

Collie Health Foundation 2021 Health Studies

Responsible Collie breeders will want to take advantage and be involved in ongoing studies that can be done for all Smooth & Rough Collies whether they are a part of your breeding program, a family pet and/or rescue so that you can be sure that your dogs, and the ones you own in the future have the best chance at a long, happy, healthy life. These studies are currently available.

To participate in any of these studies please contact Pat Jung at palary@msn.com



Study	Description of Study Topic	Method and Test Study Information	Contact
Dermatomyositis DMS	Dr. Leigh Anne Clark's genetics lab at Clemson University is looking for additional gene(s) underlying development of DMS in collies	Blood samples are requested from collies that have been diagnosed by skin punch biopsy. Dogs that have not been diagnosed by skin punch biopsy but are strongly suspected of having DMS may also be eligible. Participants will be provided with DMS risk assessment results. ** NEEDED SENIORS 7+ WITH DMS RESULTS AA/bb **	Sarah Murphy – 864-656-4696 scmurph@g.clemson.edu 154 Poole Agricultural Center 130 McGinty Ct. Dept. of Genetics & Biochemistry Clemson University Clemson, SC 29634-0318
CEA Coloboma Research	Dr. Gustavo Aguirre, VMD, PhD, University of Pennsylvania is supporting further research in both of these areas.	Group 1 (10-15 samples) are dogs that have had a clinical diagnosis of choroidal hypoplasia only by a veterinary Ophthalmologist, and are affected by the CEA DNA test. Needed now: Group 2 (10-15 samples) are dogs that have had a clinical diagnosis retinas by a veterinary Ophthalmologist, of choroidal hypoplasia, AND Coloboma or detached retina and they carry the CEA gene DNA test. Please make sure that, in addition to the completed form and blood sample, that the following is submitted: - pedigree - copy of the CERF (now CAER) examination form. - copy of the DNA test results from Optigen/Wisdom Health	Reimbursements include supplementing the subsidy for the Optimal Selection test, a cost of \$60, blood draw by veterinarian, and two-day shipping to the University of PA. You do not need to be a member to participate nor own all the Collies for this study. We will guarantee the all information will be kept private as it is our fiduciary responsibility with the Foundation. Dr. Murgiano – leomur@vet.upenn.edu Ms. Lydia Melnyk – lmelnyk@vet.upenn.edu

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<p>Identification of Von Willebrand's Disease (vWD) causal mutation and development of a direct DNA test</p>	<p>CHF supporting research by looking for participants – collies that bleed excessively or unexpectedly. Prefer samples from dogs who already have results for the factor assay test and show reduced vWF factor levels.</p>	<p>Swabs available by contacting Ann Arnold at VetGen for details. Please include a blood assay test if your veterinarian has done one.</p>	<p>3728 Plaza Drive, Suite 1 Ann Arbor, Michigan, 48108 USA Phone: (734) 669-8440 (800) 483-8436, (Fax: (734) 669-8441 VetGen E-mail: vetgen@vetgen.com VetGen vWD2</p>
<p>Vesicular Cutaneous Lupus Erythematosus (VCLE)</p>	<p>Vesicular cutaneous lupus erythematosus (VCLE) is a variant form of cutaneous lupus erythematosus (CLE) that affects predominantly adult rough collies, Shetland sheepdogs and Border collies. Distinctive cutaneous lesions consist of annular, polycyclic and/or serpiginous erosions and ulcerations, primarily affecting the axillae, ventral abdomen and groin with frequent involvement of mucocutaneous junctions and the concave aspects of the pinnae. Microscopic changes (skin biopsy) in dogs with VCLE reveal a lymphocyte-rich interface dermatitis with evidence of basal keratinocyte apoptosis, a pathology typical of CLE.</p>	<p>Our objectives are to investigate the VCLE prevalence in Collies with a further goal of performing genome-wide association study to discover a genomic region linked to VCLE in Collies.</p> <p>https://www.colliehealth.org/articles/</p>	<p>Frane Banovic & Robert Gogal Immunodermatology Laboratory</p> <p>College of Veterinary Medicine 2200 College Station Road University of Georgia 30606, Athens, GA, USA Email: fbanovic@uga.edu</p>

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Abnormalities in the Stomach's Ability to Contract	The goals of Dr. Nelson's study are to determine the relationship of abnormal stomach contraction with GDV and to define the biochemical and genetic alterations that may be associated with these stomach abnormalities. In the long term, they hope to develop a test to identify dogs at high risk for GDV that would allow selective breeding to eliminate the condition and to determine which dogs will benefit most from prophylactic gastropexy or other preventive therapies.	Contact Dr. Nelson for information	Dr. Laura L. Nelson, DVM, MS, Diplomate ACVS Michigan State University Small Animal Clinical Sciences E-mail: michae19@cvm.msu.edu 517-410-6847
Identification of Genetic Risk Factors for Epilepsy in Collies	Dr. Leigh Anne Clark proposes to conduct a genome-wide association study (GWAS) to determine if regions of the genome are associated with epilepsy in collies. As epilepsy is a genetically complex disorder, we propose a large study comprised of 50 epileptic collies and 100 healthy control collies. In Objective 2, she will generate whole genome resequencing data from epileptic and healthy collies to identify specific genetic variants that may confer risk to, or protection from, epilepsy. The long-term goal of this research is to develop a genetic test to enable selective breeding practices that will reduce the incidence of epilepsy among collies while preserving genetic variation.	Blood sample. Contact Sydney Abrahams, PhD for details. If your dog has been banked with CHIC please let Sydney Abrahams know.	Sydney Abrahams, PhD srabram@g.clemson.edu 864-656-4696 154 Poole Agricultural Center 130 McGinty Ct. Dept. of Genetics & Biochemistry Clemson University Clemson, SC 29634-0318

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Is Canine Epilepsy Associated with Gut Dysbiosis?	CHF supporting the research of Companion Animal Epilepsy Research at NC State University College of Veterinary Medicine to determine whether dogs with idiopathic epilepsy have alterations in their gut microbial population. We are looking for households with an epileptic dog and an unaffected dog to compare the bacterial populations within their gastrointestinal tract. Feces will be collected from both dogs to compare their gut microbiome	<p>Requirements:</p> <ul style="list-style-type: none"> • Owners must be willing to collect a one-time fecal sample from both dogs and send samples to NCSU CVM (pre-paid shipping). Owners will also be required to complete a brief online questionnaire at the time of sample collection. • All study materials, including shipping, will be covered by the study & include: <ul style="list-style-type: none"> • Free fecal floatation to examine for parasites • Participation will provide additional information about epilepsy that may help your dog or other animals in the future • Households must have one dog with epilepsy and one unaffected dog • Epileptic dog must have presumptive diagnosis of idiopathic epilepsy based on seizure onset between 6 months and 6 years of age, and not be on seizure medication or be on phenobarbital alone • Both dogs must not be on any other medications aside from monthly preventatives • Dogs must be fed the same diet 	<p>Contact: Julie Nettifee, RVT, BS, VTS (Neurology) janettif@ncsu.edu</p> <p>Website for more info: www.go.ncsu.edu/epilepsyresearch</p>
Martha E. Hoffman CHIC DNA Banking Project	Contributing to this project will be one of the most important things you can do to preserve the future of the Collie breed. With the gene pool of all purebred dogs shrinking, breeders need to make health testing the cornerstone of their breeding program. With your help, we will have a DNA bank that all approved researchers will have access to when they need samples for genetic research projects.	<p>Blood sample. CHF will pay the \$20 CHIC DNA Banking fee for all collies. CHF will reimburse (with receipts) up to \$125 for collection & shipping costs. We ask that you do multiple dogs at a time to keep these costs under control.</p>	<p>To participate please contact Pat Jung – palaray@msn.com</p> <p>For more information and forms visit: https://www.colliehealth.org/dna-banking/</p>

More Studies & Surveys	Information
Studies	<p>For information and to stay up on recent studies for all breeds visit the two sites listed.</p> <p>AKC Canine Health Foundation – http://akcchf.org/</p> <p>Morris Animal Foundation - https://www.morrisanimalfoundation.org/dogs</p>
Surveys	<p>Sarah Murphy, Ph.D. Candidate, Clemson University is asking for our help with a confidential survey they have created to collect the information necessary to determine if a relationship exists between body size and DMS genotype. You will be asked to provide sex, coat type, the height, weight, approximate age at measurement, and DMS genotypes of your dog.</p> <p>If you are interested in helping, please go to: https://docs.google.com/forms/d/e/1FAIpQLSdI9UxwaFa7QqBt3ppDA26VT7b6NikWxrGnbE2eEWZwplkkrA/viewform</p>
Surveys	<p>Dr. Leigh Anne Clark - Clemson University is asking our members to participate in a new survey on cryptorchidism in Collies & Shelties by doing a short survey to gather information from owners about dogs affected with cryptorchidism.</p> <p>If you are interested in helping, please go to: https://docs.google.com/forms/d/e/1FAIpQLSdyUcmMUSqKiKr0mUAI Me5RRGa6zSd2ndLSSWJL8VlyGrjrpw/viewform</p>