



**DOBERMAN
PINSCHER**
— HEALTH FOUNDATION —



Doberman Pinscher Health Foundation Summer 2021

President's Message

Welcome to our Summer 2021 newsletter; we hope this finds you well. We are excited to bring you this newsletter which is focused on our research efforts, bringing you information on the status of our previous grant recipients, along with the announcement of two new grant recipients for 2021.

We had really hoped that we had turned the corner on Covid 19, but the Delta variant seems to be causing roll backs to masking and other requirements in many parts of the country. The DPHF still has facemasks available in our store if you find yourself in need of a new mask.

Covid remains a challenge to us for fundraising. Covid prevented our traditional raffle fundraisers at local events in 2020. We want to thank you for your financial donations and support of our on-line fundraisers. They have made all the difference for us this last year and allowed us to fund two grants this year.

Our traditional raffles that occur at the end of the year remain unlikely as they are in regions experiencing covid roll backs.

The DPHF offers several levels of memberships and is a tax deductible 501(C)3 organization. Your support makes groundbreaking research possible.

2021 Grants

The DPHF is proud to share the recipients of our 2021 grants with you.

The research committee reviewed several worthy research proposals. The review process looked at scientific merit, the impact or relevance to the health of Doberman Pinschers, and whether the reviewers thought that the research would be able to meet their objectives.

This year The DPHF was able to fund the following two worthwhile projects:

Dr. Andrea Pires dos Santos - Purdue University

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

Lymphoma therapy response study

This study is looking for a miRNA marker to help predict prognosis and treatment for large B cell lymphoma.

The lymphoma study is using previously archived collected samples from dogs that were diagnosed with large B cell lymphoma and treated for cancer with a chemotherapy called CHOP (which is an abbreviation for the specific drugs used). The researchers already know how they responded to or did not respond to treatment for the cancer. They will be looking at several miRNA molecules to see if there are biomarkers that are different for the dogs that did not have a good response to therapy versus those that had complete remission of their cancer. If they can identify several of these biomarkers; they may be able to predict survival time, and if a different treatment than CHOP should be used on each specific dog.

If they are successful, they will then go on to develop a test that can be done on a simple fine needle aspirate of a lymph node taken at any veterinary office.

We believe this research and test could be helpful to owners and veterinarians in making decisions about the prognosis and treatment of large B cell lymphoma.

Dr. Ryan Fries - University of Illinois

"The Role of Myocardial Fibrosis in Dilated Cardiomyopathy"

DCM early detection study

The research is looking for 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.

This study will be using a cardiac magnetic resonance imaging (MRI) process to measure the fibrosis, along with a blood sample to measure galectin-3(Gal-3) levels in each dog. Gal-3 is a protein that has been linked to many human diseases, including cancer, fibrosis, chronic inflammation, and scarring affecting many different tissues.

This research has previously been successfully completed for cats. They are well underway for dogs, having finished getting the normal values for the control group.

If this project is successful, they hope to develop a blood test to predict which dogs may need treatment for DCM in the future.

Thanks to everyone who supports the mission to fund these research projects; without your help these projects would not be possible!

DPHF Funded Ongoing Research

The DPHF also wanted to remind you of our previous grant recipients and share our most recent updates from the researchers involved in these projects.

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.

At this point in the study, there are 4 affected and 1 control dog enrolled. The goal of the study is to have 20 affected dogs and 20 control dogs participate.

As this research is in its beginning stages, they do not have sufficient preliminary data to draw any conclusions, however, they are actively enrolling participants.

We are hopeful that we will be able to share preliminary results in a future newsletter.

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

"Genome Editing in iPSC-derived Doberman Pinscher Cardiomyocytes"

Cardiomyopathy gene editing research

Induced Pluripotent Stem cells (iPSC) are stem cells that are reprogrammed into different cell types. iPSCs have the same properties as embryonic cells, so they self-renew and can differentiate in the body. This research is developing iPSC's for genome editing studies in cardiomyocytes, which are the cells that control the contraction of the heart.

This study is using fibroblasts, a common cell found in connective tissues, as a basis for developing iPSCs-derived cardiomyocytes, to better understand the underlying pathophysiology of heart failure and mitochondrial dysfunction in canines.

Researchers have successfully characterized the metabolism of the fibroblast lineage for different genotypes of a gene called Pyruvate Dehydrogenase Kinase 4 or PDK4. This gene is involved in metabolic functions of heart cells, and understanding how these cells respond to normal metabolic responses to fuels such as glucose and butyrate is an important first step. This baseline data will be used to determine whether gene editing has functionally corrected the cells in vitro before exploring the avenues for gene editing therapies.

Although this research has had some setbacks due to the pandemic and a collaborator moving her lab to the University of Minnesota, they have secured 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.

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 Pinchers.

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.

FundRaising

In 2020 the DPHF was unable to have two of our annual raffle fundraisers that we use as a basis for our annual budget. As a result, we needed to find other revenue sources to fill that financial need. Thank you to everyone who helped make that a success.

We had hoped that the vaccine would be a game changer for 2021, but with the Delta variant resulting in some roll backs, our 2021 annual raffles are once again in doubt. We are continuing some of our most successful fundraisers and appreciate your continued support.

2022 Calendar

The DPHF was thrilled with the response to our 2021 calendar! Thank you to everyone who submitted photographs, voted, shared our project, and ordered the calendar. We are happy to announce that with your help the calendar will be back for 2022. Based on your feedback the 2022 calendar will be larger (12" x 12").



Do you have a picture of your Doberman that captures the spirit of a certain month of the year? It could be a scene that reminds us of a season, like a dog at the beach, or a specific holiday, like a dog in a Halloween costume or anything that you think captures the spirit of a month. Of course Dobermans in action are timeless and can be used for any month, therefore we highly encourage action photos! We would love to see them!

What sets the DPHF calendar apart from the other great Doberman Pinscher Calendars, is in addition to what we know will be your amazing pictures, the DPHF calendar will include valuable health and safety tips for each month of the year.

Rules:

You may submit multiple photographs for consideration.

The photograph must be one you have taken or that you have rights to use for publication.

Photos must be high resolution suitable for publishing. (Preferably Landscape)

A list of finalists will be selected by the Board of Directors and published for a public vote on our Facebook page which will determine the final photographs that will appear in the calendar.

Winner's will receive a complimentary copy of the calendar.

You can submit your photo(s) at:

calendarphotos@dobermanhealth.org

Existing Products

DPHF Facemasks

We all had hoped that the mandatory facemask period was

behind us, but with many states reinstating mask mandates, we want to remind you that our DPHF facemasks are still available. The facemask is a soft, triple layer, machine washable, [DPHF Face Mask](#).



If we are going to be wearing masks, they might as well make a statement. The DPHF facemask is the perfect accessory at dog events, as well as daily public activities.

DPHF now has a package deal that includes a leash for your facemask. A leash allows you to keep the facemask around your neck when not in use, eliminating the possibility of leaving it in your car or placing it on a possibly contaminated surface. In addition to being a convenient way to store your mask, the leash can be used to secure the mask with an adjustable band that can be tightened around the back of your head. This can help take stress off your ear cartilage or add extra comfort for those who find the mask a little tight.

Consider adding a leash to your order!

First Aid Kits

The holidays are right around the corner. The DPHF has got you covered! We have refreshed our stock of the extremely popular DPHF Pet First Aid Kit. This makes a great gift for any animal lover!



These kits are priced at just \$35 each and are available [here](#) for immediate delivery.

New for 2021

The DPHF is thrilled to announce a partnership with two small businesses to assist in the marketing of DPHF products.

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!

Our first products will feature either our official logo or a DPHF Sunrise logo on a shirt or tote bag

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.

We are planning an article about copper storage as well as some potentially new takes on VWD testing.

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:

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