REPORT OF THE DIRECTOR

TO THE FOUNDERS AND SUPPORTERS OF THE CORNELL RESEARCH LABORATORY FOR DISEASES OF DOGS

At the close of each fiscal year at the University, our annual report is prepared. It is written specifically for all of those persons whose interest and contributions make possible the research being carried out in the Laboratory. Their names are listed in the Acknowledgments section. Each one is sent a copy of this report as a means of expressing our appreciation.

Facilities

In our last annual report, the need for additional laboratory space was discussed. At that time, the Board of Trustees of Cornell University had authorized the preparation of preliminary drawings. During the past year, final plans have been approved and prepared for immediate construction of a 9,595 sq. ft. building. This new addition to the Institute will triple research space and permit an eventual increase of staff from 24 to 42 persons. With a completely modern and fully equipped building all phases of the disease process can be studied.

The frontispiece shows the architect's drawing of the appearance of the proposed new building. New equipment will require some $100,000, which has not yet been obtained, but total building costs have been secured. Application for one-half of the total cost of $348,400 was made to the National Institutes of Health, and, in accordance with their policy, the grant was approved for $174,200, with the provision that we secure matching funds from other sources. We have done this, with special help from General Richard K. Mellon, Mr. John M. Olin, Mr. and Mrs. Spencer T. Olin, Mr. and Mrs. A. Wells Peck, Mr. Edgar Monsanto Queeny and Mr. Robert Winthrop, whom we wish to thank for their aid.
Puppy Losses

Work in the Cornell Research Laboratory for Diseases of Dogs originally was concerned with losses caused by distemper, because at that time distemper was the major cause of death of dogs and there was much confusion from lack of knowledge. Infectious canine hepatitis and canine leptospirosis also were important. Now we are finding that the loss of puppies is far greater than had ever been suspected. Many either are aborted or die very shortly after they are born. During the past year, large numbers of abortions were brought to our attention. These had a similar pattern, although they had occurred in widely separated areas of the United States. From specimens brought to the Institute for analyses, the cause of this disease was found and it has been identified as a bacterium. Further intensive studies are being made.

This finding further expands our general study of the causes and prevention of abortions and puppy deaths. Canine herpesvirus, reported last year, now is beginning to be recognized in all parts of the country. Information has been widely circulated about this virus, and undoubtedly canine herpesvirus will prove to be one of the important causes of puppy losses. Consideration is being given to the advisability of vaccination. Ideally, a vaccine is introduced only when there is complete knowledge of its safety, potency, and usefulness.

A plate blood test for a Brucella in dogs, a cause of abortion. The stippling in the right hand drop of serum indicates a positive reaction. The homogenous drop on the left indicates a negative test.
Distemper

Last year, measles vaccines for puppies were introduced for general use by veterinarians in the control of distemper in puppies. As we have stressed in all previous reports, a measles vaccine, made specifically for puppies, has a useful place in prevention of distemper. Like any good vaccine, it must be properly made of the correct passage of virus, must be properly shipped, properly stored at all times, and properly given at the proper time—before exposure. Measles vaccine for puppies, suitably prepared, shipped, stored, and used, would be of great benefit in reducing losses from distemper during very early life.

Genetics of Antibody Production

At one period in the accumulation of knowledge about viruses, textbooks taught that any vaccination was expected to give permanent immunity, especially if a live virus vaccine was used. Now we realize that there is considerable variation in the duration of immunity. Some of our first studies showed that distinct breeds of dogs responded differently, and, now with more precise studies possible, individual variations within breeds can be noted. These appear to have an hereditary basis. Professors Robson and Hutt are making a study of this point that we hope will prove conclusive.

Hip Dysplasia

During the past year, the problem of hip dysplasia has been reviewed by an informal committee organized by Mr. John M. Olin. Professor Frederick Hutt, who joined the Institute staff last year as a consultant in genetics, suggested a breeding program based upon our present knowledge of genetics and hip dysplasia. Much time would be necessary, of course, to reduce incidence of this condition solely by a breeding program. In the new laboratory, an additional approach will be undertaken through study of the biochemistry of this disease. Although there is an hereditary tendency, the basic condition must result from abnormal biochemical changes that take place. Understanding the nature of these changes may lead to better diagnosis, and eventually, perhaps, to correction of this condition.
Normal hip joints of a mature dog.
Sub-luxation of hip joints in an 8½-months-old dog.
Normal Male Beagle (Leucocyte Culture) — 78 chromosomes
Female Beagle — Transmissible Venereal Tumor — only 53 chromosomes
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JAMES A. BAKER, B.S., M.S., Louisiana State University; D.V.M., Ph.D., Cornell. Professor of Virology and Director of the Institute.

BEN E. SHEFFY, B.S., M.S., Ph.D., Wisconsin. Caspary Professor of Nutrition and Assistant Director of the Institute. (On sabbatical leave July 1966-June 1967.)

Administration

DAWN L. ARTHUR, Bob Jones University. Departmental Secretary.

DUDLEY BAKER, (Mrs. James A. Baker), Louisiana State University. Editor of Publications. (Mrs. Baker was appointed to this position in 1951 and has served since that time without salary, as a personal contribution to the Institute.)


MARGARET HARDESTY, Bookkeeper.

FREDERICK B. HUTT, B.S.A., Toronto; M.S., Wisconsin; M.S., Manitoba; Ph.D., Manitoba; D.Sc., Edinburgh. (Professor Emeritus Animal Genetics), Genetics Consultant.

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HADLEY C. STEPHENSON, B.S., D.V.M., Cornell. (Professor Emeritus of Veterinary Therapeutics and Small Animal Diseases), Veterinary Consultant.

LINDA VANDERPOOL, B.A., Keuka. Secretary to the Director.

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CLARENCE CAPLE, Farmer.

GEORGE KIGER, Custodian.

MARK LYON, Technical Assistant.

ELDON MEAD, Mechanic.

CHARLES MUNCH, SR., Animal Technician. (Retired July 1, 1966.)

PAUL ORTON, Technical Assistant.

JAMES PETERSON, Animal Technician.

CARL SEARS, Experimentalist.

FRANK SEARS, Building Maintenance Supervisor.

GORDON SHAFFER, Animal Technician.

NICHOLAS SWADER, Animal Technician.

EDSON WHEELER, Senior Mechanic.
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FREDERICK ALLEN HINMAN, B.A., Ithaca College. Laboratory Technician.

Daynemouth Division (Provided by Colonel and Mrs. Lee Garnett Day):
MAX APPEL, D.V.M., University of Hannover. Graduate Student.
ESTHER GOWAN, Cornell. Laboratory Technician.

Distemper Evaluation Laboratory (Operating Funds Provided by the American Kennel Club):
LINDA JONES, Elmira; Mansfield. Laboratory Technician.
JOANN VANORMAN, Ithaca College. Laboratory Technician.

Giralda Division (Provided by Mrs. Geraldine Rockefeller Dodge):
FRANCES BARNES, A.A.S., Alfred. Laboratory Technician.
LELAND E. CARMICHAEL, A.B., D.V.M., California; Ph.D., Cornell. John M. Olin Professor of Virology.

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JAMES HOUSE, B.S., D.V.M., Cornell. Research Assistant.
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ELIZABETH WHEELER, Laboratory Assistant.
CARL WARD YOST, B.S., Syracuse. Laboratory Technician.

COOPERATING STAFF

(These veterinarians and scientists in various parts of the United States are contributing much time and effort, without compensation, in order to help secure necessary information on which to base programs for control of infectious diseases.)

DAVID BLUMENSTOCK, B.S., M.D., Cooperstown, New York.
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PUBLICATIONS FROM THE VETERINARY VIRUS RESEARCH INSTITUTE

Publications for the first ten years were listed in the Institute Report for 1960. Those for each following year were listed in its annual report. Papers published during the past year include the following:


IN APPRECIATION

We are grateful to all of our supporters whose interest and financial help make possible continued work in the Cornell Research Laboratory for Diseases of Dogs. We especially wish to thank the following for generous assistance, guidance, and support during past years and for grants-in-aid of future research: Colonel Lee Garnett Day, Mrs. Geraldine R. Dodge, Mr. John M. Olin, Mr. and Mrs. Spencer T. Olin, and Mr. and Mrs. A. Wells Peck.

Mr. Richard Tift has volunteered much time and effort to the collection of funds for the laboratory.

The American Kennel Club has continued generous support for the Distemper Evaluation Laboratory of the Cornell Research Laboratory for Diseases of Dogs.

A number of our supporters are amongst those who helped initiate the laboratory and have been constant in their support. When the laboratory began, the opinion was expressed that dog food companies should be a major factor in providing support, and some have done so consistently and notably, especially Agway, Inc. (formerly GLF), Calo Pet Food, Gaines Dog Research Center, Hill Packing, Lewis Food, Quaker Oats, Standard Brands, Inc., and Western Grain. The men directing these companies feel that they have an obligation to improve the health of dogs by supporting the basic research done here.
ACKNOWLEDGMENTS

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