LABORATORY PRIMATE NEWSLETTER

Volume 4, Number 2
April, 1965

Edited by
Allan M. Schrier

with the assistance of $\label{eq:fred_state} Fred\ Stollnitz$

Consulting Editor: Morris L. Povar

Psychology Department
Brown University
Providence, Rhode Island

POLICY STATEMENT (Revised January, 1965)

The primary purpose of the <u>Newsletter</u> is to provide information on maintenance and procurement of nonhuman primates for laboratory studies. A secondary purpose is dissemination of general information about the world of primate research. Examples of the kind of practical information that would be useful are as follows: new drugs; novel aspects of cage design; new products; evaluations of various products; references to or short summaries of articles of general interest; experiences in connection with the procurement of monkeys. The <u>Newsletter</u> will also publish offers to exchange monkeys (for example, older monkeys for young or infant monkeys) and requests for monkeys with special characteristics (for example, good breeders or pregnant females). If someone has a special problem, he might want to request help through the Newsletter.

As a rule, only research articles or summaries which have some practical implications or which provide general information likely to be of interest to investigators in a variety of areas of primate research will be accepted for inclusion in the <u>Newsletter</u>. Descriptions of current research projects will also be welcome. It should be kept in mind that the <u>Newsletter</u> is not a formal publication and it is not likely to be obtainable in libraries. Therefore citation of <u>Newsletter</u> notes or articles in publications should be limited to special circumstances.

Information for the <u>Newsletter</u> will be welcome from anyone in any research area who is using monkeys or apes. The <u>Newsletter</u> will appear quarterly and will continue so long as people are interested enough to contribute items of information. The mailing list is open to anyone expressing an interest. There is no charge for new issues and back issues for the current year. Volumes 1 and 2 of the <u>Newsletter</u> may be purchased for \$2.00 per volume and Volume 3 for \$1.00. (Please make checks payable to Brown University.)

All correspondence concerning the Newsletter should be addressed to:
Allan M Schrier
Psychology Department
Brown University
Providence, Rhode Island 02912

Acknowledgment

The <u>Newsletter</u> is supported in part by U. S. Public Health Service Grant MH-07136 from the National Institute of Mental Health.

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Acknowledgment

The $\underline{\text{Newsletter}}$ is supported in part by U. S. Public Health Service Grant MH-07136 from the National Institute of Mental Health.

SOME EXPERIMENTAL COMPARISONS OF MACACA SPECIOSA AND MACACA MULATTA

David Symmes
Yale University School of Medicine

 $\begin{array}{c} \text{Kenneth V. Anderson} \\ \text{Department of Psychology, Brown University} \end{array} \mathbf{1}$

There is evidently a growing interest in the use of stump-tailed monkeys (Macaca speciosa) in behavioral research, an interest which is in part based on their alleged tameness or tractability. Little or no evidence is available on how these animals actually perform in various experimental situations. We would like to offer some data collected in two different laboratories which allow comparison of stump-tailed monkeys with the more familiar rhesus monkey (Macaca mulatta) with respect to pretraining and discrimination learning. Our experience with the animals in the matter of tameness and ease of handling has been at least as favorable as the Editor's (Editor's notes, Lab. primate Newsltr, 1965, [No. 1]), and generally confirms the original reports of Kling and Orbach (1963) and Orbach and Kling (1964).

During pretraining, <u>S</u>s were required to learn either a lever-pressing response or a panel-pressing response. Of 32 rhesus and 6 stump-tailed monkeys required to learn a lever-pressing response, all stump-tailed monkeys learned to press the lever spontaneously during the first session (all sessions were at least 30 minutes long), whereas only 2 rhesus pressed the lever during the first session. Even more striking, however, is that, of the remaining 30 rhesus monkeys, only 15 learned spontaneously within two to five additional sessions, while a shaping procedure had to be used with the others to facilitate the acquisition of the lever-pressing response. In the panel-pressing situation a similar marked difference between the species was seen. Nine of 11 stump-tailed monkeys learned spontaneously within two sessions (4 of the 9 in the first session), while only 4 of 20 rhesus learned spontaneously within two sessions (one in the first session).

There are two experiments from which formal learning data can be reported at present. One experiment involved the development of a discrimination between continuous white noise and white noise chopped 10 times per second, and the other involved a discrimination between continuous light and light flickering 10 times per second. All <u>S</u>s were trained with a go--no-go procedure (i.e., the positive and negative stimuli were presented alternately, rather than simultaneously), and CIBA banana-flavored pellets were used as the reinforcer. At the end of 500 trials on the auditory problem, the overall performance level of 7 stumptailed monkeys was 60% correct responses and of 14 rhesus monkeys was 61%. At the end of 1000 trials, 2 stump-tailed and 2 rhesus monkeys had

¹ Now at Yale University School of Medicine.

reached a criterion of 90 correct responses out of 100 consecutive trials, and at the end of 1500 trials, 3 stump-tailed and 5 rhesus monkeys had reached the criterion. Less comparative data is available on the visual discrimination, but the results again suggest equivalent learning ability. The mean number of trials to a criterion of 90 correct responses out of 100 consecutive trials was 784 for 17 rhesus monkeys while 3 stump-tailed monkeys required 380, 560, and 920 trials respectively.

On the basis of these limited data it would appear that the only important behavioral difference between the two species is the speed with which the Ss adapt to the experimental environment and complete pretraining. This would seem to be related to the differences in temperament noted by others and ourselves. Since stump-tailed monkeys are less excitable than rhesus monkeys the former might be expected to begin exploring a new environment more quickly, thereby facilitating the acquisition of responses often required of Ss in the pretraining phases of many types of experiments. Thus, in addition to greater tameness and ease of adjustment to restraining devices, a significant advantage in using stump-tailed monkeys would appear to exist in experiments where shaping procedures are inconvenient or ruled out on logical grounds.

References

Kling, A., & Orbach, J. The stump-tailed macaque: A promising laboratory primate. Science, 1963, 139, 45-46.

Orbach, J., & Kling, A. The stump-tailed macaque: A docile Asiatic monkey Anim. Behav., 1964, 12, 343-347.

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RARE PRIMATE BIRTHS AT CINCINNATI ZOO

The Cincinnati, Ohio, Zoological Gardens in 1964 saw the birth of two very rarely exhibited African primates, one of which is the first known captive breeding for the species. The yellow-bellied or crowned guenon Cercopithecus p. pogonias is a very colorful and well-marked member of the group known as the Mona Monkeys, since all are very closely related. A youngster was born on March 22 and, while it is still kept with the mother, is doing very well. This species is only seen at one other American zoo (the Houston Zoo) and there are no previous breeding records. Its parents are establishing longevity records for the species in captivity. The other form is the Sclater's spot-nosed monkey Cercopithecus sclateri, from Uganda. Fortunately the 1964 baby was a female, born on July 15, and the zoo now has a colony of four animals. This is a very large member of the spot-nose group, with a small spot above the nose and vivid white whiskers. A spectacled langur was born October 9, the first of its kind to be born at the Cincinnati Zoo.--From the January, 1965 issue of the Newsletter of the American Association of Zoological Parks and Aquariums.

ANNOUNCEMENT OF JOINT ZOOLOGICAL SOCIETY/WORLD HEALTH ORGANIZATION SYMPOSIUM
ON SOME RECENT DEVELOPMENTS IN COMPARATIVE MEDICINE

(1) The use of primates in medical research with special reference to cardiovascular disease and oncology. (2) The role of viruses in the aetiology of leukemia in man and other animals.

The Symposium, organized jointly by Professor W. I. B. Beveridge, on behalf of the World Health Organization, and R. N. T.-W.-Fiennes, on behalf of The Zoological Society of London, will be held in the Meeting Room of The Zoological Society of London, Regent's Park, London, N.W.1, on Tuesday and Wednesday, 15th and 16th June, 1965.

Rapporteurs: Professor E. Cotchin, Professor D. K. Detweiler, Dr. G. A. Gresham

Tuesday 15th June 1965

Morning Session

- 9:00 Introduction: Professor Sir Solly Zuckerman
 - Address--Dr. W. H. Eyestone: Scientific and administrative concepts behind the establishment of the U.S. Primate Centers
 - Primates in Medical Research (phylogeny, availability, husbandry, breeding, nutrition, and disease hazards of different primate species, and suitability of each for various research procedures)
 - Chairman, Dr. William Montagna; Deputy Chairman, Dr. John R. Napier
- 9:45 Gilbert Manley and F. Bourliere: Prosimians
- 10:30 Coffee
- 11:00 K. R. L. Hall: Cercopithecoidea--Theropithecus, Papio (baboons)
- 11:45 P. Eckstein and others: Other Cercopithecoidea (Old World monkeys)
- 12:15 E. M. Lang: Anthropoidea (apes)
- 12:45 Luncheon
- 2:00 Discussion to be opened by Dr. Thomas B. Clarkson who will give also a short paper on Cebidae and Hapalidae in medical research

Afternoon Session

- Chairman, Dr. Herbert L. Ratcliffe; Deputy Chairman, Dr. R. Finlayson
- 3:00 S. B. Andrus: South American monkeys (Cebidae) in medical research with especial reference to experimental cardiovascular disease
- 3:30 M. M. Vastesaeger and R. Delcourt: Some aspects of spontaneous and experimental cardiovascular disease in Old World primates and Pongidae
- 4:00 Tea
- 4:30 B. A. Lapin: Use of nonhuman primates in medical research
- 5:15 General discussion to be opened by Dr. G. A. Gresham
- 6.15 Meeting closes

Wednesday 16th June 1965

Morning Session

- Chairman, Professor Nikolai N. Blokhin (or representative); Deputy Chairman, Professor W. I. B. Beveridge
- 9:00 J. Spencer Munroe: Experimental oncology in primates
- 9:30 J. Moloney: The transmission of neoplasms by cell free material—a critical summary of the general position to date in Vertebrata
- 10:00 Frank J. Rauscher, Jr.: Recent developments in the transmission of neoplasms of the haemopoietic system in Vertebrata
- 10:45 Coffee
- 11:15 Ray M. Dutcher: Recent researches on the aetiology of bovine lympho-sarcoma
- 11:45 W. F. H. Jarrett: Recent researches on the aetiology of lymphosarcoma in cats
- 12:15 Discussion to be opened by (to be named):
- 1:15 Luncheon

Afternoon Session

Chairman, Sir Julian Huxley; Deputy Chairman, Dr. L. G. Goodwin

- 2:30 M. A. Epstein and A. D. Thomson: Experiments on the transmission of Burkitt's lymphoma to monkeys
- 3:00 R. N. T.-W.-Fiennes: The osteodystrophies of South American primates: soft organ lesions and their significance
- 3:30 Additional short papers by Dr. Margaret Kelly, Dr. Friedrich
 Deinhardt and others
- 4:30 Tea
- 5:00 Address and summary by Sir Christopher Andrewes
- 5:30 Discussion to be opened by Dr. Roger O'Gara
- 6:30 Meeting closes

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MONKEYS LOSE TAILS

Except for their tails, African monkeys romping experimentally in a forest outside Moscow have adapted themselves to Russia's wintry outdoor life by growing heavier fur and putting on weight, Soviet scientific researchers report. Tails, subject to frostbite, have to be amputated.--From The Providence Sunday Journal, February 14, 1965.

POLIO OUTBREAK AMONG PRIMATES AT YERKES PRIMATE CENTER*

In September 1964, Emory University requested assistance from the Communicable Disease Center in controlling an outbreak of paralytic polio among the animals at the Yerkes Primate Center, Orange Park, Florida.

The Primate Center houses 68 chimpanzees, 28 orangutans, 9 gorillas, and 105 monkeys--20 different species. These animals are used in behavioral psychology studies. The physical facilities at the Center include a complex of separate, scattered compounds and cages, housing from 1 to 17 animals per cage.

On July 17, 1964, Bandam, a 9-month-old gorilla arrived at the Center. On July 27, the animal became quadriplegic. Early in August, stool and throat swabs from this animal were sent to the Communicable Disease Center where poliovirus type I was isolated. Fourteen stool specimens from other animals housed in the nursery with the gorilla were sent to CDC; from five, poliovirus type I was isolated.

On September 6, a 4-year-old orangutan which had been at the Primate Center since 1962 became febrile and anorexic. Two days later, the animal became paraplegic. This animal was not housed in the nursery.

On September 14, 1964, another gorilla in the nursery developed a left hemiplegia. This animal had arrived at the Center on July 2, 1964. A lumbar puncture on this animal showed approximately 220 WBCs, predominantly lymphocytes and normal CSF chemistries.

Stool specimens were obtained from as many animals (or cage units when more than one animal occupies a cage) as possible, in an effort to determine the prevalence of poliovirus in the primate population. Also blood samples, throat swabs, and stool or rectal swabs were taken from all 14 occupants of the nursery where the first case appeared, and from 6 orangutans, 6 chimpanzees, and 8 monkeys of different species. Following the collection of samples, every animal at the Center, except the monkeys, was given two drops of oral polio vaccine, type I.

Stool samples were collected subsequently at 3, 7, and 12 days post vaccination. Convalescent sera will be obtained from those animals previously bled.

Dr. James Froeschle and Bayard Allmond, Virology Section, Laboratory Branch, Communicable Disease Center, participated in the investigation and reported that, to their knowledge, this is the first naturally occurring outbreak of poliomyelitis among large primates ever seen. Information regarding the use of oral poliomyelitis vaccine in gorillas and orangutans appears to be nonexistent.

^{*}From CDC Veterinary Public Health Notes, December, 1964 (Prepared by the Veterinary Public Health Secion of the Epidemiology Branch, Communicable Disease Center, Atlanta, Georgia.)

BIRTH OF A TALAPOIN REPORTED*

Emory's new and highly publicized baby monkey, Pepito, was born sometime during the night of Jan. 29-30, 1965, in the anatomy building. He is believed to be the first laboratory-bred talapoin monkey in the world. Talapoins are the smallest species of Old World monkeys. The birth indicates that attempts to breed a colony of talapoins for research purposes might be successful. Also, although talapoins are used principally for studies on behavior, the species is apparently immune to tuberculosis and might be used for scientific studies on TB.

Ten days after Pepito's birth, the tiny monkey was confronted with photographers and flash bulbs popping in his face--a nerve-wracking experience for any infant. Dr. W. C. Osman Hill, assoc. director of the primate center, was afraid the excitement might have damaging side effects. "But Pepito and his family are all doing fine," Dr. Osman Hill happily reports. There's no evidence of negative side effects.

Pepito has been developing rapidly since birth, about three times the rate of the common laboratory species, the rhesus. His rapid development may be due partially to his species. Since little is known about talapoins in laboratory conditions it's hard to say. But Dr. Osman Hill suspects Pepito's rapid development is at least partly individual. Baby monkeys normally cling to their mothers after birth for a couple of weeks. Pepito left his mother after about four days. His body was about three and one-half inches at birth and his tail was about six and one-half inches. By the end of February his body was about five inches. Pepito also cut his front teeth in about the middle of February. He's learned to hold and eat grapes by himself, learned to walk and climb and has made his first attempts at leaping.

Father monkeys often attack the child, especially if it is a male as in Pepito's case, because they view the baby as competition. This hasn't happened so far. Eventually the baby and his parents may have to be separated but Dr. Osman Hill doen't anticipate this for another couple of months.

Talapoins are green with yellowish markings. They have a black smudge on each cheek. Their natural habitat is among the humid mangrove swamps of West Africa where their small size and protective coloration make them relatively free from attack.

^{*}Excerpted from The Emory University Campus Report, 1965, 17
(No. 12). According to Dr. Osman Hill, the talapoin (Cercopithecus [Miopithecus] talapoin) has been previously bred only in the Zoological Gardens at Frankfurt, Germany, and Prague, Czechoslovakia.

THE REGIONAL PRIMATE RESEARCH CENTER AT THE UNIVERSITY OF WASHINGTON

Opening of the Regional Primate Research Center at the University of Washington in December was the midway point of the National Institutes of Health's construction of seven regional primate centers. The Center adds 40,000 square feet to the Health Sciences complex on the University's campus. It is expected to house 600 primates as its normal complement.

Theodore C. Ruch has resigned as Chairman of the Department of Physiology and Biophysics at the University of Washington to become Director of the Center. Dr. Ruch has been engaged in basic research with primates since 1932 when he worked with John Fulton at Yale in neurophysiological research. He is the author of the Bibliographia Primatologica and Diseases of the Laboratory Primate.

The main research efforts of the Center will involve the development and application of advanced instrumentation and utilization of the digital data acquisition system with computer analysis in the study of systems in the primate. Especial emphasis is placed on the cardiovascular and neural areas. Studies already underway include those of neural control of cardiovascular activity and behavior by physiological psychologist O. A. Smith, Jr., Assistant Director of the Center; the pathways of memory by Mitchell Glickstein; blood pressure and flow, utilizing ultrasonic flow meters and telemetry from unrestrained baboons, by Robert L. Van Citters; the integration of unit responses of neuron populations in the sensory and motor cortex, by Arnold L. Towe and R. W. Morse; and mother-infant and infant-peer social interactions by Gordon Jensen and Ruth A. Bobbitt.

Other general areas of research include lipid metabolism by John Glomset, neuro-endocrinology by Charles C. Gale, and viral disease studies by Thomas Grayston and San-pin Wang. The Information Center, which at present offers scientists a weekly list of Unverified Primate References and classified bibliographies on request, is an important function of the Center. It will soon computerize its reference files.

Dr. Annette Ehrlich from Northwestern University Medical School and Dr. Wang of Taiwan are the first visiting scientists at the new Center.

SEPARATION OF NEWBORN MACACA MULATTA FROM THEIR MOTHERS

A common method of separation of the newborn Macaca mulatta infant from the mother involves manual restraint of the mother while the infant is dislodged from her grasp. This is traumatic for all concerned, and in relatively inexperienced hands could result in injury to the offspring and possibly to the handlers. The following technique, used at the Primate Behavior Laboratory at Brown University, avoids the risk to offspring and handlers. The mother, with baby firmly clutched, is induced to enter a transfer cage with sliding doors at either end. The cage is then rotated so that one of the doors is on top. A woven, 8-gauge, 1-in.-mesh steel press that fits into the cage and has a 3-ft. handle is placed over the door and the door then removed. The press is slowly lowered until it rests firmly on the mother's back. She usually crouches over the infant, presenting her back to the press.

An injection of phenylcyclidine (Sernylan, Parke Davis & Co.), 0.5 mg/kg, administered through the mesh of the press into the muscular lumbar area or any muscular area presented, produces adequate tranquilization in approximately 10 minutes. Then the infant may be easily and safely removed while the mother dozes. The mother is usually fully recovered from this low dosage of tranquilizer within 2 hours. To date, six infants have been so removed, some within a few hours after birth.

Morris L. Povar Psychology Department Brown University Providence, R. I. 02912

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MORE INFORMATION ABOUT BIBLIOGRAPHIA PRIMATOLOGICA

When the <u>Bibliographia Primatologica</u> was mentioned in the January, 1965, issue of the <u>Laboratory Primate Newsletter</u>, details of size, price and scope were omitted; so the Historical Library at Yale University School of Medicine, supplier of the book, has received many reprint requests and queries for this information. To save time of both the <u>Library</u> and interested scientists, here are the specifics:

Ruch, Theodore C. <u>Bibliographia primatologica</u>. A classified bibliography of primates other than man. Part I. Anatomy, embryology and quantitative morphology; physiology, pharmacology and psychobiology; primate phylogeny and miscellanea, 1941, 241 pp., \$8.50.

This work contains nearly 5,000 references, dating from 500 B.C. to 1940. The references are cross classified by subject and annotated with respect to genera studied and the number of plates, figures, tables and references.

TARSIERS IN BORNEO

We have had considerable success in keeping tarsiers, brought in injured or astray because of new urban development. Housing them in a large aviary with infra-red light and growing bushes has facilitated continuous study of their movement, feeding and sexual behaviour.

Young and adults thrive on a protein diet, consisting primarily of small gecko lizards, which are abundant in town. But in a succession of pregnancies, the females have miscarried or have died during pregnancy. Veterinary analysis and cage observation have not indicated the causes, but we suspect that some glandular or other misfunction related to diet is involved. We feel that the pregnant female requires some special food ingredient for successful delivery. Over the years, we have tried such obvious additional foods as fresh milk and cereal grains without success. Very little material is available from the zoo experts, and the tarsiers sent to the U.S.A., Germany and elsewhere by us in recent years have all died within a relatively short period, except at the Max-Planck-Institut in Frankfurt, Germany, where they have not yet bred.

We will gratefully acknowledge any new information and advice on this subject.

Tom Harrisson Sarawak Museum Kuching, Sarawak

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INFORMATION ON PROSIMIANS IN CAPTIVITY SOUGHT

I am seeking information on the care and breeding of lorisoid and lemuroid primates in captivity in order to review their usefulness as laboratory animals.

I would be very glad to receive such information in the form of references to published work, reprints, or correspondence from workers who have successfully maintained these prosimians over long periods of time and, better still, bred them. Facts sought include, for example, proven diets, cage and house conditions, suitable temperature ranges, illumination, humidity, desirability of isolating pregnant females, and so on. In addition, any information on prosimian pathology would be very welcome.

Gilbert H. Manley Wellcome Institute of Comparative Physiology Zoological Society of London Regent's Park London, N.W.1.

Books

The baboon: An annotated bibliography. San Antonio, Texas: The Southwest Foundation for Research and Education, 1964.

This bibliography consists of 1,589 entries listed alphabetically. There are two indices, a subject index and a permuted index. The latter is an alphabetical listing of key words from article titles and descriptive words added by the bibliographers.

International zoo yearbook. Vol. V. Jarvis, Caroline (Ed.)

London: Zoological Society of London, 1964. (Order from:
Publications Dept., The Zoological Society of London, Regent's
Park, London N.W.1, England. Cost is \$15.00.)

As in the past, the Yearbook contains lists of all species of vertebrates bred by zoos and aquaria during the previous year (in each case the name of the zoo where the species was bred is given), a census of rare species in captivity in 1964 and a detailed list of the zoos of the world. New features include a survey of zoological research undertaken by zoos recently, a list of recent and planned zoo construction (more than 70 primate buildings are listed) and a subject index to Vols. 1-5 of the Yearbook.

Section 2, New Developments in the Zoo World, includes the following articles of interest to persons in the primate area: Breeding lion marmosets at Rio de Janeiro Zoo, Breeding the black-faced spider monkey at Dresden Zoo, Madagascan lemurs in captivity, Hapalidae in captivity, Red-backed saki at Cologne Zoo, Maintenance of facial coloration in the red uakari, Natural environment and behaviour of chimpanzees, Myocarditis and heart failure in the red uakari, Surgery for abdominal hernia in a pig-tailed macaque, Paraplegia in a male lowland gorilla, Tuberculosis in a zoo collection of great apes, Blood groups in apes, New monkey house at Frankfurt Zoo, New ape house at Manchester Zoo, New nocturnal house at Amsterdam Zoo.

Mammals of the world. Walker, E P. et al. Baltimore: The Johns Hopkins Press, 1964. 3 vols.

This series of volumes, sponsored by the New York Zoological Society, attempts to provide information on weight, size, form, coloration, behavioral characteristics, gestation, litter size, nutritional habits and range of every living genus of mammals. Each genus occupies about one page. Each entry is completed with a photograph of one or more representative of the genus. Volume I covers the mammals from the monotremes to pholidotes. Volume II runs from the lagomorphs to artiodactyls. Volume III is a classified bibliography, categorized within each

order by family and further broken down into such topics as anatomy, diseases, ecology, behavior, habits, taxonomy, etc. At the beginning of Volume I is a series of charts of the world distribution of mammals. These charts enable the reader to determine very easily and very quickly the general distribution over the earth's surface of the various genera of mammals.

Disease

- Naturally occurring arterial lesions in African monkeys. Strong, J. P., & Tappen, N. C. <u>Arch</u>. <u>Pathol</u>., 1965, <u>79</u>, 199.
- Riboflavin deficiency in baboons. Foy, H., Kondi, Athena, & Mbaya, V. (The Wellcome Trust Research Laboratories, Nairobi, Kenya) Brit. J. Nutr., 1964, 18, 307.
- Diagnosis and therapy of tuberculosis in monkeys. (In German)
 Trolldenier, H. (Inst. of Comp. Pathology, BerlinFriedrichfelde, Germany) Zbl. vet. Med., 1964, 11B, 337.

Physiology and Behavior

- The serum group specific component in non-human primates. Kitchin, F. D., & Bearn, A. G. Amer. J. hum. Genet., 1965, 17, 42.
- Learning abilities of New World monkeys. Polidora, V. J.

 (Wisconsin Regional Primate Research Center, Univer.

 Wisconsin, Madison, Wisconsin) Amer. J. phys. Anthropol.,

 1964, 22, 245.
- Studies on the behavior of captive tree shrews (<u>Tupaia glis</u>). Kaufmann, J. H. <u>Folia primatol</u>., 1965, <u>3</u>, 50.
- Prosimians' manipulation of simple object problems. Jolly, A. Anim. Behav., 1964, 12, 560.
- Auditory discrimination behavior of brain-damaged monkeys. Wegener, J. G. (Goshen Coll., Goshen, Indiana) J. aud. Res., 1964, 4, 227.

Techniques, Instruments, and Facilities

- Emulsification of liquid monkey food. Clark, F. C. <u>J. exp. Anal.</u>
 <u>Behav.</u>, 1965, <u>8</u>, 16.
- A description of a unique outdoor primate colony. Cooper, R. W. (Zoological Society of San Diego, San Diego, California)

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 Mackay, R. S. <u>Biomed</u>. <u>Sci</u>. <u>Instrum</u>., 1964, <u>2</u>, 275.
- The care and breeding of the rhesus monkey. Robinson, J. F. <u>J. Anim. Tech. Ass.</u>, 1964, <u>15</u>, 60.
- Problems in testing an adult male gorilla. Rumbaugh, D. M. (Dept. of Psychology, San Diego State Coll., San Diego, California) Zoonooz [Zoological Society of San Diego], 1965, 38, 10.

General

Progressive primate procurement. (Editorial) Roth, T. W. (3413 Turner Lane, Chevy Chase, Maryland) <u>Lab. anim.</u> Care, 1964, 14, 524.

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POSSIBLE RECORD CAPUCHIN MONKEY AT EVANSVILLE ZOO

Capuchin Monkeys, also known as ringtail and cebus monkeys, may be one of the longest living of the primates under captive conditions. No less than a dozen animals have live! in excess of 20 years, and several over 30. The record animal, of course, is Irish, the male hooded capuchin that died this year at San Diego after more than 37 years in that zoo. Director Frank Thompson of the Evansville, Indiana, Zoo has brought to our attention that his zoo now has on exhibit a white-faced capuchin (Cebus capucinus) that arrive! there in May of 1929. Unfortunately, like so many zoos, records are lacking for 100% written proof; however, investigation seems to indicate that it is very likely true. Thus "Jerry" (as the animal is called) has probably been at the zoo over 35 years.--From the February, 1965, issue of the Newsletter of the American Association of Zoological Parks and Aquariums.

ADDITIONS TO MAILING LIST

Dept. Lab. Animal Med. A.S.P.C.A. 441 East 92 St. New York, N.Y. 10028

Terrence R. Anthoney 1009 E. 57th St. Chicago, Ill. 60637

N. J. Barnstein Dept. of Physiology Univer. of California Berkeley, Calif. 94720

J. Bert
Lab. de Neurobiologie
Faculté Mixte de Médecine
et de Pharmacie
Université de Dakar
Dakar, Senegal

David W. Bessemer Regional Primate Res. Cen. 1223 Capitol Court The Univer. of Wisconsin Madison, Wisc. 53715

Bill C. Bullock
Dept. Lab. Animal Med.
The Bowman Gray
School of Medicine
Wake Forest College
Winston-Salem, N.C. 27103

Cappet Corporation 530 N. Henry St. Alexandria, Va. 22314 Att: O. Bjornstad

Charles F. Chesney
Primate Medicine Unit
Regional Primate Res. Cen.
The Univer. of Wisconsin
1223 Capitol Court
Madison, Wisconsin 53715

Russell M. Church Psychology Dept. Brown University Providence, R. I. 02912 Gregory B. Clarke Cardiovascular Inst. Michael Reese Hospital and Medical Center 29th St. and Ellis Ave. Chicago, Ill. 60616

Harold T. Cole Virus Research Section Building 60C Lederle Laboratories Pearl River, N.Y. 10965

Robert W. Cooper Primate Research Colony San Diego Zoological Garden P. O. Box 551 San Diego, Calif. 92112

Minnette L. Cowen 29979 Harvester Road Malibu, California

F. T. Crawford Florida State University Tallahassee, Fla. 32306

Joseph H. Davis
Div. Exp. Immunogenetics
& Oncology
Yerkes Reg. Primate
Res. Center
Atlanta, Georgia 30322

Daniel H. Efron Psychopharm. Serv. Cen. NIMH Nat. Inst. of Health Bethesda, Md. 20014

M. L. Feldman
Dept. of Psychology
Boston University
Charles River Campus
700 Commonwealth Ave.
Boston, Mass. 02115

N. B. Gale Griffith Park Zoo 4730 Crystal Springs Dr. Los Angeles 27, Calif.

Philip K. Gregory Western New York Animal Resources, Inc. 10 Boston Road Ontario, N. Y. 14519

Ross M. Grey
Inst. Comparative Med.
College of Physicians
& Surgeons
630 West 168th St. 18-425
New York, N. Y. 10032

William C. Hall Psychology Department Duke University Durham, N. C. 27706

Hardco Scientific Corp. 6811 Grace Avenue Cincinnati, Ohio 45227 Att: D. Steigerwald

Wm. K. Harris Dept. of Veterinary Sci. Univer. of Massachusetts Amherst, Mass. 01003

D. B. Helms 424 Grandview Dr. Edwardsville, Ill.

Arthur L. Hogge Animal Assessment Div. US Army Medical Unit Walter Reed Army Med. Cen. Fort Detrick, Maryland

Ralph L. Holloway, Jr. Dept. of Anthropology Schermerhorn Hall Columbia University New York, N. Y. 10027

Elton R. Homan Pharm. & Toxic. Sec. Lab. Med. & Biol. Sci. Robert A. Taft San. Eng. Cen. 4676 Columbia Parkway Cincinnati, Ohio 45226

Alison Jolly Box 340 Lusaka, Zambia

A. E. Jones Div. of Psychology US Army Med. Res. Lab. Fort Knox, Ky. 40121

Dennis D. Kelly Dept. Experimental Psychol. Walter Reed Army Institute of Research Washington, D. C. 20012

William F. Kleinsorge 360 Fairbrook Court Northville, Michigan

William A. Knapp, Jr. Morris Research Labs. 4000 Meriden Road Topeka, Kansas

A. V. Lacatena Bldg. 60B Rm. 119 Lederle Labs. Pearl River, N. Y. 10965

Robert Lavallee Psychology Dept. University of Vermont Burlington, Vt. 05401

Stan Lebedeff
Regional Primate
Research Center
Univer. of Washington
Seattle, Washington 98105

Thomas E. LeVere Lab. of Comp. & Physiol. Psychology The Ohio State University 1314 Kinnear Road Columbus, Ohio 43212

M. R. C. Laboratories Woodmansterne Road Carshalton Surrey, England Att: The Secretary

Nancy K. Mello Dept. of Psychiatry Mass. General Hospital Fruit Street Boston, Mass. 02114

Robert L. Miller 775 Mosby Woods Drive Apartment 146 Fairfax, Virginia

Thomas A. Miller Faculty of Vet. Science Univer. College Nairobi P. O. Kabete Kenya

Herbert L. Morton Normal Monkey Colony Bldg. 158 Lederle Laboratories Peark River, N.Y. 10965

NE Reg. Primate Res. Cen. Harvard University Medical School 25 Shattuck St. Boston, Mass. 02115 Att: Luis Melendez

J. T. Parer Oregon Regional Primate Research Center 505 N.W. 185th Ave. Beaverton, Oregon 97006 Penrose Research Lab. Philadelphia Zoological Garden 34th St. & Girard Ave. Philadelphia, Pa. 19104

Louis Plouvier Societe STIGMA 47 bis Rue de L'Aqueduc Montreuil (Seine) France

Martha Polson Psychology Dept. Indiana University Bloomington, Ind. 47405

Oscar W. Portman Oregon Reg. Primate Research Center 505 N.W. 185th Ave. Beaverton, Oregon 97006

John S. Robinson Sonoma State Hospital Eldridge, Calif. 95431

Gary R. Sampson 9918 Grover Street Omaha, Nebraska

Charles R. Short 343 E. Sycamore Columbus, Ohio 43206

Ronald Singer
Dept. of Anatomy
The Univer. of Chicago
1025 East 57th St.
Chicago, Illinois 60637

Moncrieff H. Smith, Jr. Dept. of Psychology University of Washington Seattle, Wash. 98105

Fred K. Soifer Bellaire Boulevard Animal Clinic 6213 Bellaire Blvd. Houston, Texas 77036 Clyde Stormont San Diego Zool. Garden P. O. Box 551 San Diego, Calif. 92112

Robert W. Sussman Dept. of Biology Los Angeles Valley College 5800 Fulton Ave. Van Nuys, California

Stanley Tabor
Animal Research Center
Parmenter Road
P. O. Box 302
Southborough, Mass.

Gilberto S. Treviño Dept. of Pathology U.S. Army Med. Res. Lab. Fort Knox, Kentucky 40121 Edward C. J. Urban
Dept. Industrial Med. & Hyg.
College of Medicine
Wayne State University
1401 Rivard Street
Detroit 7, Michigan

R. J. Vallancourt Bldg. 34A Lederle Laboratories Pearl River, N.Y. 10965

Jeannette Poole Ward Department of Psychology Vanderbilt University Nashville, Tenn. 37203

Robert A. Whitney, Jr. 1103 St. Matthews Ave. Columbus, Ohio 43204

ADDRESS CHANGES

Harry F. Harlow Reg. Primate Res. Cen. The Univer. of Wisconsin 1223 Capitol Court Madison, Wisc. 53715

Phyllis C. Jay Dept. of Anthropology Univer. of California Davis, California 95616

Richard A. Lende Subdept. Neurosurgery Albany Medical College Albany, New York

Donald E. McMillan Dept. of Pharmacology Harvard Medical School 25 Shattuck St. Boston, Mass. 02115 John A. Moore
Dept. of Surg. & Med.
College of Vet. Med.
Michigan State Univer.
E. Lansing, Michigan

John H. Peters Life Sciences Division Stanford Res. Institute Menlo Park, Calif. 94025

W. Lane-Petter Huntingdon Research Centre Cromwell House Huntingdon, England

James R. Pick
Lab. Animal Facility
Univer. of North Carolina
Medical School
Chapel Hill, N. C.

Richard L. Troelstrup 1790 Homestead Ave. Atlanta, Ga. 30306

Harry Waisman Univer. of Wisconsin Medical Center 1300 University Ave. Madison, Wisc. 53706 Mark W. Wolcott 1900 Columbia Pike Apartment 413 Arlington, Virginia

William C. Young Oregon Regional Primate Research Center 505 N.W. 185th Ave. Beaverton, Oregon 97006