

CORNELL FELINE HEALTH CENTER



Our Mission

TO IMPROVE THE HEALTH AND WELL-BEING OF CATS EVERYWHERE THROUGH:

RESEARCH – Finding ways of preventing and curing diseases of cats by supporting breakthrough feline health studies

EDUCATION – Educating veterinary professionals and cat owners about feline health by providing timely medical information and by promoting public



A Message From the Director

Dear friends,

Table of Contents

OUR COVID-19 RESPONSE

RESEARCH HIGHLIGHTS

A MESSAGE FROM THE DIRECTOR

THE CAMUTI CONSULTATION LINE

2019 FRED SCOTT FELINE SYMPOSIUM

Greetings from Ithaca, and I hope this note finds you, your friends and your family (kitties included, of course) doing well as we all work to make it through the current SARS-CoV-2 pandemic together.

As I am sure is the case in your life, we have had to make some changes here at the center to assure the safety and health of all of our associates while continuing to provide the education, outreach and research support that are central to our mission. One example of these changes is that this year's annual report will be distributed primarily in a digital format. Fortunately, most of our activities have translated fairly well to the virtual realm that we are all temporarily living in, and we have even learned that there is benefit in some of the ways that we have been forced to operate. I hope that you, too, have found some of these "silver linings" in your current life.



I was honored to be appointed director of the center in December of 2019, and I am very excited about the highly impactful activities that we are currently undertaking and about what the future holds for the center and for advancements in feline well-being.

Soon after assuming this role, though, this excitement was dampened when we to learned of the passing of our faithful mascot, Elizabeth, at 17 years of age. Elizabeth lived a wonderful life and gave so much of her warmth and happiness to so many. She serves as a shining example of the love that a beloved feline friend can give and receive, and of the kindness and dedication of those who worked to make her life as full and happy as it was. As we continue our mission into the future, we will always keep her inspiration and her spirit in our hearts.

The theme of this year's annual report is Active Response, and while we have always prided ourselves on the active and personal way in which we interact with the cat-loving public and veterinary professionals, the current pandemic presents new opportunities for us to actively and rapidly respond to the needs of cat owners, veterinary practitioners and technicians, and both basic and clinical researchers here at the college.

Our outreach efforts to educate the public about the impact of SARS-CoV-2 on cats and their owners through our website, webinars and responses to individual inquiries, and our support of feline-focused SARS-CoV-2 research here at Cornell through our Rapid Response Fund are just two examples of how we are actively responding to this emerging crisis. Given the way that we have always done things, we have been well-positioned to respond to this and other feline health crises in a fluid and effective manner, and we will continue to pursue our goal of improved well-being of all cats in the way that we have become well known for today and well into the future.

I hope you enjoy this year's annual report. As you read through it, keep in mind that all of these wonderful and impactful activities would not be possible without the dedicated support of our donors. We are forever indebted to them for their generosity and for making our mission possible, and together, we will all get through the difficult times that we are experiencing.

Be well, stay safe and please let us know if there is anything that we can do to assist you.

Warm regards,

Bruce G. Kornreich, D.V.M., Ph.D., DACVIM Director, Cornell Feline Health Center



Elizabeth, Cornell Feline Health Center's proverbial mascot and long-time friend, sadly passed away earlier this year. Starting life as a barn cat, and ultimately becoming the loving companion of former center director Dr. Jim Richards, Elizabeth warmed many hearts during her long life, including those of college staff, veterinary students and the kind-hearted mother that adopted and cared for her for the last 10 years of her long life. She lives on in or hearts and our mission.

Our COVID-19 Response

The Cornell Feline Health Center is closely monitoring the ongoing COVID-19 pandemic, and is working hard to actively respond to this unprecedented crisis through the provision of information to the cat-loving public and veterinary professionals, and the support of cutting-edge research focused on improving our ability to diagnose, treat and prevent SARS-CoV-2 and other coronavirus infections.

The Camuti Consultation Service, for example, has continued to operate on its usual schedule through the pandemic shut-down, offering the support services so many have come to rely upon. The unique personalized service that our Camuti veterinary consultants provide has become even more important for many during a time when so many people are home and spending more time with their beloved cats than usual.

We have also continued to provide vital information and answers to inquiries regarding COVID-19 and other feline health issues through our email and telephone inquiry services, as always.

Informational discussions of important feline health topics are normally an important and frequently utilized feature of our website, and we quickly created a dedicated COVID-19 section on the website to update the public with SARS-CoV-2-related information regarding the well-being of their cats and themselves. The Frequently Asked Questions page, developed to help cat owners and veterinary professionals stay informed, vigilant and safe, answers many questions, including how cats become infected with SARS CoV-2, what risk they pose to people and how to care for your cat if you become infected.

Bruce Kornreich, D.V.M. '92, Ph.D. '05, director of the center and a board-certified veterinary cardiologist, routinely teaches and provides clinical service in the Cornell University Hospital for Animals (CUHA). As COVID-19 struck, all non-essential Cornell staff were moved to virtual working environments and D.V.M. students were forced to depart campus. Veterinary medicine was deemed an essential service by the State of New York, though, allowing CUHA to remain open to provide vital emergency services to its patients. Kornreich's schedule, along with that of many other dedicated Cornell veterinary faculty and staff, shifted into overdrive to ensure that emergent veterinary cases (many

of them feline) got the care they needed. Working under new safety guidelines, including the routine use of personal protective equipment, remote client communication, the contactless transfer of patients

from owner to CUHA staff and rigid cleaning protocols, the response of Dr. Kornreich and his colleagues was truly remarkable.

Consistent with our mission of providing up-to-date information to the public and veterinary professionals, we hosted a live webinar entitled "Cats, COVID-19 and Cornell" in May of 2020. This well-received presentation included a panel of experts from Cornell's College of Veterinary Medicine, including Kornreich; Dr. Gary Whittaker, professor of virology; Pamela Perry '85, D.V.M. '89, Ph.D. '11, companion animal behaviorist; and Dr. Diego Diel, associate professor of virology. Kornreich also participated in a series of Baker Institute webinars, offering his unique perspective to feline practitioners on clinical practices to combat the disease, paired with the perspectives of virology researchers on how viruses spread, first steps in testing for COVID-19 and the potential for a vaccine. These webinars are available for viewing on the Cornell Feline Health Center website.

Another important way that the center is responding to the COVID-19 crisis is by supporting vital coronavirus-related research by experts here at the college through our Rapid Response Fund. This unique research funding mechanism allows us to circumvent the normally prolonged grant application process and provide rapid support of research into emerging and vital feline health crises such as the current SARS-CoV-2 pandemic. Our Rapid Response Fund is currently supporting research focused on improving SARS-CoV-2 diagnosis in cats, better understanding the prevalence of SARS-CoV-2 infections in local shelter cats and developing drugs to treat coronavirus infections in cats.

All of these COVID-responsive activities are consistent with our mission and are made possible by the dedicated support of our generous donors.



RAPID RESPONSE FUNDING: WHEN COVID-19 STRUCK, **WE TOOK ACTION**

After the news that domestic cats, and even lions and tigers, could contract SARS-CoV-2, the virus that causes COVID-19, the Cornell Feline Health Center didn't hesitate to award rapid response funding to support feline-focused research on this and other feline coronaviruses, such as that which causes feline infectious peritonitis (FIP). The funded projects aim to improve diagnosis, to understand how the virus spreads to and between cats, and to develop drugs that may treat FIP.

The Rapid Response Fund is part of the Cornell Feline Health Center's (FHC) larger grant program, which awards more than \$500,000 each year to Cornell University researchers investigating feline health issues. "This mechanism of funding allows us to circumvent the normal grant application process, which can take up to nine months to complete, and gets funds to researchers guickly. It's something that makes us unique," said FHC director Bruce Kornreich, D.V.M. '92, Ph.D. '05. "We're only able to do this through the support of our generous donors."

Dr. Diego Diel, director of the virology lab at Cornell's Animal Health Diagnostic Center, is developing new assays to detect SARS-CoV-2, which causes COVID-19. One test directly detects the presence of the virus in tissue, while the other is a diagnostic test that identifies when an animal has developed antibodies to the virus. His lab had the latter test up and running in August and they now offer it routinely. It was this test that helped confirm SARS-CoV-2 infections in the lions and tigers at the Bronx Zoo. With support from the center, they reduced testing time from 96 hours to 24 hours. "This is one of the serological tests that can be applied not only to cats, but any animal species, without a species-specific reagent," said Diel.

Patrick Carney, D.V.M. '06, is using one of Diel's new diagnostic tests to screen cats for SARS-CoV-2 before they are spayed by Cornell veterinary students. The cats come from shelters across upstate New York, so the results will provide a sense of the prevalence of the virus in this region, and whether infected cats put veterinary personnel and owners at risk of infection. SARS-CoV-2 appears to cause mild symptoms in cats, but if it

spreads between cats, so it could have implications for both human and feline health. "This is the first step in understanding whether cats play a significant role or are innocent bystanders," said Carney. At this point, there is no evidence that cats can transmit SARS-CoV-2 to people, but vigilance and continued research are important. The study also establishes spaying and neutering as a potential surveillance system for future pandemics. "You get a good picture of what's happening within people's homes and what might be happening within feral populations."

With help from FHC's Rapid Resonse Fund, Dr. Kenneth Simpson is working with Dr. Gary Whittaker's group to test potential new drugs to treat FIP, a disease caused by a mutant form of a feline coronavirus that has many parallels to severe COVID-19 cases in humans. The novel drugs appear to block viral infection and tamp down inflammation, which is a source of tissue damage in both FIP and COVID-19. Simpson's lab has already established that the drugs are safe in mice. "The idea now is to get a handle on how cats metabolize them because they're such unique animals," said Simpson. He hopes that the drugs will treat FIP in cats, but there's potential that the compounds may also target SARS-CoV-2.

"Clinically, I think there is a lot of potential overlap between COVID in people and FIP in cats," said Whittaker. "It's quite remarkable how similar they are." Both COVID-19 and FIP result in vasculitis — inflammation of the blood vessels — and other unusual symptoms. Currently, Whittaker is reaching out to veterinarians and physicians to encourage a "One Health" approach to treating both coronaviruses. With funding from Cornell, he is working with a veterinary practice on the Upper East Side in Manhattan, screening for SARS-CoV-2 antibodies in samples obtained from feline patients there. Many of the owners of these cats work in healthcare fields and may therefore be at increased risk of exposure to SARS-CoV-2. The results of this study may shed light on how people can serve as sources of SARS-CoV-2 infection for their cats.



The Camuti Consultation Line

A LASTING LEGACY OF THE "CAT DOCTOR"

The Dr. Louis J. Camuti Feline Consultation Service was established to honor the memory of the late Louis Camuti 1916, D.V.M. 1920, known affectionately as "the Cat Doctor."

Louis Camuti studied at Cornell University, graduating with a bachelor's degree in 1916, and then receiving his D.V.M. at New York University Veterinary College in 1920 before opening veterinary practices in Westchester County and on Park Avenue in Manhattan. As he became more well known for his feline-focused care, he routinely traveled the five boroughs of New York City and beyond, working long hours making house calls to treat cats at a time when most practitioners were devoting their attention to canine health. Camuti quickly became known for his dedication and the personal attention he gave to families while treating cats in their homes. His care and knowledge transformed the way that many view cats and their health, according to Dr. Donald Smith, Austin O. Hooey Dean Emeritus, as stated in an interview with Camuti's daughter Nina Danielsen in 2007.

Camuti continued his work, making house calls until 1981, when he passed away at the age of 87. Upon his passing, there was an outpouring of tributes from those he had helped from all over the world.

The consultation line was established in memory of Camuti in 1988. To this day, the Cornell Feline Health Center is the only organization offering a service of this kind. Bruce Kornreich, D.V.M. '92, Ph.D. '05, director of the Feline Health Center,

states, "We are honored to carry on the legacy of Dr. Camuti by providing cat

lovers with the information and support they need to assure the best care for their beloved

feline friends, working in collaboration with their veterinarians."

The Camuti line has become a reliable resource for cat owners, many of whom utilize the service on multiple occasions throughout the lives of their pets. A conversation with a Camuti line consultant is an opportunity for a cat owner to discuss their

cat's health management and to receive reassurance and the latest information from veterinarians affiliated with the Cornell University College of Veterinary Medicine.

Dr. Sharon Romm, a long-time Camuti line client, states, "I had a Norwegian Forest Cat with some medical issues. I had quite good veterinary care in my home city, Seattle, but I wanted to know more about the problem. I found the Camuti Consultation service online, and this began my long relationship with the Cornell Feline Health Center. I didn't consult the Camuti line for medical care, but for medical education. Over the years, I'd call the line for the same reason: to become more informed about a specific issue. All of the veterinary consultants I spoke with were knowledgeable and kind. If they didn't know the immediate answer to a question, they researched it then contacted me with the answer. I'd come to request a particular clinician, Dr. Brian Collins, who I felt was responsive and concerned."

Dr. Louis Nerone first contacted the Camuti line in 2006, after he took his cat Sweetpea to a local veterinarian for a teeth cleaning. To Nerone's surprise, Sweetpea was diagnosed with kidney disease. When faced with various options for medications, he was not sure what to do. Calling the Camuti line helped him navigate and talk through those options. Since that time, he has contacted the Camuti line regarding the care of his other cats, Candy, Cocoa and Cici. Nerone has reached out for nutritional consults and has also referenced the health topics pages and videos on the Cornell Feline Health Center website. He says, "I've gotten great advice directly from Bruce [Kornreich]. I was so impressed to be contacted directly by the director of the Feline Health Center. Bruce helped me with Cocoa, when his teeth and gums were getting red. Dr. Kornreich took the time to listen to the problem, hear about what I was doing, and made simple recommendations on things I could do, such as brushing every day, and which toothpaste to consider using. Just having the conversation with trusted resources at Cornell helps give you confidence in what you should or shouldn't

Nerone has been a dedicated client of the Camuti Consultation line for over 14 years, and plans to continue to look to the consultants at the Cornell Feline Health Center in the future in caring for his cat companions.

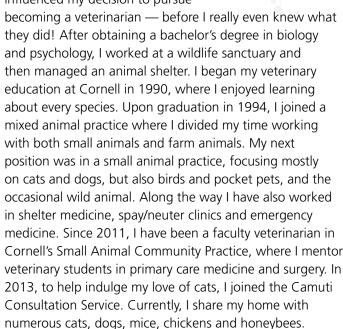
Many of our trusted veterinary consultants have served on the Camuti line for years, and clients have formed bonds with those they call to help them navigate care for their cats.

MEET OUR CAMUTI CONSULTANTS

GENERAL CONSULTANTS:

Brian Collins, D.V.M. '94

My passion for animals began like many kids from my era — on the family farm. Cows, pigs, chickens, dogs, cats and more all influenced my decision to pursue



Catherine Cortright D.V.M., DACVIM Internal Medicine

My education all took place in the great state of Ohio. I did my undergraduate studies at Ohio Wesleyan, graduate school at Case Western and veterinary school at The Ohio State University. My internship was at Purdue and then I came to Cornell for my internal medicine residency, where I met my husband and decided to make a home in Ithaca. Aside from being an internist at local practices, I am most often found being a mom to our two children and our three "fur babies": one cat, a Labrador and a Boston Terrier.

Mia Slotnick, D.V.M.

Dr. Mia Slotnick graduated from
Rutgers University with a B.S. in
animal science. She obtained her
master's degree in animal and nutritional
sciences from the University of New Hampshire, and her
doctor of veterinary medicine degree from The Ohio State
University. She has an interest in small animal nutrition
and preventative medicine. She enjoys cycling, running,
gardening, playing piano, baking and spending time with
her husband and three grown-up boys.

Paul Maza D.V.M., Ph.D.

I am on the faculty at the College of Veterinary Medicine, teaching anatomy, concentrating on feline anatomy. In addition to a D.V.M., I have a Ph.D. in science teaching. One of my very favorite current activities is doing feral cat TNR clinics locally and setting up spay/neuter clinics in communities all over the world through my non-profit group FARVets.

SPECIALTY CONSULTS ARE AVAILABLE FOR CARDIOLOGY, ONCOLOGY AND BEHAVIOR:

Bruce Kornreich, D.V.M. '92, Ph.D. '05, DACVIM
Cardiology

Bruce Kornreich, D.V.M. '92, Ph.D.
'05, is a board certified veterinary
cardiologist who has broad experience in
clinical cardiology, basic science and veterinary
education. He has practiced both private and academic
clinical medicine, has undertaken basic scientific research
in the fields of cardiology and neuroscience, and has been
recognized as an outstanding teacher of students ranging
from elementary school children to veterinary students.
Kornreich received both his D.V.M. and Ph.D. from
Cornell, and has been a dedicated member of the Cornell
community since 1988.

Joshua Glenn Henry, D.V.M. Medical and Radiation Oncology

My first memories of cats were of my grandmother complaining about the neighbor's outdoor cats peeing on her front porch. I thought I wasn't a "cat person" based on these early experiences, but that changed when

CONTINUED ON PAGE 6



Dr. Louis Nerone

CAMUTI CONSULTANTS...CONTINUED

I fell in love with my first cat, Sneakers. Now, a fully-fledged crazy cat guy, I love the companionship and joy that cats bring to my life. I am a graduate of Ross University and completed my clinical year training here at Cornell. Following veterinary school, I completed a rotating small animal internship at the University of Pennsylvania. After a couple of years working as an emergency veterinarian outside of Philadelphia, I returned to Cornell for a residency in medical oncology. Following my first residency, I was given the opportunity to stay at Cornell as a clinical fellow in the Sections of Medical and Radiation Oncology. This position has allowed me to continue to explore all aspects of cancer care and pursue a second residency in radiation oncology. Hearing that your beloved feline companion may have or has cancer is heartbreaking news, but my hope is to empower pet parents with information, resources and support so that they can make the best decisions for themselves and their feline friends.

Pamela Perry '85, D.V.M. '89, Ph.D. '11 **Behavior**

Pamela Perry '85, D.V.M. '89, Ph.D. '11, earned her D.V.M. and Ph.D. degrees from Cornell University. Her graduate research evaluated the effects of enrichment on behavior, welfare and adoptability of shelter dogs. She has lectured extensively on animal behavior and welfare topics, and she currently is a senior veterinary behavior resident at the Cornell University Hospital for Animals, a behavior consultant for the Camuti Consultation Service and the instructor for the Small Animal Behavior Problems course at the College of Veterinary Medicine at Cornell University. She also conducts behavior consultations at a veterinary referral hospital in Williston, Vermont.





THE CAMUTI CONSULTATION SERVICE HOURS OF OPERATION ARE MONDAYS, WEDNESDAYS AND FRIDAYS FROM 10 A.M. TO NOON AND FROM 2 TO 4 P.M. EST (EXCLUDING HOLIDAYS)

> 1-800-KITTYDR / Vet.Cornell.edu/Camuti (1-800-548-8937)

Friends have sought to honor the lifework of Louis Camuti 1916, D.V.M. 1920, through the Dr. Louis J. Camuti Memorial Endowment Fund, which continues his tradition of compassion and dedication to feline health by supporting the Camuti Consultation line at the Cornell Feline Health Center. Contributions in support of this fund are welcome.



Above: Dr. Niels Pedersen. Below: Attendees at the 2019 Fred Scott Feline Symposium.









2019 Fred Scott Feline Symposium

A PILLAR OF OUR MISSION: **EDUCATION**

The annual Fred Scott Feline Symposium is an internationally renowned professional education and networking opportunity for feline practitioners, and the 31st symposium held in July of 2019 at Cornell's College of Veterinary Medicine (CVM) in Ithaca, New York, did not disappoint.

Dr. Niels Pedersen, professor emeritus of the UC Davis School of Veterinary Medicine, was the keynote speaker, providing attendees with an update on the diagnosis and treatment of feline infectious peritonitis (FIP) and other feline infectious diseases. Pedersen's presentations paired with those of Dr. Gary Whittaker, professor of virology at CVM, who is an expert on the molecular mechanisms of feline coronavirus infections.

Continuing with the theme of abdominal pathology, the program then featured Dr. Julie Allen, assistant clinical professor in the college's Department of Population Medicine and Diagnostic Sciences, presenting an interactive session on the clinical pathologic evaluation of effusions, such as may be seen in cats with FIP. Dr. Galina Hayes, assistant professor in the Department of Clinical Sciences, then provided attendees a review of surgical techniques in feline abdominal surgery, and Dr. Erin Epperly, assistant clinical professor in the Section of Diagnostic Imaging, presented case studies of feline abdominal ultrasound/ imaging that were informative and clinically relevant.

anatomic pathology then presented an interactive "show and tell" session of interesting feline gross pathology cases seen at CVM. Attendees were then treated to informative and engaging case discussions of feline dermatology by Dr. William Miller, professor of medicine in the Section of Dermatology, and by Dr. Amy Morgan, who provided important continuing education on the handling of controlled substances in veterinary practice.

The symposium offers continuing education credits for attending veterinarians and veterinary technicians, and attendees have come to appreciate this conference not only for the excellence of its educational programs, but also for the unique comradery and networking opportunities it provides. It offers a chance to delve into some of the most groundbreaking research and clinical advances in feline health, a sampling of the local culinary bounty offered at the Taste of the Finger Lakes dinner and ample opportunity to check out the natural beauty of the Finger Lakes and the Cornell University campus.

As always, it was our honor and pleasure to host all speakers and attendees, and we look forward with great anticipation to next year's Fred Scott Feline Symposium.



Research Highlights



Genome Wide Association Studies in Cats with Complex Diseases Using a Proprietary High Density Illumina Mapping Array

Using DNA samples obtained from healthy cats and from cats with common feline diseases including hypertrophic cardiomyopathy, hyperthyroidism and diabetes, this unique and broad ranging study is investigating the genetic mechanisms of these diseases. The results of this study have strong potential to identify new ways to diagnose, treat and prevent a wide variety of diseases that impact the well-being of cats.

Investigator: Rory Todhunter, B.V.Sc., Ph.D. 92'

Role of Feline Calicivirus Infection in Cats with Chronic Gingivostomatitis

Feline chronic gingivostomatitis (FCGS), the inflammation of the mucous membranes of the oral cavity, is a common disease of cats; and the blisters, swelling and sores that are characteristic of this condition can significantly impact the quality of life of affected cats. Feline calicivirus (FCV) is a ubiquitous viral disease of cats that occurs in a variety of strains and that can cause symptoms ranging from upper respiratory infections to life-threatening systemic infections.

Previous studies have shown a correlation between FCGS and FCV infection, but the role of this common viral infection in the development of FCGS remains unclear. This study will investigate the role of FCV in FCGS by comparing the distribution, growth kinetics and genetic profiles of FCV isolated from cats with FCGS with known FCV strains. The improved understanding of the relationship between FCV and FCGS provided by this study holds promise of guiding the development of more effective therapeutic strategies to manage FCGS.

Investigators: Santiago Peralta D.V.M., DAVDC and co-investigator John S. L. Parker, B.V.M.S., Ph.D. '99





Uncovering Mechanisms of Feline Lower Urinary Tract Disease: Use of Urine Metabolomics to Investigate Androgen Levels in Cats with Urethral Obstruction

Feline lower urinary tract disease (FLUTD) is the leading cause of life-threatening urethral obstruction (UO) in male cats. The exact cause of FLUTD-related UO remains unclear, although it is accepted that stress and environmental factors play a major role. Investigation of FLUTD is important for prevention and to improve treatments for this devastating disease.

Previous studies in people with similar syndromes and in animal models suggest that androgens (hormones involved in male secondary sex characteristics and reproduction that are found in both males and females) are involved in the development of FLUTD. This study will utilize metabolomics, the study of small molecules involved in cellular metabolism, to investigate the role of androgens in the development of FLUTD using naturally occurring cases presented to the Cornell University Hospital for Animals.

Investigator: Julia P. Sumner, B.V.Sc., DACVS



Characterizing MicroRNAs with a Potential Role in Feline Mammary Cancer Pathogenesis

Feline mammary cancer is the third most common tumor of cats, and carries a poor prognosis if it is not caught early. The reason for the aggressive behavior of this cancer is not completely clear, and while aggressive surgical removal of these tumors with or without chemotherapy can provide some benefit, recurrence is common, and cats with larger mammary tumors (greater than 3 cm in diameter) have a poor prognosis, with a median survival time of four to six months.

This study will characterize small ribonucleic acid (sRNA) molecules, which are involved in the control of gene expression, in the mechanisms of feline mammary cancer. Learning more about the role that these ubiquitous molecules play in the development of feline mammary cancer may reveal novel ways to exploit sRNAs in the treatment of feline mammary cancer, thereby improving outcomes of this dreadful disease.

Investigators: Gerlinde Van de Walle, D.V.M., Ph.D. and co-investigator Praveen Sethupathy, Ph.D. 03'

The Role of the Macrophage in the Development of Feline Infectious Peritonitis

Before the current coronavirus pandemic, Dr. Gary Whittaker had already been developing a diagnostic test for a feline coronavirus, which in its mutant form causes deadly feline infectious peritonitis (FIP). The current studies will investigate the mechanism of the mutated feline coronavirus' interaction with and entry into the feline macrophage, a type of white blood cell that is crucial to the development of FIP. Understanding how the virus enters and metabolically interacts with feline macrophages has the potential to significantly improve our ability to diagnose and treat FIP.



Investigators: Gary Whittaker, Ph.D.



Genomic/Transcriptomic Analysis of *Toxocara cati*, the Most Common Parasitic Nematode of Cats

Toxocara cati (feline roundworm) is one of the most common intestinal parasites of cats — approximately 25% of cats are believed to be infected — and the Centers for Disease Control and Prevention has identified *Toxocara* infections as one of the five neglected parasitic infections to be prioritized for study due to their potential to infect humans as well as various companion animal species (primarily dogs and cats). There are currently no drug therapies available to treat the larval stage of *T cati* infection, and no vaccine has been developed to prevent infection in cats.

This study will investigate the genetic profiles of *T cati* obtained from naturally occurring infections as the first step in the development of improved strategies to both treat and prevent *T cati* infection in cats.

Investigators: Dwight Bowman, Ph.D. and co-investigator Erich Schwarz, Ph.D.

8 CORNELL FELINE HEALTH CENTER 2020 ANNUAL REPORT 9

Donor Spotlights





JACKY PROTANO

Jacky has long been a cat lover, and she and her family have welcomed a number of cats into their lives over the years. That is why it was especially hard when the family was faced with the loss of not only one, but three of their beloved cats to cancer in a short seven-year window. Jacky decided she wanted to find a way to remember them in a meaningful way.

So on Jacky's birthday this year, rather than receiving cards and presents, she asked her friends and relatives to instead recognize her birthday by making a gift to the Cornell Feline Health Center.

Renee Bayha '80, D.V.M. '86, a graduate of the Cornell University College of Veterinary Medicine, was someone Jacky met shortly after moving to Pound Ridge, New York. She took a feral kitten she rescued from the woods to Bayha at the local veterinary clinic. "For many years I trapped feral cats and brought them to Dr. Bayha for neutering and vaccinations before releasing them," states Jacky. "Over those years, we had three feral cats who chose to stay with us, and ended up living their best lives in a 'condo' replica of our house that my husband built them."

Bayha became an integral part of caring for Jacky's family pets and numerous feral cats over the years, and it was she that first introduced Jacky to the Cornell Feline Health Center. When Jacky was faced with the loss of her beloved cat Mandy, she explained, "I want to help further the studies to eradicate cancer in felines."

When asked why she chose Cornell to make a gift, Jacky states, "There are many reasons for starting the donation process." Jacky was impressed when she learned about the highly impactful research that is made possible through the Feline Health Center's Research Grant Program. Losing her cats to cancer made her want to do something that could benefit other cats facing the



This page, clockwise from top left: Three of Jacky's beloved feline friends: 1) Mandy, a muted Calico captured as a feral cat in 2017. 2) Carly, rescued from an abusive situation. 3) Cassie, rescued as a kitten from the streets of New York City. Next page: Two photos of Michael Zemsky.

same fate. Her gift is one that will honor the memory of her loving cats Mandy, Cassie and Carly by supporting ongoing research that impacts feline health while advancing education and outreach to cat owners and veterinary practitioners everywhere.

"I want to help further the studies to eradicate cancer in felines."





MICHAEL ZEMSKY 1952 - 2019

We were very saddened to hear of the recent passing of Michael Zemsky, chemist, inventor and long-time advocate for the well-being of cats. Michael had a particular interest in the plight of feral cats, and he worked tirelessly to improve their lives, not only by supporting the efforts of organizations like the Cornell Feline Health Center, but also in his everyday life.

His passion for helping cats, in fact, led Michael to contact the Cornell Feline Health Center in August of 2014. On that day, he contacted our Camuti Consultation Service about his 11-year old cat, Nonamas, who was suffering from a cat bite injury to the neck. Michael had taken Nonamas to the veterinarian to be examined and antibiotics were prescribed to aid in his healing. Michael was still concerned, though, because Nonamas was not recovering as quickly as expected. He was losing weight, and Michael reached out to the Camuti consultants for advice. This was one of several times that Michael relied on the expertise at the Cornell Feline Health Center to aid him in his life's work of helping cats live longer, healthier lives.

Michael was extremely focused on his career, but he also utilized his skills to assist in the care of feral cats. So much

so that he installed a cat door on the door of his lab in Virginia, and routinely welcomed in feral cats from the area for unending supplies of food, water and a warm safe haven. There was one cat in particular, named Blacky, whose antics delighted Michael to no end. "When Blacky was around, Michael couldn't make a phone call from his land line without Blacky intentionally disconnecting the call to get his full attention...our whole family knew that from experience," states Randi, Michael's younger sister. Portions of his lab space, both inside and out, were devoted to building prototypes of feral cat boxes that housed food and water, keeping them dry from the elements and safe from other hungry creatures.

"When I think back on our childhood," states Randi, "I remember this one morning going outside into the yard. Michael was out there setting up a chair under a tree in the yard. He had a broom, and he was carefully trying to rescue our kitten Kippy, who had run up the tree and had gotten stuck. He was on a mission to save Kippy. I was the one who, as a child, had begged for the kitten, but it was Michael who fell in love. I guess that is where it all began."

Michael was a humble man who did not seek recognition for his support of the Cornell Feline Health Center. Throughout his life, he focused on the safe capture, spay and release of feral cats, and the support of no-kill shelters that worked to save these unfortunate cats. A visionary in his own right, he appreciated the positive impact that research focused on feline diseases imparts, and his generous bequest to the Cornell Feline Health Center will support cutting edge research on feline infectious peritonitis, a disease that often presents in cats living in shelters, the training of veterinary students and technicians in the safe management of feral cat populations by Cornell's Small Animal Community Practice and the Maddie's ® Shelter Medicine Program, and the Center's Rapid Response Fund, a unique initiative that provides rapid funding of research focused on emerging feline health

When asked how she thought Michael would feel when hearing about all of the highly impactful programs that her brother's gift would support, Randi responds, "He would be overwhelmed and very, very appreciative."

The feeling is certainly mutual, as we are so thankful for the kind support of this generous and caring man whose life passion we share and will continue to pursue, thanks in large part to his thoughtful gift.

Thank you Michael

Thank you to our donors at all levels over the past year. While space prevents us from listing all names, please know that your support is deeply appreciated.

\$1M and above

Mr. Michael D. Zemsky*

\$40.000 - \$99.999

Ms. Cynthia J. Vroman*

\$10,000 - \$39,999

Mrs. Janet H. Wesson

Dr. Beth J. Benson

Mr. Coleman P. Burke

The Draper Foundation Fund

The Clara L.D. Jeffery Charitable Trust

Mr. Michael E. Kroboth and Ms. Suzanne Kroboth

The Michael T. & Marjorie V. Gasparik Foundation

Paul and Lea Levine Foundation

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

Ms. Kathleen Sampson

Mr. Robert B. Zoellick and Ms. Sherry L. Ferguson

\$5,000 - \$9,999

Ms. Kathryn R. Barringham

Ms. Janice N. Bechtel

Mrs. Mary Ann Clifford and Mr. Patrick J. Clifford

Mrs. Marilyn W. Price

Ms. Rona Rosenberg

Mr. Kenneth J. Sharigian and Ms. Patricia M. Armstrong

Ms. Kay Stocker

\$1,000 - \$4,999

Dr. Alan C. Baum and Mrs. Andrea Baum

Ms. Allison L. Bergstrom

Mr. John W. Broderick and Mrs. Suzanne Broderick

Mr. Bruno Buratto

Mr. James D. Calore

Ms. Kathleen Campbell

Ms. Ruth Ann Ciaramella

Ms. Jane E. Clifford

Ms. Kelly Conaty

Mr. Paul W. Creasy

Col. Lawrence Carroll Crockett and Mrs. Ellen V. Crockett

Ms. Lisa M. Danielsen

Mr. Barry R. D'Aprix and Ms. Sylvia D'Aprix

Mr. Roger D. Ditman and Ms. Barbara Ditman

Mr. Paul A. DuCommun

Ms. Lisa Ericson

Ms. Margaret Folwell*

Ms. Frances A. Frey

Dr. Mark N. Frolick and Ms. Emily S. Frolick

Mrs. Eleanor Govesky

Mr. Matt Hintsa

Mr. James B. Hirsch

Ms. Susan Hostler

Scott Hudson Esg. and Ms. Ria A. Hudson

Mr. Ronald W. Hull

Ms. Alice Hutchinson

Ms. Rose-Marie Jacobius

Dr. Mark Johnson

Ms. Sharon A. Kapple

Mr. Bernard Karwick

Mr. Dennis Lash

Ms. Angela Lennox Kay

Dr. Peter L. Malnati Jr. and Mrs. Gail Malnati

Mr. Nate McCord

Mr. James E. Mills and Mrs. Marian K. Mills

Ms. Josie Mowlem

Ms. Jennifer Neel

Mrs. Irene R. Penney and Mr. Brian J Penney

Mr. Alex Pettit Jr.

Ms. Elizabeth R. Rea

Ms. Diane Reed

Dr. Sharon Romm

Mr. Mark Rosen and Ms. Tamara Kirson

Ms. Regina M. Rubenstein

Mr. Adam Philippidis and Mrs. Randi Ellen Scholnick-Philippidis Dr. Fredric Winthrop Scott

Ms. Frances M. Shloss

Dr. Barbara J. Siepierski

Ms. Jaclyn A. Spear

Dr. Gail Spivack and Mr. David A. Spivack

Mrs. Mary Louise Stanton

Ms. Joan Susha

Dr. Robert N. Swanson and Ms. Rosemary D. Karaka

Dr. Carvel G. Tiekert

Mrs. Joanne M. Williams

Mrs. Marlene C. Winters

Mr. J. D. Woods

Anonymous

\$500 - \$999

Mr. William D. Bastow and Ms. Patricia A. Green

Dr. Gary Mark Baum and Mrs. Judith Solomon Baum

Mr. Louis M. Borgia

Mr. Theodore Chu

Ms. Martha Jane Dodge

Ms. Lynn Emmolo

Ms. Paulette B. Fownes

Mr. Michael J. Franconi

Ms. Madeleine Frankel

Ms. Ericia Gertsch

Ms. Tamberly A. Gobert and Mr. John Hinzelman

Ms. Xiaoyu Gu

Ms. Christine A. Guy

Mr. Tim Hopkins

Dr. John R. Kennedy

Ms. Tamara Killion

Mr. Eric E. Kinder

Ms. Janet Lejeune

Mr. Luigi Lenaz

Dr. Ann Marie Warner Lill and
Mr. Charles G. Lill

Dr. Donna L. Lindner

Ms. Audrey Lobdell

Ms. Sarah E. Locher

Ms. Alline Matheson

\$250 - \$499

Ms. Susan S. Menson Ms. Elizabeth N. Allred

Mrs. Patricia G. Meier

Ms. Alyssa Tova Orgel and

Mr. Adam Matthew Orgel

Ms. Patrice Molnar Picaut

Dr. David D. Stahl and Ms. Marcia Stahl

Mr. Christopher R. Picaut and

Dr. Lloyd E. Miller

Dr. Karen A. Oros

Ms. Susan J. Pinciaro

Mrs. Helen B. Putre

Dr. Richard W. Reid

Dr. Carole A. Sack

Mrs. Mary Jane G. Scott

Ms. Nancy L. Slaybaugh

Ms. Michele Sharron

Mr. C. R. Starnes III

Ms. Christine A. Stetz

Mrs. Lois E. Thompson

Dr. Raymond Vasser and

Ms. Denise Vasser

Ms. Susan Joy Lacey

Mr. Gregory W. Warmuth and

Ms. Paula J. Warmuth

Dr. Reinemarie T. Willimann

Mr. Heber Vellon and

Dr. Jonathan P. Walker

Mr. Charles Yochim

Ms. Cathy M. Andersen

Ms. Cheryl J. Bard

Mrs. Gail Barton

Dr. Peter W. Bloch

Ms. Emily Blumel

Dr. Lawrence J. Buchholz and Dr. Michele Balacich Buchholz

Ms. Jacqueline E. Burris

Ms. Maryanne Byrnes

Mr. Thomas E. Carroll

Dr. James Louis Caruso

Ms. Patricia D. Chuhta

Ms. Rae Clark

Ms. Christine Simon Coats

Ms. Allison W. Coleman

Dr. Colleen E. Currigan

Ms. Cecelia Daher

Ms. Judith A. Dannible Ms. Carol W. Dean

Ms. Christine S. Decker

Ms. Kelly Demonte

Mr. John Dwyer and Mrs. Rita Dwyer

Pamela Frankel

Mr. John Irwin Frederick

Ms. Jean L. Gaumer

Ms. Teresa Giacalone

Ms. Lisa Gluck

Ms. Lauren M. Goodrich

Ms. Lucretia Jo Hall

Ms. Susan Hanfield

Carol Hayden

Mr. Steve Hill

Ms. Deborah Jackett

Mr. Lee R. Johnson

Ms. Jennifer E. Jones

Ms. Susan M. Kieta

Dr. Timothy A. Kneen

Ms. Alison Kruk

Ms. Peggy R. Kuhn

Mr. Robert Kulikowsky and Ms. Gail Kulikowsky

Mr. Donald W. Kuty

Ms. Ellen S. Laramie

Mr. I. Leonard Leeb

Ms. Nicole Latchman

Ms. Michele Lisi

Mr. David F. Litz

Ms. Roberta E. Litzinger

Ms. Sarah Medvitz

Dr. Richard M. Mello

Ms. Margaret A. Miles

Dr. Douglas K. Miller

Ms. Donna L. Mochi

Ms. Linda Morrison

Ms. Amy L. Mowrey

Dr. Louis Nerone

Dr. John D. Nordwall Jr.

Mr. Emil F. Novak*

Mr. Edward H.L. Ong

Mr. William H. Pardoe Ms. Linda Pavey

Dr. Lorraine Kapinos Peterson

Ms. Suzanne Pfister Ms. Linda M. Pivarnik

Ms. Danielle Prill

Ms. Paula E. Rabkin Ms. Kathy Reiffenstein

Ms. Suzanne Rieder

Ms. Joyce M. Rosenberg
Ms. Shelley Rueger and Mr. Tim Rueger

Ouin Shakra

Dr. Mariko H. Soto

Ms. Karan A. Spanard

Mr. Raymond N. Spinelli

Dr. Gayle Elizabeth Sternefeld

Ms. Nancy H. Stetson Mr. Shepard B. Stone

Mr. Charles Sweeney

Ms. Maleyne M. Syracuse
Ms. Carole Rapp Thompson and

Mr. Paul M. Thompson Dr. Stanley J. Truffini

Ms. Kathryn A. Tucker

Ms. Nancy Barber Van Gieson

Dr. Diane Vigar

Dr. Patricia Turner

Mr. Craig Ward
Ms. Laurie Watts-Amato

Ms. Susan Wyatt Mr. Thomas R. Yarborough

*Denotes deceased

12 CORNELL FELINE HEALTH CENTER 2020 ANNUAL REPORT 13

Clinic Memorial Participants

The Feline Health Center's Clinic Memorial Giving Program offers veterinarians a special way to memorialize a client's beloved pet.

Memorial gifts, whether from an individual or a veterinary clinic, provide vital support to realize FHC's mission of enhancing the lives of cats and the people who love them. To learn more about our Memorial Gift Programs, please contact our Office of Alumni Affairs and Development at: 607.253.3093 or petfriends@cornell.edu.

California

Animal Hospital of Walnut Kensington Veterinary Hospital The Cat Care Clinic

Colorado

Cat Specialist

Connecticut

Aspetuck Animal Hospital
Bolton Veterinary Hospital
Burlington Veterinary Center
Chippens Hill Vet Hospital
Fairfield Veterinary Hospital
Georgetown Veterinary Hospital
Manchester Veterinary Clinic
New England Cat Care
Salmon Brook Veterinary Hospital
Schulhof Animal Hospital
South Windsor Veterinary Clinic
Suffield Veterinary Hospital

Delaware

Lums Pond Animal Hospital

Florida

A Country Cat House
A Country Cat House Tampa
All Cats Healthcare Clinic
For Cats Only, Inc.
The Cat Hospital at Palm Harbor

Georgia

Cat Care of Vinings
The Cat Care Clinic

Hawaii

North Shore Veterinary Service

Illinois

Brumley Veterinary Clinic

Chicago Cat Clinic Lombard Animal Clinic The Cat Practice

Maine

Farmington Veterinary Clinic Windsor Veterinary Clinic

Maryland

Cat Sense Feline Hospital Flower Valley Veterinary Clinic Layhill Animal Hospital Tridalephia Veterinary Clinic

Massachusetts

Best Pets Vet Hospital
Blandford Animal Hospital
Brockton Animal Hospital
Cape Ann Veterinary Hospital
Chestnut Street Animal Hospital
Linwood Animal Hospital
Mattapoisett Animal Hospital
Norwell Veterinary Hospital
The Feline Hospital

Michigan

Cat Care
The Kitty Clinic

Minnesota

City Cat Clinic

Montana

Glacier Animal Hospital

New Jersey

Animal General
Bryan Animal Hospital
Essex Animal Hospital
Exclusively Cats Veterinary Hospital
Green Pond Animal Care Center

Larchmont Animal Hospital Marsh Hospital for Animals Oradell Animal Hospital

New Mexico

Albuquerque Cat Clinic

Adirondack Animal Hospital

New York

Animal Kind Veterinary Hospital Animal Medical of New City Bath Veterinary Hospital Brook Farm Veterinary Center Central Animal Hospital Central Veterinary Hospital Cheektowaga Veterinary Hospital Cobleskill Veterinary Clinic College Point Animal Clinic Deer Park Animal Hospital Eastview Veterinary Clinic Felton Veterinary Services Fountain House Veterinary Clinic **Greenpoint Veterinary Hospital** Dr. Raymond Hayes Highland Animal Hospital Hilton Veterinary Hospital Jacobson Veterinary Clinic Lagrange Veterinary Hospital Lyndon Veterinary Clinic Manetto Hill Animal Clinic Manlius Veterinary Hospital Meadowridge Veterinary Hospital Nanuet Animal Hospital Newburgh Veterinary Hospital New York Cat Hospital Parkside Veterinary Associates Pleasant Plains Animal Hospital Pleasant Valley Animal Hospital Ridge Animal Hospital Saugerties Animal Hospital

Sleepy Hollow Animal Hospital
South Towne Veterinary Hospital
Springville Animal Hospital
Storybook Farm Veterinary Hospital
The Cat Doctor
The Moriches Hospital for Animals
Thorn Avenue Animal Hospital
Three Village Veterinary Hospital
University Animal Hospital
Veterinary Care of Ithaca
Woodbury Animal Hospital
Wrights Corners Animal Care Center
Dr. Jean Ferreri
Dr. Kimberly Kahn

North Carolina

Mayfair Animal Hospital

Ohio

Cat Care Hospital Veterinary Oncology and Referral Clinic

Pennsylvania

Bloomsburg Veterinary Hospital
Doylestown Animal Medical Clinic
Eagle Animal Hospital
Milford Animal Hospital
South Towne CVP
University Drive Veterinary Hospital

South Carolina

Creekside Veterinary Clinic

Texas

Dr. Kathy Carlson

Utah

Pet Stop Veterinary Clinic

Vermont

Otterside Animal Hospital

Virginia

Franklin Farm Veterinary Clinic Godspeed Animal Care

Washington

Woodhaven Veterinary Clinic



When you make a gift in memory of your client's deceased pet, your client will receive a letter informing them of your kind gesture in addition to a copy of our new grieving brochure. Produced in collaboration with licensed social workers and psychiatric professionals, this brochure discusses the grieving process, how it can manifest itself in peoples' lives and when to consider seeking assistance after the loss of a cherished pet.

14 CORNELL FELINE HEALTH CENTER 2020 ANNUAL REPORT 15

Cayuga Society

Over 150 families have shared that they included the Feline Health Center in their estate plans. Welcome to the Cayuga Society! This special kindness and generosity has resulted in over \$10 million of investments in cat specific discovery and outreach.

If you have planned to support our mission through your estate gift — welcome and thank you! Sharing how you wish to impact feline health is easy and helps the center strategize for the future. Please contact us for more information, or to let us know of your gift plans via email at FHC@cornell.edu or by phone at 607.253.3093.



Lila R. Abeles

Ms. Janet Alger

Mr. Bill Anderson

Mrs. Myrna Angle

Dr. Beth J. Benson

Dr. Pamela Berge

Dr. Jane Bicks

Ms. Mira Bieler Ms. Cherry P. Brown

Ms. Linda K. Brown

Ms. Connie J. Canode

Mr. Tony Carbonell

Mr. and Mrs. Paul M.

Cashman

Ms. Marilyn L. Cassidy

Mr. George Chronakis and Mrs. Barbara Chronakis

Ms. Helen G. Ciarletto

Mrs. Mary Ann Clifford and Mr. Patrick Clifford

Ms. Jane C. Dent

Dr. Amy Doofenbaker

Ms. Mary Ann Esposito

Ms. Sharon Fairchild

Mrs. Melinda Fortney Boehringer

Mr. Marcel P. Gagnon and Mrs. Theresa D. Gagnon

Paula S. Gladue V.M.D.

Ms. Carol Goodrich

Ms. Penelope J. Greene

Mr. Kurt Greenwald and Ms. Judith Greenwald

Mr. David F. Gregorski

Ms. Paulette Hepworth

Mr. Taylor R. Hoag

Mr. Randy G. Hopkins

Ms. Susan Hostler

Ms. Kathleen B. Jacklin

Ms. Patricia A. Kachur

Ms. Mary S. Kladnik

Ms. Linda A. Kovalick

Mr. Dennis Lash

Ms. Theresa M. Leadbeater

Ms. Audrey Lobdell

Dr. Carol Lowrey

Ms. Helen Magill

Dr. Mark Maller

Ms. Marilyn Martin

Ms. Marie Matarazzo

Ms. Anita Maurizio

Ms. Carolyn A. Meisenzahl

Mr. Lawrence Messick and Mrs. Jean Messick

Dr. Elinor Miller

Mr. Garth Miner Mrs. Marv-

Ann Miner

Mr. Stephen H. Mitchell

Mr. Thomas E. Morris

Ms. Christine S. Negm M.S., R.D.

Mrs. Marveen Pakalik

Ms. Carol L. Peterson

Ms. Susan Pinchot

Ms. Linda M. Pivarnik

Ms. Monica L. Prichard

Mrs. Helen B. Putre

Dr. Keith P. Richter

Dr. Sharon Romm Mr. Mark Rosen and Ms.

Tamara Kirson

Ms. Rona Rosenberg

Mrs. Linda Rossi and Dr. Clifford V. Rossi

Ms. Leslie Saltzman

Mr. Roger Schlenker

Mr. Robert Schwartzberg and Ms. Marilyn L. Ross

Ms. Nancy L. Slaybaugh

Ms. Phyllis R. Strickler

Ms. Mary R. Sullivan

Ms. Joan Susha

Mrs. Janet L. Swanson

Professor Jean Marie Tardif

Ms. Adrienne Tashjian

Ms. June Tesauro

Mr. Clark Tyler Thompson and Mrs. Rose Franck Thompson

Dr. Tina Louise Waltke and Ms. Mary Jane Constant

Ms. Fern Weiss

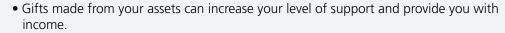
Ms. Rose S. Wendt

Mr. Douglas Wolford and Ms. Laura Wolford

Mr. Charles Yochim

Names in bold honor new members of the Cayuga Society.

PLANNED GIVING: You can support the future of feline health while meeting your philanthropic goals through planned giving.



- If you are 70-1/2 years of age or older, a gift made through your IRA can maximize your charitable impact.
- Your heirs may benefit from charitable plans that help to reduce or eliminate taxes. You may also be able to provide an income for heirs or family members with special needs.
- A beguest through your will or trust is a wonderful way to continue your support while retaining assets during your lifetime. You may also earn an income tax reduction by designating the center as the future owner of property or estates.

To learn more about planned giving options and help decide what plan is best for you, please contact the Cornell Office of Trusts, Estates and Gift Planning at 800.481.1865. Experienced, knowledgeable advisors will work with you and your legal and tax professionals to meet your personal goals.

Financials

REVENUES



- GIFTS & BEQUESTS \$1,738,132 | 83.5%
- ENDOWMENT INCOME \$228,879 | 11.0%
- EDUCATION, OUTREACH & SERVICES \$114,999 | 5.5%

EXPENSES



- **RESEARCH & FUNDING** \$526,374 | 53.1%
- COLLEGE & UNIVERSITY SUPPORT SERVICES \$139,133 | 14.1%
- EDUCATION, OUTREACH, PROGRAMS \$134.001 | 13.5%
- ADMINISTRATION \$96,663 | 9.8%
- FUNDRAISING AND DEVELOPMENT \$94,384 | 9.5%





235 Hungerford Hill Road Ithaca, NY 14853 vet.cornell.edu/FHC 607.253.3414



