BAKER INSTITUTE FOR ANIMAL HEALTH

Annual Report 2011–2012

To Improve Animal Health
Through Basic & Applied Research

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A MESSAGE FROM THE DIRECTOR

Dear Friends,

I am pleased to present the 2011-2012 Annual Report of the Baker Institute for Animal Health to you, our generous supporters. Many of you have been long-time friends of the Institute and I greatly appreciate your loyalty to this unique organization.

As we quickly approach the conclusion of my first two years as director, I am honored to follow in the footsteps of founder Dr. James Baker, who created a groundbreaking home for cutting-edge research in animal health. As you likely know, some of the most significant accomplishments of the Baker Institute include discoveries beneficial to animals and humans alike. Examples include the development of vaccines and genetic tests for dogs, cats, and horses, and the identification of differences in gene expression responsible for breast cancer. Another discovery could lead to technology that will improve targeted delivery of drugs directly to cancerous tumor sites. Our scientific investigations continue to advance animal as well as human health, which are becoming increasingly interrelated.

The Baker Institute also has a long tradition of training new generations of leading scientists – from researchers to physicians, veterinarians to academicians – who are working on issues of far-reaching, even global, impact. Here we profile four former trainees who are outstanding examples of the relationship between animal and human health investigations, and who represent the caliber of our training program. Through the highlights featured in this report, I hope you will not only be reassured of the continuing tradition of excellence but also discover new and exciting reasons to be proud of your affiliation with the Baker Institute.

As always, thank you so much for your support.

Best regards,

Colin R. [illegible]sh, PhD

BICKNESE PRIZE RECIPIENTS

About the Prize

The Bicknese Family Prize was established in 2005 by Dr. Joanne Bicknese, CALS '76, DVM '78, MS, ELS, as an annual award for research activities of a woman scientist-in-training. The award aims to provide support at a critical point in the trainee's academic development and to help launch her into a successful career. Dr. Bicknese, one of the Institute's most devoted supporters, is a current member of the Institute's Advisory Council and served six years as chair. The fund honors her parents, Helen and Louis Bicknese, and her aunt and uncle, Grace and Carl Bicknese.

Dr. Chinatsu Mukai, PhD (2011-12)

Chinatsu works as a research associate in the laboratory of Dr. Alexander Travis conducting research on two major themes. One project uses mammalian sperm as a biological model for nanotechnology to design self-powered microscopic machines with medical applications. Chinatsu also researches how cells in the testes differentiate and grow into mature sperm in dogs and mice, as a means of investigating important questions of cell biology, specific issues affecting fertility, and also for developing new ways to optimize the use of reproductive cells from threatened species to help wildlife conservation efforts.

"I hope my research will add knowledge in stem cell and reproductive biology to contribute to development of medical nanotechnology, lead to a cure for infertility by transforming stem cells into viable sperm, and improving ways to preserve wildlife," said Chinatsu. "My training at the Baker Institute has helped me grow as a scientist, and one day I hope to have my own laboratory and to continue contributing to these fields."

Dr. Leela Noronha, PhD '10 (2010-11)

As a post-DVM PhD student in the field of immunology, Leela worked in the lab of Dr. Douglas Antczak investigating the equine immune system during pregnancy and making important contributions to further the understanding of how natural killer cells, which play important roles in mammalian immune systems, operate in horses. Leela's primary long-term career goal is to advance both human and animal health by helping to bridge the gap between basic science and the clinical application of novel research discoveries.

"The Baker Institute provided me with a rigorous intellectual environment for my graduate training," said Leela. "The faculty members taught me daily by example how to develop a successful research program that uses veterinary research to advance biomedical science. The staff taught me invaluable professional and interpersonal skills that will serve me well in my career and in life. Most importantly, everyone at the Institute provided me with unconditional support whenever I needed it. I will always be grateful to everyone at Baker for helping me earn my PhD."

RAISING THE BAR: CORNELL'S LEADERSHIP PROGRAM TRAINS FUTURE INNOVATORS FOR VETERINARY RESEARCH

It takes a veterinarian's animal expertise to lead the profession and a researcher's new knowledge to drive it forward. That's why Cornell's Leadership Program for Veterinary Scholars seeks to prepare a select group of students from around the world to bridge both roles and become leaders raising the bar of the profession through veterinary research.

One of the program's activities to this end poses a thought-provoking challenge: How would you make a new drug designed to ease animals' suffering? This year a scholar helped her team meet this challenge in a way that raised the Program's bar higher than ever before.

A current veterinary student, Dr. Andrea Nies came to the Leadership Program from Germany with a PhD in chemistry and a desire to apply that specialized knowledge to veterinary research. In the Program's Drug Design and Development Module, teams of students planned the development of hypothetical drugs from concept and synthesis to marketing and distribution. Andrea led her team in drawing out a detailed roadmap demonstrating how to synthesize a hypothetical new drug for treating canine arthritis.

"This is the most chemically-feasible proposal for a drug's synthesis that this exercise has yet produced," said Dr. Doug McGregor, former director of the Leadership Program and of the Baker Institute. "Andrea has achieved something quite remarkable."

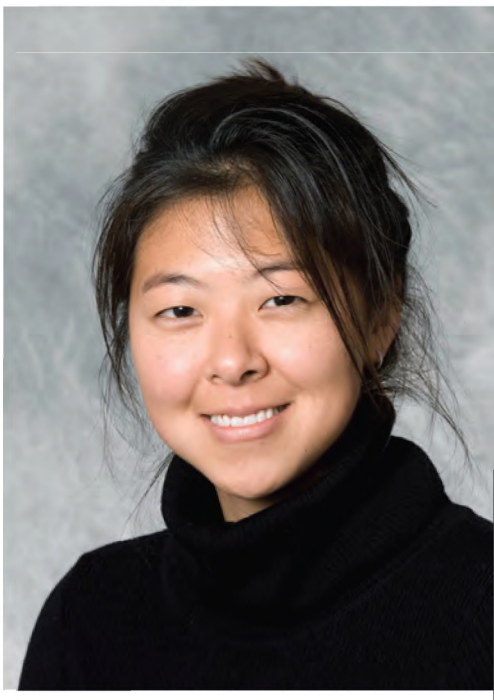
"I'm interested in a possible career in drug development and the Leadership Program has been very helpful in exposing me to the processes and issues in this field," said Andrea. "We've gotten a lot of career guidance and met professionals to talk to about options and directions in veterinary research. I've really valued this time, not only for the new ideas and experiences, but also for the strong new network of mentors and friends who may become future scientific peers."

A competitive rower, Andrea also exercised the Leadership Program's signature values beyond the classroom by

organizing nearly all of this year's 27 scholars into a dragonboat racing team that won a cup in the 2012 Finger Lakes Dragonboat Race.

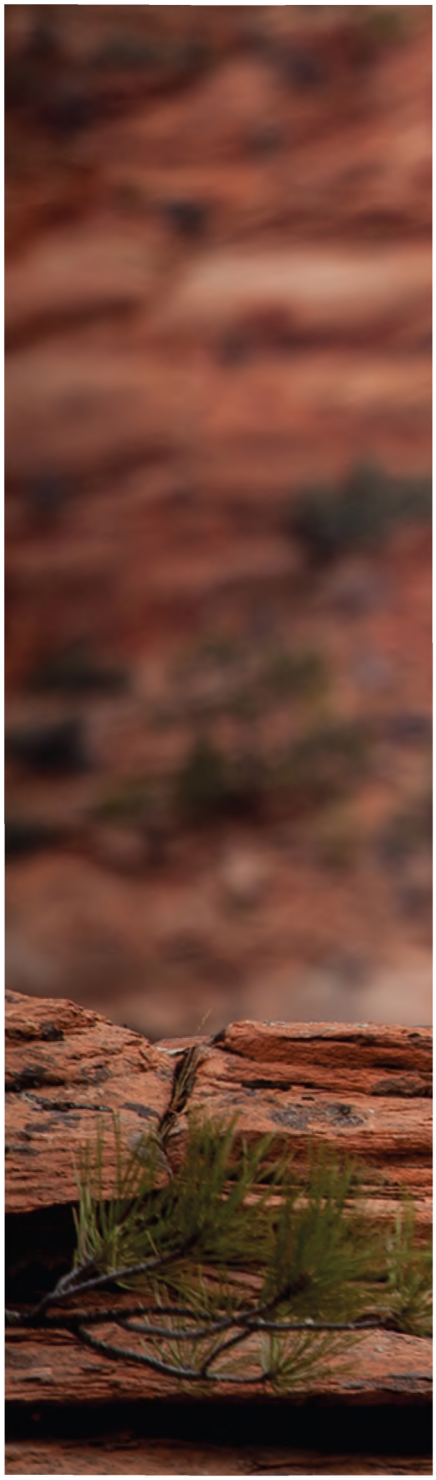
As with Andrea, Jane Park also found the Leadership Program invaluable both in research and in her future career plans. Jane entered veterinary school with the intention of balancing clinical work with research and teaching and, she says, the Leadership Program has given her the tools necessary to pursue her ambition. The experience has also expanded her knowledge of basic science and techniques that will help her with future research. Working in the epigenetics and reproductive biology laboratory of Dr. Scott Coonrod, Associate Professor at the Baker Institute, Jane examined patterns of expression of peptides in feline and human squamous cell carcinomas. This could lead to a better understanding of various stages of cancer development in humans and animals.

Jane and Andrea are just two examples of the many promising students in the long and highly accomplished history of the Leadership Program. Associate Professor of Virology at the Baker Institute and the Program's current director, Dr. John Parker, said that "overall we have seen around 30% of our 540 participants go on to advanced training and undertake a PhD degree. Veterinarians are the people best equipped to tackle many different animal and human health problems, from developing new drugs specifically for animals to translating human medical research innovations to benefit animal health, and we are giving scholars like Andrea and Jane the tools to excel in research and become leaders in whatever fields they choose."



SPREADING THE WORD ABOUT BIODIVERSITY

DR. DANIELLE BUTTKE



For Dr. Danielle Buttke, the benefits of conserving and preserving our planet's biodiversity is a (too) well-kept secret. They should be shouted from the top of every tree. Now, after nearly a decade of study and with three advanced degrees under her lab coat, she is in a position and fully prepared to help spread the word. Recently appointed as a veterinary epidemiologist with the National Parks Service, Dr. Buttke said her first priority is to help every one of the 275 million annual visitors to our nation's parks understand the interdependence between human, animal, and environmental well-being.

"Our health is so dependent on the health of the environment and animals," Dr. Buttke said, indicating that the connections between biodiversity and our own quality of life are just now beginning to be clearly articulated for the public. "Having predators among us, for example, actually has very beneficial impacts. Although it's not necessarily intuitive, reintroducing wolves in the national parks is a good idea, because it has the potential to improve our water quality."

In the position since June of 2012, Dr. Buttke is also looking for opportunities to enlist members of the health community in her mission to advance the One Health movement to the next level.

"We need to take One Health another step farther," said Dr. Buttke. "When members of the health community collaborate and embrace the idea that the health status of wildlife is directly related to the spread of vector-borne diseases in people, we'll be able to fully realize the potential of the One Health movement on the connections between human and animal health."

Although these views are second nature to Dr. Buttke, she credits her time at the Baker Institute for Animal Health with helping her realize her goals, as that was where she gained her initial training in Dr. Alex Travis's lab and enjoyed the mentorship of Drs. Doug McGregor and Alfonso Torres.

"Alex has always understood the interconnectedness between all animals (including wildlife), people, and the environment," said Dr. Buttke. "He introduced me to people working in wildlife conservation, kept me abreast of the latest thinking, and allowed me to pursue my Master's in Public Health while I was completing my PhD. I was incredibly fortunate to work with him. He is a wonderful teacher."

As Dr. Travis's graduate student, Dr. Buttke studied cell signaling between the sperm and egg for her PhD studies, working at the molecular and biochemical levels. In this basic scientist role, she became proficient in designing experiments and gleaning information from previously published works, all transferable skills that she employs daily in her current position.

"Everything I did in my doctoral work is applicable to my position today," said Dr. Buttke, who chose to study at Cornell because of its academic strengths in ecology and wildlife and because of the freedom Cornell offered to build her own path. "Reproduction and breeding are keys to successfully managing biodiversity. We need to manage populations carefully, recognizing the impact over- or under-population of one species has on the whole. This will let us preserve biodiversity and wildlife for future generations."

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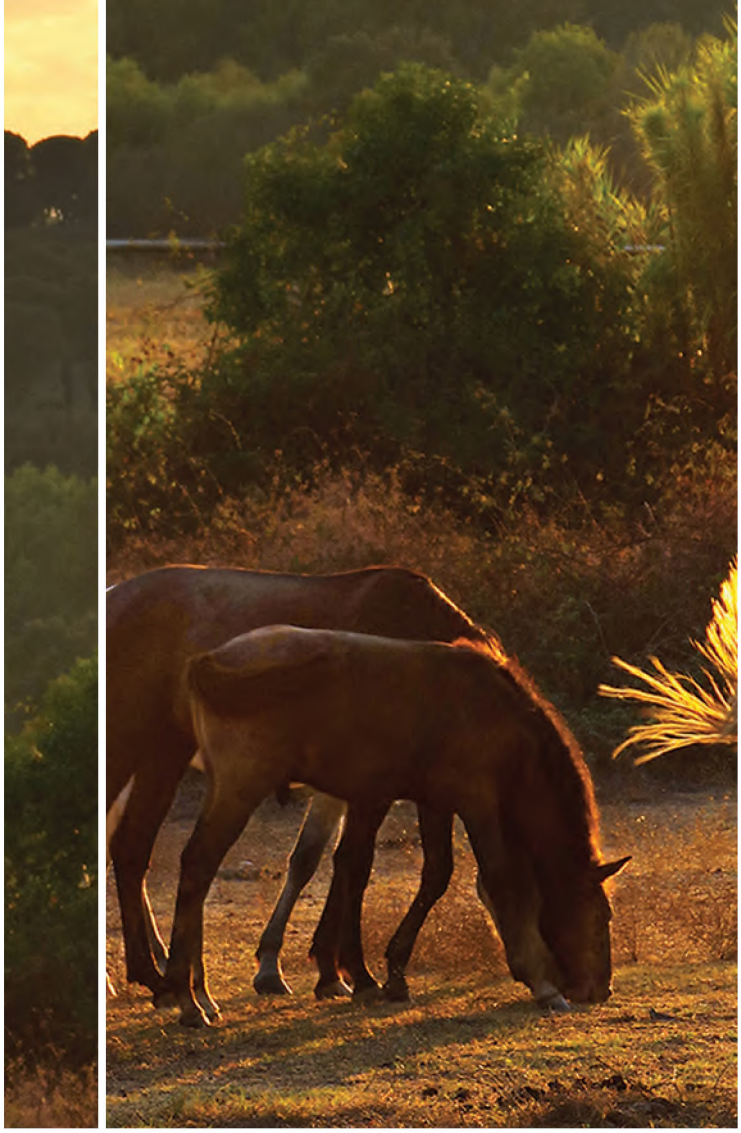


IMPROVING THE QUALITY OF LIFE OF HORSES AND PEOPLE

DR. JULIA FELIPPE

As a new graduate student looking for a mentor, Dr. Julia Felippe had a first choice: Dr. Douglas Antczak at the Baker Institute for Animal Health. Known for his dedication and innovative, insightful, and results-oriented equine immunologic research, he was at the top of her short list.

"I knew I wanted to focus my research career in the area of equine immunology, and he was simply the best," said Dr. Felippe. "He was an accomplished researcher and an extraordinary mentor. I could not have been any more fortunate."

In Dr. Antczak's lab, Dr. Felippe did gestational research, looking at how placental cells manipulate a mare's immune system to accept pregnancy, despite the fact that during this biological process, fetal foreign cells are introduced into a mother's body and are not rejected. This work, Dr. Felippe said, gave her the necessary training and experience to pursue further questions about the equine immune system. It also launched an investigation that led to a $1.5 million National Institutes of Health Director's New Innovator Award for Dr. Felippe in 2010.

As a graduate student in Dr. Antczak's laboratory in 2001, she was presented with a 12-year-old horse that contracted recurrent bacterial infections and meningitis. When the referring veterinarian checked the horse's antibodies, none were detected. With Dr. Felippe's further investigation of the immune system status, the horse was found to be lacking a class of cells called B cells, which are necessary for antibody production.

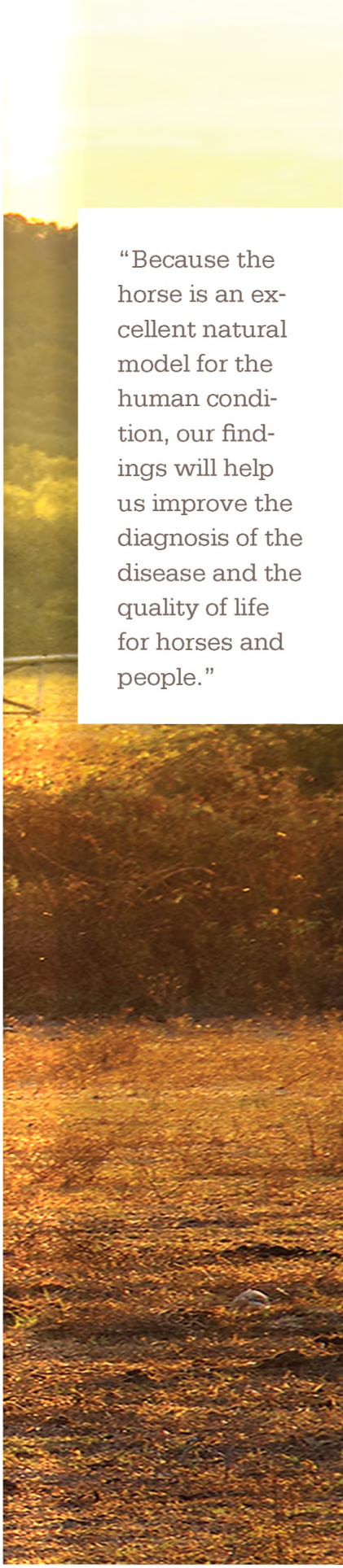
"In 2001, this condition had not been characterized in the horse," said Dr. Felippe. "We reviewed the literature for human diseases and found the link to Common Variable Immunodeficiency (CVID), a condition that has been studied in people for more than 50 years. Because the horse is an excellent natural model for the human condition, our findings will help us improve the diagnosis of the disease and the quality of life for horses and people."

Since 2001, Dr. Felippe's research team, including Research Associate Dr. Rebecca Tallmadge Ingram (who also studied in Dr. Antczak's lab) and technician Mary Beth Matychak, has diagnosed 30 cases of equine CVID, testing from samples that have been submitted from equine referral practices across the country.

"We've developed a national network of veterinarians and horse owners who are tremendously supportive and enthusiastic about our work," said Dr. Felippe, who has been on the faculty at the College of Veterinary Medicine for a decade and is an Associate Professor of large animal medicine. "Our access to these samples, our preliminary data, and our hypothesis that challenges conventional thinking were all critical to our successful application for the Innovator Award."

Dr. Felippe's lab is also involved in research supported by the USDA that explores how foals respond to immunizations as neonates. Although some studies suggest that foals are incapable of producing antibodies at birth due to maternal antibody interference, Dr. Felippe and her team question whether antibodies in foals might be consistently found if the detection method used was more sensitive. Toward that end, Dr. Tallmadge developed a novel application of a molecular technique that measures antibody diversity in neonates, with follow-up testing done after vaccination.

In addition to her research and teaching responsibilities at the College, Dr. Felippe recently was tapped to serve as the College's Veterinary Curriculum Director, a position that will allow her to ensure that future veterinarians are as prepared to make a difference as she is.



"Because the horse is an excellent natural model for the human condition, our findings will help us improve the diagnosis of the disease and the quality of life for horses and people."

TOMORROW'S LEADERS TODAY: BAKER TRAINEE DEDICATES CAREER TO IMPROVING HEALTH IN DEVELOPING NATIONS

DR. NEBIAT GEBRESELASSIE

Equipped with the knowledge and tools to make a difference, scholars trained at Baker Institute go on to become leaders in improving animal and human health around the world. Fresh from Baker's graduation line, Nebiat Gebreselassie PhD '12 has already dived straight into impactful work in Africa, where she is using her training to help improve health and quality of life in developing communities.

At the Baker Institute, Nebi trained in the laboratory of Dr. Judith Appleton, studying the immunology of infectious disease. Her thesis explored how the parasite Trichinella spiralis uses host immune cells called eosinophils to sustain long-term infection in muscle. Trichinella is a roundworm that infects rats, bears, pigs, and humans, and infection with this parasite causes intestinal and muscular disease. This can be a big public health problem, particularly in endemic areas where people frequently eat undercooked meat. Nebi described how eosinophils promote chronic Trichinella infection by suppressing an arm of the immune system that is important for clearing parasites and by helping the infected cells get the nutrients they need. The same responses are likely to be involved in the responses of animal hosts to many other parasitic infections.

"The Baker Institute is a supportive and nurturing environment which helped me grow into a confident and mature scientist," said Nebi. "Everyone truly cares for your growth at Baker. My advisor was truly a role model to me in both hard work and integrity."

Soon after graduating, Nebi travelled to Ethiopia to serve as a diagnostic laboratory manager and malaria officer at the Center for National Health Development in Ethiopia (CNHDE). A project of the Earth Institute at Columbia University, CNHDE supports efforts for achieving the Millennium Development Goals in Ethiopia, a set of initiatives to reduce poverty. Nebi managed their diagnostic laboratory and helped implement best-practices for preventing malaria in villages across Ethiopia.

Nebi recently started a post-doctoral fellowship in the laboratory of Dr. Susanna Brighenti. Though her new advisor's lab is at the Karolinska Institutet in Stockholm, Sweden, Nebi continues working in the field, spending 90% of her time in Addis Ababa, Ethiopia. Here she is conducting a clinical trial to determine whether vitamin D and the drug phenylbutyrate can be used to improve immune reconstitution and quality of life in people infected with tuberculosis or HIV. Over the next few years she hopes to develop methods of manipulating the immune system to increase vaccine and drug effectiveness.

"I plan to focus my career on helping improve health and well-being in developing nations," said Nebi. "I enjoy dedicating my expertise in immunology to better understand and resolve health problems plaguing developing countries. Ultimately over my career I hope to train and lead teams of scientists dedicated to health research, community health care, and empowerment of local communities."

Dr. Nebiat Gebreselassie has already dived straight into work in Africa, where she is using her training to help improve health and quality of life in developing communities.

BUILDING BRIDGES TO IMPROVING LIVES

DR. CAROLE HARBISON

Integration between veterinary practice and research discovery can forge knowledge that improves health in ways that couldn't be achieved through one perspective alone.

Cornell's DVM/PhD Dual Degree Program trains tomorrow's leaders in science and medicine

Integration between veterinary practice and research discovery can forge knowledge that improves health in ways that couldn't be achieved through one perspective alone. Designed to train outstanding clinician-scientists by integrating Cornell's veterinary and graduate curricula, the College of Veterinary Medicine's DVM/PhD Dual Degree Program prepares students to bridge these worlds and become leaders in science, medicine, and society.

Dr. Carole Harbison, DVM '10, PhD '11 is one of the eighteen students admitted into the Cornell DVM/PhD program since its inception in 2001. After completing her undergraduate program, Carole initially wanted to work in biotechnology. However, volunteering at a local animal shelter sparked her interest in veterinary medicine and she applied to Cornell. But while many of her peers set their sights on clinical practice, Carole's goals had a different dimension.

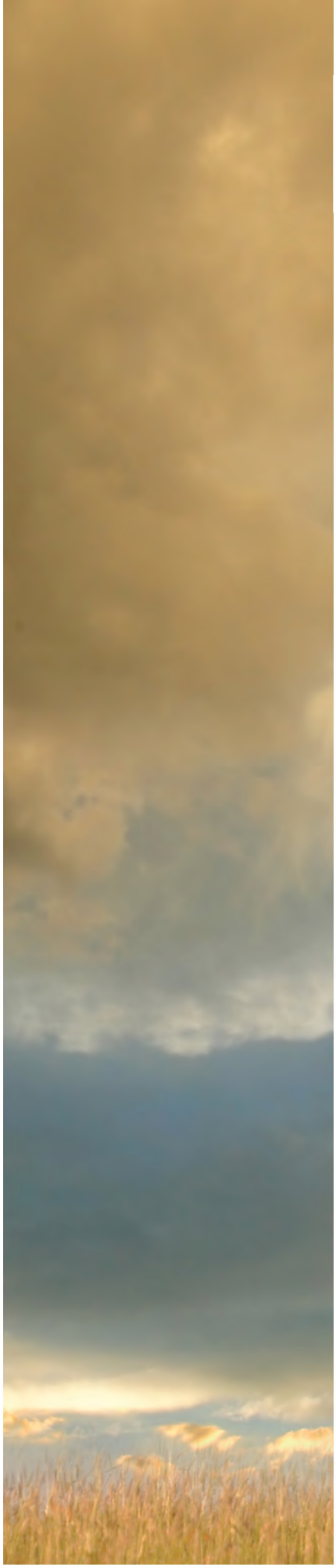
"I wanted to see the holes in medical understanding, ask informed research questions, and apply the answers to improving standards of human and animal medical care," said Carole. "I saw a need for people who can bridge the gaps between basic science and clinical medicine and between veterinary and human medicine. The dual degree program was perfect training to position myself in that gap."

Carole also participated in Cornell's Veterinary Investigator Program (VIP), a 10-week summer program providing first- and second-year veterinary students with research skills and an understanding of biomedical research's role in medicine. While pursuing her DVM, Carole embarked on independent research in Dr. Colin Parrish's laboratory at the Baker Institute, leading to her PhD thesis on how canine and feline parvoviruses evolve and spread.

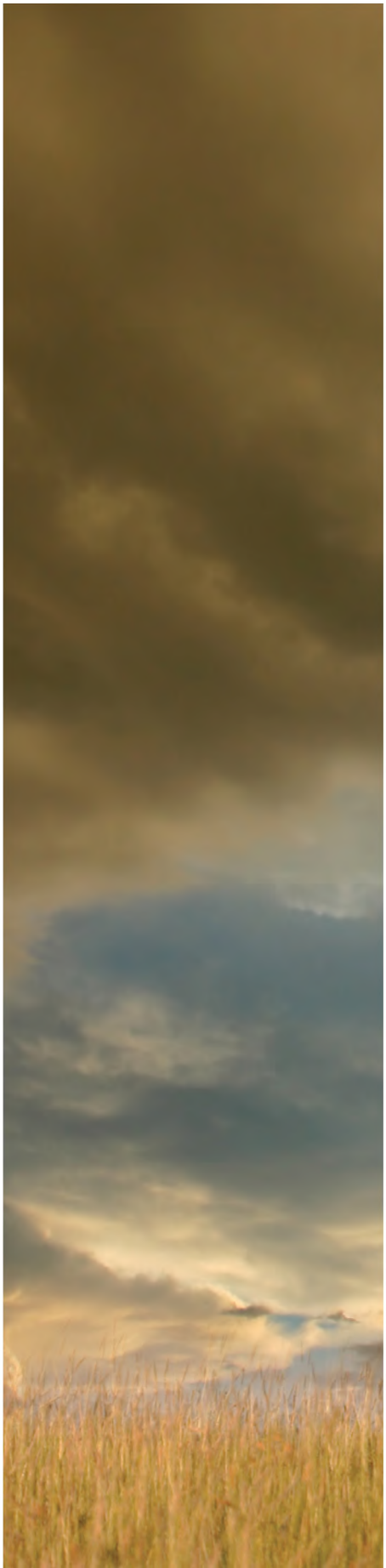
"Baker was a wonderful place to work -- a vibrant community of warm and welcoming people," said Carole. "Faculty doors were open, and it helped to have such diverse resources for guidance. The DVM/PhD program is tough, no doubt. It's a huge commitment, and the learning styles are very different: book-learning for veterinary exams vs. critical reading of research articles and independent thinking where there is no right answer in the research area. I learned how to balance these modes and am still using those skills today."

Now a Comparative Pathology Research Fellow at Harvard Medical School, Carole balances clinical duties in anatomic pathology at the New England Primate Research Center with post-doctoral research on how viruses cause brain inflammation and also a variety of cancers in humans and animals, with the goal of working towards effective therapies and vaccines.

In the future Carole looks forward to applying her pathology and research training to questions of both basic science and applied medicine.



COMMUNITIES FOR CONSERVATION



When working toward a complex goal, nothing beats the power of communities coming together for a common cause. Dr. Alex Travis, Associate Professor at the Baker Institute, has put this idea in action to further the efforts of wildlife conservation and also to benefit human health and well-being worldwide.

In Zambia's Luangwa Valley, Alex works to preserve wildlife populations by harnessing the power of human communities surrounding the area's many national parks. Alex organizes teams of Cornell graduate and veterinary students to perform field research and educational outreach with a nonprofit organization called Community Markets for Conservation (COMACO). Overseen by the Wildlife Conservation Society, COMACO offers Zambian villagers struggling for food the business infrastructure, market access, and training to abandon poaching of wildlife and take up sustainable farming and animal husbandry practices. By sustainably increasing crop yields and poultry production, COMACO enables villagers sharing space with wildlife to feed their families and grow their local economies while simultaneously reducing poaching, deforestation, and helping preserve threatened wildlife.

Alex himself is part of a greater community across Cornell engaged in a spectrum of efforts to help wildlife. In 2010 Alex helped form, and now directs, the Cornell

Sam Bell, GR, Dr. Alex Travis, Sarah Dumas, DVM '12 and guide.

Center for Wildlife Conservation (CCWC), a virtual informational hub connecting the university's many conservation-related efforts. The CCWC educates the outside world about Cornell's diverse wildlife-related initiatives and it promotes interdisciplinary collaborations among groups on campus.

"Wildlife conservation faces complex challenges, and we need the input of experts from disciplines that focus on the animals themselves, such as genetics, reproduction, and ecology to those that focus on people, such as sociology, food sciences, and economic development," said Alex. "Cornell is rich with wildlife-related resources and efforts, but they're spread out across so many departments that it's hard to get a full picture of all the wildlife-related activities that are here."

From individual animals to species to ecosystems, the CCWC strives to conserve fish and wildlife through education, service, and multi-disciplinary research across the globe. Participation is open to the entire Cornell community, and current members represent a number of different colleges and departments from across the campus, bringing together students, faculty, and programs focused on various biophysical and social aspects of wildlife.

Learn more about CCWC members and their projects at http://ccwc.cornell.edu/ .

QUELLING THE TIDE OF OVERPOPULATION

The wave of tragedy continues to rise: every day another 70,000 puppies and kittens are born in the US, overflowing the nation's shelters and streets. The dream of a long-term solution to pet overpopulation has remained unrealized, but an all-star faculty team from Cornell's College of Veterinary Medicine faculty is working to change that.

"We're interested in developing something to really help control feral pet populations," said Dr. Vicki Meyers-Wallen, a reproductive specialist at Baker Institute for Animal Health. "Dogs are so reproductively efficient that it's hard to make an impact with spaying alone. A safe sterilizing vaccine for both males and females could rapidly reduce feral dog populations and significantly improve their welfare worldwide."

Dr. Meyers-Wallen has assembled an interdisciplinary team of faculty from the College of Veterinary Medicine and Biomedical Engineering at Cornell, including Drs. Scott Coonrod, Colin Parrish, David Putnam, Donald Schlafer, Janet Scarlett, Alexander Travis, and Judith Appleton. Pooling their combined expertise in ovary and testis function, population health, gene expression, vaccine construction, bioengineering, and vaccine efficacy analysis, these coinvestigators are working towards a sterilizing vaccine that would enlist a dog's own immune system to help humanely curb overpopulation.

Normally, immune systems ignore reproductive hormones and proteins since they're part of oneself. But when one of these proteins is attached to a virus-like particle in a vaccine it may be labeled as "enemy" by association, encouraging the immune system to silence it. There are already sterilizing vaccines that work this way in other species.

This team is developing six candidate vaccines by attaching reproductive peptides or proteins to canine parvovirus capsid virus-like particles, which alarm the immune system. The team is presently testing two: gonadotropin-releasing hormone (GnRH), a peptide that both males and females need to reproduce, and maternal-antigen-that-embryos-require protein (MATER), a female-specific protein. Vaccine testing has begun, with researchers looking for a safe and effective formulation that can be tested in dogs and cats in future.

"Our findings might also apply to vaccine formulation for other species, such as deer, in which population control is desirable," said Dr. Meyers-Wallen. "It would also help curb disease transmission from animals to people. A successful sterilizing vaccine could be a major contribution to dog health as well as public health worldwide."

BOW WOW BRUNCH FEATURES THERAPY DOG, KICKS OFF WESTMINSTER KENNEL CLUB DOG SHOW

In memory of Lefty Wilpon (November 3, 1998 - June 29, 2012)

In mid-February of 2012, Cornell alumnus Andrew Tisch '71 hosted the first College of Veterinary Medicine Bow Wow Brunch as a kick-off to the Westminster Kennel Club Dog Show week at the Regency Hotel, to the delight of nearly 80 guests and 18 canine friends. Baker Institute Advisory Council member Judy Wilpon, accompanied by faithful Golden Retriever friends Lefty and Tug, shared a heart-warming story about Lefty's journey.

Lefty was treated for stomach cancer at the Cornell University Companion Animal Hospital in 2011, which extended his time with his family and friends. Although he recently passed away, Lefty will be forever remembered for his beautiful disposition and invaluable work as a therapy dog. He earned the Canine Good Citizen and Therapy Dog certifications, awards for being a Disaster Relief Dog, and he logged more than 200 hours of therapy work at various facilities. His calming ways helped countless people, including members of the military, firemen, policemen, and families of victims at Ground Zero at the Family Assistance Center at Pier 54 in New York City. He helped children undergoing chemotherapy, chronically and critically ill children at the Schneider's Children's Hospital in New Hyde Park, New York, and the Silver Lining Ranch in Aspen, Colorado. Lefty will be missed greatly by all who had the good fortune to meet him.

The Wilpon family established the Judy Wilpon Professorship of Cancer Biology at the Baker Institute for Animal Health and has issued a one-to-one fundraising challenge to endow two residencies in oncology. Presently, cancer research being conducted at the Baker Institute by Dr. Scott Coonrod could lead to the development of drugs that will help fight the spread of cancer in companion animals, like Lefty, as well as in the humans who love them.

HONOR ROLL OF GIVING 2011

$100,000 and above

Mr. Robert G. and Mrs. Mary Jane Engman

Mrs. Judy and Mr. Fred Wilpon

$50,000 to $99,999

Ms. Dorothy M. Allen

Albert C. Bostwick Foundation

Burroughs Wellcome Fund

$10,000 to $49,999

David A. Behnke and Paul F. Doherty, Jr.

Butler Family Foundation

Dr. Maria Daversa and Mr. David Gulley

Dorothy Russell Havemeyer Foundation

Robert G. and Jane V. Engel Foundation

Pfizer, Inc.

Dr. Donald C. and Mrs. Rita L. Powell

Renaissance Charitable Foundation

Thelma O. Weaver Charitable Trust

Wellcome Trust

$1,000 to $9,999

American Norfolk Terrier Association

Back Mountain Kennel Club

Dr. Lewis H. and Ms. Amanda M. Berman

Dr. Joanne Margaret Bicknese

Dr. John J. and Mrs. Mary S. Brennan

Bristol-Myers Squibb Company

Mr. Albert and Mrs. Margaret Brown

Ms. Cynthia Camargo and Ms. Beth Barrett

Ms. Phyllis Collins

Ms. Nancy G. Dickenson

Strachan and Vivian Donnelley Foundation

Ms. Sarah Gager and Mr. Arthur J. Dubois

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Greater Milwaukee Foundation

Mr. William L. Haines

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Ms. Joanne M. Hess

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Edna P. Jacobsen Charitable Trust

Mrs. Doris H. Jenkins

Dr. Joseph H. Kinnarney

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Captain Lindley A. Lentz Estate

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Mary K. Oxley Foundation

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David and Sylvia Teitelbaum Fund

Eugene and Clare Thaw Charitable Trust

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John and Mary Clare Ward Family Foundation

Mrs. Barbara W. Wood

Ms. Joan C. Wilson

Dr. James S. Young

$500 to $999

Mr. Richard G. Adams

Ms. Andrea D. Aufiero

Australian Cattle Dog Club

Ms. Karen D. Bailey

Baran Vineyards

Dr. Alan C. and Mrs. Andrea Baum

Mr. Stephen F. and Elizabeth T. Beaudin

Ms. Wendy A. and Mr. Peter Bowditch

Ms. Margaret L. Cone

Ms. Ione E. Denny

Dr. Claire G. Engle

Fidelity Charitable Gift Fund

Gracelane Kennels

Greenwich Kennel Club

Shirley W. and William L. Griffin Foundation

Dr. Ronald W. and Mrs. Suzanne Harling

Ms. Germaine L. Hodges

Jeffrey and Kimberly Karitis

Ms. Linda M. Kinney

Mr. Saul Korduner

Dr. David E. and Mrs. Frieda Lawrence

Mr. James J. Leo

 * The Honor Roll includes donors of $250+ during the fiscal year (July 1, 2010 - June 30, 2011).

Dr. Jennifer Loggie

Patricia E. McHugh

Ms. Vivian M. Miller

Olympic Kennel Club

Drs. John S. Parker and Tracy Stokol

Mr. Curtis S. and Mrs. Pamela P. Reis

Ms. Jaclyn A. Spear

Spring Hill Kennels

Mrs. Virginia L. Strunk

Dr. Peter J. and Mrs. Loretta C. Thaler

Dr. Carvel G. and Mrs. Lorraine Tiekert

Veterinary Health Care Team of Connecticut

Mr. Michael D. Zemsky

$250 to $499

Adamston Veterinary Clinic

Dr. J. Agamemnon Apostolides

Mr. W. Malcolm and Mrs. Naomi Barksdale

Dr. Peter W. Bloch

Mr. Robert O. Bottrell

Mrs. Lori and Mr. Balthasar Calabrese

Ms. Christa L. Carrington

Mr. Robert C. Chalfont

Clements Family Charitable Trust

Community Foundation of New Jersey, Tyler Family Fund

Community Foundation of South Georgia, Bicknell Family Charitable Fund

Letha W. Crutchfield

Mrs. Joanne C. Decher

Ms. Sheila A. Dineen

Mr. Avron M. Ehrlich

Ms. Sandra Enser

Ms. Nancy J. Fantom

Mr. Keith S. and Mrs. Ashley B. Fischer

Mr. Elmer Fredd and Ms. Marion Bingert

Mrs. Helen S. Friderici

Dr. Ferris G. Gorra

Mr. Roland S. Gregg

Mr. Antonio Gross, Sr.

Ms. Dorothy Hauk

ING Foundation

Mrs. Joan K. and Mr. Stanley W. Jackson

Mr. Ronald S. Jacobs

Ms. Linda Kleet

Mr. Bruce Kough

Mr. Spencer Lauer

Mr. Robert E. Little

Ms. Maria Long

Dr. Richard C. Lunna

Mrs. Carol V. and Mr. Charles C. Mead

Dr. Lloyd E. Miller

Ms. Joan F. Mizer

Dr. Richard J. Montali

Mr. Gary V. Montano

Ms. Shirley A. Moyer

Mr. G. Thomas Moynihan

Dr. John A. North

Ms. Elizabeth W. Oberdorfer

Ms. Vicky Parker

Drs. Colin Parrish and Debra Nero

Ms. Penny K. Pickett

Mr. Michael J. Pulizotto

Ms. Mary Beth and Mr. Steve Rusin

Mr. Joseph A. Russo

Dr. Sara Y. and Mr. David A. Sanders

Mr. Robert Scalise

Ms. Molly H. Shreeve

Mr. Howard T. and Mrs. Mary Lou Steiner

Mr. Stewart and Mrs. Janet P. Sutton

Ms. Martha Terrell

Ms. Teresa Tranfaglia

Dr. Dina P. and Mr. Paul J. Tresnan

Ms. Beverly Wilkins

Mr. Richard A. and Mrs. Debbie Wilpon

Dr. Dai-Wei Zhang

CLINIC & HOSPITAL MEMORIAL GIFT PROGRAM*

Adirondack Animal Hospital

All Pets Medical Center

All Creatures Veterinary Hospital

Alpha Animal Health

American Animal Hospital

Amsterdam Animal Hospital, P.C., Dr. John A. Contino

Amsterdam Animal Hospital

Animal Medical of New City, Dr. Howard J. Gittelman

Animal Care Center of Sonoma County

Animal Hospital of Kent

Animal Hospitable Veterinary Clinic, Dr. Teresa Labuszewski

Animal Medicine and Surgery of Little Neck

Animal General

Animal General, LLC., Dr. Steve C. Feldman

Animal General of East Norwich

Animal Kind Veterinary

Animal Hospital of Niskayuna, Dr. Ronald A. Scharf

Animal Clinic of Mount Vernon, Dr. Alan S. Meyer

Animal Care Clinic

Aqueduct Animal Hospital

Ardda Animal Hospital

Arlington South Veterinary Hospital

Aspetuck Animal Hospital

Baldwin Animal Hospital & Bird Clinic, Dr. Neal Saslow

Baldwin Harbor Animal Hospital

Batavia Animal Hospital

Bay Street Animal Hospital

Bellerose Animal Hospital

Berkeley Dog and Cat Hospital

Blair Veterinary Associates

Blandford Animal Hospital

Bloomsburg Veterinary Hospital

Bolton Veterinary Hospital

Brattleboro Veterinary Clinic

Briarcliff Manor Animal Hospital

Brightheart Holdings

Brockton Animal Hospital

Brook Farm Veterinary Center

Bryan Animal Hospital

Burlington Veterinary Center

Burrstone Animal Hospital

Canfield Veterinarian, Dr. Patricia A. Tolchin

Cape Ann Veterinary Hospital

Central Animal Hospital

Central Virginia Veterinary Associates, Dr. Samuel Baum

Central Veterinary Hospital

Centreville Animal Hospital

Clark Animal Care Center, Drs. A. Denise Charpentier and Kathleen E. Wakefield

Clarkson Veterinary Hospital

Cobleskill Veterinary Clinic

Dr. Elizabette Heilberg Cohen

Companion Animal Hospital of Virginia

Companion Animal Hospital

Corfu Darien Veterinary Clinic, Dr. Barbara D. Scheffler

Creekside Veterinary Clinic, Dr. Jan S. Crowe

Crossroads Veterinary Clinic, Dr. Elizabeth R. Wood

Croton Animal Hospital

Croton Animal Hospital, Dr. Bruce N. Hoskins

Cummings Veterinary Hospital

Davis Companion Animal Hospital

Deer Park Animal Hospital (Scott, Henry & Rosen)

Delmar Veterinary Associates

Eagle Rock Veterinary Hospital

East Meadow Animal Hospital

Easthampton Animal Hospital

Easton Veterinary Clinic

Easton Veterinary Hospital, Dr. Mitchell H. Greenberg

Eastview Veterinary Clinic

Englewood Animal Hospital

Estates Animal Hospital, Dr. Barry Eisenkraft

Fairfield Veterinary Hospital

Farmingville Animal Hospital

Flower Valley Vet Clinic, Dr. James J. Burns

Ford Veterinary Associates

Franklin Lakes Animal Hospital, Dr. Alan J. Pomerantz

Gearhart Veterinary Hospital

Georgetown Veterinary Hospital

German Flatts Veterinary Clinic

Godspeed Mobile Veterinary

Godspeed Animal Care

Goodmans Animal Hospital, Dr. L. William Goodman

Goosepond Animal Hospital

Goshen Animal Clinic

Great Neck Animal Hospital, Dr. Brian I. Rind

Dr. Mitchell H. Greenberg

Greenpoint Veterinary Hospital

Dr. Martin A. Gruber

Dr. George E. Hahn

Hamilton Animal Hospital

Harlingen Veterinary Clinic

Hartsdale Veterinary Hospital

Dr. William Henry Herbold, III

Highland Animal Hospital

Hilton Veterinary Hospital

Home Veterinary Services, Dr. Jeanne Baines

Huntington Animal Hospital

Jacobson Veterinary Clinic, Dr. Linda E. Jacobson

Jeffersonville Animal Hospital

Katonah-Bedford Veterinary Center

Dr. Mary L. Keating

Larchmont Animal Hospital, Dr. Mark P. Helfat

Layhill Animal Hospital

Dr. Amy and Mr. Stephen Leibeck

Dr. Pepi F. Leids

Lexington Animal Hospital

Linwood Animal Hospital

Locust Valley Veterinary Clinic

Lyndon Veterinary Clinic

Manchester Veterinary Clinic

Manetto Hill Animal Clinic

Manhasset Animal Hospital, P.C., Dr. Robert L. Henrickson

Manhasset Animal Hospital

Manhattan Vet Group

Manheim Pike Vet Hospital

Manlius Veterinary Hospital

Manorville Pet Care

Marsh Hospital for Animals, Dr. Mark Milwicki

Matawan Animal Hospital

Mattapoisett Animal Hospital

Matunis Vets Inc., Eagle Animal Hospital

Meadowridge Veterinary Hospital

Medway Animal Hospital

Meker Veterinary Clinic

Middle River Vet Hospital

Middletown Veterinary Hospital

Milford Animal Hospital

Millwood Animal Hospital

Mobile Vet Services of Northern Virginia, Dr. Steven J. Cohen

Montague Veterinary Hospital

Montrose Animal Health Center

The Moriches Hospital for Animals, Dr. Kevin G. Lynch

Mt. Lakes Vet House Call, Drs. Kim and Joel Slade

Mt. Holly Animal Hospital

Mt. Lakes Veterinary House Call

Nanuet Animal Hospital

* All Clinic & Hospital Gifts during the fiscal year are included.

Naponoch Animal Hospital, Dr. James F. Cone, Jr.

National Veterinary Associates

North Country Vet Services

North Windham Animal Hospital

North Shore Veterinary Hospital, Dr. Richard W. Fredericks

North Shore Animal Hospital

Northern Tier Vet Clinic

Norwell Veterinary Hospital

Oakton-Vienna Veterinary Hospital

Old Brookville Vet Practice

Olde Towne Animal Hospital

Oradell Animal Hospital, Dr. Gary W. Johnson

Otterkill Animal Hospital, Dr. James C. Zgoda

Oyster Bay Animal Hospital

Park Ridge Animal Hospital, P.A.

Patchogue Animal Hospital

Pet House Calls Vet Clinic, Dr. Raymond S. Pray

Pet House Calls

Pleasant Valley Animal Hospital

Pleasant Valley Animal Hospital, Dr. Martha S. Gearhart

Pleasantville Animal Hospital, Dr. Alan B. Schreier

RIB, Inc., New Milford Animal Hospital

Ridge Animal Hospital

Ridgewood Veterinary Hospital

Rockledge Veterinary Clinic

Rondout Valley Veterinarian

Rotterdam Veterinary Hospital

Rupert Veterinary Clinic

Ruxton Animal Hospital

Rye Harrison Veterinary

Rye Harrison Veterinary Hospital, Dr. Gary A. Yarnell

Rye Neck Veterinary Group

Sakonnet Veterinary Hospital

Salmon Brook Veterinary Hospital

Saugerties Animal Hospital

Schulhof Animal Hospital

Sleepy Hollow Animal Hospital

Somerset Animal Hospital

South Wilton Veterinary Group

South Towne Veterinary Hospital, Dr. Edward J. Gschrey, Jr.

South Bellmore Veterinary

South Towne Veterinary Hospital, Dr. Jeffrey S. Karpf

South Windsor Vet Clinic

Springville Animal Hospital

St. Francis Animal Clinic

Stack Hospital for Pets

Stafford Veterinary Hospital

Star Meadow Animal Clinic

Suffield Veterinary Hospital

Sunrise Animal Hospital, Drs. JoAnne M. Leja and William D. Seader

Dr. Alan M. Tausz

The Visiting Vet, Dr. Darryl S. Praul

Thoreau Veterinary Hospital

Thorn Avenue Animal Hospital, Dr. John S. Clauss

Thornwood Veterinary Hospital

Three Village Veterinary Hospital, Dr. John C. DeVerna, Jr.

Titusville Veterinary Clinic

Toll Gate Animal Clinic

Town & Country Hospital for Pets

University Animal Hospital

V.P.C. Associates

Valley Cottage Animal Hospital, Dr. Patricia J. Collins

Valley Vet Partners

Valley Cottage Animal Hospital

VCA Antech, Inc.

VCA Delmarva Animal Hospital

Vet. Specialty Hospital of San Diego

Veterinary Oncology and Referral Clinic

Veterinary Center of East Northport

Veterinary Housecalls of Long Island, Dr. Caryl Handelman Abrams

Veterinary Internal Medicine

Veterinary House Call Service

Veterinary Practice Associates

Veterinary House Calls, Dr. Raymond S. Hayes

Vienna Animal Hospital

Viking Community Animal Hospital

Village Animal Clinic

Wantagh Animal Hospital

West Chelsea Veterinary

West Park Veterinary Services

Windsor Veterinary Clinic

Winsted Hospital for Animals

Wolfe Animal Hospital

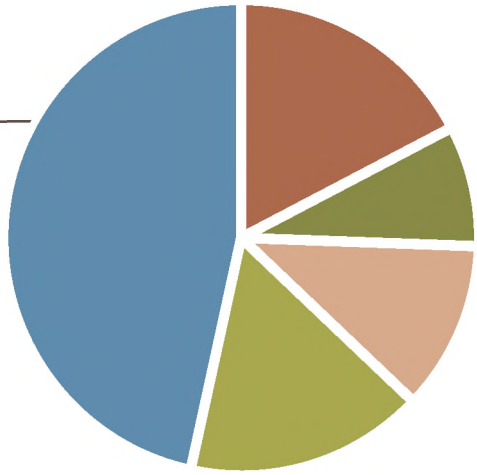
Woodbury Animal Hospital

Wrights Corners Animal Care Center, Dr. Monti

Dr. Harold M. Zweighaft

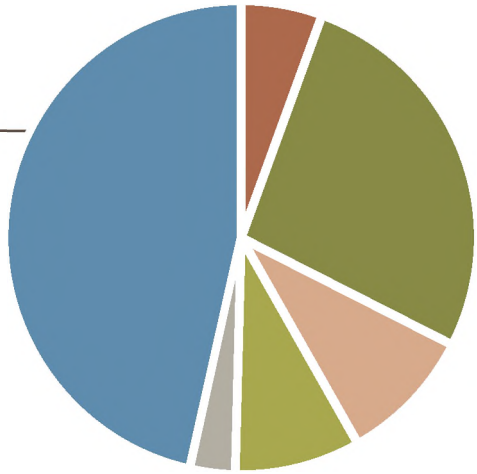
2011 EXPENSES

- 47% RESEARCH, EXTERNAL SPONSORS
- 17% ADMINISTRATION
- 16% RESEARCH SUPPORTED BY THE INSTITUTE
- 12% INFRASTRUCTURE
- 8% FACULTY SUPPORT



2011 REVENUE

- 46% RESEARCH
- 27% ENDOWMENT INCOME
- 9% GIFTS
- 9% INDIRECT COST RETURN
- 6% COLLEGE SUPPORT
- 3% OTHER SOURCES



HONOR ROLL OF GIVING 2012

$100,000 and above

Mr. Robert G. and Mrs. Mary Jane Engman

Estate of Mr. Bert Tryon

$50,000 to $99,999

Albert C. Bostwick Foundation

Burroughs Wellcome Fund

Estate of Ms. Lois Hilgeman

$10,000 to $49,999

Mr. David A. Behnke and Mr. Paul F. Doherty, Jr.

Dr. Maria Daversa and Mr. David Gulley

Robert G. and Jane V. Engel Foundation

Dorothy Russell Havemeyer Foundation

Pfizer, Inc.

Renaissance Charitable Foundation

Thelma O. Weaver Charitable Trust

$5,000 to $9,999

Butler Family Foundation

Eugene and Clare Thaw Charitable Trust

Mrs. Ellen Frenkel

Dr. Richard P. and Mrs. Fay N. Henry

John and Mary Clare Ward Family Foundation

Mary K. Oxley Foundation

Mrs. Patricia A. Moore

Ms. Priscilla Schummrick

$1,000 to $4,999

Anonymous Friend

Drs. Judith Appleton and Donald Schlafer

Australian Cattle Dog Club of America

Back Mountain Kennel Club

Mr. Steven and Mrs. Helen Baran

Dr. Joanne Margaret Bicknese

Dr. John J. and Mrs. Mary S. Brennan

Mr. Albert L. and Mrs. Margaret Smith Brown

Canine Training and Behavior Services, Dr. Margaret Reed and Ms. Patricia Fernandes

Strachan and Vivian Donnelley Foundation

Edna P. Jacobsen Charitable Trust for Animals

Dr. Claire G. Engle

Fidelity Charitable Gift Fund

Finger Lakes Kennel Club

Mr. William F. Gratz and Mr. James Bruno

Greater Milwaukee Foundation

Shirley W. and William L. Griffin Foundation

Ms. Nancy J. Hamilton

Ms. Joanne M. Hess

Dr. David H. and Mrs. Patrice K. Jenkins

Dr. Joseph H. Kinnarney

Ms. Janis L. Koch

Bernard Lewis Charitable Foundation

Dr. Peter and Mrs. Gail Malnati

Ms. Mary G. Rockefeller

Mr. Yoji and Mrs. Laurie F. Shimizu

Silvercrest Asset Management

Mr. Michael T. Strianese

David and Sylvia Teitelbaum Fund

Mrs. Anne Torda

Mr. Richard A. and Mrs. Debbie Wilpon

Mrs. Barbara W. Wood

$500 to $999

Mr. Richard G. Adams

Ms. Karen D. Bailey

Bank of America Foundation

Dr. Alan C. Baum

Mr. Stephen F. and Mrs. Elizabeth T. Beaudin

Ms. Margaret L. Cone

Ms. Florence Cusano

Ms. Sarah Gager and Mr. Arthur J. Dubois, Jr.

Greenwich Kennel Club

Ms. Germaine L. Hodges

Ms. Linda M. Kinney

Mr. Saul Korduner

Ms. Marta J. Lawrence

Mr. James J. Leo

Mr. Frank Murphy

New York Life Foundation

Nuclear Electric Insurance, Ltd.

Dr. John M. Olsewski

Olympic Kennel Club

Drs. John Stuart Leslie Parker and Tracy Stokol

Mrs. Virginia L. Strunk

The Salty Paw

Dr. Carvel G. and Mrs. Lorraine Tiekert

Ms. Joan C. Willson

Mr. Allen R. Wolff

Dr. James S. Young

 * The Honor Roll includes donors of $250+ during the fiscal year (July 1, 2011 - June 30, 2012).

$250 to $499

Mrs. Amelia Annunziata

Drs. Douglas Antczak and Wendy Robertson

Dr. J. Agamemnon Apostolides

Dr. Peter W. Bloch

Central New York Kennel Club

Mr. Robert C. Chalfont

Cornell Club of Washington

Ms. Madeline C. Cox

DCH Midland, LLC.

Dr. Robert E. Decher

Ms. Ione E. Denny

Dr. Naomi B. Esmon

Mr. Johnston L. Evans

Ms. Nancy J. Fantom

Mrs. Helen S. Friderici

Ms. Tammy A. Frost

Dr. Ferris G. Gorra

Gracelane Kennels

Elaine M. Hopson

ING Foundation

Mr. Ronald S. Jacobs

Dr. Amy and Mr. Stephen Leibeck

Ms. Judith L. Litt

Mr. Robert E. Little

Ms. Maria Long

Dr. Richard C. Lunna

Ms. Susan B. Matheson

Mrs. Carol V. Mead

Dr. Lloyd E. Miller

Ms. Joan F. Mizer

Dr. Richard J. Montali

Mr. Gary V. Montano

Dr. John A. North

Ms. Elizabeth W. Oberdorfer

Dr. Karen A. Oros

Drs. Colin Parrish and Debra Nero

Ms. Ann and Mr. Thomas J. Parziale

Ms. Penny K. Pickett

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Mr. Joseph A. Russo

Dr. Sara and Mr. David Sanders

Mr. Robert Scalise

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Dr. William R. Shek and Ms. Jill Aszling

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Jose and Jamie Torres

Ms. Lorili H. Toth

Dr. Dina P. and Mr. Paul J. Tresnan

Dr. Dai-Wei Zhang

CLINIC & HOSPITAL MEMORIAL GIFT PROGRAM*

Adirondack Animal Hospital

Albanhaus Kennels

Alpha Animal Health

American Animal Hospital

Animal General

Animal Hospitable Veterinary

Animal General of East Norwich

Animal Medical Center of Cumming, Dr. Mike McLaughlin

Animal Medical of New City

Animal Hospital of Kent

Animal Medicine and Surgery of Little Neck

Animal General, LLC.

Aqueduct Animal Hospital

Ardda Animal Hospital

Arlington South Veterinary Hospital

Aspetuck Animal Hospital

Dr. Harvey S. Atlas

Baldwin Animal Hospital & Bird Clinic

Dr. Andrea Bergman

Berkeley Dog and Cat Hospital

Blandford Animal Hospital Clinic

Bloomsburg Veterinary Hospital

Bolton Veterinary Hospital

Briarcliff Manor Animal Hospital

Brockton Animal Hospital

Brook Farm Veterinary Center

Bryan Animal Hospital

Dr. Michael P. Bukowski

Burlington Veterinary Center

Burrstone Animal Hospital

Cape Ann Veterinary Hospital

Carnegie Hill Veterinarians

Central Virginia Veterinary Associates, Dr. Samuel Baum

Central Veterinary Hospital, Dr. Michael Woltz

Central Animal Hospital

Centreville Animal Hospital

Clark Animal Care Center

Clarkson Veterinary Hospital

Clover Hill Animal Hospital

Cobleskill Veterinary Clinic

Dr. James F. Cone, Jr.

Creekside Veterinary Clinic, Dr. Jan S. Crowe

Crossroads Veterinary Clinic

Cummings Veterinary Hospital

Davis Companion Animal Hospital

Deer Park Animal Hospital, (Scott, Henry and Rosen)

Delmar Veterinary Associates

Down Maine Veterinary Clinic

Dr. Amy R. Leibeck and Mr. Stephen Leibeck

Eagle Rock Veterinary Hospital

East Meadow Animal Hospital

Easthampton Animal Hospital

Easton Veterinary, Dr. Mitchell H. Greenberg

Eastview Veterinary Clinic

Equine Pen Services, Inc.

Estates Animal Hospital, P.C., Barry Eisenkraft, DVM

Fairfield Veterinary Hospital

Farmingville Animal Hospital

Flower Valley Veterinary Clinic, Dr. James J. Burns

Ford Veterinary Associates

Dr. Marc A. Franz

Gearhart Veterinary Hospital, Dr. Martha S. Gearhart

Georgetown Veterinary Hospital

German Flatts Veterinary Clinic

Dr. Raphael Z. Gilbert

Glen Animal Hospital

Godspeed Mobile Veterinary

Godspeed Animal Care

Dr. L. William Goodman

Goosepond Animal Hospital

Goshen Animal Clinic

Gracelane Kennels

Dr. Martin A. Gruber

Hamilton Animal Hospital

Harlingen Veterinary Clinic, Dr. Christine Newman

Dr. Raymond S. Hayes

Dr. Mark P. Helfat

Dr. William H. Herbold, III

Highland Animal Hospital

Hilton Veterinary Hospital

Home Veterinary Services, Dr. Jeanne Baines

Dr. Bruce N. Hoskins

Dr. Denise R. Hugaboom

Huntington Animal Hospital

Jacobson Veterinary Clinic, Dr. Linda E. Jacobson

Jeffersonville Animal Hospital

Dr. Jeffrey S. Karpf

Katonah-Bedford Veterinary Center

Dr. Nancy D. Kay

Kinnelon Veterinary Hospital

Dr. Malcolm A. Kram

* All Clinic & Hospital Gifts during the fiscal year are included.

Layhill Animal Hospital

Dr. Pepi F. Leids

Dr. JoAnne M. Leja

Lexington Animal Hospital

Linwood Animal Hospital

Locust Valley Veterinary Clinic

Lums Pond Animal Hospital

Dr. Kevin G. Lynch

Lyndon Veterinary Clinic

Manchester Veterinary Clinic

Manetto Hill Animal Clinic

Manhasset Animal Hospital, Dr. Robert L. Henrickson

Manheim Pike Vet Hospital

Manlius Veterinary Hospital

Manorville Pet Care

Marsh Hospital for Animals, Dr. Mark Milwicki

Matawan Animal Hospital

Mattapoisett Animal Hospital

Matunis Vets, Inc., Eagle Animal Hospital

Meadowridge Veterinary Hospital

Medway Animal Hospital

Meker Veterinary Clinic

Dr. Alan S. Meyer

Middle River Veterinary Hospital

Middletown Veterinary Hospital

Milford Animal Hospital

Dr. Alexander J. Miller

Dr. Pamela A. Moks

Montrose Animal Health Center

Dr. Jeffrey J. Moyer

Mt. Holly Animal Hospital

Nanuet Animal Hospital

National Veterinary Associates

New Inn Kennels

North Country Vet Services, P.C.

North Shore Veterinary Hospital, Dr. Richard W. Frederick

North Windham Animal Hospital

Northern Tier Vet Clinic

Norwell Veterinary Hospital

Oakton-Vienna Veterinary Hospital

Dr. Carolyn T. O'loughlin

Oradell Animal Hospital, Inc., Dr. Gary W. Johnson

Otterkill Animal Hospital, James C. Zgoda, DVM

Oyster Bay Animal Hospital

Park Ridge Animal Hospital, P.A.

Patchogue Animal Hospital

Pleasant Plains Animal Hospital

Pleasant Valley Animal Hospital

Dr. Patricia K. Poggi

RIB, INC., New Milford Animal Hospital

Ridge Animal Hospital

Ridgewood Veterinary Hospital

Rockledge Veterinary Clinic

Rondout Valley Veterinarian

Mr. Richard Rosenberg

Rupert Veterinary Clinic

Ruxton Animal Hospital

Rye Harrison Veterinary, Dr. Gary A. Yarnell

Saddleback Pet Services, Nancy J. Fantom

Sakonnet Veterinary Hospital

Salmon Brook Veterinary Hospital

Dr. Sara Y. Sanders

Saugerties Animal Hospital

Dr. Ronald A. Scharf

Dr. Barbara D. Scheffler

Dr. Alan B. Schreier

Schulhof Animal Hospital

Dr. Kim A. Slade

Sleepy Hollow Animal Hospital

South Windsor Veterinary Clinic

South Wilton Veterinary Group

South Towne Veterinary Hospital, Dr. Edward J. Gschrey

Springville Animal Hospital

St. Francis Animal Clinic, Inc

Stack Hospital for Pets

Stafford Veterinary Hospital

Star Meadow Animal Clinic

Suffield Veterinary Hospital

Dr. Alan M. Tausz

Thorn Avenue Animal Hospital, Dr. John S. Clauss

Thornwood Veterinary Hospital

Three Village Veterinary Hospital, Dr. John C. DeVerna

Dr. Patricia A. Tolchin

Toll Gate Animal Clinic

Town & Country Hospital for Pets

Underhill Animal Clinic, Daniel A. Hill, DVM

University Animal Hospital

V.P.C. Associates, Dr. David S. Coley

Valley Cottage Animal Hospital

Valley Veterinary Partners, LLC., Star Meadow Animal Clinic

VCA Antech, Inc.

VetCor Professional Practices

Veterinary Center of East Northport

Veterinary Practice Associates, Veterinary Specialty Hospital of San Diego

Veterinary Oncology and Referral Clinic

Village Animal Clinic

Dr. Alvin J. Vogel

Wantagh Animal Hospital

West Park Veterinary Services

West Chelsea Veterinary

West Roxbury Animal Hospital

Whiting Veterinary Clinic

Winsted Hospital for Animals

Wolfe Animal Hospital

Woodbury Animal Hospital

Dr. Thomas Devincentis

2012 EXPENSES

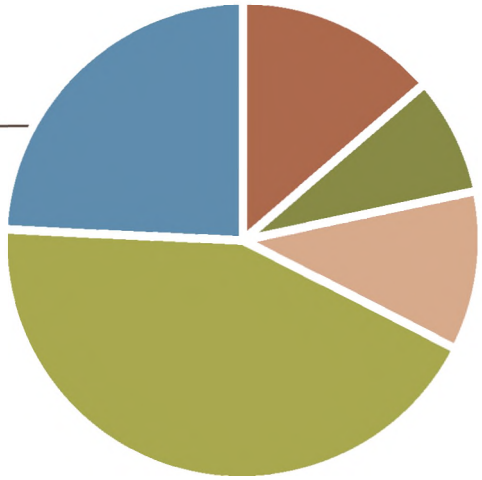
43% RESEARCH, EXTERNAL SPONSORS

14% ADMINISTRATION

24% RESEARCH SUPPORTED BY THE INSTITUTE

11% INFRASTRUCTURE

8% FACULTY SUPPORT



2012 REVENUE

46% RESEARCH

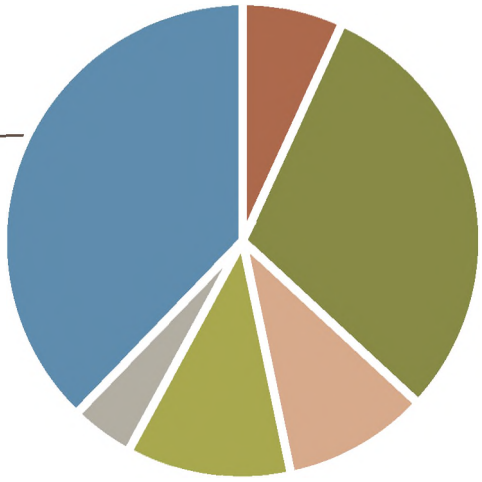
27% ENDOWMENT INCOME

9% GIFTS

9% INDIRECT COST RETURN

6% COLLEGE SUPPORT

3% OTHER SOURCES



FACULTY GRANTS

July 1, 2010 – June 30, 2011

Dr. Gregory Acland, Professor of Medical Genetics

Foundation Fighting Blindness *Module I, Medical Therapy Service Facility,* Principal Investigator

Morris Animal Foundation *Pooled Association Mapping for Canine Hereditary Disorders,* Principal Investigator

NIH *Models for Therapy of Hereditary Retinal Degenerations,* Principal Investigator

Dr. Douglas Antczak, Dorothy Havemeyer McConville Professor of Equine Medicine

Harry M. Zweig Memorial Fund for Equine Research *Expression Microarrays and Equine Placental Development,* Principal Investigator

NIH *Characterization of T Lymphocyte Modulation in Pregnancy,* Mentor

NIH *Split Immunological Tolerance to Trophoblast,* Principal Investigator

Dr. Judith Appleton, Alfred H. Caspary Professor of Immunology

Cornell Collaborative Research Program *Modulation of Systemic and Mucosal Immunity in Cryptosporidium Parvum-Infected Calves by Immune Colostrum,* Principal Investigator

NIH *Eosinophils Sustain Chronic Nematode Infection,* Principal Investigator

NIH *Regulatory B Cells in the Liver,* Principal Investigator

Dr. Scott Coonrod, Associate Professory of Epigenetics and Reproductive Biology

DOD-BCRP-Era of Hope *Epigenetic Analysis of Breast Cancer,* Principal Investigator

NIH *Role of Maternal PADI6 in Embryonic Development,* Principal Investigator

Dr. John Parker, Associate Professor of Virology

BARD (US-Israel) *Development of a Plasmid-based Reverse Genetics System for Bluetongue and Epizootic Hemorrhagic Disease Viruses to Allow a Comparative Characterization of the Function of the NS3 Viroporin in Viral Egress,* Principal Investigator

Burroughs Wellcome Fund *Reovirus-Induced Apoptosis: The Role of the Viral Outer Capsid Protein Mu1,* Principal Investigator

Cornell Feline Health Center *The Role of Feline Junctional Adhesion Molecule A in Feline Calicivirus Infection,* Principal Investigator

NIH *Reovirus Factories: Structure, Function, and Dynamics,* Principal Investigator

Dr. Colin Parrish, John M. Olin Professor of Virology

NIH *Antigenic Structure of Adeno-Associated Virus Capsids and Antibody Escape Mutants,* Principal Investigator

NIH *Engineering Altered Receptors and Antibodies to Study Viral Functions,* Mentor

NIH *Mechanisms of Parvovirus Infection and Host Range,* Principal Investigator

NIH (with The Pennsylvania State University) *The Evolutionary and Biological Bases of Host Switching in Viruses,* Principal Investigator

Dr. Alexander Travis, Associate Professor of Reproductive Biology

Morris Animal Foundation *Analyzing the Function of Feline Sperm Produced by Testis Xenografting,* Principal Investigator

NIH *Nanoscale Energy Production for Implantable Medical Devices,* Principal Investigator

NIH-Fred Hutchinson Cancer Research Center *Towards a Canine Model of Fanconi Anemia,* Principal Investigator

USAID-Virginia Polytech Institute & State University *Developing a Participatory Socio-Economic Model for Food Security, Improved Rural Livelihoods, Watershed Management, and Biodiversity Conservation in S. Africa,* Principal Investigator

Dr. Vicki Meyers-Wallen, Associate Professor of Genetics and Reproduction

American Kennel Club Canine Health Foundation *Genotyping Small Breed Dogs with Portosystemic Vascular Anomalies and Microvascular Dysplasia,* Co-Investigator

Cornell Collaborative Research Program *Candidate Gene Expression: Validation of Directly Sequenced Canine cDNA Library Database and in Silico Screening,* Principal Investigator

Cornell University ADVANCE Center *Canine XX Sex Reversal: The Molecular Basis and its Effect on Key Gene Expression During Sex Determinants,* Principal Investigator

Harry M. Zweig Memorial Fund for Equine Research *Generation of a Molecular Resource to Identify Gene Mutations Causing Inherited Equine Sterility and Infertility,* Principal Investigator

New York State Department of Health-NYSTEM *Genetic Background and Efficient Generation of Induced Pluripotent Stem (iPS) Cells,* Co-Investigator

July 1, 2011 – June 30, 2012

Dr. Gregory Acland, Professor of Medical Genetics

Foundation Fighting Blindness *Module I, Medical Therapy Service Facility,* Principal Investigator

Morris Animal Foundation *Pooled Association Mapping for Canine Hereditary Disorders,* Principal Investigator

NIH *Models for Therapy of Hereditary Retinal Degenerations,* Principal Investigator

Dr. Douglas Antczak, Dorothy Havemeyer McConville Professor of Equine Medicine

Morris Animal Foundation *Major Histocompatibility Complex (MHC) Class I Molecules as Receptors for Equine Herpes Virus,* Principal Investigator

Morris Animal Foundation-University of Minnesota *Gene Expression Study,* Co-Principal Investigator

NIH *Characterization of T Lymphocyte Modulation in Pregnancy,* Mentor

NIH *Immune Tolerance to Serial Trophoblast Transplants,* Mentor

NIH *Split Immunological Tolerance to Trophoblast,* Principal Investigator

Dr. Judith Appleton, Alfred H. Caspary Professor of Immunology

NIH *Regulatory B Cells in the Liver,* Principal Investigator

Dr. Scott Coonrod, Associate Professory of Epigenetics and Reproductive Biology

DOD-BCRP-Era of Hope *Epigenetic Analysis of Breast Cancer,* Principal Investigator

NIH *Role of Maternal PADI6 in Embryonic Development,* Principal Investigator

Susan G. Komen for the Cure *Role for PAD4 as an Estrogen-regulated Transcription Cofactor During Mammary Development and Breast Cancer,* Mentor

Dr. John Parker, Associate Professor of Virology

BARD (US-Israel) *Development of a Plasmid-based Reverse Genetics System for Bluetongue and Epizootic Hemorrhagic Disease Viruses to Allow a Comparative Characterization of the Function of the NS3 Viroporin in Viral Egress,* Principal Investigator

Burroughs Wellcome Fund *Reovirus-Induced Apoptosis: The Role of the Viral Outer Capsid Protein Mu1,* Principal Investigator

Cornell Feline Health Center *The Role of Receptor-Induced Conformational Changes in the Capsid of Feline Calicivirus During Virus Infectious Entry,* Principal Investigator

Morris Animal Foundation *The Role of Feline Junctional Molecule A in Feline Calcivirus (FCV) Infection,* Principal Investigator

Dr. Colin Parrish, John M. Olin Professor of Virology

NIH *Mechanisms of Parvovirus Infection and Host Range,* Principal Investigator

NIH *Structural Controls of Functional Receptor and Antibody Binding to Viral Capsids,* Principal Investigator

NIH (with The Pennsylvania State University) *The Evolutionary and Biological Bases of Host Switching in Viruses,* Principal Investigator

Dr. Alexander Travis, Associate Professor of Reproductive Biology

New York City Partnership Foundation *Assays of Sperm Function to Diagnose Male Infertililty,* Principal Investigator

NIH *Nanoscale Energy Production for Implantable Medical Devices,* Principal Investigator

NIH-Fred Hutchinson Cancer Research Center *Towards a Canine Model of Fanconi Anemia,* Principal Investigator

Dr. Vicki Meyers-Wallen, Associate Professor of Genetics and Reproduction

American Humane Association *America's Dogs and Cats: Providing Essential Genetic Health Data to Veterinarians and Researchers,* Principal Investigator

American Kennel Club Canine Health Foundation *Genotyping Small Breed Dogs with Portosystemic Vascular Anomalies and Microvascular Dysplasia,* Co-Investigator

Cornell Collaborative Research Program *Canine Model of Centronuclear Myopathy for Gene and Stem Cell Therapy,* Co-Principal Investigator

Cornell University ADVANCE Center *Canine XX Sex Reversal: The Molecular Basis and its Effect on Key Gene Expression During Sex Determinants,* Principal Investigator

Cornell Feline Health Center *Viral Particle-Based Display of Multiple Antigens for Feline Immunosterilization,* Principal Investigator

New York State Department of Health-NYSTEM *Genetic Background and Efficient Generation of Induced Pluripotent Stem (iPS) Cells,* Co-Investigator

ADVISORY COUNCIL SUPPORTS THE BAKER INSTITUTE'S TRADITION OF HELPING ANIMALS

Although Baker Institute Advisory Council chair, Dr. Richard Henry, and vice chair, David Behnke, come from very different backgrounds, they both recognize the importance of research in keeping our beloved animal companions healthy.

While he was a student of veterinary medicine at Cornell, Richard's experience in feline virus research with Dr. James Gillespie introduced him to thought-provoking ideas and interesting opportunities that remain important to him nearly 50 years later, namely the value of basic research for providing benefits to animal health in the clinical setting. After contemplating a research career modeled after Dr. Gillespie's successful career as a virologist, Dr. Henry determined his personality was more suited for clinical practice. As a practitioner, Dr. Henry grew Deer Park Animal Hospital, in Deer Park, NY, into one of the area's most respected veterinary centers of excellence. This progress stems directly, he said, from applying rigorous clinical standards of animal care to the highest ethical standards of medicine and business.

"Although I decided not to actively conduct basic science, I understood from my interactions with Dr. Gillespie and others the value of discovery at this level and its relevance to clinical practice," said Dr. Henry. "The discoveries that have come from research conducted at the Baker Institute for Animal Health, including the development of all the important vaccines – from distemper to hepatitis to parvovirus – have helped me provide essential care."

Discoveries like these have been made possible because of the environment that exists at the Baker Institute.

"As a council member working with people like Drs. Leland Carmichael, Gus Aguirre, Doug McGregor, Doug Antczak, and Colin Parrish I have learned what it takes to fuel inspiration," said Dr. Henry. "There is congeniality at the Baker Institute that is palpable. I appreciate and enjoy the camaraderie, the collegial nature that permeates the Institute, and the obvious commitment to bring in the best scientists and to do the best science possible."

By contrast, David Behnke spent 22 years at JP Morgan and is currently the head of investments for Najeti Ventures, a private equity firm. He is also the co-owner of the Behnke Doherty Art Gallery in Washington, CT. But David and Richard share a passion for the organization that has accomplished so much to further the cause of animal health.

Having learned about the Baker Institute initially through a gift made by his veterinarian in memory of one of his dogs, David quickly recognized the value of the Institute's scientific investigations and innovations leading to major breakthroughs in the fight against diseases that threaten the health of dogs and, in many cases, of people. As David says, there isn't a dog lover whose existence hasn't been enriched by the experience of sharing our lives with our faithful companions, whether they are purebred or rescued dogs, millions of whom have led longer, healthier lives because of the vaccines developed, genetic testing created, and therapeutic discoveries made at the Institute.

Both David and Richard enjoy sharing their enthusiasm and support for the Baker Institute with others in their roles as Advisory Council members and lifelong dog lovers.

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OUR VISION
To serve the animals that so faithfully serve mankind

OUR MISSION
To improve animal health through basic and applied research

OUR GOAL
To be the leading institution in animal health research worldwide

http://bakerinstitute.vet.cornell.edu