

OFFICE OF THE PRESIDENT

CAMBRIDGE, MASSACHUSETTS 02139

January 19, 1989

Mr. Robert Healy
City Manager
City of Cambridge
795 Massachusetts Avenue
Cambridge, MA 02139

Dear Mr. Healy:

I write in response to your letter transmitting the City Council's Order of 1/9/89 relating to the death of four squirrel monkeys at MIT during last summer's heat wave. As requested, I enclose in addition copies of reports on this accident by John Moses, M.D., Chairman of the Committee on Animal Care, and Paul Barrett, Director of MIT's Department of Physical Plant.

The investigations underlying these reports concluded that the death of four squirrel monkeys on July 5, 1988, was the consequence of human error which occurred during a repair in the facility. Dr. Moses describes the circumstances in his enclosed memorandum. No experiments had been done or were being done at the time of the accident.

As a matter of standard operating procedure, all species of animals at MIT receive excellent veterinary care and laboratory oversight to ensure humane and compassionate treatment. Further, our animal facilities, including the one in the incident of last summer, are inspected by the MIT Animal Care Committee on a monthly basis. The USDA and the MSPCA, under the auspices of the Commonwealth of Massachusetts, also make a number of inspections each year.

In addition, new safeguards have been instituted, as outlined in the report of Mr. Barrett, which will reduce the possibility that such an accident might occur again.

Insofar as reporting is concerned, outside media and organizations, like the Cambridge Committee for Responsible Research, learned of the accident from the timely release of information initiated by MIT in our own public campus

newspaper, Tech Talk, published on July 13th.

In regard to the language of the Order describing the animals as "in isolation at MIT," I should note that while, as newly arrived animals they were in quarantine for purposes of health assessment, they were not isolated from one another.

As to the question in the Order of our concern for the "social and psychological well-being" of the monkeys at MIT, I would note further that there is an on-going effort at MIT to improve housing, increase diversion, and provide feeding procedures for monkeys which are more like those of the natural habitat.

Let me conclude by emphasizing that the accidental death of the four squirrel monkeys has created concern and sorrow among everyone involved in the unfortunate incident. Further, as the enclosed documents make clear, we have instituted measures to minimize the possibility of any recurrence in the future.

Sincerely,

A handwritten signature in cursive script, appearing to read "Walter".

Walter L. Milne
Assistant to the President



MIT ROOM
45-104

MASSACHUSETTS INSTITUTE OF TECHNOLOGY
COMMITTEE ON ANIMAL CARE
CAMBRIDGE, MASSACHUSETTS 02139

TELEPHONE
(617) 253-1757

MEMORANDUM OF THE CHAIRMAN
OF THE
COMMITTEE ON ANIMAL CARE
ON THE JULY 5 ACCIDENT

The death of four squirrel monkeys on July 5, 1988, as a consequence of the failure of the environmental control system in a facility in Building E20 was investigated by a Subcommittee of the Committee on Animal Care. That process included two site visits to inspect the facilities involved. The investigation led to the conclusion that the death of the monkeys was caused by excessive heat in the animal room involved, and that the cause of the failure of the environmental control system was the result of procedural error by a repair crew.

The facts were determined to be the following:

On July 5, 1988, an environmental monitoring device indicated a small rise in temperature in one room (herein designated "A") suggesting a problem in the environmental control system. This resulted in a prompt response by a repair crew. In the process of determining the cause of the rise in temperature, exploration of the air flow to other rooms was undertaken by transiently disrupting ventilation in each room in the general area.

Replacement of a defective valve in the system supplying air to the room (A), which showed the original faulty control, was successfully carried out and adequate environmental control was restored. However, the failure to re-establish the system which controlled the air supply to another room (B), after the system had been disrupted during the initial investigation of the building system, was inadvertently unnoticed and uncorrected.

As a consequence of that failure, uncooled heated air was emitted to the room (B) quartering 10 squirrel monkeys, four of which succumbed to heat exhaustion. Six other monkeys in the room, which were given first-aid and follow-up medical attention, survived. Although deliberate sabotage could not be absolutely excluded, this seemed very unlikely.

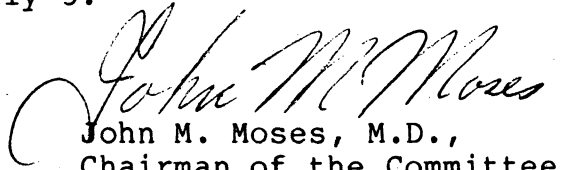
It was concluded that an error of oversight was responsible for the accident.

As a result of the investigation of the accident, several measures were taken to prevent any recurrence of this or any similar event. These measures included replacement of the existing environmental monitoring system with an improved temperature and humidity sensing system guided by a microprocessor; new labelling of air ducts to enhance rapid identification of air supply to individual rooms; and a policy change which requires the presence of personnel in all animal quarters throughout repair and maintenance unless automated surveillance systems are known to be constantly operative.

Two additional recommendations were made by the Subcommittee of the Committee on Animal Care:

- 1) That inquiry into the adequacy of smoke detection in Building E20 be made; and
- 2) That the Chairman of the Subcommittee interview the supervisor of the repair personnel involved in the July 5 event.

Both of these suggestions have also been carried out. Physical Plant has reviewed smoke detection equipment and found it adequate. The interview reaffirmed the absence of any malice in the event of July 5.


John M. Moses, M.D.,
Chairman of the Committee
on Animal Care



Massachusetts Institute of Technology
Department of Physical Plant
77 Massachusetts Avenue
Cambridge, Massachusetts 02139

October 13, 1988

Dr. John Moses, Chairman
Committee on Animal Care

Dear John:

I want to report to the Committee on the status of the Building E20 Animal Facility subsequent to the July incident which resulted in the death of several monkeys. The new microprocessor-based temperature and humidity sensing system is operational and feeding back a continuous report of animal space conditions to our Operations Center in Building E19. Values which fall outside proscribed limits will result in a computer generated alarm condition which will be responded to immediately by a radio dispatched mechanic as a standard procedure. In addition, we made an inspection of the mechanical and electrical equipment in the facility to ensure that all systems were complete and in good operating condition. Several minor deficiencies were identified and corrected.

Management staff and repair mechanics were involved in the review of the incident and the critical care requirements for animals were reaffirmed for all involved personnel.

In order to eliminate a condition that may have contributed to the incident, we have labeled the supply air ducts and devices in the mechanical room with individual animal room numbers.

While we can never guarantee absolute freedom from mechanical failure or human error, we believe that the E20 facility does have the operational reliability and support required for housing research animals.

Sincerely,

Paul F. Barrett
Director



CITY OF CAMBRIDGE

CAMBRIDGE, MASSACHUSETTS 02139

TEL. 498-9011

EXECUTIVE DEPARTMENT

ROBERT W. HEALY

City Manager

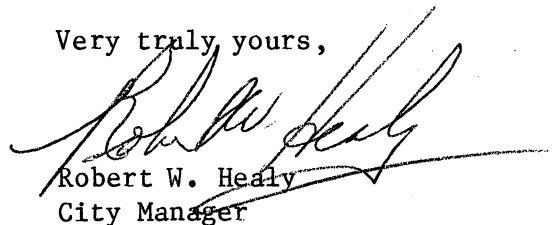
RICHARD C. ROSSI
Deputy City Manager

January 23, 1989

To the Honorable, the City Council:

With respect to Awaiting Report Item No. 28 relative to the care and use of primates at MIT and reports of any apparent laxity in care, enclosed please find copy of a report from Walter L. Milne, Assistant to the President at MIT.

Very truly yours,



Robert W. Healy
City Manager

RWH/mbf
Enc.

Agenda Item No. 18 S-49

Re: response to Awaiting Report Item 28 on
the care & use of primates at MIT.

In City Council,

January 23, 1989

1-23-89

Placed on file.