



UCDAVIS

VETERINARY MEDICINE

Center for Companion Animal Health

CCAH UPDATE

FALL 2022



Finding New Ways to Combat FIP

For nearly 60 years, the school has been at the forefront of feline infectious peritonitis (FIP) research. Now, a grant from the Center for Companion Animal Health (CCAH) has allowed for the creation of an expert all-star team to attack the disease on multiple fronts. Clinical trials are underway to test new approaches to both prevent and treat the disease. This “bracketing the cat” before and after the disease takes hold may finally end FIP’s death sentence.

FIP is caused by a feline coronavirus variant that spreads through a cat’s body causing systemic inflammation. Nearly all cats diagnosed with FIP die without treatment. Cats can develop FIP at any age, but it is usually diagnosed between 6 months and 2 years of age.

Drs. Brian Murphy and Patricia Pesavento, from the Department of Pathology, Microbiology & Immunology, have assembled research teams to cure the disease (Murphy) and to prevent

See Combatting FIP on page 4

From the Director

Results count. We appreciate and honor the trust you place in us to advance the health of our animal family members and companions. We also understand that there is a lot of need and uncertainty in the world. This is one of the reasons why it is so important that we show how your investment in us impacts the lives we have pledged to help. This issue shows you our strong commitment to the health and well-being of dogs, cats and the other companion animals we serve.

While we have reported to you in past issues on the ground-breaking work we have done to develop the first treatments for [feline infectious peritonitis \(FIP\)](#), we are excited by the advances of an interdisciplinary team of researchers and clinicians to “bracket the cat.” This means we are working on more easily accessed treatments and also on preventing FIP – protecting cats from this formerly near-universal fatal disease from all angles.

We also describe a new form of cancer therapy that has been introduced by Dr. Amandine LeJeune into the clinic, and on the impact stereotactic radiosurgery has on brain tumor treatment, which the [CCAH](#) brought to cancer care more than a decade ago.

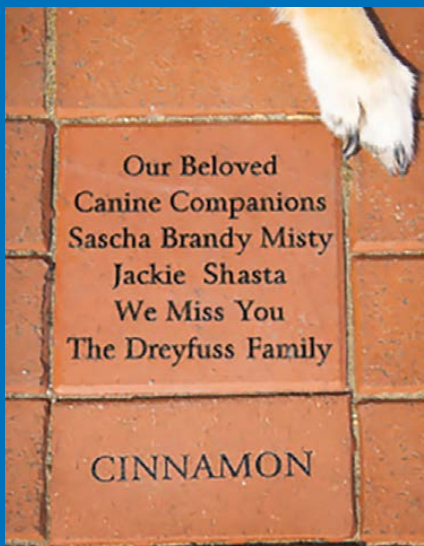
We are proud of the work being done statewide, thanks to the [California for All Animal's](#) program. Through this initiative, we are helping shelters and communities protect society's most vulnerable animals. This would not be possible without the support of the governor, state legislator and all the people who brought this need to their attention. So far, we have allocated more than \$7,500,000 across our state, making a real difference to lives of animals without permanent loving homes.

These are results! None of this would come to fruition without your help and support over the years. We are excited to expand and continue our work, honoring our promise to bring health, longevity and wellness to animals.

My best,



Michael Kent, DVM, DACIMV (Oncology), DACVR (Radiation Oncology)
Director, CCAH



CCAH MEMORIAL BRICK

Are you looking for an enduring way to share a special message? Honor a much-loved pet, recognize a friend or family member, pay tribute to a special companion, memorialize a beloved animal, and more...

Inscribe a brick at the CCAH as a lasting tribute by visiting <https://give.ucdavis.edu/Go/MemorialBrick> or calling 530-752-7024.

Celebrating A Decade **CANCER FREE**

Research Makes a Difference

Tiddles was a 4-year-old Papillon when he was diagnosed in 2011 with a brain tumor.

His referring veterinarian gave him approximately 2 months to live. Other documented cases showed that, even with innovative treatments, he would probably not survive more than a year or two. But thanks to research, equipment, and treatments made

possible by the donors to the CCAH, Tiddles beat the odds. He recently turned 15 and is celebrating a decade of being cancer free.

“I had no idea that he would live such a good long life,” said owner Jennifer Denning. “I was devastated when I heard the diagnosis. I don’t know what it is about having an animal attached to you so deeply – Tiddles never left my side. I was absolutely traumatized that he was going to die at the young age of four, so I was thrilled about the possibility that he could have a longer life (with this treatment). I was willing to do anything and clinging to any hope I could find at that point.”

Tiddles underwent a relatively new treatment back then – stereotactic radiosurgery to treat the mass growing in his brain. The non-invasive procedure delivers a single high dose of precisely targeted radiation on the specific area of the brain where a tumor resides, minimizing the amount of radiation to healthy surrounding tissue. In many tumor types, this is done in 3-5 treatments. [UC Davis](#) started offering this treatment option shortly before Tiddles was diagnosed and is now advancing the therapy to new heights because of continued support from CCAH donors.

“I want to let the donors know that what you do makes a difference. Without that help, and the research and intervention, Tiddles would have died. But he’s lived a full life.”

– Jennifer Denning

“I want to let the donors know that what you do makes a difference,” said Denning. “Without that help, and the research and intervention, Tiddles would have died. But he’s lived a full life.”

Denning went on to reflect on how much Tiddles means to her and how he holds a special place in her heart because of another major event that coincided with his arrival in her life.

“I think animals mark points in your life,” said Denning. “We tell time by those events. Tiddles’ arrival and the adoption of my son from China happened within a month of each other, so that marking of time holds significant value to me.”



COVER STORY

Combatting FIP from page 1

infection (Pesavento). Drs. Terza Brostoff and Sarah Cook are post-doctorate researchers leading these efforts. The wide scientific expertise needed for this venture requires a team comprised of a biophysicist (Dr. Randy Carney), immunologists (Drs. Stefan Keller and Liz Sparger), pathologists (Drs. Cook, Amir Kol, Pesavento, and Murphy), vaccinologists (Drs. Brostoff, Lark Coffey, and Dennis Hartigan-O'Connor), a coronavirus specialist (Dr. Simon Anthony), and infectious disease clinicians who have experience treating FIP (Drs. Krystle Reagan and Jane Sykes). This group of DVMs, MDs, and PhDs are taking UC Davis into the future of FIP care and prevention.

Previous research conducted by UC Davis Professor Emeritus Niels Pedersen uncovered the promise of FIP antiviral treatment, including a specific antiviral drug, but it is not available to veterinarians in the United States. Kol, Murphy, and Reagan are focused on finding effective, affordable FIP treatments with new clinical trials.

The first ongoing trial evaluates whether cats improve or are cured when treated with one of two closely related antiviral drugs. The first drug, remdesivir, is an antiviral drug with FDA emergency use authorization to treat COVID-19 in people. If fully licensed, veterinarians could prescribe it to affected cats in the future. The second

drug, GS-441524, is closely related to remdesivir. Pedersen found it safe and effective in treating cats with FIP, but veterinarians cannot prescribe it in the United States.

Another trial will examine whether antiviral drugs combined with stem cell therapy will improve response to treatment. The goal is to see if cell therapy can direct a more effective antiviral immune response and help regenerate the cat's compromised immune system post-infection.

Brostoff is leading an investigation into a potential preventive measure to stop cats from contracting the virus and/or to prevent its transformation into

Researchers (from left) Stefan Keller, Krystle Reagan, Brian Murphy, Liz Sparger, Randy Carney, Amir Kol, Patricia Pesavento, Ken Jackson, Simon Anthony, Lark Coffey, and Terza Brostoff (seated) are collaborating to prevent and cure feline infectious peritonitis, a deadly disease for young cats. Photo: Vu Dao



the deadly disease if cats are already carrying it. In her time as a practicing clinician, Brostoff saw firsthand the dangers of FIP and how devastating it is for cat owners. Now, she is focused on preventing the disease. She has experience working with Carney in biophysics seeing how viruses are packaged and how they move around the body, and she has worked with Coffey and Pesavento on studying viruses and vaccination.

“This is the perfect project for Dr. Brostoff,” said Pesavento. “It encompasses all of her areas of expertise into exactly what is needed to deliver a useful preventive product to cats.”

[Save Our Cats and Kittens from FIP \(SOCK FIP\)](#), a non-profit organization dedicated to eliminating FIP, is playing a major part in supporting this research. Through their advocacy

and community education initiatives, the volunteer organization raises FIP awareness and funds for research at UC Davis.

“After I lost a cat to FIP, I came to know and support Dr. Pederson’s work,” said Carol Marshall, president of SOCK FIP. “We are eager to focus on helping UC Davis with this new research and continue to support it as it moves forward.”

OUR FAMILY

Widget



Sadie



Roo



Cori



Meet Widget Young, Sadie Stetter, Roo Kent-Jandrey and Cori Tell— four of nearly 90 pets photographed by the school’s now-retired photographer Don Preisler. He set out to capture the adorable personalities of the animal companions of faculty, staff and students from the UC Davis School of Veterinary Medicine. Preisler, along with the CCAH, developed this project to highlight our pets for artwork throughout the hospital and for school communications.

California for All Animals IS ALL IN

Since its launch on Valentine's Day 2022, more than 7.5 million dollars have been awarded to California shelters through two granting cycles as part of [California for All Animals](#)—a five-year initiative to strengthen the relationship between rescue groups, the community, and animal shelters to expand the safety net for animals at risk of homelessness or euthanasia.

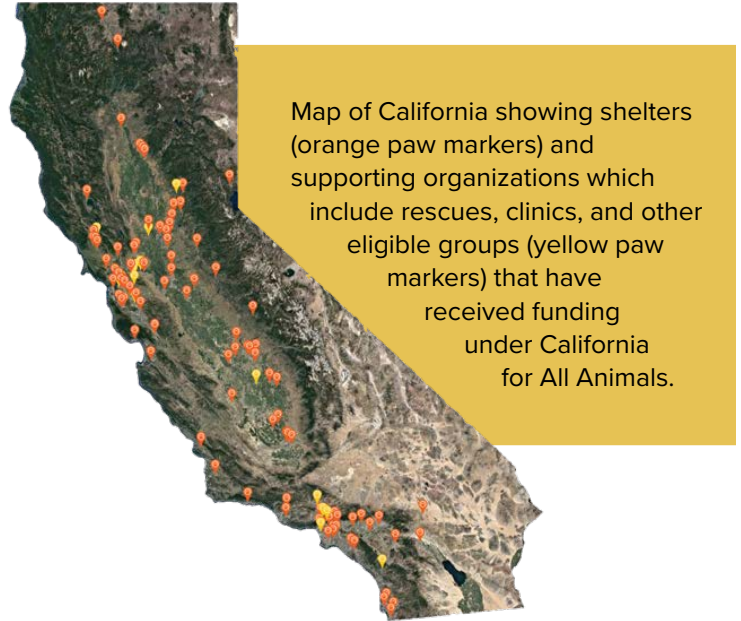
Grant proposals were assessed using a formula that weighed impact, community vulnerability, and need. The social vulnerability index helped identify shelters in areas of high vulnerability, while shelter data such as annual intake and euthanasia rates helped measure potential impact. Shelters and animal control agencies located within the highest vulnerability index regions were prioritized, as well as programs that provide free or low-cost services to keep pets in homes.

More than 100 California shelters received grants. How were they selected?

Medical capacity as well as adoptions are declining in American shelters right now, adding days to the average stay in an animal shelter, creating bottlenecks, and reducing positive outcomes. Expanding access to spay and neuter services was paramount in this funding cycle and will remain a priority for the life of this program.

Funding has been prioritized in the following areas:

- Spay/neuter surgeries for shelter animals and to keep pets in homes
- Access to veterinary care in communities where resource deserts exist
- Shelters in areas of high vulnerability or with high euthanasia rates
- Increasing outcomes such as foster, adopt and return to home that remove barriers and promote inclusivity and equity
- Humane housing for animals in shelters such as double-compartments for dog and cat kennels
- Reducing euthanasia of healthy and treatable animals
- Resources to keep pets in homes, allowing animal control agencies to offer services as an alternative to impoundment



Map of California showing shelters (orange paw markers) and supporting organizations which include rescues, clinics, and other eligible groups (yellow paw markers) that have received funding under California for All Animals.

More than 100 California shelters have been awarded funding to support initiatives that advance shelter-community integration and prevent unnecessary shelter intake, such as community/volunteer engagement and family-led rehoming. Initiatives that support animal well-being inside the shelter, such as double compartment housing, behavior, training and enrichment programs, were favored to reduce the length of stay for animals experiencing an emergency and for whom the shelter is the right place to receive care.

Last but certainly not least, initiatives that reduce the number of barriers between pets and people were prioritized. Examples include expanding access to affordable pet care; removing restrictive, fear-based adoption policies that are not supported by science and not in line with equity and inclusion; waiving reclaim fees; streamlining foster/volunteer onboarding (including making orientations and training available online); and introducing field service initiatives that focus on strengthening the human-animal bond and the relationship between community and animal services, and provide problem-solving resources to help community members keep their pets and support those willing to foster short-term.

This September, another round of funding will be offered for shelters with the specific goal of further expanding access to spay and neuter services. Shelters are being asked to push the boundaries of creativity, partnership, and innovation to search for even more ways to grow our surgery capacity during this national shortage.

Is your local shelter on board? Share the good news! Visit californiaforallanimals.com to find out how California for All Animals can help your community.

Research Funding Helps Advance **IMAGING CAPABILITIES**



▶ Drs. Ehren McLarty and Mathieu Spriet in front of Explorer CT which was funded by CCAH donors and used in this study.

Fused PET/CT images from an 11-month-old Labrador Retriever, who was being evaluated for limping, which shows the areas (bright orange region) in the elbow which is causing his lameness. The CT image alone was unable to localize the cause of his lameness.

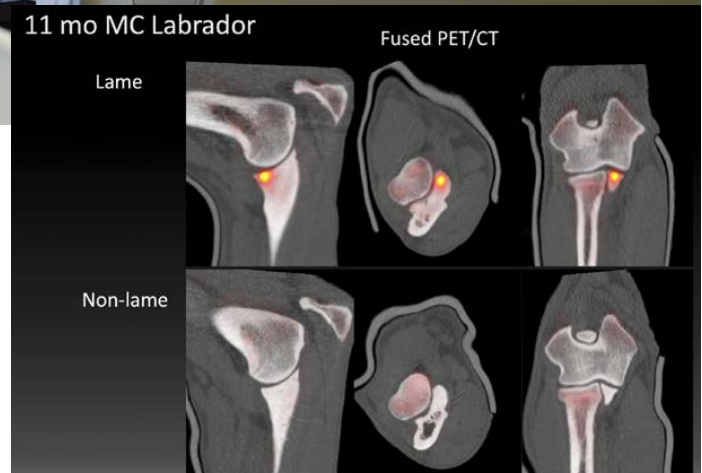
Determining the source of lameness in a dog's front legs has been challenging until now. Thanks to a CCAH research grant, Drs. Ehren McLarty and Mathieu Spriet have been able to investigate the benefits of positron emission tomography (PET) imaging over computed tomography (CT) scans. Their research suggests that PET improves the ability to detect lesions in dogs with elbow pain and is a potential improvement on CT findings.

CT is a common diagnostic tool for lameness issues, especially in large breed dogs with orthopedic disease in their elbows, explained McLarty, a newly appointed faculty member in radiology.

“But we wanted to see if we could better detect exactly where the pain is coming from,” she said. “Are there areas with active lesions that haven't shown any changes on CT?”

McLarty was still a resident when she teamed with faculty mentor Spriet and others to compare the imaging modalities, which was funded by a CCAH resident grant. This grant program, funded by CCAH donors, is designed to help residents design and complete research projects that advance animal health while helping them jump start their career.

Spriet was looking into this exact issue with horses using a prototype of the first equine PET scanner. Based on his pioneering work, they studied 12 lame dogs and



determined that PET was able to detect lesions not found on CT. The findings not only helped determine initial workup for new lameness cases, but also helped re-assess long-term, complex joint issues in patients that had previously only been imaged with CT.

“The CCAH funding was absolutely essential to the success of this study,” said McLarty. “We never could have recruited the dogs needed for this study without the funding that paid for the comparative scans.”

The school now has a combined CT/PET scanner specifically for small animals, which the CCAH donors helped purchase, that is advancing the success of this initial project. Follow-up research, also funded by CCAH, evaluating hind limb lameness in dogs will soon be presented at the [American College of Veterinary Radiologists](#) annual meeting, and a new CCAH-funded study looking at shoulder disease in dogs will begin soon.

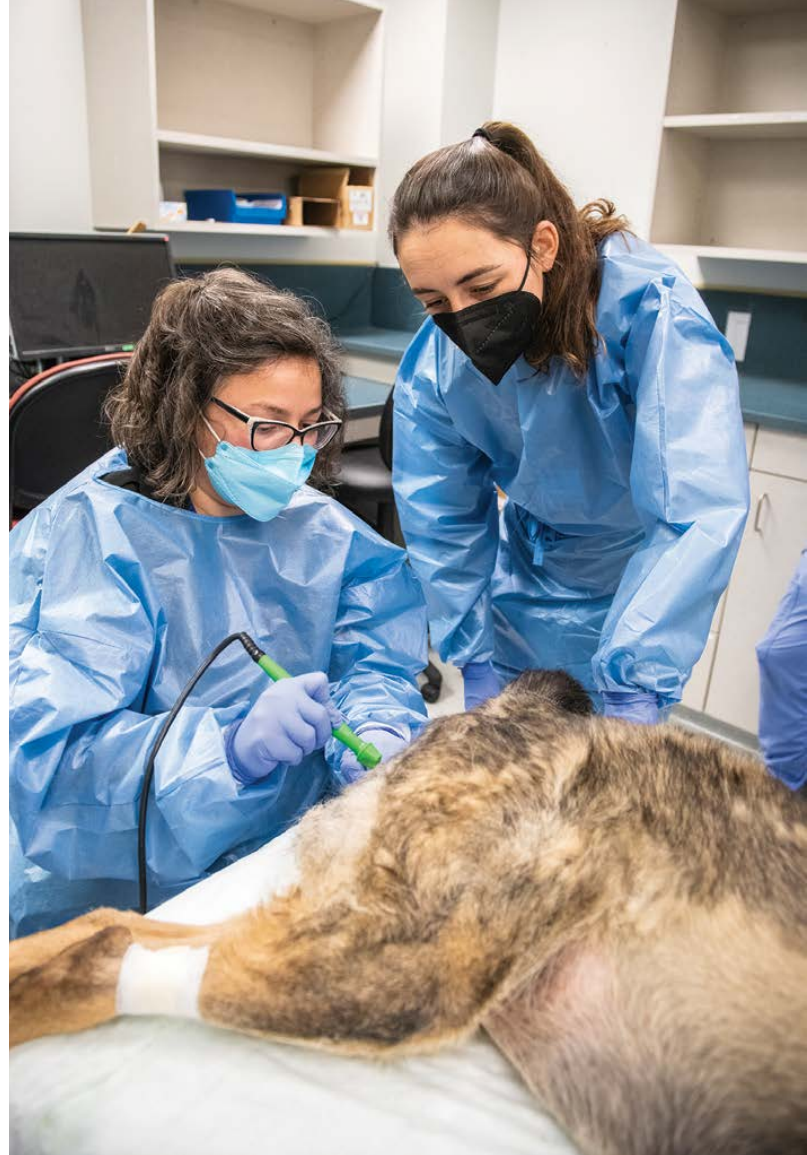
Expanding CANCER TREATMENT OPTIONS

Owners of cancer patients now have another therapy option for their beloved pets – one that may be more tolerable than traditional chemotherapy and more affordable than radiation treatments. The veterinary hospital's [Medical Oncology Service](#) recently acquired an electrochemotherapy device to treat tumors on or just under the skin, which make up a large percentage of tumors in dogs and cats. Made possible by a CCAH grant, the equipment is proving to be a valuable alternative method of care.

Electrochemotherapy treatments involve administering chemotherapy drugs intravenously into anesthetized animals, then sending electronic pulses into the tumor area via a probe held to the animal's skin. The electric current creates pores in the tumor's cells, allowing for a higher percentage of the chemotherapy agent to enter into the directed areas, killing the cells and preventing cell division. For several days following treatments, dead cells are eliminated by the animal's immune system. Generally, only two treatments are necessary after an incomplete excision, but additional treatments may be needed in patients with macroscopic tumors.

The new equipment is mostly used to treat tumors after they are surgically removed, but with small amounts of tumor left behind, or for tumors located in areas that are not ideal for surgery. While radiation is the gold standard for these scenarios, electrochemotherapy is gaining traction as an alternative for pet owners who may not be able to afford radiation or who live in areas where radiation therapy is not available. Additional benefits include far fewer treatments than radiation (which may require 16-20 sessions) and the use of more tolerable chemotherapy drugs than traditional treatments.

Types of tumors that may be treated with electrochemotherapy include squamous cell



Faculty member Dr. Amandine Lejeune (left) and resident Dr. Julia Colosi using Electrochemotherapy to treat a dog with cancer.

carcinomas, mast cell tumors, melanomas, fibrosarcomas, and other soft tissue sarcomas.

The technology for electrochemotherapy has existed since the 1980s with its first use in veterinary medicine being recorded in France in 1997. The use of this technology is described for palliation of cancer in humans. However, even after 25 years of use, research into its capabilities for our pets remains limited.

Dr. Amandine Lejeune is looking at outcomes of pets diagnosed with various tumor types and treated with this technology. In addition to documenting its efficacy, she aims to describe any side effects and optimize anesthetic protocols to be used during the delivery of the pulses. Future research will involve assessing the impact of this therapy on the immune system and the pharmacology of the chemotherapy used during the sessions.

HARNESSING HOPE

for Cancer Patients

Jan Miller and her husband Jeff Rich have been passionate supporters of the school since 2005 when the veterinary hospital saved their beloved beagle Genny, who was battling renal disease. They are grateful to the school for offering unparalleled expert and compassionate care, and having extraordinary clinicians and researchers.

Most recently, they contributed a gift to the CCAH to support research harnessing the immune system to fight cancer in dogs. Researchers have been working to develop monoclonal antibodies that can be used to target cells expressing tumor markers to reverse immunosuppression caused by the tumor – hopefully allowing the body’s immune system to then recognize and attack cancer cells.

“We are not only passionate about UC Davis but we are passionate about the science,” Miller and Rich said. “Dr. Michael Kent is an innovator and has our support always.”

Miller is the founder and CEO of Dupree Miller & Associates, a premier literary agency representing authors, innovators and brands across all genres. Since 2014, she has provided her visionary insight and advice to the dean as a member of the school’s [Dean’s Leadership Council](#), comprised of distinguished leaders in their fields. Members generously volunteer their time and demonstrate the power of philanthropy.

“We are immensely grateful to Jan and Jeff for supporting our work to develop new immunotherapy agents to help fight cancer,” CCAH Director Kent said. “Because of their generosity and longtime commitment to advancing health, we are able to develop new tools in the fight against cancer to make the lives of our animal companions healthier and better.”

Additionally, Miller and Rich established the Schumacher Veterinary Student Scholarship in 2017 in memory of their cherished beagle. Inspired by their appreciation for higher education and love of animals, they look to the future and value the importance of investing in tomorrow’s veterinary leaders.








Jan Miller is a long-time champion of the school and the CCAH.



HIGHLIGHTS OF DONOR-FUNDED CCAH RESEARCH STUDIES

Here are a few of the 25 research studies recently funded:

-  Improving anesthesia safety for cats
-  Advancing glioma and osteosarcoma treatment in dogs
-  Developing better treatments for feline chronic gingivostomatitis
-  Exploring a new drug to optimize treatment outcomes in canine cancer patients
-  Advancing tissue engineering of cartilage in dogs

With your help, we are able to improve the health and welfare of all companion animals.



JUMPING GENES –

Surprise genetic discovery in dogs

Researchers have determined that a high number of dog genes “jump” chromosomes.
Photo: Jessica Hecock

Jessica Hecock

Even when you’ve been studying genetics for 25 years, science is still full of surprises. When Dr. Danika Bannasch recently discovered a very large number of variants in canine DNA known as retrogenes, she realized they could have significant health implications.

“These retrogenes result in a large amount of structural variation that could cause diseases in dogs we didn’t know about until now,” said Bannasch, who holds the Maxine Adler Endowed Chair in Genetics and is associate director of the [CCAHA Genetics Program](#).

She explained that these retrogenes have previously remained hidden to investigators because it was impossible to tell them apart from their parent genes. They occur when a complete copy of a gene is carried or “jumped” to a new location on a different chromosome via transposable elements. But, thanks to a donor-funded CCAH grant, Bannasch and her colleagues have developed new genomic sequence analysis techniques to identify the previously hidden retrogenes.

What they’ve found has come as a bit of a surprise. They recently published a study in the journal, [Genes](#), that shows retrocopy genes are 10 times more likely to happen in dogs as humans. In their study involving nearly 300 dogs, they found that each individual dog has on average 55 retrocopies that could be meaningful alterations that may cause disease or other phenotypic variations.

“It’s kind of scary to see how common these retrogenes are as far as canine health goes,” Bannasch said.

The first canine retrogene discovery was made in 2009 for a retrogene that causes chondrodysplasia or dwarfism. The researchers thought the discovery was a fluke, but when Bannasch and colleagues were looking at a second form of

dwarfism, a second retrogene was identified. The hunt was like searching for a needle in a haystack. Bannasch was sitting at the county courthouse waiting for jury selection and over the course of five hours of swiping through a mountain of data on her computer, found what she had been looking for—the second dwarfism retrogene. It had “jumped” chromosomes twice. Further investigation by Kevin Batchler, a graduate student in the Bannasch Lab, revealed that it had moved five times in dogs.

This led Bannasch and Batchler to hunt for more retrogenes. They developed a method to find all these hidden retrogenes and identified that they are widely present in the canine genome.

“Making these new discoveries is what keeps research exciting,” Bannasch said. “While there are many canine diseases that we know the genetic cause for, we hope this fresh information will enable other researchers to identify mutations for particular conditions.”

Transposable elements or “jumping genes” were first identified in the 1940s by Barbara McClintock, who found they were responsible for variation in corn kernel colors. The discovery was fairly ignored for several decades until her pioneering work was finally recognized with a Nobel Prize in 1983.

Transposable elements make up to 41% of a dog’s genome and about 50% of the human genome. Dogs have higher activity in these elements, but it’s still unclear what all of these “jumping” retrogenes are doing. Bannasch is continuing the line of scientific inquiry and hopes to tackle a study of those canine transposable elements.

This study was made possible by funding from the CCAH, as well as research scholarships for co-author Kevin Batchler, a PhD student in [Integrative Genetics and Genomics](#).



THANK YOU!

Friends of Companion Animals Honor Roll

Thank you to our friends for making a difference in the lives of beloved animal companions! Your dedicated partnership makes our work possible — each discovery we make, each grant we fund, every piece of equipment we provide, and each resident we help train. We are pleased to recognize those who contributed \$1,000 or more to the Center for Companion Animal Health from July 2021 to June 2022.

Anonymous
Don & Elizabeth Abbott
Kristi Abrams & David Rubcic
Stacey Baba & James Vokac
Charitable Foundation
Mercedes Barris
Kay Bartlett
Harriet Benson
Eric M. Berg Charitable Fund
Black Butte Bison Ranch
Grace Blair
Nanette Blair
Michael Borck & Kathleen Brannan
Douglas A. Butler (estate)
Robert Camm
Michael Carney
Glen & Angela Charles Family
Foundation
Sharon Clevesy
Janet & John Collins
Nancy & Christopher Connery
Victoria Corrales
Marcia Cox
Alan Defever (estate)
Noel Dybdal & Paul Lutes
Marlene Ehresman
James & Sharon Ellisor
Mildred G. Federico Charitable
Foundation
Edwin & Patricia Fichtner
Geoffrey and Barbara Fong
David Fradin
Christine & Greg Freeman
Lawrence Goland
Anne Gray
Barbara Greenstein

GVV Capital
Colleen & Robert Haas
Kristi Haddock
Marianne & Raymond
Hammerschmidt
Roy E. Hanson Jr. Manufacturing
Linda Hat
Suzanne Hill
Karen Hooper
Carol Horace
Weslee Howell
Thomas & Karen Jefferson
Linda Jensen
Steven Jensen & Mark Grace
John T. & Jane A. Wiederhold
Foundation
Teresa Kaneko
Michael Kent & Karl Jandrey
Barbara Kerr
Jody Kinner
Susan Koret
Krane Family Charitable Gift Fund
JoAnn & Stan Kromfols
William & Mabel Labiak
Gail Lawrence
John & Pamela Leggett
Paul & Lea Levine Foundation
Holly & Ryan Lindsay
Christina & Chee Louie
Christine Lynch & William Tanner
Maddie's Fund
Marit Marino
Pat Marsh
Beverly & Fritz Maytag
Barbara McCoy
Joan & Hans Mehn

Ana Mendez & Rajeev Jayavant
Andrew Merenbach &
Elizabeth Cheney
William Miklos and Susan Rinne-
Miklos
George & Phyllis Miller Feline
Health Center Fund
Jeffrey Rich and Jan Miller
Mark Miller
Diana Muller
Dr. Pauline Mysliwiec &
Dr. John Yao
Charles & Phyllis Newman
Joanne Nicholson
John Noll & Kathrin Stamp
Norcal Golden Retriever Club
Helen North-Root
Jean Nunes
John Olson & Tom Kim
Muriel H. C. Ong
Kim Ooi & Paul Neumeyer
Jerry Pacheco
Michael & Ann Parker
Jerald Pearson
Laurel Place
Bill Porter & Kirsten Greene
Bob & Lori Pryt
Janet Radford-Harris
Kevin Ray & Ronald Caple
Martha Reese
Joan Reynertson (estate)
Deanna Marie Roth
Rebecca Rowland Mosley
Shirley Ruxton Soper
Elyse Salven-Blatt
Bille Sarzin

Diana Schlesinger
Cheryl Sedestrom
Shirley Sichel (estate)
Kenneth Smith & Lucia
Christopher
SOCK FIP
William Sommers & Sandra Black
Gary & Cathy Spratling
Roberta & Donald Stanisich
James Steele
James Stimson & Sandra Uratsu
Joan & William Strohauser
Mariko Sugiyama
Marcia Syufy
Maureen Tolson
Michael Tracy & Debra Lelek
Timothy Trucano
Wallace & Sylvia Tsang
Katharine Tyson
Unti Vineyards LLC
Eric & Cari Valle
Varian Medical Systems
Srividya Velchamy & Velchamy
Sankarlingam
Inta Vodopals & David Jones
Nadya von Lorenz (estate)
Suzanne Walchli Charitable Fund
Linda Wark
Erin Wilson
Sondra Wood
Linda Wroth
Karen Young
Zalec Familian & Lilian Levinson
Foundation
Lin Zucconi



UC DAVIS

VETERINARY MEDICINE

Center for Companion Animal Health



Nonprofit Org.

U.S. Postage

PAID


UC Davis

Center for Companion Animal Health
c/o Office of the Dean—Advancement
School of Veterinary Medicine
University of California
944 Garrod Drive
Davis, CA 95616-5270

(654W)

CCAH Update is published by the School of Veterinary Medicine at the University of California, Davis: Mark Stetter, dean; Michael Kent, director, CCAH; Tom Hinds, director strategic planning and communications; Trina Wood, editor; Nancy Bei, Andy Cowitt, Vu Dao, Mandy Newkirk, Don Preisler, Carolyn Sawai, Tamara Shevlin, Rob Warren, contributors; Steve Dana, ATS Mediaworks.

The CCAH is dedicated to advancing studies in veterinary medicine—encompassing new ways to prevent, diagnose and treat diseases including cancers, genetic and immune disorders, infectious diseases, kidney and heart diseases, and nutritional disorders in companion animals. We welcome visitors to come and learn more about our mission and programs. To schedule a visit, please call 530-752-7295. *The University of California does not discriminate in any of its policies, procedures or practices. The university is an affirmative action/equal opportunity employer.*

 **Help us go green!** Subscribe to our online publications by visiting www.vetmed.ucdavis.edu/go/subscribe.

GIFTS from the Heart

Are you looking for a heartfelt way to show that you care? Honor someone special—a beloved pet, friend or family member—with a donation made in their name to the [Companion Animal Remembrance and Endearment \(CARE\) fund](#). Your gift will help support studies that improve the health of our animal companions. We will brighten your honoree’s day with a letter sharing your meaningful tribute.

Honor a loved one by visiting give.ucdavis.edu/Go/care or calling 530-752-7024.



Center for Companion Animal Health

Business office: 530-752-7295 • **Small animal clinic appointments:** 530-752-1393



ccah.vetmed.ucdavis.edu