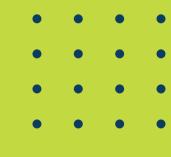


# 2021 Year in Review



# **OUR MISSION**

Animal Cancer Foundation is a 501(c)(3) organization dedicated to finding a cure for cancer by funding research in and increasing public awareness of comparative oncology, the study of naturally occurring cancers in pets and people.



### **A LETTER FROM THE EXECUTIVE DIRECTOR**

At Animal Cancer Foundation, we recognize that President Biden's call for a renewal of the Cancer Moonshot through the Advanced Research Projects Agency for Health (ARPA-H) is an opportunity to finally unite veterinary and human oncologists to solve the puzzle of cancer. We were gratified that at a workshop held at the National Academies of Sciences, Engineering, Medicine of which ACF was a co-sponsor, National Cancer Institute Director Dr. Ned Sharpless discussed elevating canine genomic research through the Integrated Canine Data Commons (ICDC) to enable comparative analysis.

Your contributions have allowed ACF to inaugurate the Canine Cancer Genome Project (CCGP) sponsored by Blue Buffalo Foundation that will produce datasets that will be included in the opensource ICDC, creating opportunities to advance effective new treatments more quickly to the clinic and unlocking new genomic science to help people and pets.

Animal Cancer Foundation continues to support best-in-field comparative oncology research, but we must raise more funding and reach a wider audience to meet the urgent need for clinical research for pets and people today. You can amplify the voice of our community by sharing our mission with your circle, participating in our events and by joining me in giving as generously as you can to support our mission work.

We are pleased to offer you our year in review – a flipbook of what is possible when a community unites against a disease like cancer through support for our mission work.

Thank you for opening your hearts to help.



Barbara S. Cohen Executive Director

# NEW FRIENDS & RECOGNITIONS



### Michael Pioani, CPA | Treasurer

Michael leads Technical Accounting and Financial Reporting for Upstart, an organization based in San Mateo, California that is working to expand access to affordable credit. He is a Certified Public Accountant and holds both Bachelors and Masters degrees from the University of Florida.

Since joining the board, Michael has been steadily guiding the organization through its internal and external financial reviews, as well as carefully monitoring investment strategies for the organization during these challenging times to ensure fiscal stability.

Michael says, "Unfortunately, cancer has been a presence in my life, affecting family members with two and four legs. I want to make a positive impact on the world on a daily basis, so I'm honored to have the opportunity to contribute and to develop ACF's financial strategy in our race to cure cancer."

Please join ACF in warmly welcoming Michael!

#### VETERINARY PRACTICE COMMUNITY MEMBERS GIVE BACK

These community members volunteer to serve on ACF science advisory councils reviewing grant proposals. Moreover, they host and volunteer at events to benefit ACF research:

#### **Portland Veterinary Emergency & Specialty Clinic**

#### Marta Agrodnia, DVM, DAVS, Practice Owner Gail Mason, DVM, DAIM, Medical Director

For the 10th year, Portland Veterinary Emergency and Specialty Care (PVESC) joined with Portland Radio Group for Pet Rock in the Park at Deering Oaks Park in Portland, ME. Started by Dr. Mason and enthusiastically supported by Dr. Agrodnia, Team PVESC volunteers at the day-long event that brings together the Portland pet community for music, vendors, pet-related charities, food trucks and for an in park event that focuses on pet health and welfare while benefiting Animal Cancer Foundation. We salute their service, their team effort and are proud to call them part of the ACF family. Join us in Maine, Sunday, August 28, 2022 and stop by the ACF booth to say hello and receive a

Our valued veterinary practice members also make memorial donations to honor clients' pets and further ACF research:

### **Upstate Veterinary Specialists**

"As a veterinary oncology team, there are many benefits to supporting the Animal Cancer Foundation. Donating to the ACF after a patient has passed allows us to contribute to a cause that we are passionate about and create a legacy in their honor.

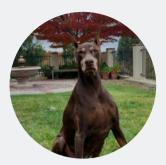
The idea that we can further oncology research and clinical trials to move towards better standards of care and treatment for our patients is rewarding for our team and our dedicated owners. As a team, we've grown to care deeply about our patients, and these donations are a beautiful way to memorialize them and honor their owners.

We've seen firsthand the appreciation from our clients, knowing their pet is continuing to make a difference once their time on earth has ended. This positive response is a huge motivating factor that propels us to keep giving to the Animal Cancer Foundation."

-Dr. Ariana Verrilli, DVM, DACVIM (Oncology) and the Oncology Team at Upstate Veterinary Specialties

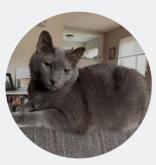
#### Visit acfoundation.org for ways to get involved

# DEDICATIONS



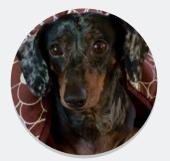
Jackson

In loving member of Jackson. The sweetest boy who will be forever loved. .



Pops

We love Pops! Lori and Ron



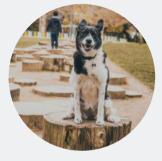
### Cortie

In loving memory of my dachshund Cortie who passed away from bladder cancer just over 2 years from her diagnosis.



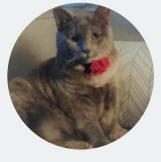
Lex

My heart is a empty without you Lex! I miss you so much! XO, Margaret



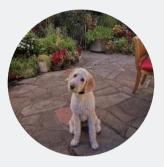
Maya

Sweet Maya, thank you for sharing your life with us. We will love and miss you always. – Maddalena & Marc



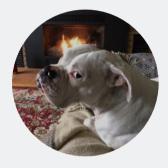
Mabel

A beautiful soul who was rescued by two of the most caring hearts humanity has ever known.



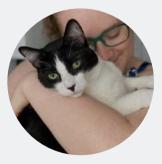
### Cooper

You are a part of our story, our family and will forever be in our hearts. We love you Coop!



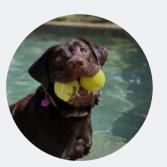
Maddox

You bring so much joy to all



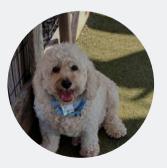
### Jameson

In honor of Mary Stottele's 30th birthday, in memory of Jameson Stottele-Stevens.



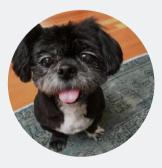
### Hazel

To our sweet Hazel – we hope that Heaven is full of pools, tennis balls, and everything and everyone you love.



### Missy

My life is better because she was a part of it. I will forever have a heavy heart without her. Love, Daddy.



Midge

In memory of much-loved Midge. Auntie Tammy, Uncle Bob, Maya, Frankie and Anthony

# **GUIDING PRINCIPLES**

Too many of us continue to lose our loved ones – people and pets – to cancer. We also suffer the long-term consequences of current treatment options or face a diagnosis of a rare cancer that does not have effective treatment possibilities.

Animal Cancer Foundation seeks to improve this situation to benefit both pets and people. We're focused on closing the gap in funding for comparative oncology research, uniting pet and human research for a cure. Our approach includes the following three science-based funding priorities, coupled with ongoing public-facing awareness and information initiatives:

Improved understanding of cancer through comparative oncology genomics research.

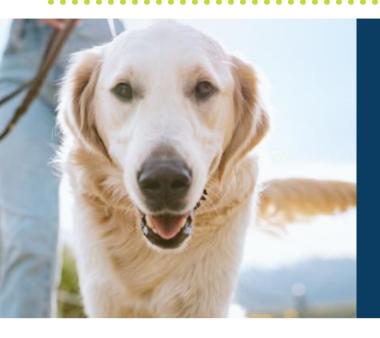




Discovery of novel, effective cancer treatment methods.

Randomized controlled comparative oncology clinical trials to address many longstanding diagnostic and treatment questions.

# **EVENTS**



#### 2021 NATIONWIDE® PET CANCER AWARENESS WALK

For the second consecutive year, over 6000+ people and their pets laced up their sneakers, clicked on their pet's leashes and walked during the month of November for pet cancer awareness month to raise awareness and funds for ACF research. The walk community raised more than \$73,000 for the cause while also giving back to local shelters and rescues through the Wooftrax app FidoCure Prizes. New corporate sponsors for the event in 2021 included Outward Hound, Vetoquinol, BestPetRX, and Investor's Foundation.

If your business is interested in becoming a sponsor for our 2022 November event, please contact Wendy Lee, Director of Marketing, wlee@acfoundation.org.

6,192 Participants 43 States **429,617** Miles

CLICK HERE TO VISIT OUR WALL OF HONOR PARTICIPANT TRIBUTE VISIT

#### **GULLIVER'S RUN 2021**

John & Lisa Heycock's beloved dog Gulliver loved a good run in the trail parks of Lewisberry, Pennsylvania, so when he passed of cancer his family created Gulliver's Run, a 5K annual trail run taking place in November, sponsored by merchants and vendors in the local community and including events for children, too. In this 10th anniversary year, Lisa's and John's love for creating Gulliver's legacy, as well as their love of their state parks and their local community continued to shine brightly, raising over \$15,000 for ACF research. Can you say grateful? We are!

For more information about becoming a Gulliver's Run sponsor or participant, email: gulliversrun@gmail.com



250

# Lewisberry

Participants

Pennsylvania

Trail Run-Walk

**5K** 

Join the 2022 Gulliver's Run, November 6, 2022 (Register by 9/26/2022 for additional savings!)

# CASE FOR SUPPORT & INITIATIVES

The National Institutes of Health – National Cancer Institute Budget Request for 2022 is for \$7,600,000 + \$194M of Cancer Moonshot Funding which expires in 2023 entirely. Comparatively, veterinary oncology research has received a small fraction of funding from the federal government through the NCI or the US Department of Agriculture.

Veterinary oncology is underfunded by government health institutions dedicated to science when that budget for research is compared to that for human oncology. Veterinary oncology often depends on additional funding sources from pharmaceutical companies that may limit the scope of investigation, and on college veterinary schools. Because of these circumstances, Animal Cancer Foundation grants make all the difference to comparative oncology researchers' efforts to help pets and people.



# **\$50**

A case of gloves / A box of pipette tips 1 hour of research / General lab supplies and reagents

\$100

# \$5,000

A single dog in a dog cancer clinical trial

# \$50,000

A small toxicity study in dogs / A small COVID-19 study in mice A Good Laboratory Practice qualified, large scale toxicity study in Dogs (required for the FDA)

\$250,000

A robust, large scale research study in canines, one that would be usable to establish a basis for a new cancer therapeutic under consideration by the Food & Drug Administration, is estimated to cost \$250,000 in total.

Because a "gold" standard of treatment may not exist for companion animals, they may be enrolled in a clinical trial without first exhausting all other treatment options. Compare that to funding a Phase I human clinical trial of a new therapeutic which is estimated to cost \$150,000 per person.

Now factor in that the person in a Phase I clinical trial must often have failed all other approved treatments before being enrolled in the trial.

Non-profits, like Animal Cancer Foundation, are often the only source to fill the funding gap, and support early initiative comparative oncology research that is not limited in scope, allowing scientists to ask "big picture" questions about cancer disease and conduct canine clinical trials.

## **Canine Cancer Genome Project**



#### RESEARCH

The Canine Cancer Genome Project Sponsored by Blue Buffalo Foundation and Animal Cancer Foundation

#### **GRANT AWARD**

TGen (Translational Genomics Research Institute), an affiliate of City of Hope

#### **Principal investigators**

- Nicholas Schorck, PhD, Distinguished Professor and Director, Quantitative Medicine & Systems Biology Division
- Jeffrey Trent PhD, FACMGG, President & Research Director

#### Team Leaders - Tufts University & Ethos Discovery & Children's Hospital of Philadelphia

A multidisciplinary, cross-institutional collaboration to map canine cancer genomes and analyze and harmonize the datasets for placement in an open-source database for use by all cancer researchers.

Phase I and Phase II have been fully funded. ACF is dedicated to raising another \$600,000 to bring this project to result in 36 months.

# **CAR-T Therapy**



#### CAR-T Therapy for Refractory B-Cell Lymphoma Receives NIH Investment Provides Proof of Impact for ACF Selected Early Seed Funding

Researchers at the University of Pennsylvania School of Veterinary Medicine led by principal investigator Nicola Mason, BVetMed, PhD received seed funding from Animal Cancer Foundation in 2016 to develop CAR-T therapy for use in dogs with B-cell lymphoma. According to Dr. Mason, Animal Cancer Foundation's grant initiated this project, which was the first to develop canine CAR-T cells for clinical use.



"We needed an organization like ACF to see the value in creating and testing this therapy in dogs with hematologic (blood) cancers to move us forward."

The researchers were hoping that the therapy would produce durable remission in dogs with B-cell lymphoma. They used the CD20 molecule, which is expressed on the majority of B cell lymphomas, as a target for the CAR-T cells. They generated canine CD20-targeting CAR-T cells and showed that they effectively killed CD20 expressing tumor cells in the petri dish. With the early data showing promise, Dr. Mason's team was able to apply for and receive National Institute of Health-National Cancer Institute funding to carry on the work which is now expanding the application and use of CAR-T therapy for pets, as well as providing valuable information to improve its use in human patients. Because of this work, Dr. Mason envisions a day when CAR-T may be produced off the shelf, lowering cost considerably and increasing access to use for many more pet and human patients.

# **PEEL THERAPEUTICS**



"Our team continues to do amazing research and discovery thanks to your support! The research funded by Animal Cancer Foundation has allowed our scientists to work around the clock both in the United States and in Israel to advance our new medicines for cancer, which will benefit both humans, dogs and other companion animals with cancer."

Joshua Schiffman, MD | CEO & Founder, PEEL Therapeutics Pediatric Oncologist, Huntsman Cancer Institute

Joshua Schiffman, MD's three dogs encourage him to do comparative oncology research every day.

#### Progress Report for ACF Funded Research from Joshua Schiffman, MD, pediatric oncologist, Huntsman Cancer Institute, University of Utah; CEO & Founder, PEEL Therapeutics

Elephant p53 Lipid Nanoparticles (EP53-LNPs), an anti-cancer drug that delivers the natural cancer resistance that is found in elephant protein, is currently in preclinical studies with early results demonstrating great promise for use in both people and pets with cancer. PEEL scientists are currently working with the developer of mRNA LNPs, the system used in COVID vaccines, as a potential delivery system for EP53 to patients.

PEEL researchers are continuing their investigation of Neutrophil Targeted Peptides (NTPs) to block the inflammation associated with COVID-19 and cancer. The work is an outgrowth of the discovery of a small protein called a Neutrophil Extracellular Trap (NETs) that is present in newborns and protects them immediately after birth from their new environment. NETs are also activated by the adult immune system when they blockade chemotherapeutic and immunologic drugs from reaching the cancerous tumor. Researchers are developing this novel, naturally-derived agent (NTPs) to essentially disable the NETs and allow cancer therapies to work. Since both people and dogs have been shown to have NETs, researchers believe the drug will be helpful to both species.

PEEL-224 is a new medicine that originates from a leaf stem used for more than 2000 years in Eastern Traditional Chinese medicine engineered in the laboratory to avoid chemotherapy resistance. A first-in-human clinical trial is enrolling patients with solid tumors who have failed their current chemotherapy.

Since dogs also have solid tumors, the scientists would like to be able to conduct a canine clinical trial as well, so that people and pets would benefit.

# **SPONSORSHIPS**

## National Academies of Sciences – Medicine

The Role of Companion Animals as Sentinels for Predicting Environmental Exposure Effects in Aging and Cancer Susceptibility in Humans: A Workshop

Examined the potential role of companion animals as sentinels of relevant, shared environmental exposures that may affect human aging and cancer. The workshop explored the opportunities and challenges for using this novel translational approach to exposure science as a way to accelerate the knowledge turn in this evolving field. The workshop featured invited presentations and panel discussions on topics, including:

- Potential data sources needed to assess whether companion animals may serve as sentinels for human environmental exposures.
- The state of the science for biomarkers of exposure and use of biosensors for application to companion animal populations of interest.
- Best practices for collection, storage, and analysis of biosamples to assess exposures (eg., biorepository resources, DNA susceptibility, DNA methylation, microbiome, etc).
- Strategies for standardizing, sharing, and aggregating health records and relevant metadata across species.
- Current policies and regulations related to monitoring and mitigating environmental exposures and the role for prospective interventions based on companion animal data.

# **UPCOMING WORKSHOP SPONSOR**

#### Veterinary Cancer Society, October 2022, Norfolk, Virginia

ACF is co-Presenting a workshop specifically for comparative oncology researchers led by the world-renowned Alda Center for Communicating Science to train our scientists in the vital communication skills necessary to take the research forward:

The Alda Center says, "Scientific understanding is too important to leave to chance. Science affects everyday people (we'd add, and our pets) every single day."

ACF believes in enhancing the communities it serves with the best techniques in science communication.

# FINANCIALS

Animal Cancer Foundation is recognized as a tax exempt entity with the IRS. For an overview of ACF's mission, programs, activities and financial information, please click here.

Audited financial statements available upon request.

# PARTNERS AND IN-KIND DONORS



# **GET INVOLVED**

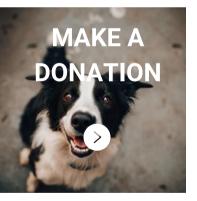
## Shop with Us

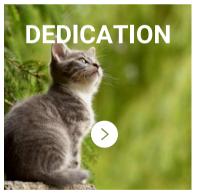
A percentage of your purchases will go back to Animal Cancer Foundation and our mission of uniting pet and human cancer research for a cure.

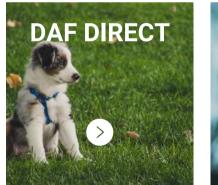
# amazonsmile chevy

### **Give to Us**

Your donation today ensures that we can support comparative oncology research for countless tomorrows.







## **CARE2SHARE**

Help us raise funds at no cost to you with Investors Bank. ACF will receive a 0.25% donation annually from Investors Bank based upon the average monthly balance in all eligible accounts enrolled each quarter. The more people who enroll, the better! Enroll today and start giving back to Animal Cancer Foundation!

Help us raise funds at no cost to you





DOUBLE YOUR

DONATION

# WHAT TO EXPECT IN 2022



#### **PAWS 4 A CAUSE**

**Saturday, April 30, 2022** at Heritage Park/Capitol Lake in Olympia, WA. The 1st Annual PAWS 4 A CAUSE event: Pets helping People is a canine-friendly walk for a world free of cancer! Animal Cancer Foundation was selected as one of the event beneficiaries with proceeds supporting our mission of uniting pet and human cancer research for a cure.

#### PET ROCK IN THE PARK

**Sunday, August 28, 2022** in Deering Oaks Park, Portland, Maine. We have once again been selected as the beneficiary at the 11th Annual Pet Rock in the Park hosted by Portland Veterinary Emergency and Specialty Care & Portland Radio Group's REWIND 100.9 FM. We are excited to see over 3,000 Mainers and their furry friends come together to lift up other pets in their fight against cancer by supporting our life-saving research mission at this event.





#### **GULLIVER'S RUN**

**Sunday, November 6, 2022** in Gifford Pinchot State Park in Lewisberry, Pennsylvania. Gulliver's Run is an annual running event for runners and walkers (virtual participation also an option) that honors the memory of Gulliver Rue, a brave Hungarian Vizsla who raced against canine lymphoma for the last 13 months of his life. The purpose of the race is to raise funds for canine cancer research, and we are thrilled that we will once again be the proud beneficiary of this event.