



AMERICAN KENNEL CLUB®
CANINE HEALTH
FOUNDATION®

Discoveries

Summer 2026 | Vol. 122

How pain can shape a dog's behavior

Exploring how chronic pain may
affect emotion and focus.

New science for healing stubborn wounds

Studying platelet lysate as a new
recovery tool.

Keeping senior dogs active and engaged

How Edy and Kate found joy
through lifelong learning.

Advancing the health of all dogs
through knowledge and discovery.



Message from the CEO

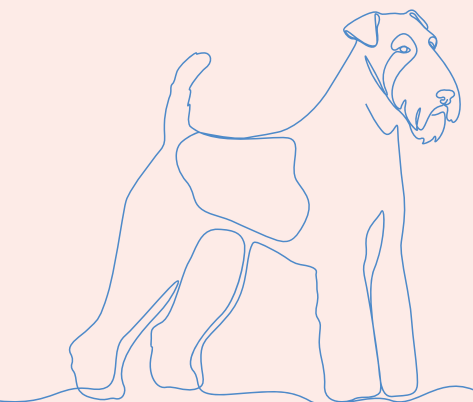
Dear Friends,

Summer is a season made for dogs in motion. Longer days invite more time outdoors with the dogs who run, retrieve, herd, serve, train, compete, and explore beside us. In this issue of *Discoveries*, we highlight performance and working dogs, along with the science that helps protect their health, comfort, recovery, and longevity.

These remarkable dogs ask a great deal of their bodies and minds. They also teach us a great deal when we pay attention. The earliest signs of fatigue, injury, illness, pain, or aging often appear as subtle changes noticed first by the people who know them best.

Thank you for supporting research that helps dogs stay healthy, active, and ready to do what they love.

With gratitude,
Stephanie Montgomery
DVM, PhD, DACVP



In This Issue

- 3 **The Hidden Cost of Pain:** Osteoarthritis and the canine mind.
- 5 **The Science of Recovery:** Platelet lysate and hard-to-heal wounds.
- 6 **Born to Work, Bred for Health:** Protecting future German Shepherd Dogs.
- 7 **Training the Next Generation of Sports Medicine Experts:** Meet Dr. Gabriela Medrano.
- 8 **Still in the Game:** How senior dogs keep thriving through aging research.
- 9 **CHAMPS in Action This Summer**
- 10 **A Lasting Tribute at Purina Farms**
- 11 **Donor Spotlight:** A Long-Lived Breed Invests in Aging Well

Where to Find Us:

Bark & Bolt Races

August 1 / Patton Park, Hendersonville, NC

Wiggle Butts: A Boykins Palooza

August 1 / Why Not An American Ark Zoo, Monroe, NC

2026 Canine Health in Motion Symposium

August 6-8 / Sheraton Imperial Hotel
Raleigh-Durham Airport, Durham, NC

Tarheel Labor Day Cluster

September 4-7 / Jim Graham Building, NC
State Fairgrounds, Raleigh, NC



The Hidden Cost of Pain

A closer look at how pain affects the canine mind

By Dr. Stephanie Montgomery

For a performance dog, pain can change more than movement.

A dog may slow down on the course, hesitate before a jump, lose focus during training, or seem less eager to do work they once loved. For owners, handlers, trainers, and veterinarians, these changes can be difficult to interpret. Is the dog getting tired more easily? Less interested? Aging? Or could pain affect not only his body but also how he feels, thinks, and responds to the world around him?

That idea is now being explored by Dr. Maggie Creamer, a researcher at North Carolina State University whose work is supported by both CHF and the National Institutes of Health (NIH). Dr. Creamer is a recipient of a CHF Rising Researcher Award, a program that helps promising early-career scientists launch independent careers in canine health. With this support, she is studying how chronic pain may affect not only a dog's physical comfort but also its emotions and cognitive function.

Her focus is osteoarthritis, a common joint disease that occurs when the protective cartilage that

cushions movement within joints gradually wears away, leading to pain, stiffness, and reduced mobility. In people, chronic osteoarthritis pain is known to affect much more than movement. It can also influence mood, cognition, and overall quality of life. In dogs, however, the relationship between osteoarthritis pain, emotional state, and cognitive function remains poorly understood.

Dr. Creamer's research aims to deepen our understanding of how chronic pain shapes a dog's emotional and cognitive well-being.

With CHF support, the team is developing the Dog Pain-Related Emotion and Cognition Test Battery, a set of behavioral tests designed to give researchers a more complete picture of a dog's emotional and cognitive health. The goal is to combine newly developed tasks with established cognitive and emotional assessments in a way that is practical and feasible for both healthy dogs and those living with chronic pain.

"Since receiving funding in September 2025, we've made strong progress," Dr. Creamer reported to CHF this spring. "We began by designing four new

tasks focused on understanding emotion in dogs, especially signs related to depression-like behavior and how dogs make emotional decisions. Three of these tasks proved promising.”

With the development phase complete, the team has now moved into testing the assessments with dogs participating in the research.

For canine athletes and working dogs, improved pain assessment could have meaningful implications. Understanding how pain may affect behavior, attention, decision-making, and quality of life could help veterinarians and owners recognize discomfort earlier and evaluate future treatments more thoroughly.

“Although we are still in the early stages of data collection, we are on track to meet our goals and look forward to sharing our findings with both the scientific community and dog-loving public,” Dr. Creamer wrote.

For every dog in motion, recognizing subtle signs of pain more clearly is an important step toward protecting their comfort, performance, and the joy of doing what they love.



Active Grant Highlights

Prevalence and Risk Assessment of Heterobilharzia americana in Dogs and Freshwater Sources in the Southwestern United States

Principal Investigator: Adler Dillman, PhD; University of California, Riverside

Total Grant Amount: \$209,770

Grant Period: 4/1/2026 - 3/31/2028

Following recent infections in the Southwestern United States, researchers are investigating how commonly dogs living near the Colorado River are infected with a liver fluke parasite not previously thought to occur in the region. The study will identify environmental factors that increase infection risk and create maps highlighting areas where dogs may be most vulnerable.

Comprehensive Computed Tomographic Calculator for Canine Elbow Dysplasia: Leveraging Computer Automation with Standard of Care Imaging for Complete Quantitative Assessment

Principal Investigator: Sarah Pownder, DVM; Hospital for Special Surgery

Total Grant Amount: \$48,320

Grant Period: 4/1/2026 - 9/30/2027

This multi-center project aims to unlock the full value of CT scans used to evaluate elbow dysplasia in dogs by developing an automated tool that rapidly analyzes imaging data. The resulting registry will create a powerful resource for future research.

Development of an Antibiotic Susceptibility Protocol and Genetic Characterization of Canine Mycoplasmas

Principal Investigator: Rinosh Mani, BVSc, MS, PhD, DACVM; Michigan State University

Total Grant Amount: \$28,484

Grant Period: 6/1/2026 - 5/31/2027

This study advances understanding of mycoplasmas, bacteria linked to kennel cough and reproductive problems in dogs. Researchers will identify the most effective antibiotics and study the genetics of these bacteria to improve treatment and guide future disease prevention efforts.

See our full research grants directory at akcchf.org/research.





The Science of Recovery

How platelet lysate could help veterinarians address wounds that won't heal

By Dr. Stephanie Montgomery

Most wounds heal through a carefully coordinated process of clotting, cleaning, and rebuilding tissue. When infection occurs, that process can slow or break down.

Chronic infected wounds are a common and frustrating challenge in veterinary medicine. According to Dr. Maria Naskou at Auburn University, these wounds are often complicated by biofilms, communities of microorganisms that adhere to surfaces and protect themselves within a slimy layer. In a wound, this layer can make bacteria harder to reach and more difficult to treat.

For dogs in motion, recovery matters. Cuts and abrasions are often an unavoidable part of the job for dogs that train, compete, or work in challenging environments. When a wound does not heal properly, it can lead to prolonged pain, limited mobility, and a delayed return to normal activity.

Dr. Naskou and her team are exploring an exciting new regenerative approach called platelet lysate. Platelets are naturally found in blood and are essential for clotting, but they also carry powerful growth factors and antimicrobial molecules that promote healing. By carefully processing platelets to create platelet lysate, researchers can unlock and study these healing components in a concentrated

form, offering promising new ways to support tissue repair and recovery.

With CHF support, Dr. Naskou's team is optimizing a novel canine platelet lysate therapy and testing its ability to fight infection, both alone and in combination with conventional antibiotics. The goal is to determine whether this approach could help reduce bacterial growth in challenging wounds complicated by biofilms.

"Our team is currently preparing to develop and test this therapeutic product," reports Dr. Naskou. "We are in the process of recruiting dogs to be blood donors and are scheduling blood donations. Once blood has been collected, we will process the blood to concentrate the platelets and make platelet lysate for testing against bacterial biofilms."

The work is still in development, but the need for better therapies is clear. Dogs with chronic infected wounds need better options, and veterinarians need tools to support healing when conventional approaches fall short.

For performance dogs and active companions alike, recovery is essential to lifelong health. CHF-funded research like this helps bring promising ideas closer to the dogs who need them.



Built for Service, Protected by Science

How CHF-funded genetic research is helping protect future generations of German Shepherd Dogs

By Dr. Stephanie Montgomery

German Shepherd Dogs are among the world's most versatile working breeds. They herd, track, protect, serve as guide dogs, assist in search and rescue, and work alongside police, military, and first responders. Their strength, focus, intelligence, and drive make them extraordinary partners.

That makes it especially devastating if one is diagnosed with congenital idiopathic megaesophagus.

Dogs with this disorder cannot move food normally from the esophagus to the stomach, making a simple meal a daily challenge. Although it can occur in many breeds, German Shepherd Dogs are affected more often than any other breed.

With CHF support, Dr. Leigh Anne Clark and her team at Clemson University began searching for a genetic explanation in 2020. Their genome-wide study uncovered a strong genetic signal for congenital idiopathic megaesophagus. They identified a small DNA repeat associated with a gene called *MCHR2*, which plays a role in appetite and gastrointestinal motility. In most breeds, this sequence appears twice, but in German Shepherd Dogs, it commonly occurs as either one or three copies.

Dr. Clark's team found that the single-copy version is strongly linked to congenital idiopathic megaesophagus, with dogs inheriting one copy from each parent at the highest risk of developing the disorder. They also discovered that male German Shepherd Dogs are affected at nearly twice the rate of females. Together, sex and this small DNA repeat pattern can predict disease status in more than 75 percent of dogs. A genetic test is now available to help breeders make more informed breeding decisions.

But the picture is incomplete. Because the genetic variant can also occur in healthy dogs, breeders need better information before selecting against it too aggressively.

With follow-up CHF funding, Dr. Clark's team, now at the University of Georgia, is searching for additional risk factors using a carefully documented breeding colony at The Seeing Eye, which trains German Shepherd Dogs as guide dogs for people who are blind. By comparing affected and unaffected siblings, the team aims to deepen understanding of the disease and develop a more comprehensive screening tool.

For breeders, handlers, and working-dog communities, this research offers a path to healthier litters, better decisions, and stronger protection for the dogs born to do extraordinary work.



People Spotlight

Training the Next Generation of Sports Medicine Experts

Meet Dr. Gabriela Medrano, the newest AKC/CHF Canine Sports Medicine & Rehabilitation Resident at Cornell University

By Trent Brown

Keeping dogs in motion requires more than strong bodies. It also requires veterinarians trained to understand performance, mobility, recovery, rehabilitation, and the human-animal bond that makes each dog's work so meaningful.

CHF is pleased to congratulate **Dr. Gabriela Medrano**, the newest veterinarian selected for the AKC- and CHF-supported Canine Sports Medicine & Rehabilitation Residency at the Cornell University College of Veterinary Medicine.

Dr. Medrano earned her veterinary degree from St. George's University in Grenada and completed a clinical internship at the Cornell University College of Veterinary Medicine. She also gained valuable veterinary experience through externships in Puerto Rico, Alabama, and South Africa.

"I've always known I wanted to become a veterinarian," Dr. Medrano told CHF. "From a very young age, I felt a deep connection to animals and developed a strong appreciation for the human-animal bond."

Her interest in sports medicine and rehabilitation grew during her clinical rotations and internship, where she saw the impact of helping dogs regain mobility, comfort, and function.

"Support from the AKC and AKC Canine Health Foundation helps expand advanced training opportunities in veterinary sports medicine and rehabilitation, an area that plays an important



Dr. Gabriela Medrano

role in improving mobility, performance, and quality of life for dogs," Dr. Medrano said. "I'm honored and grateful for the opportunity to continue that training at Cornell University."

By supporting this residency program, CHF and AKC continue to invest in building the specialized expertise dogs need to recover well, move comfortably, and perform at their best.



Still in the Game

How senior dogs can keep learning, moving, and loving life

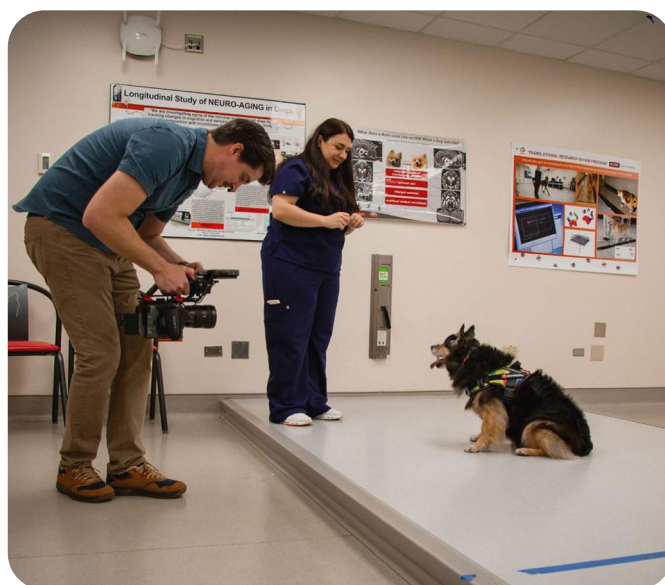
By Trent Brown

When Amber Yelton found Edy more than a decade ago, the little rescue dog was starving and alone on a country back road. Amber could not have known then how much life Edy still had ahead of her, or how much Edy and her older sister, Kate, would one day teach her about aging, resilience, and staying active.

Years later, when 15-year-old Edy visited North Carolina State's College of Veterinary Medicine for a separate health scare, Amber discovered the work of Dr. Natasha Olby, the lead collaborator on CHF's funded initiative to create the first guidelines for diagnosing and monitoring Canine Cognitive Dysfunction Syndrome. Soon, Edy and Kate were enrolled in Dr. Olby's Longitudinal Study on Aging.

"Seeing the girls' demeanors and moods when they came home from their study days made me excited and curious," Amber told CHF. "They were happy and active and engaged. It occurred to me then that despite their age, the girls loved learning!"

That realization changed what Amber imagined possible. She enrolled Edy in Rally just for fun, and Edy soon began entering trials. When bladder



stones sidelined Edy, Amber brought Kate to training instead. Though Kate was 15 and deaf, Amber created hand signals and cues just for her. Within two trials, Kate qualified for AKC Rally Nationals, where she was the oldest participant in 2025. She turned 17 the following week.

"It was magic," Amber said.

Edy found her own way back into motion, too. After Amber learned through another NC State study that Edy had severe arthritis in all her major joints, they discovered Happy Ratters, a senior-friendly hunting sport that Amber said "breathed new life" into her.

"Old dogs have so much life, love, and sport left to share," Amber told CHF. "There are so many options to keep your best friend active and engaged in their senior years, and the dogs that love you unconditionally are worth it!"

For every dog in motion, aging well is not only about adding years. It is about protecting curiosity, comfort, connection, and the joy of still having something wonderful to do.



CHAMPS

CHAMPS in Action

Dog lovers are turning purpose into progress this summer

By Paige Hofstad

Across the country, CHF supporters are turning their love for dogs into meaningful action through CHAMPS community events and grassroots fundraising.

This summer, we hope you will follow two CHAMPS ambassadors who are using their platforms to raise awareness and support for canine health research. Casie Shimansky, **@pawsitivepointers**, honors the memory of her German Shorthaired Pointer, Kimbee, by advocating for hemangiosarcoma research. Donna DiPrato, **@hollyandlemon**, continues the legacy of her Golden Retriever, Holly, by sharing resources and raising support for kidney disease research.

You can also join CHF in person this summer. On August 1, CHAMPS Ambassador **Mitch Quiring** will host a Colorado Rockies fundraiser in memory of his dog, Brooklyn, with proceeds supporting canine hemangiosarcoma research. That same day, CHF will be onsite at **Bark & Bolt** in Hendersonville, North Carolina, a dog-friendly race event featuring a 5K, one-mile run, and 100-meter dash.

Whether you follow, attend, volunteer, or fundraise, you can help move canine health forward.

Learn more about CHAMPS and upcoming events at akcCHF.org.

Good Rest, Good Science: Lesure Joins CHF's Aging Dog & Joint Health Research

By **Andrea Fiumefreddo**

The AKC Canine Health Foundation is proud to recognize Lesure as a named sponsor of two active research grants focused on canine aging and joint health.

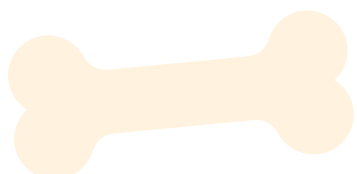
Lesure is a pet comfort brand whose new RealOrtho™ Dog Sofa was designed with large-breed and senior dogs in mind, applying orthopedic support to improve sleep and comfort for aging dogs. Their decision to invest in CHF research reflects a genuine commitment to the science behind canine health.

Through this sponsorship, Lesure is supporting two canine health research grants: one focused on developing an automated tool to improve the detection and treatment of elbow dysplasia, and another investigating whether a naturally occurring hormone may help protect aging dogs from cognitive decline.

CHF is grateful to Lesure for their support of this important work. Sponsors like Lesure make it possible to fund the science that improves and extends healthy lives for dogs.

To join Lesure in fueling canine aging and joint health research, visit akcchf.org/donate.

Lesure



A Lasting Tribute at Purina Farms

Honoring the dogs we love while supporting canine health research

By **Andrea Fiumefreddo**

Every dog leaves a mark. Through Purina Farms' commemorative brick programs, dog lovers can create a lasting tribute while helping advance the health of future generations.

Nestlé Purina PetCare has been a valued partner of the AKC Canine Health Foundation for many years, united with CHF by a shared commitment to helping dogs live longer, healthier, more active lives. At Purina Farms in Gray Summit, Missouri, that commitment is reflected in meaningful spaces that honor the bond between dogs and the people who love them.

The **Walk of Champions** recognizes titled dogs with a permanent tribute celebrating their achievements in competition, sport, and the field. The **Path of Honor** welcomes tributes for cherished pets, people, kennels, and clubs.

With Rainbow Bridge Remembrance Day approaching on August 28, now is a meaningful time to honor a beloved dog. Each \$115 commemorative brick includes an \$80 tax-deductible gift supporting CHF's mission and creates a tribute that can be visited during future events and competitions at Purina Farms.

Through collaborations like this, CHF and Purina continue celebrating remarkable dogs while supporting the science that helps dogs thrive.

Create a tribute at akcchf.org/pavetheway



Donor Spotlight

A Long-Lived Breed Invests in Aging Well

The Portuguese Water Dog Foundation helps advance CHF's Aging Research Program Area

By Fleming Samuels

For the Portuguese Water Dog Foundation, supporting CHF's newly announced focus on aging came down to a clear reality: their dogs are living longer. As a result, cognitive health has become an increasingly important concern.

"Because we're such a long-lived breed, cognitive health is more and more important," said Janet Boyd, President of the Portuguese Water Dog Foundation. "Our dogs are hanging around for a longer period of time."

Their Foundation recently completed a global health survey of 3,365 dogs. Among deceased dogs in the survey, roughly 60 percent lived beyond age ten, with some reaching 17 and 18 years. That longevity makes the later years especially meaningful and makes aging research a natural priority for their breed community.

The Portuguese Water Dog Foundation has supported CHF for 21 years and is now within approximately \$100,000 of reaching million-dollar donor status. Its investment in the Aging Research Program Area exemplifies the best of breed-club philanthropy – using knowledge of the breed to support science that may improve life for future generations.



Portuguese Water Dog Foundation, Inc.

Upcoming Webinars

Learn more about canine sports medicine, pain assessment, and healthy aging.

July

Inside Canine Sports Medicine:
Research, Rehabilitation, and
Performance

July 21 at 7 PM ET

Dr. Christopher Frye

August

Advancing Pain Assessment in
Dogs: Emotion and Cognitive
Testing

August 4 at 7 PM ET

Dr. Maggie Creamer

September

Aging Insights: Canine
Cognitive Dysfunction
Syndrome

September 15 at 7 PM ET

Dr. Natasha Olby

For more information and to register, visit akcCHF.org/webinars.

WOOF WORDS

Dogs in Motion

Test your canine health vocabulary with words inspired by this issue of *Discoveries*. From sports medicine and recovery to aging, mobility, working dogs, researchers, donors, and the special dogs featured in these pages, every word connects to the science helping dogs stay healthy and in motion.

Complete the puzzle and submit it by **August 15** for a chance to win a **Lesure RealOrtho™ Dog Sofa**. To enter, scan the QR code and upload a photo of your completed puzzle.

Good luck, and happy puzzling!

Scan
entries here



WIN ONE 4 YOUR DOG!



Lesure



**Congratulations to last
issue's Paw Puzzle
Winner, April Sherwood
of Olmsted Falls, OH.
Woof Woof!**

O	K	W	K	R	A	L	C	W	W	Y	T	I	L	I	G	A	K
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MOTION
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HEALING
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CLARK

RECOVERY
RETRIEVER
BIOFILM
CHAMPS
MEDRANO

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AGILITY
COGNITION
AGING
CREAMER

KATE
MOBILITY
PAIN
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EDY

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NASKOU
PERFORMANCE
REHABILITATION
DISCOVERY

Support the Science Behind Dogs in Motion

Every gift helps move canine health forward.

Make a gift today at akcchf.org/dogsinmotion.

