Inside the Laboratories of UC Davis:

The Truth About primate Experimentation



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Introduction

Primate experimentation is an extremely controversial issue. Animal protectionists question both the moral and scientific basis of primate experimentation. Pro-experimentation organizations imply that medical science would come to a screeching halt without the use of primates.

However, the experimentation itself is not often discussed in any level of detail. The public does not know what is being discussed when these issues are raised because research facilities are not typically open to the casual visitor. Therefore taxpayers do not have any idea what their money is subsidizing. Is the research unique? Is it scientifically relevant? Is it conducted humanely? We do not know.

To answer these questions several research protocols from the University of California, Davis will be examined. The research projects will be examined from the point of view of scientific validity, animal treatment, and legality.

University of California, Davis/California Primate Research Center

Background Information

The University of California, Davis/California Primate Research Center is one of the largest primate research facilities in the United States. According to the website for the primate center http://www.crprc.ucdavis.edu/pages/about/overview.html the center houses/experiments on approximately 4000 primates per year.

The report filed with the United States Department of Agriculture/Animal & Plant Health Inspection Service lists the use of 4661 primates during the 2001 reporting year. Documentation filed with the National Institutes of Health (funding agency for the primate center) by the Primate Center indicate total primates passing through the facility to be roughly 4100 for the 2002 – 2003 reporting year. During this same reporting year the Primate Center brought \$81.1 million to the University of California through experimentation.

Researchers affiliated with the Primate Center/UC Davis perform experiments in many areas including virology, reproduction, neurobiology, drug addiction, etc. It would be beyond the scope of this report to examine all research at the facility. This report will examine experimentation in the area of neurobiology.

Reports filed by UC Davis with the USDA for the 2000 and 2001 reporting years list the use of 4987 (2000) and 4661 (2001) primates in experimentation. For a two year period 9648 primates were used in experimentation. However, according to UC Davis none of these animals experienced any pain or distress.

Primate Health Care at UC Davis/CPRC

Statistics filed in reports by the California Primate Research Center with the NIH are not conclusive. The methodology of these statistics does not allow for meaningful interpretation. Therefore, post-mortem records (obtained through public records request to the University of California) for 321 primates who died at the California primate Research Center will be the basis of assessing the health and treatment of the animals at CPRC.

This group of 321 primates died from January of 2001 through September 2001. 49 of these necropsies represented abortions/stillbirths. 21 represented neonatal deaths which were caused by everything from parental neglect to failure to thrive. 195 of the deaths were experimental in nature. 78 of the experimental deaths had little/no diagnostic work done because the animals were killed for tissue harvest. Therefore these 78 deaths will not figure into calculations regarding health matters. 56 adult primates died of non-experimental causes.

For statistical purposes this report will use a sampling of 173 non-infant primates who died of both experimental and non-experimental causes. Many causes of death were listed including: pneumonia, meningitis, encephalitis, colitis, bloat, etc. The most common findings in these documents were: colitis/gastritis/enteritis (63 or 36%), inanition/thin (59 or 34%), dehydration (34 or19.7%) and parasites (24 or 13.9%). Fully 1/3 of the primate deaths, of either or non-experimental causes involved gastro-intestinal tract disease.

The information would lead to several conclusions. While gastro-intestinal tract disease can have many causes, in captive animals – especially those who are subjected to unnatural conditions and/or experimentation – stress is a common cause. Additionally, 1/3 of these primates were allowed to reach an advanced state of debilitation marked by substantial loss of body mass (inanition/thin) and/or dehydration. Clearly, these animals are being allowed to reach an unacceptable level of deterioration. It is highly likely that these animals received inadequate care. Whatever the cause, at least 46 of the primates at CPRC suffered substantially as a result of their diseases – many of which were experimentally induced. However, according to the staff of UC Davis none of these animals (despite the severely debilitated conditions which were reached by these animals) experienced any pain or distress.

Experimentation at the UC Davis/CPRC

Many different types of experimentation are performed at UC Davis/CPRC. It would be impossible to discuss all of these varieties of projects. Therefore this report will focus on the area of neurobiology. Specifically, the studies discussed have been categorized by utilizing the NIH CRISP system. These 10 studies performed at UC Davis (See Appendix A)

The basic procedures, or parts of these procedures, are common to many of the experiments performed at UC Davis in the area of neurobiology. The scientists performing the experiments describe them best:

"The general methods are similar to those used in previous studies and will be described only briefly. Before recording, each monkey was equipped with a head post for restraint, a scleral search coil to monitor eye position, and a recording cylinder implanted over the occipital cortex to allow microelectrode access to area MT from a posterior direction, 20° above horizontal in a parasagittal plane. This equipment was secured to the skull using a dental acrylic implant, and this procedure was performed under deep surgical anesthesia. The monkeys were given at least 2 wk to recover from surgery before recording. For recording experiments, the monkeys were removed from their home cages and seated in a primate chair in front of the cathode ray tube (CRT) screen on which the stimuli were displayed. They were required to fixate within 0.75-1.2° of a small spot projected on the screen; no discrimination was required. Successfully completed fixation trials were rewarded with a drop of water or juice; broken fixations were followed by a brief time-out period." -- Kenneth H. Britten and William T.

NewsomeThe Journal of Neurophysiology Vol. 80 No. 2 August 1998, pp. 762-770

While this description may not allow the layman to picture this experimentation the photos should provide a technically accurate representation of these protocols.









These photos are not from the UC Davis. However, if they are examined and compared to the description of the protocol from the labs of UC Davis, it is clear that they accurately represent research at Davis. These are macaque monkeys, confined in primate restraint chairs. Bars for further restraint are attached to the skulls of these monkeys, and recording cylinders are attached to the skulls as well.

It is clear to even the casual observer that these animals must experience substantial pain/distress during this experimentation. Confinement to a restraint chair must be stressful for the macaque monkeys used in this category of experiments. Additionally, according to a research protocol obtained from UC Davis through the public records act of California, these animals are also deprived of water for substantial periods of the day. This document also states that these animals are singly housed. Social isolation is substantially stressful to primates, causing 10% of individually housed animals to begin to engage in self injurious behavior. These monkeys are also subjected to multiple survival surgeries as well as behavior modification techniques.

And again, despite confining these animals to restraint chairs, bolting devices to their skulls, depriving them of water, and socially isolating these macaque monkeys – according to officials at UC Davis – these monkeys experienced no pain or distress.

Conclusion

It is clear from the information presented in this report that all is not well within the laboratories of the University of California, Davis/California Primate Research Center. Based upon the primate health care records examined for this report it is clear that the monkeys within these labs are afflicted with serious pathological conditions which cause them substantial suffering. Apparently 1/3 of the monkeys who die at this facility are allowed to reach such an advanced state of disease that the laboratory's own staff refers to them as suffering from inanition and dehydration.

The experiments in which the primates at this facility are used are no less serious for them. Typical experiments deprive them of water, confine them to restraint chairs, and bolt devices to their skulls. Other protocols subject these animals to induced stress, brain lesions, seriously infectious diseases, etc.

Yet throughout all of these situations the staff of UC Davis have maintained in legally required reports that none of the 9648 animals who were subjected to experimentation during the 2000 – 2001 reporting years experienced any pain or distress. The only possible conclusion which can be drawn from this information is that officials at UC Davis have deliberately misled the public and have filed false and misleading reports with the United States Department of Agriculture.

Recommendations

- 1. Experiments at UC Davis which involve the use of primate restraint chairs, water deprivation, social isolation, and other stressful procedures be immediately terminated
- 2. The United States Department of Agriculture should investigate the UC Davis/California Primate Research Center for filing misleading reports, potentially violating environmental enhancement requirements for primates, and performing unnecessarily duplicative experiments.
- 3. Stop Animal Exploitation NOW! will obtain further documentation to perform a more extensive investigation of the experimentation and health care of primates at UC Davis/California Primate Research Center.
- 4. Federal Representatives/Senators should hold congressional hearings to investigate the Primate research Center System regarding the performance of experimentation which is duplicative, unnecessarily painful/stressful, as well as the examination of the system facilities for compliance with federal regulations.

Appendix A

NIH-Funded Experiments at UC Davis which study Neural Information Processing in Macaque Monkeys

5R01EY013458-02 RECANZONE, GREGG

MULTI-MODAL INTERACTIONS IN SPATIAL PERCEPTION

5R01MH041479-16

AMARAL, DAVID

ANATOMY OF THE PRIMATE AMYGDALOID COMPLEX

5R01NS016980-22

AMARAL, DAVID

FUNCTIONAL ORGANIZATION OF THE HIPPOCAMPAL FORMATION

5R01EY010562-09

BRITTEN, KENNETH

HIERARCHICAL PROCESSING IN THE MOTION SYSTEM

5R01EY013588-02

USREY, W

Functional Properties of Neural Circuits for Vision

5K01MH001902-03

GOTHARD, KATALIN

DIFFERENTIAL FACIAL ENCODING IN MONKEY AMYGDALOID NUCLEI

5F31MH012876-02

KELLY, JENNIFER

Projections from the amygdala to the cortex: an EM study

5R01NS035103-06

KRUBITZER, LEAH

SOMATOSENSORY CORTEX & THALAMUS

1F31DC005516-01

PETKOV, CHRISTOPHER

Neural Correlates of Auditory Fill-in

5F32DC000442-02

WOODS, TIMOTHY

SOUND SOURCE LOCALIZATION