This report honors those whose generosity sustains the Institute's independence and commitment to excellence and the pursuit of truth.
We enter 1984 as a leaner and stronger institution.
A Message from the Director

Nineteen eighty-three was a year of significant accomplishments for the Baker Institute. New advances were made in both basic research and studies of diseases of dogs and horses. The full dimensions become apparent when one considers the background against which those results were attained.

The impact of the recent recession was felt early in the year. Budget constraints obliged us to make further economies in our operations. Our electron microscopy laboratory was closed, and a number of capital improvement and maintenance projects were deferred. But our fortunes improved as the year progressed. New program support was provided by industry and the federal government, and recent investments in our facilities were rewarded in significant advances in research.

Much of our income for sponsored research is provided by grants and contracts. Our major sponsor is the National Institutes of Health. We also do research for the United States Department of Agriculture, foundations, associations, and other agencies that have an interest in animal health. Still other income for research is provided by gifts from individuals and dog clubs and by monies received by New York State through the dog license program. Of the amount collected for each license, ten cents is allocated to the Institute for health research. Although the license monies constitute only a small portion of the Institute's total operating income, they have contributed greatly to the health of the dog population. The Institute's role in developing vaccines for distemper, hepatitis, and parvovirus alone has saved countless lives and alleviated much suffering.

The American Kennel Club received the Arthur F. North, Jr., Canine Service Award this year. The award is made each year by the Institute to an individual or organiza-
We have a well-equipped facility and a dedicated staff.
tion that has contributed in an extraordinary way to the improvement of the health and well-being of dogs. As recipient of the North Award, the AKC was cited for its contributions to purebred dogs and responsible dog ownership and its sponsorship of canine health research. We value our association with the AKC and its member clubs, and with the many individuals whose generosity has sustained the Baker Institute for more than three decades.

Our new programs in equine medicine received further impetus this year with the performance of the first successful equine embryo transplants at Cornell. The significance of that achievement is discussed elsewhere in this report. I mention it here because the embryo studies illustrate how our staff members are applying new techniques to the analysis of health problems. The opportunities are many, and the Institute intends to vigorously pursue research using embryo transplantation and other technological advances that hold promise for the future.

We enter 1984 as a leaner and stronger institution, resolute in our commitment to excellence and confident that our efforts will be rewarded in new insights into the nature of animal diseases and better methods for their treatment and prevention. Our optimism is firmly rooted in the knowledge that we have a modern, well-equipped facility, a dedicated staff of gifted men and women, a superbly capable advisory council, and a growing number of concerned benefactors. An institution like ours could wish for no finer assets.

Douglas D. McGregor
Director
Staff of the Baker Institute

Administration

Douglas D. McGregor, director: B.A., M.D., University of Western Ontario; D.Phil., Oxford University
Susan H. Hamlin, administrative manager: B.S., Elmira College
Kim T. Arcangeli, accounts assistant
Carlene M. Campbell, office assistant
Nancy D. Combs, accounts coordinator
Anita S. Hesser, secretary
Florence C. Huth, administrative aide
Ann W. Signore, administrative aide: Cornell

Giralda Laboratory for Canine Infectious Diseases

Leland E. Carmichael, John M. Olin Professor of Virology: A.B., D.V.M., University of California; Ph.D., Cornell
Roy V. H. Pollock, assistant professor of microbiology: B.A., Williams College; D.V.M., Ph.D., Cornell
Colin R. Parrish, graduate research assistant: B.Sc., Massey University
Jean C. Joubert, research technician
Priscilla H. O’Connell, laboratory technician: C.L.A., A.S.C.P.

Daynemouth Laboratory for Canine Nutrition

Ben E. Sheffy, Caspary Professor of Nutrition: B.S., M.S., Ph.D., University of Wisconsin
Alma J. Williams, research technician: B.A., University of Pennsylvania; M.S., Cornell; AALAS accreditation

John M. Olin Laboratory for the Study of Canine Hip Dysplasia

George Lust, professor of physiological chemistry: B.S., University of Massachusetts; Ph.D., Cornell
Nancy B. Wurster, research associate: B.A., M.S., Ph.D., New York University
Susan J. Harter, laboratory technician: B.S., Lock Haven State College

Hadley C. Stephenson Laboratory for the Study of Canine Diseases

Max J. G. Appel, professor of virology: Dr.med.vet., University of Hannover; Ph.D., Cornell
William J. Mitchell, Jr., graduate research assistant: D.V.M., Auburn University
Ching-chung Sheu, graduate research assistant: D.V.M., National Taiwan University; M.S., Taiwan University
Mary Beth Metzgar, research technician: University of Evansville

Donnelley Laboratory of Immunochemistry

Judith Ann Appleton, research associate: B.S., Indiana University; M.S., Ph.D., University of Georgia
Melissa C. Woan, research associate: B.Ed., Taiwan Normal University; M.S., Ph.D., University of Illinois
Daniel H. Sajewski, graduate research assistant: B.A., Cornell
Lori S. Best, laboratory technician: B.S., Elmira College
Kristie E. Schmidt, laboratory technician: B.A., University of California, Santa Cruz
Laura M. Stenzler, laboratory technician: A.A.S., State University of New York Agricultural and Technical College, Delhi; B.S., Cornell

Oswald R. Jones Laboratory of Immunology
Robin G. Bell, assistant professor of immunology: B.Sc., Australian National University; Ph.D., John Curtin School of Medical Research
Ching-hua Wang, graduate research assistant: M.D., Peking Medical School
Lincoln S. Adams, research technician: B.S., Hobart College; AALAS accreditation
Cheryl S. DiDomenico, laboratory technician: B.S., Middle Tennessee State University
Ralph W. Ogden, laboratory technician: B.S., University of Maine

Immunogenetics Laboratory
Douglas F. Antczak, assistant professor of immunology: B.A., Cornell; V.M.D., University of Pennsylvania; Ph.D., Cambridge University
Anne L. Crump, graduate research assistant: B.A., Mount Holyoke College
Christopher J. Davies, graduate research assistant: B.S., D.V.M., Cornell
Jane M. Miller, laboratory technician: B.S., Cornell
Jeannette C. Poleman, laboratory technician: B.A., Cornell

Colgate Tissue Culture Laboratory
Stephanie M. Oberhaus, laboratory technician: B.A., Goucher College

Glassware Department
Jeannette R. Carney, laboratory attendant
Rodney R. Riker, laboratory attendant

Animal Care
Charles B. Bailor, animal technician
Roy L. Barriere, animal technician: AALAS accreditation
Bernard L. Clark, animal technician
Raymond M. Combs, animal technician
Raymond J. Corey, animal technician: A.A.S., State University of New York Agricultural and Technical College, Delhi; AALAS accreditation
James C. Hardy, animal technician: B.S., Cornell; AALAS accreditation
Laura A. Michel, animal technician: A.A.S., State University of New York Agricultural and Technical College, Farmingdale; B.S., Cornell; AALAS accreditation
Anastasia E. Newell, animal technician
Gerald G. Rice II, animal technician

Maintenance
Edson Wheeler, Jr., maintenance supervisor
Arthur D. Howser, maintenance mechanic
Gerald G. Rice, vehicle mechanic
We are addressing the complex problems of viral pathogenesis and genetics.
Work in our laboratories continues to focus on canine parvovirus (CPV) and canine brucellosis caused by *Brucella canis*. Although we maintain a strong commitment to questions of concern to veterinarians and dog breeders, we have extended our work to address the more complex problems of viral pathogenesis and genetics. Contemporary methods of molecular biology are being applied to CPV, as well as to the closely related parvoviruses that cause disease in cats and mink. We are also making progress in developing reliable methods to identify dogs that have been infected with *Brucella canis*.

Research during the past year led to several discoveries important to understanding the natural history of CPV infection and the reasons for immunization failures. Previous work defined the critical period in the life of a pup during which maternal antibodies are still high enough to block responses to CPV vaccines, but are too low to prevent infection by virulent virus. That period has been shown to extend as long as five months in pups born to bitches that suffered infection during the previous year. The phenomenon underscores the importance of kennel management in controlling CPV disease. Pups must be isolated from CPV until they reach the age when they can be successfully immunized.

Another critical factor in the control of CPV is the availability of effective vaccines. We found that several commercial vaccines failed to immunize young dogs in which maternal hemagglutination-inhibiting antibody titers were very low (≤1:10). A number of the dogs were nearly nineteen weeks old at the time of vaccination. Their poor response was unexpected, because an experimental attenuated living CPV vaccine (A-CPV) prepared in our laboratory successfully immunized more than 60 percent of pups with similar, or even higher, antibody titers. Further study revealed differences in the biological characteristics of the vaccine virus strains and different amounts of virus in the four lots tested. When a variant virus population predominated, the minimal immunizing dose of the vaccine was a thousand times greater than a vaccine containing only the original seed virus.

Study of the CPV variants in attenuated live virus vaccine stocks and those variants that develop after growth in cell cultures is a principal focus of current research. Such variants were anticipated, for earlier studies revealed the emergence of variant viral populations in an experimental A-CPV when the virus was propagated in feline or mink cells.

We are also exploring the possibility that CPV can suppress the immune system, rendering infected dogs vulnerable to other infectious agents. Preliminary experiments in disease-free dogs given virulent CPV indicated only a slight and transient (one-day) decrease in cell-mediated immunity, as measured by lymphocyte blastogenesis. Responses were normal in littermates given high doses of CPV vaccine. Further studies using different tests of immune function are in progress.
Perhaps CPV renders infected dogs vulnerable to other infectious agents.
Studies of CPV and the closely related feline panleukopenia virus (FPV) and mink enteritis virus (MEV) were continued. The three viruses are being compared with respect to their host range, antigenic structure, and capacity to cause disease. Biochemical, molecular biological, and immunological methods are being used to identify and define the properties of those viruses that account for differences in their host range and pathogenicity. CPV, FPV, MEV, and a closely related virus of raccoons were distinguished by a panel of monoclonal antibodies. A significant finding was the antigenic variation observed both within and between the parvoviruses of each species. Although natural isolates of CPV were similar, MEV isolates could be grouped into three antigenic types. Analysis of the variant parvoviruses revealed that the surface of the virions contain at least two determinants, each comprising many different but overlapping epitopes.

Several recombinant and mutant strains of CPV and FPV have been prepared. They will be used to determine the roles of the viral genes and structural components of the virus in the viral replication cycle in cell cultures and in their respective animal hosts and to map DNA sequences that code for expressed antigenic and host-range differences. Similar methods are being used to analyze the extent of natural variation among isolates of the various parvoviruses.

The above studies are steps toward our long-term objective of defining the mechanisms by which these small, simple viruses vary in host range, pathogenicity, antigenic type, and virulence.

*Leland E. Carmichael*
Overfeeding and obesity are increasingly common problems in dogs.
We reported last year that cellular responses were less in old dogs than in young adult dogs, and that the in vitro proliferative capacity of lymphocytes of old dogs was significantly stimulated by the addition of vitamin E and selenium to the cultivation medium. Studies now completed tested whether such responses could be stimulated by increasing old dogs' dietary vitamin E and selenium intake levels above those recommended by the National Research Council. No clear evidence for recommending such supplementation was found.

Past research established that when amino acid requirements for early growth are met, dogs require only thirty grams of protein per thousand calories of metabolizable energy (ME) consumed. Our current studies, conducted over the entire growth period from weaning to early adulthood, and using the average growth rate for the breed as the principal criteria of sufficiency, confirmed that minimum requirement. Comparisons of average synthesis and growth of red blood cells (RBC), demonstrated by packed cell volume, hemoglobin values, and total serum protein, also confirmed the protein requirement.

That requirement represents about 12.8-percent protein content in a diet supplying 4.0 calories of ME per gram of food. Since the average commercial dry dog food supplies about 3.5 calories of ME per gram, only 11.2 percent of protein is needed if the protein is of a quality equivalent to that of whole egg. If the protein is of a quality similar to that in commercial foods today, namely 80 percent of egg protein, then 14 percent would be required.

Rate of growth and level of RBC production were greater when the amino acid content of the food was increased by 30 percent, to a level equivalent to 16.6-percent protein. That corresponds to a present-day commercial dry dog food containing about 18-percent protein.

The significance of the faster growth rate and increased hemoglobin level on the health and well-being of dogs during growth and in later life remains to be shown. Earlier studies at Cornell demonstrated that maximal size for age resulting from a nutritionally induced rapid growth rate was not conducive to good skeletal development. Great Danes as well as Labrador Retrievers fed to achieve maximal growth rates developed anatomical changes similar to hypertrophic osteodystrophy and other early signs of skeletal degenerative disease. Additionally, among dogs with high parental frequency of hip dysplasia, those fed to increase the growth rate developed more severe disease at earlier ages than littermates fed to achieve only average growth rate for their breed.

Thus it seems the protein content of commercial dog foods may be significantly lowered, particularly if the protein quality is improved. Those changes, both in foods for growing dogs and foods for dogs at maintenance, should result in greater feeding efficiency without adverse effect. There are of course stress situations where greater protein intake is beneficial, such as after infection or surgery or during strenuous work.

Overfeeding and resulting obesity are increasingly common problems in dogs. We investigated the potential use of "starch blockers" to decrease digestibility of commercial dog foods and thus reduce energy intake of dogs. Addition of starch blockers to dog food at levels recommended for humans had no adverse effect on gastrointestinal function or stool form. Nor did it depress digestibility of the carbohydrates in the food. Total energy available was unchanged. Weight loss, it appears, can result only from a reduction of caloric intake and an increase in exercise. Dogs are no different from their masters.

Ben E. Sheffy
There is more fibronectin in the cartilage and synovial fluid of osteoarthritic joints.
A new observation of some importance was made in our studies of osteoarthritis and hip dysplasia in dogs. There is more of the protein fibronectin in the cartilage and synovial fluid of osteoarthritic joints than normal joints. The accompanying table shows the average values (and the ranges) for cartilage and synovial fluid samples obtained from normal and osteoarthritic hip joints.

**Fibronectin Content of Cartilage and Synovial Fluid**

<table>
<thead>
<tr>
<th></th>
<th>Cartilage (µg/mg)</th>
<th>Synovial Fluid (µg/ml)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disease-free joints</td>
<td>0.07 (0–0.10)</td>
<td>99 (70–146)</td>
</tr>
<tr>
<td>Osteoarthritic joints</td>
<td>3.19 (0.60–7.01)</td>
<td>206 (84–460)</td>
</tr>
</tbody>
</table>

Fibronectin is a normal constituent of the blood and many tissues. It is thought to have a variety of biological functions. Although we do not yet know why there is more fibronectin in osteoarthritic joints, it is tempting to speculate that the protein is involved in some way in the degenerative process. In any case, its presence in increased amounts in cartilage and synovial fluid is an objective indicator of joint disease. On the basis of those findings, we are evaluating the possibility that fibronectin levels in joint fluid can be used to monitor the effects of drugs and procedures whose purpose is to arrest or slow the osteoarthritic process.

We are currently investigating the origin of the fibronectin in the synovial fluid of diseased joints. Is it formed in the cartilage or derived from the blood? The protein is produced in the cartilage of osteoarthritic joints five times faster than in disease-free cartilage. That finding suggests that at least some of the fibronectin in synovial fluid originates in the cartilage.

We also want to determine the biochemical composition of the fibronectins in cartilage and in blood. A difference between those proteins could provide the basis for a diagnostic test of osteoarthritis in dogs.

*George Lust*
The result of our studies should be a better CDV vaccine.
Vaccines for the prevention of viral diseases are often the product of many years of careful study and testing. A major objective is to identify constituents of viruses capable of inducing an immune response that protects against infection. This year we undertook such a study of canine distemper virus (CDV). We immunized dogs with an antibody to a single CDV antigen and demonstrated that those animals were protected against distemper. We are continuing our analysis by determining how much antibody is required to confer protection, when during the course of infection an injection of the antibody can modify disease, and whether immunity to CDV can be generated by antibodies to other antigenic constituents of the virus. The result of our studies should be a better CDV vaccine.

Vaccination of some carnivores—for example, red pandas, black-footed ferrets, and kinkajous—with modified live CDV vaccine can result in fatal infections. We have provided the National Zoo in Washington with inactivated CDV vaccine for those species.

We found that cell-mediated immunity is a reliable indicator of the course of a CDV infection. Dogs that develop acute encephalitis usually have little or no cell-mediated immunity, whereas those that recover from a CDV infection have the highest levels. Reduction, or delay in the onset, of cell-mediated immunity is often associated with persistent infection by CDV.

We continued our research on how CDV causes persistent infection and brain disease in dogs. In cooperation with Dr. Brian Summers, from the Department of Pathology, we demonstrated that chronically infected dogs harbor CDV in uveal tissue of the eye. Inflammation of the uvea, or uveitis, is often a feature of multiple sclerosis, a pathologically similar disease in human beings. Our finding has encouraged others to search for a viral cause of multiple sclerosis in the uveal tissue of patients.

Dr. Summers and Dr. Jeffrey Mitchell demonstrated that certain cells of the brain, called astrocytes, can be infected with a strain of CDV known to cause persistent infection. The virus persisted in astrocyte cultures for several weeks without causing cell death. That finding may explain how CDV can continue to exist in the brain after it has been eliminated from most tissues.

Interferon has attracted much attention because of its potential use in treating viral infections and cancer. Efforts to identify a nontoxic inducer of interferon have been frustrated because repeated administration of interferon inducers results in progressively feeble responses. We studied that phenomenon in dogs and found that macrophages and their secretions inhibit interferon induction.

We continued our studies of infectious diarrhea in dogs. Canine parvovirus and canine coronavirus are the most frequent causes of that disease. However, we demonstrated that canine rotavirus can cause a mild infection and diarrhea in newborn susceptible laboratory dogs. Further studies will be required to ascertain the significance of rotavirus infection as a cause of diarrhea among dogs reared in conventional kennels or as house pets.

Max J. G. Appel
Milk confers on suckling animals a powerful protection against infection.
Recovery from infection with *Listeria monocytogenes* (LM) depends on the host’s cellular immune response to antigens of that bacterium. Our studies point to thymus-dependent lymphocytes, or T cells, as the mediators of host resistance to LM. During the past year we demonstrated that the protective activity is a property of a subset of T cells. That subset was identified by monoclonal antibodies. We were able to maintain LM-protective cells in culture for a time by repeatedly stimulating the cells with LM antigens. However, the cultured cells eventually lost their ability to protect normal animals against an LM infection. We are now investigating whether the LM-responsive cells from such long-term cultures can regulate the immune response to infection.

We have also been studying the immunity transferred to suckling animals in their mother’s milk. We found that young rats born to and suckled by rats infected with the parasite *Trichinella spiralis* are protected from infection with that parasite. We know that the protection is conferred by a component of the milk, because rats born to infected rats but suckled by uninfected rats are susceptible to the infection. The protection conferred by milk is capable of eliminating 95 percent of a challenge dose within just a few hours.

It appears that antibodies from the blood of the mother rats can provide the same protection when fed to suckling rats. That finding confirms that antibodies in milk protect suckling rats from infection with *Trichinella spiralis*, underscoring the importance of mothers’ milk to the health of young animals and human beings.

*Melissa C. Woan*

*Judith A. Appleton*
Our experiments show a complex interaction between different parasites.
Our laboratory remains committed to a basic biological and immunological analysis of the relationship between hosts and parasites, particularly intestinal helminths.

During the past year we introduced a new parasite, *Trypanosoma musculi*, into our studies. That parasite is related to the trypanosomes that cause sleeping sickness and Chagas' disease in human beings and to the trypanosomes that prevent effective utilization by cattle of large segments of prime grazing land in Africa. The economic and human costs are enormous. We are examining the basic host-parasite interaction, thereby increasing our understanding of trypanosomal infections of animals and human beings. We are also examining the effects on the host and parasite of two concurrent infections—with the intestinal nematode *Trichinella spiralis* and with the trypanosome.

Since many individuals in natural populations harbor parasites of several different species, it is important to know how those parasites influence the host and each other. Some parasites impair the host's ability to respond immunologically to other infectious agents. Immunosuppression can occur even when the primary infection is not apparent.

Our experiments show a complex interaction between different parasites. The outcome of infection is influenced by the species of parasites, the timing of the infection, and the genotype of the host. The results have important implications for the control of infections in natural environments. We are also learning about the evolution of resistance in animal and human populations in circumstances where multiple infections are common.

Our continuing studies of the genetics of resistance to *Trichinella spiralis* have disclosed that the major determinants of intestinal rejection are genes that are not linked to the major histocompatibility complex. We have identified three patterns of worm expulsion in mice: strong, intermediate, and weak. Each type is genetically heterogeneous. Furthermore, the pattern can vary depending on the infectious dose of worms. Those results disclosed an unsuspected diversity in the genome of the mouse, implying that there are several distinct processes or targets of worm expulsion. Experiments now under way are directed at determining the number of genes involved. We also want to map the chromosomal location of those genes through classical linkage studies.

*Robin G. Bell*
We are studying the relationship between equine histocompatibility antigens and pregnancy.
We have established a comprehensive program for long-term genetic investigations of the horse, of both theoretical and practical interest. The research is designed to provide fundamental knowledge of the genetic control of immune responses in the horse and to produce an immunogenetic testing service for the equine industry in New York State. We have concentrated on studies of the equine lymphocyte antigens (ELAs), which are probably the major histocompatibility complex (MHC) molecules of the horse. The MHC controls a number of immune responses in both animals and human beings. Of particular importance during the past year were our studies of the relationship between equine histocompatibility antigens and pregnancy.

In 1981 our laboratory organized the First International Workshop on Lymphocyte Alloantigens of the Horse. A second workshop on the subject was held in Ithaca last year. Both were funded by the Dorothy Russell Havemeyer Foundation. The workshops defined ten ELAs. Antisera prepared in our laboratory can define all those ELAs and five others, as well as the ITH-12 antigen, which is not linked to the ELA region.

Six new monoclonal antibodies to equine lymphocyte antigens were produced by cell hybridization. Those antibodies recognize at least three different molecules. One of the molecules represents a new genetic marker for horse lymphocytes. The new marker will add to the discriminating capacity of the conventional typing sera.

For the third year in a row we performed ELA typing on yearlings from a large standardbred farm in New York State. The aim of the service is to confirm the pedigrees of the yearlings before they are sent to the yearling sales. We expanded our horse-typing service by adding testing capabilities for five serum enzyme polymorphisms. Those systems are all used by other laboratories offering a blood-typing service for horses. The expansion of our services was accomplished through collaboration with Dr. Bernard May of Cornell's Laboratory for Ecological and Evolutionary Genetics.

We also responded to requests from veterinary practitioners in need of blood typing in cases of suspected hemolytic disease of the newborn foal. We tested sera from pregnant mares for the presence of antibody to red-cell antigens of the stallions to which they were mated. Such antibodies can bind to the foal's red blood cells, releasing their content of hemoglobin and causing serious, or even fatal, illness. About 1 percent of foals are at risk.

During the past five years we have pioneered studies of the strong immune responses in mares against their developing fetuses. That response has many characteristics in common with reactions to organ transplantations in human beings that result in the rejection of the organ. The consequences of the maternal immune response to the equine fetus are not known. However, with a foaling rate of about 60 percent, the horse is probably the least fertile of the major species of farm animals. Furthermore, it has been estimated that
The lab responded to requests from veterinarians in need of blood typing.
about 10 percent of equine pregnancies abort or resorb about the time antibodies to fetal antigens first appear in the mare’s serum.

Our observations and expertise in equine histocompatibility testing encouraged us to pursue these studies in collaboration with Dr. W. R. Allen, an internationally recognized authority on equine reproduction. That collaboration is now in its third year. It has encouraged several exchanges of personnel between the Baker Institute and Dr. Allen’s unit in Cambridge, England, and considerable progress has been made. The results may soon be applied to problems of concern to horse breeders.

In the course of our investigations we developed a new model for studying the differences between the maternal immune responses to fetal histocompatibility antigens made by horses and donkeys. Those differences could be important to our understanding of normal horse pregnancy and the many causes of infertility in mares. The idea is to use female mules as recipients for horse or donkey embryos. The development of the embryos can thus be compared in a neutral maternal environment. Our first transplants using mules as recipients were performed in the summer of 1983. At the time of this writing we have five mules pregnant by embryo transfer. Four are carrying horse embryos, and one is carrying a donkey.

Those experiments represent the first equine embryo transfers performed at Cornell, and possibly the first embryo transfers using mules as recipients ever performed. They have already demonstrated that although the mule is a sterile hybrid, its reproductive tract is capable of supporting a pregnancy, at least through the first third of gestation. We do not know if the horse or donkey embryos will be carried to term. One mule carrying a horse embryo has already made a strong im-

mune response to her fetus. The outcome of the embryo transfers will form the basis of experiments in our laboratory during the coming year.

Douglas F. Antczak
Publications

Publications listed as in press in last year's report are repeated this year, with their original numbers, to record their full bibliographic details.


The Institute is deeply committed to biotechnology research.
The Institute in Perspective

As one reads this report, one is impressed with the remarkable advances in health research made possible by the new methods being used in studies of animal diseases at the Institute. At our annual meeting in Ithaca this year we heard how our staff scientists are unlocking the genetic information in viruses to better understand how those agents cause disease, and how the nucleic acid that carries the information can be modified and rearranged in useful ways.

We also heard how antibodies can be tailor-made for the diagnosis and treatment of illness, and how such antibodies can be used in conjunction with new advances in laser and computer technology to reveal valuable information about how our immune system is mobilized to defend us against a myriad of agents and toxins that provide a threat to our health.

Finally, and perhaps most remarkably, we learned how studies of the developing embryo are shedding new light on pregnancy. The immediate benefit of that research will be to improve the reproductive efficiency of horses, and even more remarkable advances are close behind. They include the improvement of domestic stock, the propagation of endangered species, and the early detection and even correction of certain genetic abnormalities.

Gene splicing, flow cytometry, cell fusion, embryo transplantation. That is the language of biotechnology. I am gratified to report that the Institute is deeply committed to this research, and as a result of its efforts one can expect a continuing flow of new information and products that will provide a better life for our animals and for us.

Dorothy R. Donnelley
Chairwoman

Advisory Council

Dorothy R. Donnelley
Chairwoman

Dr. William C. Beck
Past President
Donald Guthrie Foundation for Medical Research

G. Watts Humphrey, Jr.
President, Steel Group National Intergroup, Inc.

Dr. Richard T. Johnson
Dwight D. Eisenhower Professor of Neurology
Johns Hopkins University

Joseph W. Jones
Senior Vice President
The Coca-Cola Company

John A. Lafore, Jr.
Past President
American Kennel Club

Gary A. Lee
Vice President for Governmental Affairs
IC Industries

Dr. Robert R. Marshak
Dean, School of Veterinary Medicine
University of Pennsylvania

Dr. Niel W. Pieper
General Practitioner and Member
AVMA Executive Board, District I

William Rockefeller
Partner
Shearman and Sterling

Frances G. Scaife
Vice President
Allegheny Foundation

Dr. Robert E. Shope
Director, Arbovirus Research Unit
Yale University

Robert Winthrop
Director
Wood, Struthers and Winthrop Management Corporation
Gifts enable us to carry out our mission.
Your interest in the James A. Baker Institute for Animal Health, expressed by your gift, enables us to carry out our day-to-day mission. With your support we can respond swiftly to opportunities as they arise and improve the quality of animal health. Your gift earns the Institute’s deepest thanks.

In appreciation for their exceptional interest in the Institute, we should like to express our gratitude to Mrs. Warren Bicknell, Jr., Mr. Warren Bicknell III, Miss Wendy H. Bicknell, Mr. and Mrs. Robert S. Boas, Mr. Albert C. Bostwick, Jr., Mr. Alan P. Cusick, Mr. and Mrs. Gaylord Donnelley, Mrs. N. Clarkson Earl, Jr., Mrs. Priscilla Maxwell Endicott, Mrs. Pamela Firman, Mrs. Gordon H. Gillis, Mr. R. L. Ireland III, Mr. and Mrs. David J. McFadden, Mr. George A. Motter, Mrs. Adelaide C. Riggs, Mr. William Rockefeller, Mrs. Richard M. Scaife, Mrs. Anita E. Seits, Mr. Jack B. Ward, Mr. and Mrs. Harwood Warriner, Mr. Gilbert H. Wehmann, Mr. Robert Winthrop, and Mr. Robert W. Woodruff.

Friends

Dr. and Mrs. Nickolas R. Abramo
Mr. and Mrs. Joseph Alderisio
(In memory of Peter)
Mrs. Jean Aldous
Miss Mildred Allen
Mrs. Frances T. Allison
(In memory of Max)
Mrs. Julia Amato
Mr. and Mrs. Gary N. Amon
(In memory of Buckwheat)
Mr. and Mrs. Harry Anderson
(In memory of Tippie and Brigitte)
Mrs. Olga B. Anderson
(In memory of Ann Roberta Furstenau)
Mr. and Mrs. Jerry P. Angelastro
Ms. Edith S. Annable
(In memory of Penny)
Mr. and Mrs. Leonard Annese
(In memory of Shadow)
Dr. and Mrs. Charles Ansell
Mr. and Mrs. Paul Appell
(In memory of Mr. Frederick Butler and Joellie)
Mr. and Mrs. H. Smith Applegate
(In memory of Tashi)
Mr. and Mrs. David E. Armington
(In memory of Suki)
Mr. and Mrs. Steven Artley
Mr. Otto Bachheimer
Mrs. Stevens Baird
Mr. and Mrs. Robert R. Ball
Mr. and Mrs. Frank A. Balsamo
(In memory of Dr. Peter Humphrey)
Mr. William Balzeret
(In memory of Ann Roberta Furstenau)
Mrs. Patricia A. Barry
(In memory of Kaiser, Gretchen, and Hector)
Ms. Deborah L. Bartlett
Ms. Gloria V. Batdorf
(In memory of Lady Samantha)
Mrs. Lee M. Bauer

Mr. and Mrs. Milton E. Bauer
(In memory of Tena)
Mr. Philip E. Beach
(In memory of Fireball)
Mr. and Mrs. Donald G. Beattie
Mrs. Marjorie G. Beaver
Mr. and Mrs. Theodore P. Beck
(In memory of Dooley)
Mr. R. Belanger
Mr. and Mrs. James R. Bell
(In memory of Breeze)
Mr. and Mrs. Louis Bender
(In memory of Farfel)
Mr. and Mrs. Harold Benton
Mrs. Donald Berg
(In memory of Int. Ch. Tarza Beau Monde and Elenbusch Blossom C. Lee)
Ms. Judy Valentine Berkal
(In memory of Suzie)
Mr. and Mrs. Walter A. Berry
Mrs. Warren Bicknell, Jr.
Mr. Warren Bicknell III
Ms. Wendy H. Bicknell
Dr. Jane Bicks
Dr. Miles O. Bidwell
(In memory of Saki)
Mrs. Ann W. Billings
Col. and Mrs. Harold Black
(In memory of Dee Oh Gee)
Ms. Patricia M. Blackett
Mr. and Mrs. Paul I. Bledsoe
(In memory of Jiggs)
Mr. and Mrs. James E. Blythe
(In memory of Mrs. Joan Dell)
Mr. and Mrs. Robert S. Boas
(In honor of Dr. Chester Hartenstein)
Ms. Wendy Bogin
Mr. and Mrs. Victor P. Bond
(In memory of Max)
Mr. and Mrs. Fred Bondi, Jr.
<table>
<thead>
<tr>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Col. and Mrs. J. B. Bonham</td>
</tr>
<tr>
<td>[In memory of Heather]</td>
</tr>
<tr>
<td>Mrs. Sheila Boston</td>
</tr>
<tr>
<td>Mr. Albert C. Bostwick, Jr.</td>
</tr>
<tr>
<td>Ms. Ann B. Bower</td>
</tr>
<tr>
<td>Mr. and Mrs. James R. Bowler</td>
</tr>
<tr>
<td>[In memory of Leo and Gerta]</td>
</tr>
<tr>
<td>Mr. and Mrs. Richard E. Boyatzis</td>
</tr>
<tr>
<td>[In memory of Rusty and Casaba]</td>
</tr>
<tr>
<td>Col. and Mrs. George P. Brandel</td>
</tr>
<tr>
<td>Dr. and Mrs. Brett Branson</td>
</tr>
<tr>
<td>Dr. and Mrs. Eben Breed</td>
</tr>
<tr>
<td>Mrs. Karl Breed</td>
</tr>
<tr>
<td>Mrs. Mary E. Breisch</td>
</tr>
<tr>
<td>[In memory of Franny]</td>
</tr>
<tr>
<td>Mr. and Mrs. William C. Breuler</td>
</tr>
<tr>
<td>[In memory of Mrs. Susan Postemski]</td>
</tr>
<tr>
<td>Mr. and Mrs. Edwin W. Bright</td>
</tr>
<tr>
<td>[In memory of Bright]</td>
</tr>
<tr>
<td>Mr. Atherton Bristol</td>
</tr>
<tr>
<td>Mr. Hy Brodsky</td>
</tr>
<tr>
<td>Mr. and Mrs. Jacob Brodsky</td>
</tr>
<tr>
<td>[In memory of Ricky]</td>
</tr>
<tr>
<td>Mrs. Jane Bronga</td>
</tr>
<tr>
<td>The Broughton Family</td>
</tr>
<tr>
<td>[In memory of Molly and Barney]</td>
</tr>
<tr>
<td>Ms. Dorothy C. Brower</td>
</tr>
<tr>
<td>[In memory of Freckles]</td>
</tr>
<tr>
<td>Mrs. Frederick D. Brown</td>
</tr>
<tr>
<td>Mr. and Mrs. Joseph Brown</td>
</tr>
<tr>
<td>[In honor of Dr. Claudia Meyers and Dr. William Zitek]</td>
</tr>
<tr>
<td>Mr. and Mrs. William E. Brown, Jr.</td>
</tr>
<tr>
<td>[In memory of Tammy]</td>
</tr>
<tr>
<td>Miss Karen Browner</td>
</tr>
<tr>
<td>[In honor of Dr. Thomas Pescod]</td>
</tr>
<tr>
<td>Ms. Kathryn Hayes Bruder</td>
</tr>
<tr>
<td>Ms. Diane Brunner</td>
</tr>
<tr>
<td>Ms. Agnes Buchwald</td>
</tr>
<tr>
<td>Mrs. Dorothy E. Buckner</td>
</tr>
<tr>
<td>Mr. and Mrs. George A. Burpee</td>
</tr>
<tr>
<td>Mr. James G. Butterworth</td>
</tr>
<tr>
<td>Mrs. Maureen Zimmer Buzyniski</td>
</tr>
<tr>
<td>[In memory of Oscar]</td>
</tr>
<tr>
<td>Dr. Robert Carlen</td>
</tr>
<tr>
<td>Mrs. Beatrice Carney</td>
</tr>
<tr>
<td>Mrs. Margaret Carpenter</td>
</tr>
<tr>
<td>Mrs. Elizabeth M. Carr</td>
</tr>
<tr>
<td>[In memory of Hermann]</td>
</tr>
<tr>
<td>Mr. and Mrs. Paul E. Carr</td>
</tr>
<tr>
<td>[In memory of Cognac]</td>
</tr>
<tr>
<td>Mr. and Mrs. John M. Carrigan</td>
</tr>
<tr>
<td>Mr. and Mrs. John Carrott</td>
</tr>
<tr>
<td>Ms. Mary E. Cartanza</td>
</tr>
<tr>
<td>[In memory of Misty Gale]</td>
</tr>
<tr>
<td>Ms. Rita M. Cartanza</td>
</tr>
<tr>
<td>[In memory of Misty Gale]</td>
</tr>
<tr>
<td>Mr. and Mrs. Robert S. Castelle</td>
</tr>
<tr>
<td>[In memory of Fancy]</td>
</tr>
<tr>
<td>Mr. Vincent C. Catalano</td>
</tr>
<tr>
<td>Mr. and Mrs. William J. Cavey</td>
</tr>
<tr>
<td>Mr. Robert C. Chalfont</td>
</tr>
<tr>
<td>Mr. and Mrs. William A. Chapman</td>
</tr>
<tr>
<td>Dr. and Mrs. Stanley Chapple</td>
</tr>
<tr>
<td>Ms. Anna M. Chiappisi</td>
</tr>
<tr>
<td>Ms. Florence Chichester</td>
</tr>
<tr>
<td>[In memory of Maggie Mae]</td>
</tr>
<tr>
<td>Mr. and Mrs. Joseph Cirillo</td>
</tr>
<tr>
<td>[In memory of Mei-Ling]</td>
</tr>
<tr>
<td>Mr. and Mrs. Barry Clark</td>
</tr>
<tr>
<td>Mrs. Everett M. Clark</td>
</tr>
<tr>
<td>[In memory of Jeanne LeAndro Doyen and Ch. Wu's China Doll of Mira]</td>
</tr>
<tr>
<td>Mrs. William W. Cleland</td>
</tr>
<tr>
<td>Mrs. Ana E. Clemente</td>
</tr>
<tr>
<td>[In memory of Sheba]</td>
</tr>
<tr>
<td>The Clifford Family</td>
</tr>
<tr>
<td>[In memory of Daisy]</td>
</tr>
<tr>
<td>Ms. Francis Cochrane</td>
</tr>
<tr>
<td>Dr. and Mrs. Alan D. Cohen</td>
</tr>
<tr>
<td>[In memory of Sahara]</td>
</tr>
<tr>
<td>Ms. Victoria A. Cohen</td>
</tr>
<tr>
<td>[In memory of Monster]</td>
</tr>
<tr>
<td>Mrs. Susan K. Cone</td>
</tr>
<tr>
<td>Mr. and Mrs. Gary L. Conover</td>
</tr>
<tr>
<td>Mr. and Mrs. Michael Contessa</td>
</tr>
<tr>
<td>Mr. and Mrs. Larry Cortesi</td>
</tr>
<tr>
<td>Mrs. Marion Costello</td>
</tr>
<tr>
<td>Cottonwood Kennels</td>
</tr>
<tr>
<td>Mr. and Mrs. Frederick Cowan</td>
</tr>
<tr>
<td>[In memory of Sam]</td>
</tr>
<tr>
<td>Mr. and Mrs. Louis Crescenzo</td>
</tr>
<tr>
<td>[In memory of Pepe]</td>
</tr>
<tr>
<td>Mr. and Mrs. Anthony Crocini</td>
</tr>
<tr>
<td>Mrs. Carolyn Crusse</td>
</tr>
<tr>
<td>Mr. and Mrs. William R. Crutcher</td>
</tr>
<tr>
<td>[In memory of Jack]</td>
</tr>
<tr>
<td>Mrs. Jane D. Cunningham</td>
</tr>
<tr>
<td>Mr. James Curran</td>
</tr>
<tr>
<td>[In memory of Goldie]</td>
</tr>
<tr>
<td>Mrs. Margaret K. Curtis</td>
</tr>
<tr>
<td>Mr. Leonhard Czarlinski</td>
</tr>
<tr>
<td>[In memory of Coquette]</td>
</tr>
<tr>
<td>Mr. and Mrs. Conrad J. Dahlstrom</td>
</tr>
<tr>
<td>[In memory of Jenny and in honor of Dr. Allan J. Ahearne and Dr. Richard K. Zeitel]</td>
</tr>
<tr>
<td>Mr. and Mrs. Joseph J. Daley</td>
</tr>
<tr>
<td>[In memory of Brian, Sparky, and Peaches]</td>
</tr>
<tr>
<td>Mrs. Judith I. Dalpan</td>
</tr>
<tr>
<td>Mrs. Joyce M. Dalton</td>
</tr>
<tr>
<td>[In memory of Bally]</td>
</tr>
<tr>
<td>Mr. and Mrs. David W. Davare</td>
</tr>
<tr>
<td>Ms. Barbara S. Davenport</td>
</tr>
<tr>
<td>[In memory of Snuffy]</td>
</tr>
<tr>
<td>Mrs. Elizabeth Davis</td>
</tr>
<tr>
<td>Miss Mertie Van B. Davis</td>
</tr>
<tr>
<td>Mr. and Mrs. Royal S. Davis</td>
</tr>
<tr>
<td>[In memory of Tiffany]</td>
</tr>
</tbody>
</table>
Ms. Ann Marie Deegan  
Miss Vivian DeFreitas  
Mr. and Mrs. Aaron Dell  
(In memory of Joan Dell)  
Mr. and Mrs. Aaron W. Dell, Jr.  
(In memory of Joan Dell)  
Mr. and Mrs. Richard Devereaux  
Mr. Robert De Vore  
Ms. Judi Didcoct  
Mr. and Mrs. Anthony J. Diorio  
(In memory of Misty)  
Mr. and Mrs. Bruce D. Dixon  
Mrs. Tilton H. Dobbin  
(In memory of Cushion)  
Dr. and Mrs. Daniel W. Doctor  
Ms. Helen K. Doland  
(In memory of Rusty)  
Mr. and Mrs. Gaylord Donnelley  
Mrs. Patricia A. Dowler  
Mrs. Patricia E. Dowling  
(In memory of Barney)  
Mrs. Nella C. Downward  
(In memory of Jake)  
Mr. and Mrs. Frank Doyle  
(In memory of Trinka)  
Mr. Ernest E. Drake  
Miss Nancy-Carroll Draper  
Ms. Patricia Ann Drasin  
(In memory of Gretchin and in honor of Dr. Joseph Giardina)  
Ms. Janet C. Drew  
(In memory of Bonnie II)  
Mr. and Mrs. Stuart E. Dreyfus  
(In memory of Nike)  
Mr. and Mrs. George W. Drown  
Mrs. C. P. Dubose, Jr.  
Mrs. Mabel B. Duckworth  
(In memory of Jiminy Cricket)  
Mrs. Emily T. duPont  
Ms. Carol Duras  
(In memory of Ann Roberta Furstenau)  
Mr. Cornelius F. M. Dwyer  
(In memory of Slippers)  
Mr. Jacob Dykstra  
Ms. Patricia A. Dziechciarz  
(In memory of De De)  
Ms. Kathleen Dziegiel  
(In memory of Naomi)  
Mrs. N. Clarkson Earl, Jr.  
Mr. and Mrs. Arnold Y. Earp  
(In memory of Wyatt Earp)  
Mr. Murray Edelman  
Mrs. Margaret A. Ehrenasperger  
Mr. and Mrs. William H. Eisler, Jr.  
(In memory of Duffy)  
Mr. and Mrs. William Ellis  
(In memory of Gigo)  
Mr. and Mrs. Benjamin Elzweig  
(In memory of Misty)  
Ms. Robin Emerson  
Mrs. Priscilla Maxwell Endicott  
(In honor of Dr. Niel W. Prieper)  
Mr. and Mrs. Richard Engel  
Mr. and Mrs. Charles S. English  
Mr. Henry H. Enos  
(In memory of Sir Silas of Lake)  
Mrs. Priscilla N. Estes  
Mr. and Mrs. Peter O. Evenson  
(In memory of Mugsy)  
Ms. Charlotte Fabrich  
(In memory of Whisky)  
Mr. James C. Fennimore  
Ms. M. Dolores Fernandez  
Ms. Annette Ferrey  
Mrs. Pamela Firman  
Mr. and Mrs. Charles F. Fitter  
(In memory of Lewis and Clark)  
Mrs. Doris Flesman  
(In memory of Sparky and Sam)  
Mr. and Mrs. John L. Fletcher  
(In memory of Candy)  
Ms. Sarah J. Fletcher  
Ms. Sharon U. Fling  
(In memory of Nika)  
Ms. Virginia Florence  
Mrs. Barbara B. Ford  
(In memory of Bromley and Berri)  
Mr. Hal Forden  
Mrs. Tonia Fortunato  
(In memory of Buttons)  
Mr. Joseph T. Foster  
(In memory of Samantha)  
Mr. and Mrs. M. Taher Fouad  
(In memory of Vice-Admiral Farouk A. Fouad)  
Mr. and Mrs. Henry E. Foulds  
(In memory of Cindy)  
Mrs. Angelo Francese  
(In memory of Bow)  
Ms. Eleanor A. Freeman  
(In memory of Slippers)  
Mr. Stuart Frenzel  
(In memory of Ann Roberta Furstenau)  
Mr. and Mrs. Phillip G. Friedman  
(In memory of Maps)  
Ms. Stephanie G. Funk  
(In memory of Coco)  
Mr. George G. Gaetz  
(In memory of Karla)  
Mr. and Mrs. Anthony J. Gardini  
(In memory of Pom Pom)  
Mr. and Mrs. Johnny Gardner, Jr.  
(In memory of Susie and Trixie)  
Mr. and Mrs. Stanley Garfinkle  
(In memory of Rusty)  
Ms. Helen Gatchel  
Mr. William H. Gatenby  
Mr. and Mrs. Newman R. Gaugler  
Mrs. D. Christian Gauss
<table>
<thead>
<tr>
<th>Name of Donor</th>
<th>In Memory Of</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mrs. Elaine Gavin</td>
<td>Bluie</td>
<td></td>
</tr>
<tr>
<td>Mr. and Mrs. Robert A. Gaylor</td>
<td>Princess</td>
<td></td>
</tr>
<tr>
<td>Mrs. Dawn Gee and Miss Lisa Gee</td>
<td>Mark H. Donovan</td>
<td></td>
</tr>
<tr>
<td>Mrs. Harriet Gehorsam</td>
<td>Muffin</td>
<td></td>
</tr>
<tr>
<td>Mrs. Jean Geissinger</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ms. Linda L. Gerber</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mrs. Frances M. Gerdes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mr. and Mrs. Jerome L. Gerl</td>
<td>Hatty</td>
<td></td>
</tr>
<tr>
<td>Mr. Andrew N. Gerson</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mr. and Mrs. John J. Giglio</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mrs. Grace A. Gillen</td>
<td>Lucky</td>
<td></td>
</tr>
<tr>
<td>Mrs. Gordon H. Gillis</td>
<td>Baron</td>
<td></td>
</tr>
<tr>
<td>Mr. and Mrs. H. M. Gillman</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mr. and Mrs. Robert Gloria</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mrs. Dorothy B. Goodlatte</td>
<td>Harold</td>
<td></td>
</tr>
<tr>
<td>Ms. Dorothy Goodwin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mrs. Anne C. Gove</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ms. Margaret A. Gram</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mrs. Helen C. Grasso</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mr. Gregory G. Graunke</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dr. and Mrs. James K. Green</td>
<td>Tucker</td>
<td></td>
</tr>
<tr>
<td>Mr. and Mrs. Dru L. Greenberg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mr. and Mrs. Saul L. Greenberg</td>
<td>Gretel</td>
<td></td>
</tr>
<tr>
<td>Ms. Georgina Griffin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mr. and Mrs. William L. Griffin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mrs. Florence Greenspan</td>
<td>Shana</td>
<td></td>
</tr>
<tr>
<td>Mr. and Mrs. Ed Grogan</td>
<td>Cadence</td>
<td></td>
</tr>
<tr>
<td>Mr. and Mrs. Antonio Gross</td>
<td>Samantha</td>
<td></td>
</tr>
<tr>
<td>Mrs. Ann Grossman</td>
<td>Jody</td>
<td></td>
</tr>
<tr>
<td>Miss Joan C. Grossman</td>
<td>Ch. Thenderin O'Toole</td>
<td></td>
</tr>
<tr>
<td>Mrs. Anne Marie Guarniero</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mr. and Mrs. Tony Gucciardo</td>
<td>Rocky</td>
<td></td>
</tr>
<tr>
<td>Mr. and Mrs. John J. Hafer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ms. Gloria E. Haffen</td>
<td>Morgan</td>
<td></td>
</tr>
<tr>
<td>Ms. B. Joan E. Haines</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mr. Nicholas J. Halias</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mr. and Mrs. B. Duffield Hamilton</td>
<td>Jet</td>
<td></td>
</tr>
<tr>
<td>Mr. and Mrs. Harold J. Haney</td>
<td>Missy</td>
<td></td>
</tr>
<tr>
<td>Mr. William J. Hanna</td>
<td></td>
<td>Miss</td>
</tr>
<tr>
<td>Mr. and Mrs. David B. Hannan</td>
<td>Joan Dell</td>
<td></td>
</tr>
<tr>
<td>Mrs. John B. Hannum III</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mr. and Mrs. Homer Harris</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mr. and Mrs. Richard P. Hart</td>
<td>Sasha</td>
<td></td>
</tr>
<tr>
<td>Ms. Mary W. Harvey</td>
<td></td>
<td>Sally</td>
</tr>
<tr>
<td>Miss Miral A. Haubner</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mrs. Dona E. Hausman</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mr. and Mrs. Thomas Heagney</td>
<td>Nickey</td>
<td></td>
</tr>
<tr>
<td>Mr. and Mrs. Frank M. Healey</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mr. Henry Heiman II</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mr. and Mrs. Robert J. Hemmings</td>
<td>Lady</td>
<td></td>
</tr>
<tr>
<td>Ms. Barbara W. Herndon</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ms. Georgina Herrera</td>
<td>Michelle</td>
<td></td>
</tr>
<tr>
<td>Dr. and Mrs. Isaac Hessney</td>
<td>Joan Dell</td>
<td></td>
</tr>
<tr>
<td>Dr. and Mrs. Isaac Hessney, Jr.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ms. Martha Hill</td>
<td>Taffy</td>
<td></td>
</tr>
<tr>
<td>Mr. Frank M. Hilton</td>
<td></td>
<td>Barry</td>
</tr>
<tr>
<td>Mr. and Mrs. Richard L. Hilton</td>
<td></td>
<td>Snoopy</td>
</tr>
<tr>
<td>Mr. and Mrs. Ben Hissam</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mrs. Doris P. Hoadley</td>
<td>Heidi</td>
<td></td>
</tr>
<tr>
<td>Mrs. Violette W. Hoaglin</td>
<td>Rusty</td>
<td></td>
</tr>
<tr>
<td>Ms. Joyce A. Hoffman</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miss Marie M. Hoffman</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mr. and Mrs. Joseph G. Holland</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ms. Gail Holmberg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mr. Carl Holmes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mrs. Gladys Horan</td>
<td></td>
<td>Dr. Alan Chrisman</td>
</tr>
<tr>
<td>Mr. Arthur M. Horowitz</td>
<td></td>
<td>Arthur P. Howard</td>
</tr>
<tr>
<td>Mr. and Mrs. Arthur P. Howard</td>
<td></td>
<td>Scott Howard</td>
</tr>
<tr>
<td>Mr. and Mrs. J. Scott Howard</td>
<td>Sass</td>
<td></td>
</tr>
<tr>
<td>Mr. and Mrs. Robert M. Howe</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mrs. Wendell T. Howell</td>
<td>Buttons</td>
<td></td>
</tr>
<tr>
<td>Mr. and Mrs. John S. Hughes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mr. Myron Ideman</td>
<td>Gypsy</td>
<td></td>
</tr>
<tr>
<td>Mr. and Mrs. Andrew W. Imbrie</td>
<td>Charlie and Penelope</td>
<td></td>
</tr>
<tr>
<td>Ms. Mary Inzio</td>
<td></td>
<td>Kate Ireland</td>
</tr>
<tr>
<td>Miss Kate Ireland</td>
<td></td>
<td>Shirley J. Irwin</td>
</tr>
</tbody>
</table>
Ms. Margaret Izzo
(In memory of KoKo)
Dr. and Mrs. Durand F. Jacobs
Mr. Charles M. Jadovich
(In memory of Jim)
Mr. Lawrence Jay
(In honor of Dr. Thomas Pescod)
Mr. and Mrs. Donald Jayson
(In memory of P.)
Mr. Lawrence Jeffries
(In memory of Jamie)
Mr. and Mrs. Henry Jerman
Mr. Bruce E. Jobe
Ms. Agnes Marie Johnson
Ms. Iola Johnson
(In memory of Neesa)
Mrs. Lois C. Johnson
(In memory of Bunny Bear)
Mr. and Mrs. Neil G. Johnson
(In memory of Guenie)
Ms. Susan B. Johnson
Mr. Richard L. Johnston
Mr. and Mrs. Bernard S. Jones
Mrs. Mildred M. Jones
Ms. Alice Judge
Ms. Irma Juhasz
Ms. Joan M. Jungbluth
Mr. and Mrs. Charles C. A. Keeney
Mr. and Mrs. William V. W. Keeney
(In memory of Jake)
Miss Diantha Keith
(In memory of Mandy)
Miss Pauline Keith
(In memory of Mandy)
Mr. Andrew J. Kelly
Mrs. Frances Kennedy
Mr. and Mrs. Paul L. Khanton
Mrs. Esther Kieckhefer
Ms. Debra K. Kinney
Mr. and Mrs. Stephen H. Klafter
(In memory of Ripp and Tucker)
Mr. and Mrs. Robert Kleinberg
(In memory of Lulu)
Mrs. Elizabeth S. Knight
Mr. Peter B. Knock
(In memory of Gregor)
Mr. and Mrs. Richard E. Koskey
(In honor of Dr. Raymond Stock)
Mrs. Catherine Kotelchuck
(In memory of Gaspard)
Mr. and Mrs. Paul Kowalchuk
Mrs. Diane G. Kranz
(In memory of Daisy)
Mrs. H. Peter Kriendler
Mr. and Mrs. Richard Krongel
Ms. Nancy J. Krout
Mr. Michael J. Kukura
Ms. Gail Kulaga
(In memory of Gretchen)
Mrs. Helena V. Kwasinowicz
(In memory of Maxie)
Ms. Jean Labadie
(In memory of Molly)
Mr. and Mrs. Myron B. Lampert
(In memory of Princess)
Mr. and Mrs. Roy Land
Ms. Renee Landau
(In memory of Goldie)
Mrs. Beatrice English Landers
Mrs. Martha R. Lapham
(In memory of Ollie)
Mr. Fred M. Larry
Mrs. Lois I. Laurenzi
(In memory of The Duke)
Mr. and Mrs. Charles Lavery
(In memory of Ding-a-Ling)
Ms. Alma B. Lawrence
Ms. Margaret Lawton
Mrs. Claudia M. Leffler
Mrs. Eva Legeny
(In memory of Jason)
Dr. Clark Lemley
Mr. and Mrs. Arthur H. Leonard
(In memory of Anchors, Noelkah, Judy, and Dutchboy)
Mr. and Mrs. Harvey M. Lerner
Mr. and Mrs. Edward A. LeRoy
(In memory of Mia)
Mrs. Bernice Lesser
Mrs. Victoria Levy
(In memory of George)
Mrs. Jane A. Light
Mr. and Mrs. Joseph H. Linnemann
(In memory of Charlie and in honor of Dr. Ronald Frank and Dr. James Reid)
Mrs. Nancy B. Lob
(In memory of Pepper)
Ms. Marietta C. Lombardo
Mr. Herbert M. Lord
Mrs. Edna A. Lovett
Mrs. Molly Lowatsky
Mr. and Mrs. Wilbur C. Lowell
(In memory of Jason)
Mr. and Mrs. Thomas Lucas
Mr. and Mrs. Irving M. Lustig
Mrs. Eva Lynch
(In memory of Slippers)
Mr. and Mrs. Patrick O. McAtee
Mr. and Mrs. Earl McCarthy
Mr. Jack H. McCarthy
(In memory of Misty)
Mr. and Mrs. Robert J. McCartney, Sr.
(In memory of Dutchess)
Ms. Patricia McCormack
Mr. and Mrs. George F. McCoy, Jr.
Mr. and Mrs. H. Douglas McCullough
(In memory of Smokey)
Mrs. Lorraine McAvoy McDermott
Mrs. Patricia McEwen
Mr. and Mrs. David J. McFadden
Mr. and Mrs. Byron E. McFarland
(In memory of Smokey)
Mr. and Mrs. Terence J. McGurn
Mrs. Dolores McIntyre
Ms. Violette W. McLitus
(In memory of Heidi)
Mr. and Mrs. L. D. McMichael
(In memory of Bismarck)
Mr. and Mrs. James E. McMillan
(In memory of Skippy)
Mr. and Mrs. Robert C. Magee
Mr. and Mrs. John J. Mageean
Mr. and Mrs. John J. Magner
Mrs. Russell B. Mahar
Mr. and Mrs. Robert J. Maher
(In memory of Thunder)
Mr. and Mrs. Walter A. Mahosky
Mr. and Mrs. Raymond M. Majka
(In memory of Cynthia)
Ms. Alma C. Maler
(In memory of Puppy and Homer)
Mrs. Cynthia La Porta Maloney
Mrs. Selinda Mangione
Mrs. Lucille Mann
(In memory of Bally)
Mr. William Marchak
(In memory of Snoopy)
Mr. Marc-Roger Marchat
Mr. and Mrs. John L. Marchica
Dr. Richard L. Marks
Mrs. Margot W. Marsh
Ms. Ana Martens
Ms. Susan Martens
Mr. and Mrs. John M. Martin
(In memory of Amanda)
Ms. Susan B. Mathesson
(In memory of Max)
Mr. and Mrs. Gordan Mathews
(In memory of Nelson J. Quintin)
Mr. and Mrs. Radu Mavrodineau
Mr. Randall C. May
Mr. and Mrs. Julien N. Mayer
Mrs. Marianna Mayer
(In memory of Max)
Dr. Pamela Mazzoline
Mr. and Mrs. Fred Messinger
Mr. Richmond F. Meyer
Mrs. Rose M. Michaels-Rezvon
(In honor of Dr. Allan Leventhal)
Mr. Jeremiah Milbank
(In memory of Maria)
Mrs. John Stuart Mill
(In memory of Jason)
Ms. Celeste J. Miller
Mr. and Mrs. Edward R. Miller
Mr. and Mrs. Ernest E. Miller
(In memory of Patches)

Mrs. Ida F. Miller
(In memory of Mitzie)
Mr. and Mrs. John B. Miller
(In memory of Token)
Mrs. J. Marlene Miller
(In memory of Missy)
Mr. and Mrs. Thomas J. Miller
(In memory of Fellini)
Ms. Judy Mills
Mr. and Mrs. Billy R. Mince
(In memory of Thumper)
Mr. and Mrs. Peter R. Mineo
(In memory of Joby)
Mr. and Mrs. George W. Misko
Mr. and Mrs. John J. Mitchell
(In memory of Kelly)
Mr. Joseph B. Mitchell
Mr. Robert C. Moering
(In memory of Sam)
Mr. William Mollison
Mrs. Harice K. Monyek
(In memory of Mr. McGoo)
Ms. Beth Alison Moore
Mr. and Mrs. John S. Moore
(In memory of Cricket)
Mr. and Mrs. Joseph A. Moore
Mr. and Mrs. Richard Moore
Mr. and Mrs. Michael J. Moran
(In memory of Spotty)
Mrs. H. S. Morgan
Mr. Henry M. Morgan
(In memory of Cinders)
Mr. Clayton Morse
Mrs. Kathleen M. Morse
(In memory of Shanna)
Mr. and Mrs. Alois Morth
(In memory of Heidi)
Mrs. Francis J. Mott
(In memory of Saki)
Mr. George A. Motter
Mr. and Mrs. Frank E. Mueller
Mr. and Mrs. Raymond P. Mulligan
(In memory of Taj)
Ms. Winifred K. Munger
(In memory of Diamond)
Mr. and Mrs. Michael Mureddu and Family
(In memory of Che Lin)
Mr. and Mrs. Harry L. Murphy
(In honor of Dr. Martin H. Fremont)
Miss Alice Najarian
(In memory of Lassie and Queenie)
Ms. Colleen Napoli
(In memory of Slippers)
Mr. and Mrs. Agostinho Nascimento
Ms. Helen M. Navilia
(In memory of Slippers)
Mr. and Mrs. Jacob J. Nehr
(In memory of Rosey O'Grady)
Mr. and Mrs. Frank J. Nelson
Mrs. Ruth W. Nemeth  
(In memory of Bitsy Boy)
Mr. and Mrs. Gary New
Mr. and Mrs. Edward A. Newman
Mr. and Mrs. Harry I. Nicholas, Jr.
Mrs. Bengt Nilson
Mrs. Barbara Noonan
Mrs. Emily A. Nordfeldt
Mr. and Mrs. Clyde L. Nordheimer
Mr. and Mrs. Louis Nougeim  
(In memory of Woodstock)
Mr. and Mrs. Arthur G. Nylander  
(In memory of Bubbles)
Mr. and Mrs. Dennis C. Oehm
Mr. and Mrs. Walter Okino
Miss Louise L. O’Neal  
(In memory of Penny)
Mrs. Laura S. O’Neill
Mr. and Mrs. Theo Orlan  
(In memory of Joshua)
Ms. L. Rita Öhr  
(In memory of Pete)
Mr. and Mrs. Sam Osmun
Ms. Mary J. O’Toole  
(In memory of Winston)
Mrs. E. Brigitte Page
(In memory of Lewis and Clark)
Mr. John G. Palache, Jr.
Mrs. Grace S. Palagonia  
(In memory of Wedel)
Ms. Carol A. Pallesen  
(In memory of Princess)
The Bill Palmer Family  
(In memory of Helga)
Dr. Donald L. Palmer  
(In memory of Grethchen)
Mr. and Mrs. Donald H. Parker  
(In memory of Tippy and Blackie)
Friends at Parker Junior High School  
(In memory of Penny)
Mr. and Mrs. Charles A. Parlee  
(In memory of Maxine)
Ms. Helen K. Paul
Mrs. Cynthia J. Pennington  
(In memory of Duncan)
Mrs. Anne P. Perdue
Mrs. J. Gordon Perlmutter
Mr. and Mrs. Ben Pessin
Mr. and Mrs. Michael Petrozza  
(In memory of Bernie)
Mr. and Mrs. Richard M. Pettinger
Mr. and Mrs. Richard Pfießtckier  
(In memory of Sammy and Taffy)
Mr. and Mrs. Gunther Piepke  
(In memory of Horace Reed III)
Mrs. Collier Platt
Mr. and Mrs. Norman O. Pollet
Mr. Jerome Pollitt  
(In memory of Max)
Mr. and Mrs. Richard W. Porter  
(In memory of Punkie)
Mr. and Mrs. Robert M. Posey  
(In memory of Mia)
Mr. and Mrs. Murray Pottruck
Mr. Richard G. Potts
Mr. and Mrs. Robert Powers
Ms. Pearl Preiss
Mr. and Mrs. Richard C. Purdy
Mr. and Mrs. Patrick J. Quinn
Ms. Phyllis J. Quintin  
(In memory of Nelson J. Quintin and Little Guy)
Ms. Tami Raider  
(In memory of Mrs. Joan M. Hoefer)
Mr. and Mrs. James R. Raker  
(In memory of Rivet)
Mr. Duncan H. Read
Mrs. Helen M. Reardon  
(In memory of Coocher)
Mrs. Elizabeth K. Reed
Mrs. Marjorie J. Reed
Mrs. Joan Regula  
(In memory of Kiwiya)
Mr. Alfred Reinhardt  
(In memory of Buttons)
Ms. Elsie Reploge
Dr. Harvey Resnick
Mr. Edward M. Resovsky
Mrs. Cheryl R. Reynolds
Mr. and Mrs. Harold N. Reynolds
Maj. Gen. R. C. Reynolds
Mr. and Mrs. William F. Reynolds  
(In memory of Chevy)
Dr. and Mrs. John D. Rhodes III
Mr. and Mrs. James V. Rhoney  
(In memory of Skipper)
Mrs. Robert H. Rial  
(In memory of George)
Ms. Lucile Ricci  
(In memory of Molson)
Mr. and Mrs. Herb Riemann  
(In memory of Coco)
Mrs. Katherine H. Rifice
Mrs. Adelaide C. Riggs
Mrs. Pamela G. Righthyer
Mr. and Mrs. John S. Roberts
Mr. Martell Roberts
Ms. Selma Robinton
Mrs. Barbara D. Roby
Mr. Shannon Rodgers  
(In memory of Mac)
Mr. and Mrs. Walter C. Roemer, Sr.  
(In memory of Ginger)
Mrs. Margaret Roginski
Mrs. Virginia Ronsaville  
(In memory of Becky)
Mr. and Mrs. Eugene H. Rosen
Mr. and Mrs. Seymour Rosenheck  
(In memory of Twink and Lucifer)
Mr. and Mrs. Robert Rothe  
(In memory of Penny and Muffin)
Dr. Rosalind W. Rothman  
(In memory of Arakus)
Ms. Fran Rothstein  
In memory of Pepe)
Ms. Diana Rowland  
(In memory of Pepe)
Ms. Norma Rubenstein  
Dr. and Mrs. Samuel L. Russell  
(In memory of Ching)
Ms. Lucille Russo  
Mr. and Mrs. Charles Ryan  
(In memory of Joan Dell)
Mr. and Mrs. Gerald Safferman  
Mrs. Beatrice Saffian  
(In memory of Lucky and
in honor of Dr. Malcolm Kram)
Mr. and Mrs. Thomas Salemi  
(In memory of Princess)
Mr. Reginald D. Sanborn  
Mr. and Mrs. Fred Sauer  
(In memory of Joan Dell)
Ms. Oliv Saunderson  
(In memory of Tiffany)
Mr. George F. Savage  
(In memory of Sauce and Skipper)
Mr. and Mrs. Ronald E. Sawyer  
(In memory of Monster)
Mrs. Catherine Schaedtler  
(In memory of Smokey)
Mrs. Billie Schenk  
Ms. Arlette Schlitt  
Mr. and Mrs. James T. Schmutzer  
Dr. Rolf Schnorf  
Mrs. Rita F. Schwallar  
(In memory of Max)
Dr. and Mrs. Jerome M. Schweitzer  
Mr. and Mrs. Frank Scott  
(In memory of Sundi)
Mrs. Anita E. Seits  
Mr. Maurice Sendak  
Mr. Richard W. Shappell  
Mr. and Mrs. Paul Sharon  
Ms. Ellen Sharpley  
(In memory of Bandit)
Mrs. Ann Shaw  
(In memory of Duffy)
Mr. Horace A. Shepard  
Ms. Bonnie Lynn Sherin  
Mrs. Bette M. Sherrill  
Mr. and Mrs. Leon L. Siegel  
(In memory of Mustache)
Mr. Jerome Silverman  
(In memory of Mac)
Mr. and Mrs. Mitchell J. Silverman  
(In memory of Jason)
Mr. and Mrs. William W. Simons  
(In memory of Robbie)
Mr. and Mrs. Tom Skerritt  
Mrs. Nancy Skluth  
(In memory of Boozar)
Mr. and Mrs. Howard G. Sloane  
Mr. Eugene B. Smith  
Mr. Marion Smith  
Mr. and Mrs. Norman Smith  
Mr. Terry Smith  
Mr. and Mrs. William E. Smith  
(In memory of Joan Dell)
Mr. and Mrs. Byron H. Souder, Jr.  
(In memory of Taffy)
Mr. and Mrs. Robert W. Speidel  
(In memory of Kelly)
Ms. Molly J. Spencer  
(In memory of Tay)
Mr. and Mrs. Frederick Spollett  
(In memory of Kishka)
Ms. Cynthia Sproull  
Mr. and Mrs. George W. Stebbins  
Mr. Bernard George Steinetz, Jr.  
Ms. Constance A. Stella  
(In memory of Missy)
Mr. and Mrs. John D. Sternberg  
Mr. and Mrs. Allan Sterrer  
Mr. Harold H. Steve  
(In memory of Cleo)
Mr. and Mrs. Victor S. Stiff  
Mr. Franz T. Stone  
Mrs. Ann Strathern  
Ms. Arlene Sturm  
(In memory of Martha Chidester)
Ms. Susie Sturm  
(In memory of Martha Chidester)
Mr. and Mrs. Robert C. Swaffield  
(In memory of Sandy and Pal)
Mr. and Mrs. Martin A. Sweeney  
Ms. Rebecca L. Tehon  
Ms. Mary G. Thibault  
(In memory of Dr. Peter Humphrey and Button)
Dr. David F. Thomashow  
(In memory of Stanley)
Mrs. Esther duPont Thouron  
Mr. and Mrs. Stephen Tisinger  
(In memory of Lady Ashley of Foxmill)
Miss Iris de la Torre Bueno  
Mr. and Mrs. Dennis B. Tower  
(In memory of Ernie)
Miss Susan Frances Train  
Mr. and Mrs. Edgar Trent  
Ms. Rachel Troche  
Mr. Peter Tsarnas  
Mrs. Tessie Tsoutsouras  
(In memory of Buffy)
Mrs. S. Badenhop Tucker  

Mr. William Turnbull, Jr.
(In memory of Wash)
Mr. and Mrs. Charles Turner
(In memory of Laddie)
Mrs. Marie A. Uscinski
(In memory of Rip)
Mrs. Peter Van Brunt
Mrs. Constance Van Hook
(In memory of Satin)
Mrs. Evelyn Monte Van Horn
(Mr. and Mrs. Jack Vanlandingham)
(In memory of Tippy)
Mrs. Alice E. Vanorden
(In memory of Dr. Arthur F. North, Jr.)
Mrs. Margaret Vogt
(In memory of Georgette)
Mrs. Alexandrine Von Westrem
Mr. and Mrs. Peter Vosburgh and Caroline
(In memory of Tiffany)
Mr. and Mrs. Kendrick L. Wade
(In memory of Rebel)
Mrs. William P. Wadsworth
Ms. Maria D. Wajdo
Mr. and Mrs. Stanley Waldman
(In memory of Romeo)
Mrs. Christine Wallace
Mrs. Eddieynn L. Wallace
(In memory of Pierre)
Mr. Emmet S. Wallach
Mr. and Mrs. Walter K. Walsh
(In honor of Dr. Alvin J. Vogel)
Mr. Jack B. Ward
(In memory of Axel)
Mr. and Mrs. Harwood Warriner
Mrs. Julia B. Wasserman
Mr. and Mrs. Ray S. Watson
Mr. and Mrs. Theodore T. Watson
Mr. and Mrs. Fred Weber
(In memory of Velvet)
Mrs. F. Carrington Weems
Mr. Robert G. Wehle
Mr. Gilbert H. Wehmann
The Weinbacher Family
(In memory of Pogo)
Dr. and Mrs. Irwin Weiner
Mr. and Mrs. Richard R. Weiner
(In memory of Ginny)
Mrs. Lorraine M. Weinsheimer
Ms. Paula Weilhofer
Mr. and Mrs. Moe Werner
(In honor of Dr. Howard Schatz and the staff of Massapequa Hospital)
Mr. “J. R.” Westervelt
Mr. and Mrs. Paul Whalen
(In memory of Tiffany)
Mrs. Mary B. Wheeler
(In memory of Lady)
Mr. and Mrs. Frank N. Whipple
Ms. Eleanor White
(In memory of Daffy and Cissy)
Mrs. Janice White
Mrs. Josephine White
Mrs. Elaine Whittinghill
Mr. and Mrs. Anthony Whitton
Mr. and Mrs. Samuel Wian
(In memory of Hortense)
Mrs. Cynthia Williams
(In memory of Paco)
Miss Marjorie R. Williams
Mr. and Mrs. William A. Williams III
Mrs. Carolyn R. Wilson
Dr. and Mrs. William W. Wimer III
Mr. and Mrs. James E. Winters
(In memory of Toots)
Mr. Robert Winthrop
Mr. Robert Winthrop II
Mr. and Mrs. Marvin Wolf
Mr. and Mrs. Theodore M. Wolkof
(In memory of Kris)
Mrs. Barbara W. Wood
Ms. Susan J. Woodard
(In memory of Ginger)
Mr. Robert W. Woodruff
Ms. Veronica L. Woodruff
Mr. Ronald Wronski
(In memory of Arnie)
Mr. and Mrs. John P. Wynn
Mr. and Mrs. David C. Young II
(In memory of Sultan)
Mr. and Mrs. George M. Zdanoff
Ms. Mary Zuorski
Mr. and Mrs. Louis Zuppello

Ms. Paula Wellhofer
The designation research partner was established thirteen years ago to honor a gift of $250 or more. Those who have made a gift of $2,500 are indicated by L.T. (lifetime research partner). The names of the research partners are inscribed on a permanent plaque in the library of the Institute, as are those of our founders and longtime supporters.
Veterinarians

Dr. Harry W. Abair
Dr. Patricia Abo
Dr. Gerald Aguiar
Dr. Allan J. Ahearne
Dr. Robert Ahlers

Albany Veterinary Clinic
Dr. David Allard
Dr. David H. Almstrom
Dr. Ralph E. Alter
Dr. John C. Andersen

Anderson Animal Hospital
Dr. James Ansley
Appanasha Pet Clinics
Dr. Randy D. Aronson
Dr. John P. Arthur

Ashland Animal Hospital
Dr. Herbert M. Atkinson
Dr. Duncan Augustine
Dr. Elden R. Austin
Dr. Frederic K. Baff
Dr. DeWitt T. Baker
Dr. Karl G. Baker
Dr. Charles H. Baldwin, Jr.

Dr. Gary Banas
Dr. T. H. Banks

Banning Veterinary Hospital
Dr. Alfred Lee Barkan
Dr. Donald Barr
Dr. Lawrence W. Bartholf
Dr. Frank E. Bartlett
Dr. Richard R. Basom
Dr. Roger W. Batchelder
Dr. Wendy Anne Bates

Dr. Samuel Baum

Bellaire-Richmond Pet Hospital
Dr. Theodore L. Bellhorn
Dr. Jan Bellows
Dr. Stefan G. Belman
Dr. Samuel Bender
Dr. Richard N. Benjamin
Dr. Charles J. Berger

Berkeley Dog and Cat Hospital
Dr. Israel Berkowitz
Dr. Jay A. Berkowitz
Dr. Lewis H. Berman
Dr. Martin V. Berrigan
Dr. F. Clarke Berryman
Dr. Roy De B. Bertolalet

Bethany Animal Hospital
Dr. Martin B. Betts
Dr. George J. Beyer
Dr. Theodore J. Beyer
Dr. J. Irvine Bingham
Dr. Edwin E. Blaisdell

Dr. Frank Bloom
Dr. Bruce T. Boehringer
Dr. D. A. Boelter

Dr. Sidney Bogen
Dr. Robert E. Bogue

Dr. Richard H. Bohning, Jr.
Bolton Veterinary Hospital
Dr. Neil M. Boodman
Dr. Stanton E. Bower
Dr. Louis V. L. Bowers
Dr. Karen F. Bowls
Dr. Susan G. Boyd
Dr. George E. Boyle
Dr. Marshall H. Breite
Dr. John J. Brennan

Brewster Veterinary Hospital
Briar Patch Veterinary Hospital
Dr. Walter S. Briggs
Dr. Herbert A. Brinkman

Brockton Animal Hospital
Dr. Robert D. Brofee
Dr. Sherry L. Brothers
Dr. Bernard L. Brown
Dr. Charles E. Brown
Dr. Garrison M. Brown
Dr. James T. Brown
Dr. Robert D. Brown
Dr. Walter R. Brown
Dr. Lyle E. Brumley

Bryan Animal Hospital
Dr. Greg Brzoska
Dr. R. L. Buchanan
Dr. Glenn A. Bucher
Dr. Clarence M. Burgher

Dr. Jack Burke

Burrstone Animal Hospital
Dr. William P. Cadwallader, Jr.
Dr. Howard Camay

Dr. David J. Carlson
Dr. Leland E. Carmichael
Dr. Don J. Carren
Dr. Penelope A. Carroll
Dr. Arnold D. Cary
Dr. Robert F. Case
Dr. Vincent P. Castellano
Dr. John P. Caulwell

Cazenovia Animal Hospital
Dr. Eugene C. Ceglowski

Dr. Jean R. Ceglowski

Dr. Dean J. Cerf
Dr. J. Kent Chapman

Cherry Ridge Veterinary Clinic

Cheshire Veterinary Hospital
Dr. James P. Childress, Jr.

Dr. Alan M. Chrisman

Dr. Edward F. Christensen
Dr. Nicholas Chuff

Clark Animal Hospital

Dr. Gary Clemens

Dr. Peter E. Coakley

Dr. Richard H. Coburn

Dr. Deborah Cogan

Dr. Phillip B. Cohen

Dr. Steven J. Cohen
<table>
<thead>
<tr>
<th>Doctor's Name</th>
<th>Doctor's Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Robert Cohn</td>
<td>Dr. Roger Ellis</td>
</tr>
<tr>
<td>Dr. David S. Coley</td>
<td>Dr. Donald Ellis</td>
</tr>
<tr>
<td>Dr. Donald K. Collins</td>
<td>Dr. Raymond Factor</td>
</tr>
<tr>
<td>Dr. Walter E. Colon</td>
<td>Dr. Glenn Fahnestock</td>
</tr>
<tr>
<td>Colonial Animal Hospital</td>
<td>Fallon Veterinary Clinic</td>
</tr>
<tr>
<td>Community Animal Hospital</td>
<td>Dr. Robert H. Featherston</td>
</tr>
<tr>
<td>Dr. Cliff N. Conarck</td>
<td>Dr. Frederick Feibel</td>
</tr>
<tr>
<td>Dr. William E. Condon</td>
<td>Dr. Dennis Feinberg</td>
</tr>
<tr>
<td>Dr. James F. Cone, Jr.</td>
<td>Dr. Gilbert J. Feldman</td>
</tr>
<tr>
<td>Dr. Richard L. Cook</td>
<td>Dr. Craig D. Felton</td>
</tr>
<tr>
<td>Dr. Carol Cookingham</td>
<td>Dr. Jay Ferber</td>
</tr>
<tr>
<td>Dr. Lewis Cooper</td>
<td>Dr. Robert Ferrer</td>
</tr>
<tr>
<td>Dr. Paul J. Corwin</td>
<td>Dr. Fred Fernich</td>
</tr>
<tr>
<td>County Animal Hospital</td>
<td>Dr. Joseph Ferris</td>
</tr>
<tr>
<td>Dr. David Covitz</td>
<td>Dr. and Mrs. Lincoln E. Field</td>
</tr>
<tr>
<td>Dr. Franklin A. Coy</td>
<td>Dr. Henry M. Fierman</td>
</tr>
<tr>
<td>Dr. James C. Crandall</td>
<td>Dr. Martin N. Fineman</td>
</tr>
<tr>
<td>Dr. J. Anthony Crawford</td>
<td>Dr. Ralph T. Fireoved</td>
</tr>
<tr>
<td>Dr. Karen Crawford</td>
<td>Dr. Larry Fischer</td>
</tr>
<tr>
<td>Dr. Richard L. Crissey</td>
<td>Dr. Stephen C. Fisher</td>
</tr>
<tr>
<td>Dr. Susan Cropper</td>
<td>Dr. Susan Fischer</td>
</tr>
<tr>
<td>Dr. Clifford G. Cummings</td>
<td>Dr. Alvin Fishman</td>
</tr>
<tr>
<td>Dr. Dale L. Cupp</td>
<td>Dr. Jane Fishman</td>
</tr>
<tr>
<td>Dr. Stephen K. Curtis</td>
<td>Dr. Edward C. Fleischh</td>
</tr>
<tr>
<td>Dr. Randy Custer</td>
<td>Dr. Robert D. Flowers</td>
</tr>
<tr>
<td>Dr. Thurston Dale</td>
<td>Dr. Michael R. Floyd</td>
</tr>
<tr>
<td>Dr. Linton Dangar</td>
<td>Dr. A. L. Fochios</td>
</tr>
<tr>
<td>Darien Animal Hospital</td>
<td>Dr. Ed Folkers</td>
</tr>
<tr>
<td>Dr. Douglas S. Darlington</td>
<td>Dr. Donald C. Ford</td>
</tr>
<tr>
<td>Dr. F. Langdon Davis, Jr.</td>
<td>Dr. Lorraine A. Fournier</td>
</tr>
<tr>
<td>Dr. Forrest H. Davis</td>
<td>Dr. Wayne J. Fowles</td>
</tr>
<tr>
<td>Dr. Robert S. Dedrick</td>
<td>Framingham Animal Hospital</td>
</tr>
<tr>
<td>Dr. Jonathan P. Deitchman</td>
<td>Dr. Ronald J. Frank</td>
</tr>
<tr>
<td>Dr. Frank L. Del Greco</td>
<td>Dr. John E. Franklin</td>
</tr>
<tr>
<td>Delmar Veterinary Associates</td>
<td>Dr. Norman T. Freid</td>
</tr>
<tr>
<td>Dr. Henry J. Deutsch</td>
<td>Dr. Jeffrey B. French</td>
</tr>
<tr>
<td>Dr. John C. DeVerna, Jr.</td>
<td>Friendship Animal Hospital</td>
</tr>
<tr>
<td>Dr. Thomas De Vincentis</td>
<td>Dr. John H. Fudens</td>
</tr>
<tr>
<td>Dr. Daniel Di Bitetto</td>
<td>Dr. Kenneth R. Gadd</td>
</tr>
<tr>
<td>Dr. Herbert C. Dietrich</td>
<td>Dr. Leslie Gall</td>
</tr>
<tr>
<td>Dr. J. E. Doles</td>
<td>Dr. Gregory W. Gallagher</td>
</tr>
<tr>
<td>Dr. Michael E. Doty</td>
<td>Dr. Eric J. Galster</td>
</tr>
<tr>
<td>Double R Veterinary Center</td>
<td>Dr. John M. Gambardella</td>
</tr>
<tr>
<td>Dr. Andrew M. Draper</td>
<td>Dr. Stephen A. Gardner</td>
</tr>
<tr>
<td>Dr. Donald F. Dries</td>
<td>Dr. John L. Garman, Jr.</td>
</tr>
<tr>
<td>Dr. George A. Dubato</td>
<td>Dr. Edward Garner</td>
</tr>
<tr>
<td>Dr. Daniel Duberman</td>
<td>Dr. Fred G. Garrison</td>
</tr>
<tr>
<td>Dr. Sandra Dudek</td>
<td>Dr. Donald C. Gay</td>
</tr>
<tr>
<td>Dr. and Mrs. G. Clayston Dudley</td>
<td>Dr. Jay W. Geasling</td>
</tr>
<tr>
<td>Dr. W. S. Dunnavant, Jr.</td>
<td>Dr. Eric L. Germaine</td>
</tr>
<tr>
<td>Dr. Vernon Roy Durie</td>
<td>Dr. Clifford M. Glade</td>
</tr>
<tr>
<td>Dr. Cleon W. Easton</td>
<td>Dr. Stanley Glick</td>
</tr>
<tr>
<td>Eastview Veterinary Clinic</td>
<td>Dr. Gregory W. Godon</td>
</tr>
<tr>
<td>Dr. George W. Eberhart</td>
<td>Dr. Lewis A. Goldfinger</td>
</tr>
<tr>
<td>Dr. N. Joel Edwards</td>
<td>Dr. William T. Goldsmith</td>
</tr>
<tr>
<td>Dr. Stephen Egelhofer</td>
<td>Dr. Norman H. Goldstein</td>
</tr>
<tr>
<td>Dr. Joel Ehrenzweig</td>
<td>Dr. David M. Goodman</td>
</tr>
<tr>
<td>Dr. Edward R. Eisner</td>
<td>Dr. Laurence W. Goodman, Jr.</td>
</tr>
<tr>
<td>Dr. Debra Mainville Eldredge</td>
<td>Dr. Edward I. Gordon</td>
</tr>
<tr>
<td>Dr. James C. Gordon</td>
<td>Dr. Donald C. Holst</td>
</tr>
<tr>
<td>----------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Dr. Michael L. Gordon</td>
<td>Dr. and Mrs. James A. House</td>
</tr>
<tr>
<td>Dr. Robert P. Gordon</td>
<td>Dr. Courtland R. Howard</td>
</tr>
<tr>
<td>Dr. Jack A. Gorelick</td>
<td>Dr. Allan G. Howie</td>
</tr>
<tr>
<td>Dr. Ferris G. Gorra</td>
<td>Dr. James M. Hulme</td>
</tr>
<tr>
<td>Dr. Allen C. Goss</td>
<td>Dr. Peter W. Humphrey</td>
</tr>
<tr>
<td>Dr. Thomas A. Gould</td>
<td>Dr. John H. Hunt</td>
</tr>
<tr>
<td>Dr. James A. Gourlay</td>
<td>Dr. Tanveer Hussain</td>
</tr>
<tr>
<td>Dr. Richard C. Grambow</td>
<td>Dr. Merril Irvin</td>
</tr>
<tr>
<td>Dr. Edward Grano, Jr.</td>
<td>Dr. James R. Jackson</td>
</tr>
<tr>
<td>Dr. Melvin D. Grattridge</td>
<td>Dr. Raymond T. Jackson</td>
</tr>
<tr>
<td>Dr. Brian Green</td>
<td>Dr. Margaret Janes</td>
</tr>
<tr>
<td>Dr. Lawrence E. Green</td>
<td>Dr. David Harvey Jenkins</td>
</tr>
<tr>
<td>Dr. Myles A. Greenberg</td>
<td>Dr. Richard B. Jogodnik</td>
</tr>
<tr>
<td>Dr. Wayne M. Greenfield</td>
<td>Dr. Dan E. Johns</td>
</tr>
<tr>
<td>Dr. Ronald Greenwald</td>
<td>Dr. Gordon Johnson</td>
</tr>
<tr>
<td>Dr. Craig Griffin</td>
<td>Dr. Mark Johnson</td>
</tr>
<tr>
<td>Dr. Robert Groskin</td>
<td>Dr. Merrill K. Johnson</td>
</tr>
<tr>
<td>Dr. John F. Gross</td>
<td>Dr. Norman H. Johnson</td>
</tr>
<tr>
<td>Dr. Stephen Gross</td>
<td>Dr. Roger K. Johnson</td>
</tr>
<tr>
<td>Dr. Martin A. Gruber</td>
<td>Dr. Tom J. Johnson</td>
</tr>
<tr>
<td>Guilderland Animal Hospital</td>
<td>Dr. Christine L. Johnston</td>
</tr>
<tr>
<td>Dr. William C. Gulick</td>
<td>Dr. Herbert Jonas</td>
</tr>
<tr>
<td>Dr. Marguerite B. Gulick</td>
<td>Dr. Robert E. Jones</td>
</tr>
<tr>
<td>Dr. Mary Lynn Gulleide</td>
<td>Dr. Stuart V. Jones</td>
</tr>
<tr>
<td>Dr. Kenneth I. Gumaer</td>
<td>Dr. James M. Jorgenson</td>
</tr>
<tr>
<td>Dr. John T. Gus</td>
<td>Dr. Robert F. Kahrs</td>
</tr>
<tr>
<td>Dr. John Gustafson</td>
<td>Dr. Abe B. Kamine</td>
</tr>
<tr>
<td>Dr. Gerald C. Haggard</td>
<td>Dr. Michael Kaplan</td>
</tr>
<tr>
<td>Dr. and Mrs. George E. Hahn</td>
<td>Dr. Jeffrey Katuna</td>
</tr>
<tr>
<td>Dr. Richard L. Hall</td>
<td>Dr. John J. Kazmierczak</td>
</tr>
<tr>
<td>Dr. Roger Halvorsen</td>
<td>Dr. Michael H. Kenfield</td>
</tr>
<tr>
<td>Dr. Beth Ann Hareski</td>
<td>Dr. K. Robert Kennedy</td>
</tr>
<tr>
<td>Dr. Ganapathirao Harish</td>
<td>Dr. Frederick H. Kent</td>
</tr>
<tr>
<td>Dr. Ronald W. Harling</td>
<td>Dr. Joseph Kessinger</td>
</tr>
<tr>
<td>Dr. Howard Harmon</td>
<td>Dr. Sydney M. Kessler</td>
</tr>
<tr>
<td>Dr. Charles C. Harris</td>
<td>Dr. Richard A. Kester</td>
</tr>
<tr>
<td>Dr. S. Emeigh Hart</td>
<td>Dr. Kenneth L. Kiehle</td>
</tr>
<tr>
<td>Dr. Richard A. Hartkopf</td>
<td>Dr. William R. Killevold</td>
</tr>
<tr>
<td>Hasbrouck Heights Veterinary Clinic</td>
<td>The Kindness Animal Hospital</td>
</tr>
<tr>
<td>Dr. Phillip W. Hayes</td>
<td>Dr. Eugene Knispel</td>
</tr>
<tr>
<td>Dr. Joseph M. Helfand</td>
<td>Kohn Animal Hospital</td>
</tr>
<tr>
<td>Dr. David R. Helland</td>
<td>Dr. Barbara Kollin</td>
</tr>
<tr>
<td>Dr. Michael G. Henes</td>
<td>Dr. Harold Kopit</td>
</tr>
<tr>
<td>Dr. Richard P. Henry</td>
<td>Dr. Barry N. Kopp</td>
</tr>
<tr>
<td>Dr. Richard Henshaw</td>
<td>Dr. Lloyd Kornblatt</td>
</tr>
<tr>
<td>Dr. William H. Herbold III</td>
<td>Dr. Mitchell E. Kornet</td>
</tr>
<tr>
<td>Dr. Judith K. Herman</td>
<td>Dr. Cynthia J. Kosacz</td>
</tr>
<tr>
<td>Dr. Jerome B. Higgins</td>
<td>Dr. Jeffrey N. Krakowsky</td>
</tr>
<tr>
<td>High Ridge Animal Hospital</td>
<td>Dr. Malcolm A. Kram</td>
</tr>
<tr>
<td>Hillsborough Veterinary Hospital</td>
<td>Dr. Arthur I. Kronfeld</td>
</tr>
<tr>
<td>Dr. Renee W. Himes-Williams</td>
<td>Dr. Kent A. Kruse</td>
</tr>
<tr>
<td>Dr. Leslie S. Hirsch</td>
<td>Dr. Joel N. Kutz</td>
</tr>
<tr>
<td>Dr. Ronald E. Hirshberg</td>
<td>Dr. Thomas E. Lassiter</td>
</tr>
<tr>
<td>Dr. Robert F. Hirt</td>
<td>Dr. John C. Laurie</td>
</tr>
<tr>
<td>Dr. Theodore N. Hoch</td>
<td>Dr. and Mrs. Stephen E. Lavidor</td>
</tr>
<tr>
<td>Dr. George F. Holmes</td>
<td>(In memory of Lucky)</td>
</tr>
<tr>
<td>Dr. J. M. Holmes</td>
<td>Dr. John R. Leahy</td>
</tr>
<tr>
<td>Dr. Harold J. Holshuh II</td>
<td>Dr. Robert K. Lee</td>
</tr>
<tr>
<td>Dr. Myles Jay Leeds</td>
<td>Dr. Alexander J. Miller</td>
</tr>
<tr>
<td>---------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Dr. George W. Leighow</td>
<td>Dr. Bonnie Miller</td>
</tr>
<tr>
<td>Lemoore Animal Clinic</td>
<td>Dr. Eugene C. Miller</td>
</tr>
<tr>
<td>Dr. Allan A. Leventhal</td>
<td>Miller-Clark Animal Hospital</td>
</tr>
<tr>
<td>Dr. Bernard G. Levine</td>
<td>Dr. Michael H. Milts</td>
</tr>
<tr>
<td>Dr. Leonard R. Levine</td>
<td>Dr. Mark Milwicki</td>
</tr>
<tr>
<td>Dr. George Levy</td>
<td>Dr. Jack Mindell</td>
</tr>
<tr>
<td>Dr. Norman F. Lewis</td>
<td>Dr. Grayson B. Mitchell</td>
</tr>
<tr>
<td>Liberty Veterinary Clinic</td>
<td>Dr. Jeffrey S. Moak</td>
</tr>
<tr>
<td>Dr. Kay S. Lin</td>
<td>Dr. Calvin Moon</td>
</tr>
<tr>
<td>Dr. James W. Lindley</td>
<td>Dr. Clifford B. Morcom</td>
</tr>
<tr>
<td>Dr. Barry A. Lissman</td>
<td>Dr. Craig T. Morena</td>
</tr>
<tr>
<td>Dr. Edward Loewenstein</td>
<td>Dr. Lee A. Morgan</td>
</tr>
<tr>
<td>Dr. Nancy Logue</td>
<td>Dr. Robert W. Morrill</td>
</tr>
<tr>
<td>Dr. Robert A. Lopez</td>
<td>Dr. William E. Morrill</td>
</tr>
<tr>
<td>Dr. John F. Lormore</td>
<td>Dr. Max R. Moss</td>
</tr>
<tr>
<td>Dr. John W. Love</td>
<td>Dr. Robert D. Moss</td>
</tr>
<tr>
<td>Dr. Greg S. Lovgren</td>
<td>Mountain Lakes Hospital for Animals</td>
</tr>
<tr>
<td>Dr. Jonathan B. Lubar</td>
<td>Dr. A. Wayne Mountain</td>
</tr>
<tr>
<td>Dr. Kenneth Luckow</td>
<td>Dr. Herbert C. Mueller</td>
</tr>
<tr>
<td>Dr. Scott Luckow</td>
<td>Dr. George H. Muller</td>
</tr>
<tr>
<td>Dr. Donald R. Lundy, Jr.</td>
<td>Dr. Earl J. Mummet</td>
</tr>
<tr>
<td>Dr. Seymour Lustig</td>
<td>Dr. Margaret Mummet</td>
</tr>
<tr>
<td>Dr. Robert E. Lynk</td>
<td>Dr. Thomas C. Murray</td>
</tr>
<tr>
<td>Dr. Randy C. Lynn</td>
<td>Dr. Jolene Nagakura</td>
</tr>
<tr>
<td>Dr. Marvin R. Maas</td>
<td>Dr. Hal Nass</td>
</tr>
<tr>
<td>Dr. Richard E. McCarthy</td>
<td>Dr. A. J. Nelson</td>
</tr>
<tr>
<td>Dr. Walter K. McCarthy</td>
<td>Dr. Carl D. Nelson</td>
</tr>
<tr>
<td>Dr. Anne McComb</td>
<td>Dr. Charles P. Nelson</td>
</tr>
<tr>
<td>Dr. Arthur E. McCormick</td>
<td>Dr. Tomas Alan Neuzil</td>
</tr>
<tr>
<td>Dr. Molly McCullough</td>
<td>Dr. Louis O. Nezvesky</td>
</tr>
<tr>
<td>Dr. David L. McGee</td>
<td>Dr. Danny T. Noble</td>
</tr>
<tr>
<td>Dr. W. Kenneth McKersie</td>
<td>Dr. William E. Noble</td>
</tr>
<tr>
<td>Dr. Janet I. McKim</td>
<td>Dr. Susan Norman</td>
</tr>
<tr>
<td>Dr. James H. McKinley</td>
<td>Dr. Ronald North</td>
</tr>
<tr>
<td>Dr. R. E. McKinney</td>
<td>North Shore Animal Hospital</td>
</tr>
<tr>
<td>Dr. D. Kelly MacManus</td>
<td>Northside Animal Hospital</td>
</tr>
<tr>
<td>Dr. Mac H. McMillan</td>
<td>Dr. Robert E. Norton</td>
</tr>
<tr>
<td>Dr. John C. McQuown</td>
<td>Norwalk Veterinary Hospital</td>
</tr>
<tr>
<td>Dr. Lester Mandelker</td>
<td>Norwell Veterinary Hospital</td>
</tr>
<tr>
<td>Dr. Robert V. Manning</td>
<td>Dr. Charles W. Nydam</td>
</tr>
<tr>
<td>Dr. William Marienberg</td>
<td>Oakton Animal Clinic</td>
</tr>
<tr>
<td>Dr. John J. Martin</td>
<td>Dr. Barbara O'Brien</td>
</tr>
<tr>
<td>Dr. Robert S. Martin</td>
<td>Dr. Robert W. O'Brien</td>
</tr>
<tr>
<td>Massapequa Hospital for Animals</td>
<td>Old Dominion Animal Hospital</td>
</tr>
<tr>
<td>Dr. Lawrence C. Mauer</td>
<td>Dr. William P. O'Leary</td>
</tr>
<tr>
<td>Dr. George E. Maurice</td>
<td>Dr. Sigurd F. Olsen</td>
</tr>
<tr>
<td>Dr. Robert A. Mavian</td>
<td>Oneida Animal Hospital</td>
</tr>
<tr>
<td>Dr. Ronald P. Mayhew</td>
<td>Dr. John O'Neil</td>
</tr>
<tr>
<td>Dr. David V. Medic</td>
<td>Dr. Russell B. Oppenheimer</td>
</tr>
<tr>
<td>Dr. Henry C. Melius</td>
<td>Otradell Animal Hospital</td>
</tr>
<tr>
<td>Dr. Thomas W. Melius, Jr.</td>
<td>Dr. Martha O'Rourke</td>
</tr>
<tr>
<td>Meller-James and Associates Veterinary Service</td>
<td>Dr. Sherbyn W. Ostrich</td>
</tr>
<tr>
<td>Dr. Gafur Memon</td>
<td>Dr. Kenneth Ostroff</td>
</tr>
<tr>
<td>Dr. Claudia Meyers</td>
<td>Dr. Herbert I. Ott</td>
</tr>
<tr>
<td>Dr. Edward Michelitch</td>
<td>Dr. Terry L. Owen</td>
</tr>
<tr>
<td>Dr. Louis W. Mick</td>
<td>Dr. Andrew Ozdy</td>
</tr>
<tr>
<td>Dr. Donald E. Mielke</td>
<td>Dr. Dore Charlotte Ozdy</td>
</tr>
<tr>
<td>Dr. Robert K. Milkey</td>
<td>Dr. S. Howard Padwee</td>
</tr>
<tr>
<td>Name</td>
<td>Name</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>-------------------------------------------</td>
</tr>
<tr>
<td>Dr. John W. Paeplow</td>
<td>Dr. Stewart R. Rockwell</td>
</tr>
<tr>
<td>Dr. Philip G. Page</td>
<td>Dr. George A. Roegge</td>
</tr>
<tr>
<td>Dr. Raymond G. Pahle</td>
<td>Dr. Jay Rogoff</td>
</tr>
<tr>
<td>Dr. James G. Paine</td>
<td>Dr. R. Gary Roop</td>
</tr>
<tr>
<td>Dr. Ants Pallop</td>
<td>Dr. Bernard W. Rosen</td>
</tr>
<tr>
<td>Dr. Foster K. Palmer</td>
<td>Dr. James H. Rosenberger</td>
</tr>
<tr>
<td>Dr. P. M. Pandolfi</td>
<td>Dr. Wayne Rosenkrantz</td>
</tr>
<tr>
<td>Dr. Philip T. Parker</td>
<td>Dr. Norman Roskin</td>
</tr>
<tr>
<td>Dr. Stephen Robert Pate</td>
<td>Ross Valley Veterinary Hospital</td>
</tr>
<tr>
<td>Dr. William H. Patlogar</td>
<td>Dr. T. R. Rossi</td>
</tr>
<tr>
<td>Dr. Charles B. Patton</td>
<td>Dr. Joan M. Rothschild</td>
</tr>
<tr>
<td>Dr. Mike A. Paul</td>
<td>Dr. Kenneth J. Rotondo</td>
</tr>
<tr>
<td>Dr. Jerome Payton</td>
<td>Dr. Samuel Rowell</td>
</tr>
<tr>
<td>Dr. Donald E. Peddie</td>
<td>Dr. Ellis F. Rubin</td>
</tr>
<tr>
<td>Dr. James F. Peddie</td>
<td>Dr. Nolan P. Rubin</td>
</tr>
<tr>
<td>Dr. Linda Reeve Peddie</td>
<td>Dr. John Rutherford</td>
</tr>
<tr>
<td>Dr. Roger J. Peduzzi</td>
<td>Dr. Robert Ryan</td>
</tr>
<tr>
<td>Pender Veterinary Clinic</td>
<td>Dr. C. L. Sackler</td>
</tr>
<tr>
<td>Dr. Emil E. Perona</td>
<td>Dr. John S. Sainsburg, Jr.</td>
</tr>
<tr>
<td>Dr. Thomas R. Pescod</td>
<td>Sakonnet Veterinary Hospital</td>
</tr>
<tr>
<td>Dr. Earle N. Peterson</td>
<td>Dr. Ray M. Sammons, Jr.</td>
</tr>
<tr>
<td>Dr. Roy H. Peterson</td>
<td>Dr. Keith L. Samson</td>
</tr>
<tr>
<td>Dr. Russ Petro</td>
<td>Dr. Joan M. Samuels</td>
</tr>
<tr>
<td>Dr. W. Brent Pettigrew</td>
<td>Dr. Thomas T. Sanford</td>
</tr>
<tr>
<td>Dr. Thomas H. Pettit</td>
<td>Dr. Burton Saunders</td>
</tr>
<tr>
<td>Dr. Diana K. Phillips</td>
<td>Dr. James R. Saunders, Jr.</td>
</tr>
<tr>
<td>Pine Bluff Animal Hospital</td>
<td>Dr. Jeremiah N. Sbarra</td>
</tr>
<tr>
<td>Pleasant Valley Animal Hospital</td>
<td>Dr. Eugene Scallon</td>
</tr>
<tr>
<td>Dr. Michael L. Podolin</td>
<td>Dr. Walter B. Schaffeld</td>
</tr>
<tr>
<td>Dr. L. Richard Poggi</td>
<td>Dr. Albert Schaffer</td>
</tr>
<tr>
<td>Dr. William Pomper</td>
<td>Dr. Ned S. Schankman</td>
</tr>
<tr>
<td>Potomac Animal Hospital</td>
<td>Dr. George N. Schatzle</td>
</tr>
<tr>
<td>Dr. Ralph Pover</td>
<td>Dr. Harold G. Scheffler</td>
</tr>
<tr>
<td>Dr. Don C. Powell</td>
<td>Dr. Deborah A. Schelkopf</td>
</tr>
<tr>
<td>Dr. Frank R. Powell</td>
<td>Dr. Charles Schenck</td>
</tr>
<tr>
<td>Dr. Josef M. Powell</td>
<td>Dr. S. J. Schimelman</td>
</tr>
<tr>
<td>Dr. Raymond S. Pray</td>
<td>Dr. Gary D. Schlapp</td>
</tr>
<tr>
<td>Dr. John Prentiss</td>
<td>Dr. Milton D. Schmutz</td>
</tr>
<tr>
<td>Prynn Veterinary Clinic</td>
<td>Dr. Ralph S. Schoemann</td>
</tr>
<tr>
<td>Dr. Bruce S. Putchat</td>
<td>Dr. J. Kenneth Schoolmeester</td>
</tr>
<tr>
<td>Dr. Susan Rabaut</td>
<td>Dr. Michael D. Schriver</td>
</tr>
<tr>
<td>Dr. Franklin W. Rapp</td>
<td>Dr. Stephen M. Schuchman</td>
</tr>
<tr>
<td>Raritan Animal Hospital</td>
<td>Schulhof Animal Hospital</td>
</tr>
<tr>
<td>Dr. Jack O. Rasmusson</td>
<td>Dr. Steven M. Schultz</td>
</tr>
<tr>
<td>Redlands Animal Hospital</td>
<td>Dr. Harry Schumacher, Jr.</td>
</tr>
<tr>
<td>Dr. Howard W. Redlus</td>
<td>Dr. John Paul Schultz</td>
</tr>
<tr>
<td>Dr. H. Clinton Reichard</td>
<td>Dr. Stephen H. Schwirck</td>
</tr>
<tr>
<td>Dr. Barbara Jean Reid</td>
<td>Dr. George H. Scott</td>
</tr>
<tr>
<td>Dr. James S. Reid</td>
<td>Dr. Michael V. Scott</td>
</tr>
<tr>
<td>Dr. Martin Reiter</td>
<td>Dr. Richard Z. Segall</td>
</tr>
<tr>
<td>Dr. Arnold M. Remson</td>
<td>Dr. Dan L. Segna</td>
</tr>
<tr>
<td>Dr. Joseph P. Renaldo</td>
<td>Dr. Maurice E. Serling</td>
</tr>
<tr>
<td>Dr. Robert K. Reynolds</td>
<td>Dr. John M. Sexton</td>
</tr>
<tr>
<td>Dr. Harvey Rhein</td>
<td>Dr. Martin P. Shapiro</td>
</tr>
<tr>
<td>Dr. Arthur Richards, Jr.</td>
<td>Dr. Malcolm Sharpe</td>
</tr>
<tr>
<td>Ridge Animal Hospital</td>
<td>Dr. Dinjer Shefki</td>
</tr>
<tr>
<td>Dr. Kenneth E. Rix</td>
<td>Dr. Maxine Shefki</td>
</tr>
<tr>
<td>Dr. Helen S. Rizzo</td>
<td>Dr. Alan C. Shiro</td>
</tr>
<tr>
<td>Dr. Kent C. Roberts</td>
<td>Dr. James M. Shuler</td>
</tr>
<tr>
<td>Clubs</td>
<td>Clubs</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>Afghan Hound Club of the Inland Empire</td>
<td>Fond Du Lac County Kennel Club</td>
</tr>
<tr>
<td>Alaskan Malamute Club of Wisconsin</td>
<td>Fort Worth Obedience Club</td>
</tr>
<tr>
<td>Allentown Dog Training Club*</td>
<td>Fremont Ohio Dog Fanciers Association</td>
</tr>
<tr>
<td>American Boxer Club*</td>
<td>Garden State Siberian Husky Club</td>
</tr>
<tr>
<td>Anne Arundel Kennel Club*</td>
<td>German Shepherd Dog Club of America*</td>
</tr>
<tr>
<td>Aurora All Breed Kennel Club</td>
<td>German Shepherd Dog Club of Charleston*</td>
</tr>
<tr>
<td>Australian Terrier Club of America*</td>
<td>German Shepherd Dog Training Club of Chicago</td>
</tr>
<tr>
<td>Back Mountain Kennel Club*</td>
<td>Glendale Beagle Club</td>
</tr>
<tr>
<td>Bakersfield Obedience Training Club</td>
<td>Glens Falls Kennel Club*</td>
</tr>
<tr>
<td>Bellfontaine All-Breed Kennel Club</td>
<td>Golden Retriever Club of Illinois†</td>
</tr>
<tr>
<td>Boxer Club of Long Island</td>
<td>Golden Retriever Club of Long Island</td>
</tr>
<tr>
<td>Boxer Club of Western New York</td>
<td>Goldsboro Kennel Club</td>
</tr>
<tr>
<td>Brevard Kennel Club†</td>
<td>Greater Fredericksburg Kennel Club*</td>
</tr>
<tr>
<td>Cairn Terrier Club of America*</td>
<td>Greater Lowell Kennel Club*</td>
</tr>
<tr>
<td>Catonsville Kennel Club*</td>
<td>Greater Miami Boxer Club</td>
</tr>
<tr>
<td>Cayuga Lake Beagle Club</td>
<td>Greater Miami Scottish Terrier Club</td>
</tr>
<tr>
<td>Central Florida Cairn Terrier Club</td>
<td>Greater Philadelphia Dog Fanciers Association</td>
</tr>
<tr>
<td>Central Illinois Shetland Sheepdog Club</td>
<td>Greater Twin City Su-Mac Cairn Terrier Club</td>
</tr>
<tr>
<td>Central Iowa Kennel Club*</td>
<td>Great Lakes English Springer Spaniel Breeders Association</td>
</tr>
<tr>
<td>Central New York Kennel Club*</td>
<td>Green Bay Shetland Sheepdog Club</td>
</tr>
<tr>
<td>Chain O'Lakes Kennel Club*</td>
<td>Greenville Kennel Club*</td>
</tr>
<tr>
<td>Chicagoland Old English Sheepdog Club*</td>
<td>Harrisburg Kennel Club†</td>
</tr>
<tr>
<td>Chicagoland Shetland Sheepdog Club</td>
<td>Huntsville Obedience Training Club*</td>
</tr>
<tr>
<td>Cincinnati Kennel Club†</td>
<td>Irish Setter Club of Metropolitan Toledo</td>
</tr>
<tr>
<td>Clermont County Kennel Club*</td>
<td>Iroquois German Shepherd Dog Club</td>
</tr>
<tr>
<td>Cocker Spaniel Club of Orange County</td>
<td>Junior Collie Club of Central New York</td>
</tr>
<tr>
<td>Cocker Spaniel Club of Rhode Island</td>
<td>Kanadasaga Kennel Club*</td>
</tr>
<tr>
<td>Collie Club of America</td>
<td>Kennel Club of Buffalo (In memory of Dr. John C. Laurie)</td>
</tr>
<tr>
<td>Colonial Akita Club</td>
<td>Kennel Club of Freeborn County, Minnesota</td>
</tr>
<tr>
<td>Columbiana County Kennel Club*</td>
<td>Kerry Blue Terrier Club of Hawaii</td>
</tr>
<tr>
<td>Connecticut Terrier Club</td>
<td>Labrador Retriever Club of Central Connecticut</td>
</tr>
<tr>
<td>Delaware Valley Dalmatian Club</td>
<td>Lancaster Dog Training Club*</td>
</tr>
<tr>
<td>Devon Dog Show Association†</td>
<td>Land O Lincoln Collie and Sheltie Club</td>
</tr>
<tr>
<td>Diamond State German Shepherd Dog Club</td>
<td>Lehigh Valley Kennel Club*</td>
</tr>
<tr>
<td>Dog Owners Training Club of Maryland*</td>
<td>Lizard Butte Kennel Club*</td>
</tr>
<tr>
<td>Durham Kennel Club</td>
<td>Lone Star Bulldog Club</td>
</tr>
<tr>
<td>Elm City Kennel Club*</td>
<td>Long Island Kennel Club*</td>
</tr>
<tr>
<td>Endless Mountains Kennel Club*</td>
<td>Los Alamos Dog Obedience Club</td>
</tr>
<tr>
<td>Evergreen Empire Manchester Terrier Fanciers</td>
<td>Lower Bucks Dog Training Club*</td>
</tr>
<tr>
<td>Finger Lakes Kennel Club†</td>
<td>McKean County Beagle Club</td>
</tr>
<tr>
<td>Florida West Coast Miniature Schnauzer Club</td>
<td>Maine Retriever Trial Club</td>
</tr>
<tr>
<td></td>
<td>Medallion Rottweiler Club*</td>
</tr>
<tr>
<td></td>
<td>Medina Kennel Club†</td>
</tr>
<tr>
<td></td>
<td>Metropolitan Bench Beagle Association</td>
</tr>
</tbody>
</table>

*Gave $100–$499 since January 1, 1983.  
†Gave $500–$999 since January 1, 1983.  
‡Gave $1,000 or more since January 1, 1983.
Miami Valley Vizsla Club
Mid-Hudson Kennel Club
Mid-Jersey Companion Dog Training Club
Midwest Borzoi Club
Mid-West Cocker Spaniel Club of Canada
Miniature Pinscher Club of America*
Minnesota Field Trial Association
Mission Valley Cocker Spaniel Club
Mohawk Beagle Club
Mohawk-Hudson German Shepherd Dog Club
Monticello New York Kennel Club*
(Memorial of Drs. James Cone, George Hahn,
Stuart Jones, Lawrence Mauer, Clifford Morcom,
and Allen Wachter)
Nassau Dog Training Club
Nathan Hale Obedience Club
New Jersey Beagle Club
New Jersey Boxer Club*
Newton Kennel Club‡
Northern California Whippet Club
Northern Obedience Training Enthusiasts†
Northern Ohio Beagle Club
North Penn Field and Conservation Club
Norwegian Elkhound Association of Southern California*
Norwich and Norfolk Terrier Club*
Obedience Dog Training Club of Waterbury
Obedience Training Club of Hawaii*
Old English Sheepdog Club of America*
Old Pueblo Dog Training Club*
Olean Kennel Club
Olympic Kennel Club*
Onondaga Kennel Association†
Oregon State Bulldog Club
Ox Ridge Kennel Club‡
Pembroke Welsh Corgi Club of America*
Peninsula Dog Fanciers’ Club*
Penn Ridge Kennel Club*
Perkiomen Valley Kennel Club*
Philadelphia Dog Training Club*
Pike’s Peak Collie Club
Pimiteoui Poodle Club‡
Poodle Club of Southeast Michigan
Pug Dog Club of America*
Richmond County Kennel Club
Richmond Dog Obedience Club
Ringneck German Shorthaired Pointer Club
Rocky Mountain German Shepherd Dog Club
Rombat Hunt
Rubber City Kennel Club‡
St. Bernard Club of Greater Buffalo
St. Bernard Club of Greater Detroit
St. Hubert Kennel Club
Samoyed Fanciers of Sacramento*

Santa Ana Valley Kennel Club*
Saucon Valley Boxer Club
(In memory of Mr. Howard Eldridge)
Saw Mill River Kennel Club†
Scottish Terrier Club of Greater Washington, DC*
Scottish Terrier Club of Michigan*
Siberian Husky Club of San Diego County
Silver Bay Kennel Club of San Diego*
Skyline Cocker Club*
Somerset County Dog Obedience Club*
Somerset Hills Kennel Club‡
South Bay Kennel Club*
South County Kennel Club
Southeast Arkansas Kennel Club
Southeastern Brittany Club
South Texas Obedience Club
Space Coast Kennel Club
Springfield Kennel Club†
Standard Schnauzer Club of Southern California
Stark Beagle Club*
Steel City Kennel Club*
Suburban Dog Training Club
Sussex Hills Kennel Club*
Tanana Valley Kennel Club*
Terry-All Kennel Club*
Tibetan Terrier Club of Northern California
Tibetan Terrier Club of the Greater New York Area
Tidewater Kennel Club of Virginia*
Tonawanda Valley Kennel Club*
(In memory of Mrs. Doris Hollenbeck)
Trenton Kennel Club*
Two Cities Kennel Club*
Ulster Dog Training Club*
Upper Snake River Valley Dog Training Club
Valley Hills Obedience Club*
Valley of the Sun Boston Terrier Club
Vizsla Club of Greater Cleveland
Waterloo Kennel Club*
(In honor of Dr. Jerry Den Herder)
Westchester Kennel Club*
Western Reserve Kennel Club†
Western Reserve Old English Sheepdog Club*
West Highland White Terrier Club of
Greater Denver
West Highland White Terrier Club of
Western Pennsylvania
Wilkes-Barre Dog Training Club
(In memory of Mrs. Suzanna Schermin)
William Penn West Highland White Terrier Club
Winnebago Labrador Retriever Club*
Yorkshire Terrier Club of Greater Los Angeles*
### Veterinary Associations
- Central New York Veterinary Medical Association
- Finger Lakes Veterinary Medical Association
- Westchester-Rockland Veterinary Medical Association
  (In memory of Dr. Irene Kraft)
- Women's Auxiliary to the Long Island Veterinary Medical Society
- Women's Auxiliary to the New York State Veterinary Medical Society

### Foundations and Trusts
- C.A.L. Foundation
- Gaylord Donnelley Foundation
- Firman Fund
- Dorothy Russell Havemeyer Foundation, Inc.
- Gilbert W. and Louise Ireland Humphrey Foundation
- Ireland Foundation
- Walter Kendall Trust
- James A. Macdonald Foundation
- Dr. J. E. Salsbury Foundation
- Shepard Foundation
- Marilyn M. Simpson Charitable Trusts
- Robert Winthrop Trust

### Companies
- Acmaro Securities Corporation
- Agway
- Alpo Pet Foods
- Animal Inn
- Beatrice Foods Company
- Biotron Laboratories
- Champion Valley Farms
- Ciba-Geigy
- Colonial Bancorp
- Fort Dodge Laboratories
- Gibbs and Hill
- Hilborn-Hamburger
- Hoffmann-LaRoche
- Illinois Bell
- Invenex Veterinary Laboratories
- Investors Diversified Services
- Jay-Edd Trim Shop
- Mony Trust
- Norden Laboratories
- Quaker Oats Company
- Ralston Purina Company
- Stuart Pharmaceuticals
- Syntex Research
- Veterinaria AG, Zurich

### In Memoriam
- Mrs. Mildred Brown
- Mr. Frederick Butler
- Mrs. Martha Chidester
- Mrs. Joan Dell
- Mrs. Jeanne Le Andro Doyen
- Mr. Howard Eldridge
- Mrs. Ann Roberta Furstenau
- Ms. Toni Hanna
- Mrs. Joan M. Hoefer
- Mrs. Doris Hollenbeck
- Mrs. Susan Postemski
- Mr. Nelson J. Quintin
- Mr. Horace Reed III
- Dr. James Robbin
- Mrs. Suzanna Schermin
- Mr. David Schwartz
- Mrs. Allan Shelden
- Ms. Jane Stigum
There are many ways you can give to advance the work of the Institute.
Ways of Giving

In establishing the Institute, of which the Cornell Research Laboratory for Diseases of Dogs is an important part, the Cornell University Board of Trustees authorized the Treasurer's Office of Cornell to be custodian of all funds given in support of the Institute. You are thus assured your gift will have the maximum benefit.

There are many ways you can give to advance the work of the Institute. Some of these opportunities offer substantial income tax and estate tax benefits.

Checks. All checks should be made payable to Cornell University and mailed to Office of the Director James A. Baker Institute for Animal Health Cornell University Ithaca, New York 14853 for the uses and purposes of the Cornell Research Laboratory for Diseases of Dogs.

Appreciated stocks. Selling appreciated stocks is almost certain to increase your taxes, but if you give the stocks to Cornell outright and deduct their full current market value as a charitable contribution, you can avoid capital gains tax. To complete the transaction with maximum speed and at lowest cost—

1. take the certificate to your bank or broker;
2. inform your bank or broker that you want to make a gift of these shares or securities to Cornell University for the Institute;
3. instruct your bank or broker to telephone the Office of University Investments, at 607/277-0022;
4. write a note to the Director, James A. Baker Institute for Animal Health, Cornell University, Ithaca, New York 14853, including the name of your bank or broker and the form and size of your gift.

Depreciated stocks. You get maximum benefit from a gift of depreciated stocks by selling them and giving the cash to Cornell. That way you get the capital loss allowance and a charitable contribution deduction for the amount of the gift. Instruct your bank or broker to sell the shares or securities and send the proceeds as a gift to Cornell for the James A. Baker Institute for Animal Health.

Bequests. Charitable bequests provide substantial estate tax benefits. They can be gifts of land or buildings, securities, personal property, or cash. The University counsel of Cornell University suggests the following provision: "I hereby give, devise, and bequeath [description of property] to Cornell University, an educational corporation located at Ithaca, New York, for the uses and purposes of the Cornell Research Laboratory for Diseases of Dogs."

Deferred giving. An income-producing trust enables you to make a gift to the Institute, gain income for life, and derive tax benefits. A beneficiary may be named to receive the income, too. The Institute offers three plans: the Pooled Life Income Fund, the Annuity Trust, and the Unitrust. Financial planning involving deferred gifts requires expert advice from your attorney and other specialists. If you are interested in deferred giving, please notify the director, who will make arrangements for you to receive more-specific information.