilities were appropriately designed and very well maintained, the equipment for clinical care was more than adequate, the professional and technical veterinary personnel were appropriately trained and experienced, the SOPs were well written and complete, and documentation of animal care activities was appropriate.

2. The veterinary care provided to the three identified chimpanzees was appropriate and complete. In each case the veterinary technicians noted the clinical signs and promptly alerted the veterinarians. Response times were quick, diagnostic workups were appropriate and extensive, treatments instituted were acceptable and intense and all actions were documented. ~~Specific comments are:~~

· Topsey, 1223, had an inordinate amount of blood loss from a minor wound in her sex skin. It is standard practice not to suture these wounds due to the fragility of the skin at this time of the estrous cycle and the fact that blood loss is normally insignificant from this type wound. Unexplainably Topsey lost considerable blood. She survived the episode due to the excellent veterinary care provided by the APF staff.

· Ashley, 1396, also sustained a laceration to the sex skin with subsequent bleeding. In my 36 yrs of working with nonhuman primates I have not seen nor heard of an animal having significant blood loss from this type lesion. Regardless, the chimpanzee did lose considerable blood but was accorded appropriate and intensive veterinary care. After the animal died a necropsy was performed and tissue sent to a highly qualified veterinary pathologist. No apparent cause was determined to explain the blood loss. However, the

chimpanzee had a history of blood disease that could have contributed to reduced clotting factors. I do not know of anything else the APF veterinary staff could have done that they did not do. The veterinary care given to this animal was appropriate.

Rex, CA0147, had a history of gradual weight loss and action was taken to rectify this trend. He presented with inappetance, cough and increased rate of breathing. Upon examination he was dehydrated and had a mass in the abdomen. Accepted diagnostic and treatment procedures were performed; however, the chimpanzee died. A necropsy was performed and tissues submitted to the same pathologist. The diagnosis was liver abscesses, septicemia and purulent bronchopneumonia. The experimental history of this animal was extensive with numerous liver punch biopsies having been performed prior to arriving at APF. The septicemia probably resulted from these multiple biopsies. It should be noted that chimpanzees will frequently mask clinical signs. That is, they do not present any signs until the disease condition is advanced; thus, making veterinary care difficult when signs are finally detected.

Related Findings and Comments

1. The APF was recently awarded Full Accreditation status by AAALAC, International; thus, the animal care and use program had been fully assessed by experts in the field of laboratory animal medicine and found satisfactory.
2. As of Oct. 1, 2003, the APF IACUC planned to investigate the three specified cases and to determine if all actions taken by the veterinary staff were according to accepted veterinary practice.
3. The chimpanzee colony at APF is composed of animals that have come from several sources, have been used extensively in research (multiple studies and numerous procedures) and are aging. Therefore, it should be expected that morbidity and even mortality will be slightly higher than the norm for a captive but stable chimpanzee colony. For example, it is a known fact that chimpanzees over the age of 30 have a high incidence of cardiovascular problems, e.g., high blood pressure, cardiomyopathy, etc.
- ~~4. The IACUC had a policy on the reporting of concerns about animal care and use.~~
Notices were posted in the facility telling staff how to report any concern. This procedure was also described in staff training sessions. It was suggested to APF that the policy and procedures documents also describe a process by which the IACUC would report any findings and actions taken back to the complainant. Obviously, if a person chose to remain anonymous they would not get a personal response.
5. The APF administration and IACUC were cognizant of all reporting requirements for significant events to OLAW, AAALAC and USDA. The three specific cases identified by an animal rights organization were not reportable since they were within the scope of routine clinical veterinary care. If the cases had been as a result of an experimental study or deficiency of the facility or staff then they would have been reportable. The APF made the correct decision not to report the events. A suggestion was made that APF should

develop a policy or SOP on the reporting process that describes or defines what a reportable event would be.

6. The APF had a relatively high percentage of staff that was certified by AALAS at one of the three levels of animal technician or technologist. Additionally, the rate of turnover of personnel was relatively low indicating job satisfaction and providing APF with an experienced technical staff.

Thomas M Butler
20 Oct 03

8/297

ANNUAL REPORT
CONTRACT YEAR 01

Alamogordo Primate Facility
Holloman A.F.B., New Mexico

Dr. D. Rick Lee
Director

Submitted to:
Kathleen Jarboe Marsden, Contracting Officer
Ray O'Neill, Project Officer
National Institutes of Health
Bethesda, Maryland 20892-2759

ANIMAL CARE

Veterinary Care: A health care program for chimpanzees was developed and implemented. Many chimpanzees had long-term complications of experimental infections that had not been treated appropriately. Approximately 300 physicals were conducted on the chimpanzees at APF. Many animals required immediate surgeries or treatments. For example, 10 animals needed surgery for air sacculitis. Virology profiles were developed on each animal housed at APF. This required HBV, HCV and HIV testing of the whole colony. Dr. Feinstone (FDA), [non-key personnel] and Bill Switzer (CDC) performed the serological testing for no cost or a minimal charge. The virological profiling will help to identify carriers so that we can reform social groups based upon infectious status.

Health Care Status: The health status of the chimpanzee colony is continuously being assessed. The original population of approximately 240 animals is separated from the 43 quarantined animals recently transferred from the Coulston Foundation's Biocontainment unit. Since the quarantine animals have multiple infections (HBV, HCV and HIV) and were isolated in single cages for many years, they have many health problems. Based on results of physical examinations, and virological assessment, the colony status is as follows:

HEALTH STATUS	NUMBER	PERCENT
Clean	62	22.5%
Exposed	41	15%
Carriers	112	40.5%
Sick	62	22.5%

1. The quarantine population had some morbidity and mortality (Appendix 1). Several of them had severe chronic medical problems. Four animals died from a cardiomyopathy syndrome involving left ventricular hypertrophy and sudden death. Our consulting cardiologist suspects that ventricular fibrillation produced rapid onset of circulatory failure, cardiac arrest and collapse. One animal had to be euthanized because he had severe thrombosis in the major arteries to the extremities and another had chronic renal failure secondary to experimental infections.
2. One of several areas of success has been improved health care for the geriatric group. We have seen increased muscle mass, activity, appetite and social interaction in many of the elderly animals. Changes in diet (reduced fat and sodium, increased fiber), group formation and vitamin-mineral-hormone therapy have been effective. We will continue to monitor the markers of aging in chimpanzees and document the long-term effects of infectious disease research on chimpanzees.

Preventative Medicine: Our preventative medicine program has resulted in improved health care of the colony. The colony is responding very positively to programmatic changes such as improved nutrition, increased space and social group size, and outdoor

access. We are also training several of the chimpanzees for health and husbandry procedures. Some of the parameters used to monitor health status daily include increased activity, increased social interaction, reduced aggression, improved hydration, hair coat appearance, and muscle mass. We have also performed repeated physical examinations and laboratory tests on animals with abnormal test results.

1. We have screened all colony members for the hepatitis B panel, hepatitis C, and HIV-1 serology. The virological profiling is helping to facilitate the formation of new social groups based upon infectious status. The serological results also help the clinicians to identify candidates for antiviral treatment to reduce the prevalence of HCV-induced cryoglobulinemic immune complex glomerulonephritis and resulting death from acute renal failure.
2. We have an extensive training program to improve the competence of the animal technicians. There are weekly training sessions for SOP's, Occupational Health, and other APF policies.
3. The veterinarians have a daily meeting with the colony manager and the behaviorist. In addition to daily rounds of all animal dens, they conduct a weekly grand rounds seminar, consult with the director, conduct training courses (AALAS and residency), and participate in extramural continuing education programs to maintain clinical proficiency. The program is designed to improve the diagnostic capabilities and effective medical treatment for emerging diseases. Diagnostic tools include ultrasonography, fluoroscopy, radiography and endoscopy.

Animal Inventory Changes: On 1 June 2001, APF took responsibility for 252 chimpanzees owned by NIH. Five were transferred to MD Anderson Cancer Center on 25 June 2001, and three were transferred to New Iberia on 1 August 2001. An additional 43 animals from the Coulston Foundation were added to the contract. There were 10 deaths leaving the census count at 277 animals on June 1, 2002 (see Appendix 2).

Computerized Records and Data Archiving: All of the original animal records were obtained from TCF. [redacted] reviewed APF records and trained [redacted] in the use of the USChimps database. The APF master database was created in September 2001, and the initial chimpanzee colony-related data was entered at that time. In December 2001 the APF database was joined with the US Chimps database used by ISIS. Since its creation, the Microsoft Access 2000 database managed system has proven to be both functional and efficient. Information is easily edited and appended, and by adding additional tables to the database, much of the data required by APF is readily accessible. Access queries allow data to be pulled up that matches specific criteria requested.

In March, the serum banking information was added to the database. Also, the blood chemistries and hematology data are kept in separate files. Animal specimens (serum, plasma, tissues, and slides) are retained for future analysis and reference. Frozen serum and plasma samples are kept in a freezer in [redacted] # [redacted] of Building 1264. Five 1mL serum

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APPENDIX 2
 ALAMOGORDO PRIMATE FACILITY
 NCRR Owned Chimpanzee Deaths
 June 1, 2001 - May 31, 2002

Colony Number	Name	ISIS Number	Birthdate	Date of Death	Cause of Death
1411	B.G.	5297	12/13/1986	6/23/2001	Severe diffuse glomerulonephritis with possible amyloidosis
1293	Dawn	4714	4/26/1983	8/11/2001	Renal failure and associated pericarditis secondary to chronic glomerulonephritis.
1538*	BamBam	5808	1/15/1992	10/31/2001	Chronic history of epilepsy. Cause of death: inhaled vomitus.
1417	Dixie	5357	6/23/1987	11/9/2001	Cancer. Euthanized due to recurring metastatic tumors.
974	Ginger	3758	2/16/1977	1/7/2002	Renal failure. Unresponsive to emergency care.
CA0115	Kelly	6596	1/7/1985	2/1/2002	Heart failure. Dilated cardiomyopathy.
199	Lennie	1423	1/1/1962	2/23/2002	Heart failure. Cardiomyopathy, hepatic and pancreatic degeneration.
CB0477	Kist	6881	5/20/1977	3/7/2002	Euthanized due to insufficient blood supply from thrombi in right femoral artery, distal aorta (calcified), left axillary artery, and cardiac arteries.
CB0446	Peg	4641	12/9/1982	3/8/2002	Renal failure, heart failure. Anuria, cardiomyopathy.
					Unresponsive to emergency care.
1141	Aaron	2331	10/1/1973	5/10/2002	Heart failure. Diluted cardiomyopathy. Hepatic degeneration.

* Death of 1538 BamBam occurred while housed at the Coulston Foundation.

Project Schedule

Alamogordo Primate Facility
Holloman A.F.B., New Mexico

November 2001

Dr. D. Rick Lee
Director

Dr. B. Darrel Florence
Assistant Director

[Non-key Personnel]
[]

Submitted to:
Kathleen Jarboe
Contract Manager
National Institute of Child Health and Human Development
Bethesda, Maryland 20892-2759

1. **Outside Administrative Support:** The committee discussed whether the APF was getting all of the support they needed from the government and CRL corporate. The consensus was that in most areas needed support was being provided. One area of concern is the time that it takes to get expense items approved.

J. **Continuing Education:** The committee suggested that APF encourage the staff to keep up their professional interactions by attendance at meetings and through continuing education.

VII. **Disease Surveillance** *f. Non Key members* 2

Most of the APF chimpanzees are veterans of experimental studies. Many of them have subclinical health problems related to infectious protocols and the medical records are incomplete. Therefore, the veterinary staff must continue to define the population serologically and identify any subclinical diseases. Comprehensive diagnostic work-ups are appropriate and should be pursued whenever abnormal clinical findings are detected in order to establish a definitive diagnosis and an appropriate. The APF is in the process of accurately characterizing the antibody status, viral status, and vaccination history. Currently, the emphasis is on identifying HCV carriers and HIV positive animals.

A. **Animal Health Assessments:** Historically, this facility has had "unexplained" deaths which have caused public relations problems. It appears that mortality in the Hepatitis C-infected animals may be due to cryoglobulinemia and kidney failure. This syndrome may be a chronic issue in the facility. The staff should continue to investigate and document this as well as other health problems. A current physical examination and record review will help to diagnose health problems and identify individuals that need monitoring. Clinical treatment/management plan for the affected individual(s) and/or colony groups. Animals should be grouped/managed based on documented disease/health status.

B. **Animal records:** Since the records are in such a bad state, the staff is sampling every animal to determine their serological and viral status. This program should continue to have high priority. The experimental history and medical records should be reviewed for any potential exposures.

C. **Infectious Disease Status:** The main viruses of concern are the hepatitis viruses (HBV, HCV) and HIV-1 viruses due to their carrier state. Since there are no cures for infections with these viruses, the animals' infectious status must be confirmed. The retroviral testing should be systematic using paired serum to confirm the current infectious status. Hepatitis C virus testing should be systematic and performed with the most current techniques. Other agents of concern are HTLV-

1, Simian Foamy Virus, EBV, and CMV. I would encourage the staff to be certain that it is not done piecemeal and that only the highest quality labs are used

VIII. Occupational Health & Safety [Non Key members]

The facility nurse, [] reviewed the OHS program at the APF. The program is fairly comprehensive with regular employee testing and training. A few areas where improvements might be made were suggested. Members counseled that

~~AAALAC may concentrate on the OH&S aspect of the APF application and APF~~
should address these issues on a priority basis.

- A. **Risk Assessment:** Consideration should be given to careful documentation of the risks that the program is trying to minimize (A risk assessment program). This should be followed by documentation of your "risk reduction" program. By doing these things you will both demonstrate and insure that you are identifying and addressing the most serious problems.
- B. **Human Serum banking:** Currently, blood samples from employees are not banked. I would encourage the APF to consider a banking program since there is a significant risk that an employee will eventually contract a disease from a chimpanzee, or that an employee will claim to have contracted a disease at work when in fact it was preexisting. Opinion among the committee members was not unanimous on this point. If a program is undertaken, legal advice should be sought to make certain that both Charles River and the government are protected.
- C. **Training Records:** Training records are now kept in several locations. Consideration should be given to consolidation of these and maintaining a summary computer database of relevant training. Records should be reviewed and audited at regular intervals to make certain that nothing slips through the cracks.
- D. **Single Point of Contact:** It appeared that various administrators are responsible for different aspects of the OH&S program. It might be helpful to consolidate this under a single administrator.
- E. **Biosecurity:** ~~Most of the APF colony chimpanzees have been exposed to~~ infectious agents that pose a risk to the employees and other animals. It was strongly recommended that a Risk Assessment/Abatement Program be established. A program to evaluate the risk of injury or exposure to infectious agents should be conducted on a task-oriented bases. Areas such as appropriate PPE's for the task, sanitation of enrichment items were discussed. In addition, the risk reduction program should review ways to reduce the risk of exposure were reviewed. It was suggested that the APF formalize a program with the CRL OHS officers and there should be a single point of contact for all different aspects of the program.

ANNUAL REPORT
CONTRACT YEAR 2

Alamogordo Primate Facility
Holloman A.F.B., New Mexico
Contract Number N02-RR-1-209
June 1, 2002 through May 31, 2003

D. Rick Lee, D.V.M.
Director

Submitted to:
Kathleen Jarboe Marsden
Contracting Officer
NHLBI
National Institutes of Health
Bethesda, Maryland 20892-2759

12/1/03

APPENDIX 6

Chronology of APF Chimpanzee Colony

Date	Ownership to NIH/NCRR	Transfer from APF	Death	Colony Total
6/1/2001				252
6/23/2001			1411 B.G.	251
6/25/2001		5 to MDACC(Eastrop) 888, 923, 965, 1019, 1206		246
7/1/2001				246
8/1/2001				246
8/3/2001	37 from Coulston Foundation			283
8/11/2001			1293 Dawn	282
8/27/2001		3 to ULL-NIRC(New Iberia) 1535, 1536, 1564		279
9/1/2001				279
10/1/2001				279
10/31/2001			1538 BamBam	278
11/1/2001				278
11/9/2001			1417 Dixie	277
12/1/2001				277
1/1/2002				277
1/7/2002			974 Ginger	276
2/1/2002				276
2/1/2002			CA0115 Kelly	275
2/23/2002			199 Lennie	274
3/1/2002				274
3/7/2002			CB0477 Kist	273
3/8/2002			CB0446 Peg	272
4/1/2002				272
4/16/2002	12 from Coulston Foundation 1435,1436,1441,CA0047, CB0159,CB0323,CB0339 CB0376.CB0671.CB0087, 1495, CA0218			284
4/16/2002		6 to Coulston Foundation CB0500,CB0587,CA0002, CA0044,CB0409.CB0494		278
5/1/2002				278
5/10/2002			1141 Aaron	277
6/1/2002				277
6/10/2002			CA0022 Chuck	276
6/14/2002			CB0517 James	275
7/1/2002				275
8/1/2002				275
9/1/2002				275
9/16/2002			1396 Ashley	274
10/1/2002				274
11/1/2002				274
11/6/2002			1156 Alex	273
12/1/2002				273
12/30/2002			CA0147 Rex	272
1/1/2003				272
2/1/2003				272
3/1/2003				272
4/1/2003				272
5/1/2003			CB0376 Muna	271
5/21/2003				271
6/1/2003			1301 Wally	270
				270

Monthly Progress Report

Alamogordo Primate Facility
Holloman A.F.B., New Mexico
Contract Number N02-RR-1-209
October 2004

D. Rick Lee, D.V.M.
Director

Submitted to:
Kathleen Jarboe Marsden
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National Institutes of Health
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IV. Colony Census

There was one animal euthanized in October. Therefore, the colony has 260 chimpanzees.

Animal ID	Name	Sex	DOB	AVIS	PCV	PCV/HIV	PCV	Notes
1046	Hercules	M	1978/10/09		neg	neg	pos	2004/10/05 Euthanized due to severe hepatocellular carcinoma. Also had evidence of chronic interstitial nephritis and heart disease. Complete histology is pending.

The attached report reflects changes in the health status of the other colony members.

Monthly Progress Report

Alamogordo Primate Facility
Holloman A.F.B., New Mexico
September 2002

Dr. D. Rick Lee
Director

Submitted to:
Kathleen Jarboe Marsden
Contracting Officer
NHLBI
National Institutes of Health
Bethesda, Maryland 20892-2759

PROBLEM LIST

1. Clinical Case Load – Most of the animals in the colony are infected or exposed to HAV, HBV, HCV, or HIV. Many of them are also geriatric or have been housed in single cages for many years. Therefore, we have many chimpanzees that require extensive diagnostic evaluations. Several animals have chronic insidious diseases such as Amyloidosis or are chronic Hepatitis carriers. We currently have one clinician and one resident to handle the caseload. We are continuing to find medical conditions that have gone untreated for many years. Conditions such as Airsacculitis, Chronic Renal Failure, and Neoplasias continue to be discovered. We are recruiting another clinician to help with the caseload. See the Colony Census for complete details on health status and infectious state.
2. There was one animal that had a bone marrow dyscrasia that died in September. Animal # 1396 had a history of thrombocytopenia and a clotting problem. Her Thrombocytopenia was first identified 10 years ago, but no work-up was conducted until APF 2001. A bone marrow aspirate was performed earlier this year and a diagnosis of hematopoietic dysplastic syndrome was made. She was being treated for the condition and was stable. On 9/17/02, she was attacked by her cage mates and sustained a large laceration. Due to her condition she had very few platelets and was transferred to a sick care cage to be treated. Despite intensive care she died later that night. A complete necropsy was performed and several samples taken to confirm the cause of death and other medical conditions. At necropsy she had an abnormal mass near the left adrenal gland. Therefore, the Differential Diagnosis is: Myelophthistic leukemia, hematopoietic dysplastic syndrome or adrenal Neoplasia. A complete set of tissues was sent to Sublogwa for histopathology.
3. We have received notice from AAALAC that we are a "Fully Accredited Facility" and there were no "Suggestions for Improvement". We do need to know if NCCR will pay the annual fees directly or if CRL should have a purchase order. NIH paid the application fee.

ANNUAL REPORT
CONTRACT YEAR 2

Alamogordo Primate Facility
Holloman A.F.B., New Mexico
Contract Number N02-RR-1-209
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Director

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Bethesda, Maryland 20892-2759

2003

Infectious Status	Clean	HBV Carrier	HCV Carrier	HIV +	HIV+/HCV Carrier	TOTAL
Number	165	8	53	35	9	270
Percent	61	3	20	13	3	100

Veterinary Medicine: In order to provide the best quality of animal husbandry, health care and psychological well being, we will continue to develop and apply innovative husbandry techniques to improve the health and management of the colony. The medical management program will explore subclinical diseases and disorders. The biggest problem is chronic renal failure in the Hepatitis C Virus carrier population. It appears that cryoglobulinemia is more prevalent in our carriers than the human population. We will explore pharmaceutical and biological therapies available in the fields of genetic therapy, immunological diagnoses, and interferon/antiviral therapy. In addition to daily rounds of all animal dens, the veterinarians have a daily meeting with the colony manager and the behaviorist. The program is designed to improve the diagnostic capabilities and effective medical treatment for emerging diseases. Diagnostic tools include ultrasonography, fluoroscopy, radiography and endoscopy. We currently have one clinician and one resident to handle the caseload. With the addition of another clinician we should be able to diagnose and treat all of the cases with state of the art health care.

Cardiovascular disease: Several cardiac cases were evaluated on site by a cardiologist. Echocardiography was performed on 15 animals and their ECG's and radiographs were also reviewed. Four cases of cardiomyopathy were diagnosed. One was diagnosed as severe, congestive heart failure due to a prior ischemic event. The cardiologist recommended euthanasia if the animal does not respond to therapy. A multidrug regimen was initiated and the animal is responding very well to the treatment. The other cases were diagnosed as mitral valvular regurgitation with cardiac dilation. The conditions do not appear to be life threatening, but the animal will be closely monitored. We are working with the cardiologist to establish normal parameters for echocardiography in chimpanzees.

Mortality: With the addition of the animals from the Coulston Foundation, we obtained many animals that had been in single cages for quite some time. All of them have been through one year of extensive evaluation and quarantine. A few of the animals were in poor health and died after relocation to the APF facility. This year the APF had 7 deaths (2.5%) in the colony. Complete gross necropsies were performed and tissues were sent to CRL for histopathology. (See Appendix 4 for mortality details)

In-House Diagnostic Testing: We received approval from NIH to purchase a VetScan machine to perform the blood chemistries and a Hemascan to perform the hematology's. This equipment allows us to have our laboratory technician perform the analysis while the animal is sedated and obtain timely laboratory results and improve our diagnostic and therapeutic efficiency. We evaluated the accuracy of the testing methods by running in-house testing and also sent comparative samples to our regular diagnostic laboratory (i.e., ^{Subcontractor -} _{Dr. Pappas}). Thus far, all of the blood test results are similar between the two methods, except those parameters that are off from the delay in sample processing by ¹⁻² ₁₋₂ due to the shipping time.