



**DOBERMAN
PINSCHER**
— HEALTH FOUNDATION —



Doberman Pinscher Health Foundation Spring 2022

President's Message

Spring is always an exciting time of year at the DPHF. Inspired by the renewal of life that spring brings, the DPHF renews our mission to fund innovative research that we hope will benefit the Doberman for years to come.

This newsletter will include information on our newest grant process, how you can help, and an update on previously funded research projects.

While we move forward with hope, we know that this last year has been hard on many of us, and we would be remiss not to reflect on who and what we may have lost. The DPHF board members are not exempt from this sad fact.

We have previously told the story of how the loss of Mike Dellorto's dog Tex led to the formation of the DPHF. Sadly, Mike has recently lost a second dog to presumed Dilated Cardiomyopathy. In this newsletter you will hear how he is honoring his dog and what other supporters have done to help support the foundation and honor their dogs.

Finally, as I write this having just completed my taxes, it is a good time to remind everyone that donations to the DPHF are tax deductible. Please consider including us in your yearly charitable giving.

As always, I hope you find this newsletter informative and entertaining. We cannot do this without your support and are humbled by your continued support of the DPHF.

2022 Grant Process.

The 2022 Grant Process is just getting underway. We are excited to announce that thanks to your continued support, we once again hope to offer the highest distribution of funds in our history. This year the DPHF is offering a grant of up to \$40,000 depending on the merit and subject of the grant research. We are extremely grateful to be able to do this in large part due to two substantial donations to the organization.

We are anticipating that the larger grant amount will result in more interest and applications from the veterinary research community.

One of the first tasks in the grant process is defining our Research Committee. We currently have openings for 1-2 new committee members depending on qualifications.

Our Research Committee is comprised primarily of experts in the field of veterinary medicine and other scientific fields. If you meet these criteria, would be interested in investing time reviewing and scoring our RFP responses, and can be available for one or two virtual meetings, please contact our committee chair, [Mike Dellorto](#) for more information.

Fund Raising

2022 Calendar

The DPHF would like to take this opportunity to thank everyone who supported our 2022 calendar, whether that was submitting photographs, voting for your favorites, or purchasing the calendar.

Thanks to your support we sold 195 calendars and raised \$3900 for the DPHF.

A Tribute and opportunity to boost your donation.

As mentioned in the President's message, Mike Dellorto lost his dog and agility partner Griffin to suspected cardiomyopathy. This was the second dog Mike lost to suspected DCM without any advanced warning.

Griff, as he was affectionately known, was a high drive, rehomed dog from his breeder. Like Tex before him, he was an accomplished agility dog.



The loss of his previous dog Tex resulted in the formation of the DPHF and Mike also wanted to do something to honor Griff.

Through the month of April, all donations, including those made through memorials for other dogs, facebook campaigns, etc, will be matched at .50 on the dollar.

Now is the perfect time to donate, honor the dogs who have touched your lives, and see your money go further as Mike honors Griff who made a difference in his life.

You can assist in this effort by visiting our [donation page](#) here.

DPHF Funded Ongoing Research

Dr. Ryan Fries - University of Illinois

The Role of Myocardial Fibrosis in Dilated Cardiomyopathy

In our previous newsletter we told you about this study which is attempting to find a non-invasive way to determine the fibrosis (scarring) of the heart as many dogs with DCM often die before they show left ventricular enlargement on an echocardiogram.

We reported that the control animal data had been collected and are happy to inform you that the researchers are now in the process of collecting data from dogs who have been diagnosed

with Cardiomyopathy.

Currently 6 dogs have been enrolled and more have been scheduled for this Summer and Fall, the hope is to get 30 dogs for this phase of the study and the researchers are actively recruiting additional participants. If you live in the Midwest and would like to be involved in this study, you are encouraged to reach out to [Dr. Ryan Fries](#) at:

The University of Illinois Urbana-Champaign
College of Veterinary Medicine
Department of Veterinary Clinical Medicine Veterinary Clinical Medicine

Dr. Andrea Pires dos Santos - Purdue University

"MicroRNA-based profile for the prognosis of diffuse large B-cell lymphoma"

Lymphoma therapy response study

Lymphomas are a type of cancer of the blood cells called lymphocytes. The most common type of lymphoma in dogs is called Diffuse Large B-cell Lymphoma (DLBCL), which affects the lymph nodes of dogs and can spread to the body. Although Dobermans, German shepherds, Golden retrievers, Newfoundland, Cocker Spaniels, and Rottweilers have an increased risk of developing DLBCL, their responses to the standard treatment vary dramatically. Some dogs will become unresponsive to treatment during disease, and their cancer will be uncontrolled, ultimately leading to death. Even with successful treatment, nearly all dogs with DLBCL will eventually relapse and need an alternative therapeutic plan.

Purdue University researcher Dr. Andrea Pires dos Santos and her collaborators found initial evidence that a class of molecules called microRNAs can predict how the dog will respond to treatment. These are small molecules composed of genetic material responsible for regulating genes in health and disease; the expression of microRNAs can be detected in the laboratory and compared between different conditions.

Dr. Santos' laboratory used next-generation sequencing and bioinformatics to identify 15 candidate microRNA markers to be tested in archived biopsy samples of dogs with DLBCL that underwent the standard CHOP therapy and have either achieved partial or complete recovery.

This test will be designed to evaluate the tumor at the time the dogs receive a diagnosis of DLBCL, assisting veterinarians in making informed decisions on the best, customized treatment plan for their patients, increasing their chances of survival.

Dr. Penny Regier - University of Florida

"Assessing gastrointestinal viability in canine patients with vascular compromise with real-time near-infrared fluorescence (NIRF) quantification "

Bloat Study Using Near Infrared Florescence Technology

Near Infrared Florescence (NIRF) is a developing technology in which a safe florescence-imaging substance is administered to a patient and then viewed using near infrared technology.

The purpose of this study is to determine if this NIRF Imaging can determine if removal of part of the stomach is necessary in dogs suffering from bloat and to determine the degree that stapled closure preserves the vascular supply to the stomach.

Given the unpredictable nature of this disease process (GDV), the researchers are enrolling GDV patients as they are admitted through the UF Small Animal Emergency Hospital and undergo emergency surgery. They have collected data from 12 GDV cases out of the 20 originally proposed to enroll and are currently enrolling client-owned healthy canine patients undergoing elective procedures, not related to the gastrointestinal tract, and using these cases to obtain their control data. The researchers have just begun this part of the data collection, and have collected data for 2 control cases out of the original 20 planned. This control data is needed to determine quantitative near-infrared parameters of healthy gastrointestinal tissue, in order to draw conclusions on the GDV data that have been collected.

Dr. Chris J. Martyniuk & Amara Estrada - University of Florida

"Genome Editing in iPSC-derived Doberman Pinscher Cardiomyocytes"

Cardiomyopathy gene editing research

As we all know, heart disease is a devastating condition in Doberman Pinschers and many other breeds of dogs. Genetic mutations in critical genes expressed in the heart can lead to premature heart failure. Gene therapies are therefore desperately needed to restore functional heart cells (or cardiomyocytes) that contain unwanted gene mutations.

Researchers at the University of Florida and the University of Minnesota are teaming up to study a gene called pyruvate dehydrogenase kinase 4 (PDK4). This gene plays a key role in heart metabolism.

The research team is working to optimize a tool called CRISPR/Cas9 gene editing which can be used to edit or "correct" defects in genes. Once PDK4 is edited into a gene without mutation, cardiomyocytes are expected to show normal metabolic function like healthy cells. Gene editing in heart cells will act as pre-clinical support for translation as a molecular therapy into the clinical realm.

The research team has leveraged the original funding from the DPHF to obtain additional funding from the American College of Veterinary Internal Medicine (ACVIM) and the Morris Foundation. These additional funds provide valuable momentum for continuing the research and developing gene therapy for breeds suffering from heart disease and will allow a PHD candidate to be added to the team this summer.

Dr. Tamas D. Ambrisko - University of Illinois

"Cardiomyopathy Detection using High-Frequency ECG"

This study proposes using a High-Frequency ECG diagnostic method that extracts high frequency components of the complex ECG signal. Alteration of this signal in humans is an indicator that the heart is not getting enough oxygen. The goal is to use this technology for early DCM detection in Doberman Pinschers.

Currently the digital signal processing with high quality techniques has been completed as well as a full dataset of features obtained from the ECG signals.

The next step will include implementing a machine learning (i.e. neural network) to build a predictive algorithm. It is anticipated that this project will be completed in the next 6 months.

We had previously been told the machine learning process would be completed by this spring, however, we are now being informed that it will be completed by August when Dr. Ambrisko completes his contract with the University of Illinois.

DPHF is hopeful that we will see the result of this research, but we are also mindful of the upcoming deadline and uncertain what the future holds for this project.

Existing Products

You can also support us by visiting our store and purchasing one or more of our available products [here](#).

First Aid Kits

Are you looking for the perfect gift for the dog lovers in your life? The DPHF has got you covered! We have refreshed our stock of the extremely popular DPHF Canine First Aid Kit. This makes a great gift for any dog lover!



DPHF Collars

The DPHF would like to thank Collarati Collars for selecting DPHF in their "Collars for Causes" program.



The DPHF collar is a 1.5" printed biothane collar, with buckle hardware. It is available in blue with white printing or brown with black printing.

Biothane is a fantastic product that has the feel of leather, but is easier to clean and maintain.

With the two color choices available, Dobermans of any color have an option to look great, and show their support for veterinary research!

You can find the collars [here](#)

DPHF Embroidered Products

The DPHF is partnering with Studio 134 to provide embroidered merchandise. This merchandise will feature our logo attire as well as other unique Doberman related designs.



The offerings from Studio 134 will be updated and rotated on a regular basis, so if you see something you like, make certain to get it while it is still in stock!

You can find the current available products from Studio 134 [here](#)

What's Next?

We hope you have found this issue of the DPHF Newsletter interesting and useful. Our next newsletter is planned for this summer and will include information about our annual grant process and the 2022 recipient(s).

If you have questions or ideas for useful information for our newsletter, please let us know!

Remember, none of this is possible without the generous support of our donors!

Sincerely,

DPHF Board of Directors:

James Barron
Jenn Cannerelli
Mike Dellorto
Libby Hargrove
Kaye Krueger DVM
Sue Lynch
Denise McKay
Shirlee Walker
Linda Zaeske