



## 2014 ABA National Health & Research Opportunities

You are invited to participate in some fantastic opportunities at the 2014 American Bullmastiff Association National Specialty on **Tuesday, October 7 and Wednesday, October 8.**

**DNA Blood Draw for Health – Donate your dogs DNA to the CHIC Repository and help fight cancer with a vial of your dog's blood on the molecular level:** Cancer research has identified Hemangiosarcoma and Lymphoma indicating genes; and a test for these indicating genes is expected in 2016. We will use our DNA in the CHIC repository to ensure the indicating test is accurate for our breed. The other 50% of Hemangiosarcoma and Lymphoma cases are believed to be environmental which is being researched as part of a large \$25 million 7 year study via the Morris Foundation.

**Cardiology - Echocardiogram clinic:** Last year 31% of the Membership identified Cardiac as the #1 most severe health issue impacting our breed. Only listening to the heart does not always identify issues with increased velocity. In response, a Cardiac clinic offering OFA Echocardiograms with color doppler for \$175 each will be conducted by the top Cardiologist in dogs today, Dr. Joshua Stern DVM, PhD, DACVIM - Cardiology at UC Davis.

**Bullmastiff Specific Confidential Cardiology Repository and Study:** Discover the genes associated with Sub-Aortic-Stenosis (SAS) and Pulmonic-Stenosis (PS). If you wish, you may also participate in a confidential bullmastiff cardiology repository. SAS and PS are inherited and there are certain genes that have been identified that cause SAS and PS. Two normal parents can produce affected offspring. Severe SAS can cause immediate death and treatment of mild SAS often requires expensive beta blockers. Heart issues differ between breeds and must be studied, chromosomes mapped and genes identified on a breed by breed basis.

More information on SAS at the ABA webpage <http://www.bullmastiff.us/sas.html>

### **Those that wish to have their dog participate in the repository and study:**

It's as easy as 1-2-3 (and it's free!) - you pay for the Echo and the repository and study are free!

One completed OFA Cardiology Echo by a DACVIM (note: be sure to **include the pulmonic and aortic velocity flow rates** as these are not automatically on the form)

(included in the \$175 fee or previously supplied by your cardiologist);

2. Two ml of blood drawn at the national; and a
3. Three generation pedigree.

This information will be stored at UC Davis in a confidential Bullmastiff cardiac repository and once we have enough dogs banked, we can request funding approval from the ABA Board of Directors for an AKC CHF bullmastiff specific cardiology study. We need 48 PS dogs, 48 SAS dogs, and 48 normal dogs.

These initiatives have approval and support from the head AKC CHF Chief Scientific Officer, Veterinarian and researcher - Dr Shila Nordone, Phd.

*We therefore need all of our owners and breeders to participate in this incredible opportunity!*

## 2014 ABA National Health & Research Registration Form

\*\*Register before September 15, 2014 for your Doppler and study participation and receive a free microchip (if needed) and a free DNA blood draw. A \$30 value. One form per dog. This form may be photocopied for additional dogs.

Yes, my dog will need a microchip. \$10

Yes, my dog will be donating DNA for the CHIC Repository. \$20  
(fill out and bring this form [DNA CHIC Repository Form](#) with you) *please print back to back*

Yes, I would like to have my dog's heart Echo (dopplered) at the heart clinic. \$175  
(fill out and bring this form <http://www.offa.org/pdf/cardappbw.pdf> with you)

In addition to the Doppler. I would like to have my dog's blood drawn for the bullmastiff specific cardiac study. \*I will bring a copy of my 3-generation pedigree. (\*must have) **FREE**

\*Yes, I would like to have my dog participate in the bullmastiff specific cardiac study and have already had my dog's heart dopplered. \* I will bring a copy of my 3-generation pedigree and a copy of my dog's *Doppler results including the velocity flow rate, aortic artery rate and pulmonary artery rate.* (\*must have everything listed in order to participate) **FREE**

### Before Sept. 15, 2014

- Microchip – \$10 (FREE w/Doppler)
  - DNA – \$20 (FREE w/Doppler)
  - Doppler - \$175
  - Study – Free
- Total \$175

### After Sept. 15, 2014

- Microchip – \$10
  - DNA - \$20
  - Doppler - \$175
  - Study - Free
- Total \$205

Name: \_\_\_\_\_

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

Dogs call name: \_\_\_\_\_

Dogs Events: \_\_\_\_\_

We need the events your dog is entered in so we can schedule an appointment time.

Scheduled dogs will take priority over walk-ins.

Mail this form to:

Renee Hombsch

W239S6017 Chinook Ct.

Waukesha, WI 53189

**Be sure to bring all necessary forms and information with you when you come.**

If your dog won't be attending the National we still invite you to participate. You will need to send 2ml of blood, your test information (see form above \*) and a three generation pedigree to:

Stern Lab c/o Joshua Stern

UC Davis School of Veterinary Medicine Dept. of Medicine and Epidemiology

2108 Tupperware Hall One Shields Ave.

Davis, CA 95616

**Office Use Only**  
 APPL \_\_\_\_\_  
 RAD \_\_\_\_\_  
 CK \_\_\_\_\_



**Orthopedic Foundation for Animals**

2300 E Nifong Blvd, Columbia, MO 65201-3806

Phone: (573) 442-0418; Fax: (573)875-5073

www.offa.org

A Not-For-Profit Organization



**Office Use Only**

**Application for Congenital Cardiac Database**

Registered name:		Registration number: <input type="checkbox"/> AKC <input type="checkbox"/> CKC		Other registry name:	
Breed:		Sex:		Date of Birth (month-day-year):	
ID Number (if any): <input type="checkbox"/> Tattoo <input type="checkbox"/> Microchip		Registration number of sire:		Registration number of dam:	
Owner name:		Co-Owner name:		Examining veterinarian's name or veterinary hospital:	
Mailing address:		Mailing Address:			
City:		State:		Zip/postal code:	
Phone:		E-mail:		Date of Evaluation (mm/dd/yy):	

I hereby certify that the animal examined is the animal described on this application. I understand that all normal results will be released to the public.

Signature of owner or authorized representative \_\_\_\_\_

<b>Authorization to Release Abnormal Results</b>	<b>Authorization to Collect Statistical Data</b>
<input type="checkbox"/> I hereby authorize the OFA to <b>release the abnormal results</b> of the animal described on this application to the <b>public</b> .	<input type="checkbox"/> I hereby authorize the examining veterinarian to submit the results of the animal described on this application for <b>statistical purposes</b> . The results may be shared with the ACVIM or canine health researchers, but <b>will not be disclosed to the general public</b> .
	

**Veterinary Instructions**

**Clinical findings based on cardiac auscultation is required.** (see page 2)

- Auscultation is within normal limits. Additional diagnostic studies not indicated.
- Auscultation reveals a soft (grade 1 or grade 2) murmur at rest.
- Auscultation reveals a moderate to loud heart murmur.
- Auscultation was performed after exercise and revealed:
  - Normal heart sounds without a cardiac murmur.
  - A soft (grade 1 or grade 2) murmur.

**Describe any cardiac murmurs:**

Timings:  systolic  diastolic  continuous

Point of maximal intensity:

- Mitral valve area  Aortic or subaortic area
- Pulmonary valve area  Tricuspid valve area
- Other location:

Radiation or other characteristics: \_\_\_\_\_

**Echocardiography** if indicated (see page 2):

- Echocardiography with Doppler was performed and the results were within limits of normal.
- Echocardiography with Doppler was performed and the results were equivocal: mild congenital heart disease cannot be conclusively diagnosed nor excluded based on this study.
- Echocardiography with Doppler was performed and the results were indicative of congenital heart disease.

**Describe any abnormal echocardiographic or Doppler findings**, including transvalvular or other pertinent velocities in m/sec.

pulse/continuous wave  left apical/subcostal

**Summary evaluation and opinion of the examiner:**

- Normal cardiovascular examination—congenital heart disease is not evident
- Equivocal cardiovascular examination—congenital heart disease cannot be diagnosed nor excluded; status uncertain for breeding.
- Abnormal cardiovascular examination indicative of congenital heart disease; indicate diagnosis below: \_\_\_\_\_

<input type="checkbox"/> I certify that the standards for cardiac examination as set forth by the OFA were carefully followed in performing this examination.	
<input type="checkbox"/> I DID verify tattoo/microchip on this dog	<input type="checkbox"/> I DID NOT verify tattoo/microchip on this dog
<b>Veterinarian Signature</b> _____	Specialty: <input type="checkbox"/> Practitioner, <input type="checkbox"/> Specialist, <input type="checkbox"/> Cardiologist _____
	Date _____

**Fees**      Animals Over 12 Months..... \$15.00      **Kennel Rate**—Individuals submitted as a group, owned/co-owned by same person.  
 Litter of 3 or more submitted together ..... \$30.00      Minimum of 5 individuals .....\$7.50 per study

Exams on animals under 12 months of age are considered preliminary evaluations and are not eligible for OFA numbers

Payments can be made by check, money order, (U.S. funds drawn on a U.S. bank) cash, Visa, or Mastercard, payable to the Orthopedic Foundation for Animals.

\_\_\_\_\_  
 Visa/Master Card Number      Name on Card      Exp Date      CVV (security code)

*Affected Animals, Statistical Data Submission and Resubmissions at No Charge*

## Methods of Examination

### Clinical Examination

**1. The clinical cardiac examination should be conducted in a systematic manner.** The arterial and venous pulses, mucous membranes, and precordium should be evaluated. Heart rate should be obtained. The clinical examination should be performed by an individual with advanced training in cardiac diagnosis. Board certification by the American College of Veterinary Internal Medicine, Specialty of Cardiology is considered by the American Veterinary Medical Association as the benchmark of clinical proficiency for veterinarians in clinical cardiology, and examination by a Diplomate of this specialty board is recommended. However, any licensed veterinarian may be able to perform this examination by auscultation.

**2. Cardiac auscultation should be performed in a quiet, distraction-free environment.** The animal should be standing and restrained, but sedative drugs should be avoided. Panting must be controlled, and if necessary, the dog should be given time to rest and acclimate to the environment. The clinician should be able to identify the cardiac valve areas for auscultation. The examiner should gradually move the stethoscope across all valve areas and also should auscultate over the subaortic area, ascending aorta, pulmonary artery, and the left craniodorsal cardiac base. Following examination of the left precordium, the right precordium should be examined.

- The mitral valve area is located over and immediately dorsal to the palpable left apical impulse and is identified by palpation with the tips of the fingers. The stethoscope is then placed over the mitral area and the heart sounds identified.
- The aortic valve area is dorsal and 1 or 2 intercostal spaces cranial to the left apical impulse. The second heart sound will become most intense when the stethoscope is centered over the aortic valve area. Murmurs originating from or radiating to the subaortic area of auscultation are evident immediately caudoventral to the aortic valve area. Murmurs originating from or radiating into the ascending aorta will be evident craniodorsal to the aortic valve and may also project to the right cranial thorax and to the carotid arteries in the neck.
- The pulmonic valve area is ventral and the one intercostal space cranial to the aortic valve area. Murmurs originating from or radiating into the main pulmonary artery will be evident dorsal to the pulmonic valve over the left hemithorax.
- The tricuspid valve area is a relatively large area located on the right hemithorax, opposite and slightly cranial to the mitral valve area.
- The clinician should also auscultate along the ventral right precordium (right sternal border) and over the right craniodorsal cardiac border.
- Any cardiac murmurs or abnormal sounds should be noted. Murmurs should be described as indicated below.

**3. Description of cardiac murmurs—A full description of the cardiac murmur should be made and recorded in the medical record.**

- Murmurs should be designated as systolic, diastolic, or continuous.
- The point of maximal murmur intensity should be indicated as described above. When a precordial thrill is palpable, the murmur will generally be most intense over this vibration.
- Murmurs that are only detected intermittently or are variable should be so indicated.
- The radiation of the murmur should be indicated.
- Grading of heart murmurs is as follows:
  - Grade 1—a very soft murmur only detected after very careful auscultation
  - Grade 2—a soft murmur that is readily evident
  - Grade 3—a moderately intense murmur not associated with a palpable precordial thrill (vibration)
  - Grade 4—a loud murmur; a palpable precordial thrill is not present or is intermittent
  - Grade 5—a loud cardiac murmur associated with a palpable precordial thrill and not audible when the stethoscope is lifted from the thoracic wall
  - Grade 6—a loud cardiac murmur associated with a palpable precordial thrill and audible even when the stethoscope is lifted from the thoracic wall
- Other descriptive terms may be indicated at the discretion of the examiner; these include such timing descriptors as: proto(early)-systolic, ejection or crescendo-decrescendo, holo-systolic or pan-systolic, decrescendo, and tele(late)-systolic and descriptions of subjective characteristics such as: musical, vibratory, harsh, and machinery.

**4. Effects of heart rate, heart rhythm, and exercise.**

- Some heart murmurs become evident or louder with changes in autonomic activity, heart rate, or cardiac cycle length. Such changes may be induced by exercise or other stresses. The importance of evaluating heart murmurs after exercise is currently unresolved. It appears that some dogs with congenital subaortic stenosis or with dynamic outflow tract obstruction may have murmurs that only become evident with increased sympathetic activity or after prolonged cardiac filling periods during marked sinus arrhythmia. It also should be noted that some normal, innocent heart murmurs may increase in intensity after exercise. Furthermore, panting artifact may be a problem after exercise.
- It is most likely that examining dogs after exercise will result in increased sensitivity to diagnosis of soft murmurs but probably decreased specificity as well. Auscultation of the heart following exercise is at the discretion of the examining veterinarian.
- At this time the OFA does not require a post exercise examination in the assessment of heart murmurs in dogs; however, this practice may be modified should definitive information become available.



**CHIC DNA Repository**  
 2300 E Nifong Blvd, Columbia, MO 65201-3806  
 Phone: (573) 442-0418; Fax: (573)875-5073  
 www.caninehealthinfo.org

**Dog Call Name:**

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Sponsored by



## Application for DNA Repository

Previous application number (if any):			Registration number: <input type="checkbox"/> AKC <input type="checkbox"/> CKC		Other registry name:
					Other registry #:
Registered name:			Sex:		Color:
Breed:			Date of Birth (month-day-year):		
ID Number (if any): <input type="checkbox"/> Tattoo <input type="checkbox"/> Microchip			Registration number of sire:		Registration number of dam:
Owner name:			Co-owner Name:		
Mailing address:			Owner Email:		
City:	State:	Zip/postal code:	Owner Phone:		

### DNA Sample Submission Agreement

I hereby donate, assign, and transfer a DNA sample of the dog named above to the CHIC DNA Repository for research purposes and warrant my authority to do so. I understand that any future use or distribution of this DNA sample will be within the sole direction and authority of the CHIC DNA Repository. I authorize the OFA and the AKC CHF to provide any researchers receiving a portion of this sample with all necessary information including pedigree and health history to make the sample useful. My intent in providing this DNA sample is to further research into canine health issues. I hereby relinquish all rights to, and ownership of, the DNA sample.

\_\_\_\_\_  
 Signature of owner/agent

\_\_\_\_\_  
 Date

### Mission Statement

The CHIC DNA Repository, co-sponsored by the OFA and the AKC/CHF, collects and stores canine DNA samples along with corresponding genealogic and phenotypic information to facilitate future research and testing aimed at reducing the incidence of inherited disease in dogs.

### Objectives

- Facilitate more rapid research progress by expediting the sample collection process
- Provide researchers with optimized family groups needed for research
- Allow breeders to take advantage of future DNA based disease tests as they become available
- Foster a team environment between breeders/owners and the research community improving the likelihood of genetic discovery



# CHIC DNA Repository Health Survey

Has this dog ever been diagnosed with any of the following health issues? For each section you answer with a yes, please fill out the rest of the section. If you answer no to any section, skip to the next section.

## Eye Disorders Yes No

- Distichiasis
- Dry Eye
- Entropion
- Juvenile Cataracts
- Non Healing Corneal Ulcer
- Retinal Dysplasia
- Persistent Pupillary Membrane
- Glaucoma
- Cherry Eye
- Other \_\_\_\_\_

## Ear Disorders Yes No

- Chronic ear infection
- Deafness (if yes, describe coat color/pattern) \_\_\_\_\_
- Other \_\_\_\_\_

## Skin Disorders Yes No

- Atopic Dermatitis (allergy to inhaled substances)
- Food/Medicine Allergies
- Alopecia
- Autoimmune Skin Disease
- Systemic Demodectic Mange
- Sebaceous adenitis
- Seborrhea
- Other \_\_\_\_\_

## Gastrointestinal Disorders Yes No

- Pyloric Stenosis
- Megaesophagus
- Cleft Palate
- Chronic Vomiting
- Choric Colitis
- Inflammatory Bowel Disease
- Other \_\_\_\_\_

## Respiratory Disorders Yes No

- Congenital Tracheal Stenosis (narrow trachea)
- Stenotic Nares
- Elongated Soft Palate
- Laryngeal Paralysis
- Other \_\_\_\_\_

## Orthopedic Disorders Yes No

- Hip Dysplasia
- Patellar Luxation
- Elbow Dysplasia
- Premature IVD (intervertebral disc degeneration)
- Vertebral Anomalies
- HOD
- Other \_\_\_\_\_

## Cardiac Disorders Yes No

- Vascular Ring (right aortic arch)
- Subaortic Stenosis
- Pulmonic Valve Stenosis
- Persistent Ductus Arteriosus
- Persistent Foramen Ovale
- Tricuspid Valve Defect
- Mitral Valve Defect
- Cardiomyopathy
- Porto-Systemic Vascular Shunt (Liver Shunt)
- Other \_\_\_\_\_

## Urinary Disorders Yes No

- Ectopic Ureter
- Urinary Crystals / Stones
- Other \_\_\_\_\_

## Blood/Lymph Disorders Yes No

- Autoimmune Hemolytic Anemia
- Hemophilia (Type A or B)
- Idiopathic Thrombocytopenia
- vonWillebrand's disease (Symptomatic?)  Y  N
- Other \_\_\_\_\_

## Endocrine Disorders Yes No

- Hypothyroid
- Addison's disease (adrenal insufficiency)
- Cushing's disease (adrenal oversecretion)
- Diabetes
- Other \_\_\_\_\_

## Reproductive Disorders Yes No

- Cryptorchid/Monorchid
- Abnormal Sperm
- Testicular Atrophy
- Irregular heat cycle
- Uterine Inertia
- Other \_\_\_\_\_

## Neurologic Disorders Yes No

- Epilepsy
- Caudea Equina Syndrome
- Degenerative Myelopathy
- Other \_\_\_\_\_

## Cancer/Tumors Yes No

- Mast cell tumor
- Lymphoma
- Hemangiosarcoma
- Testicular cancer
- Mammary cancer
- Osteosarcoma
- Other \_\_\_\_\_