



**Study Title: The study of the genetics of osteochondrosis dessicans in the Great Dane.**

**Client Consent Form  
Department of Veterinary Clinical Sciences**

You are invited to participate in a research study on the genetics of osteochondrosis dessicans in Great Danes. This study is being conducted by Michael Conzemius, DVM, PhD, DACVS. We ask that you read this form and ask any questions you may have before agreeing to participate in the study.

**Purpose:** At the University of Minnesota we are studying an orthopedic condition that affects the Great Dane breed of dog. Osteochondrosis (OC) is a developmental orthopedic disease that results in areas of cartilage that do not properly develop into bone. The abnormally thickened cartilage is prone to damage which can result in lameness, swelling of the joints, and osteoarthritis if fractured (a flap is formed, known as osteochondrosis dessicans, OCD). The lesion is typically diagnosed by radiographs and can be located in the shoulder, elbow, knee, and tarsus in the dog.

Osteochondrosis most commonly affects rapidly growing, large and giant breed dogs, males more commonly than females. The Great Dane is considered a high risk breed for the development of OC. Animals are typically affected during periods of rapid growth and the majority of animals, depending on which joint is involved, exhibit clinical signs by the time they are 10 months of age. Many different causes of OC in the dog have been theorized. Most likely it is a multi-factorial genetic disease and its expression can be affected by rapid growth, over nutrition, trauma, hormones, and excessive calcium intake. We aim to collect DNA samples and, when available, pedigrees from 200 Great Danes, 100 affected and 100 unaffected with osteochondrosis (OC). The purpose of this project is to develop a genetic archive of Great Danes affected and unaffected with this condition. Our hypothesis is that osteochondrosis in the Great Dane is a heritable condition and predisposition to OC is associated with individual gene defect(s).

Our goals are to examine the pedigrees to search for a possible mode of inheritance for osteochondrosis. This will help us to identify a gene or genes that may be responsible for the condition. Further analysis of these genes may reveal mutations that could be used as markers of the condition, allowing us to investigate ways to reduce the incidence of OC in the Great Dane breed.

**Selection of patients:**

- We are looking for purebred Great Danes with or without osteochondrosis.
- We ask that you provide a copy of your dog's pedigree, if available.

**Procedures:**

If you agree to be in this study, your dog will undergo a complete orthopedic examination and we will collect a small blood sample from your dog during your visit to the Veterinary Medical Center.

**Risks:** We do not anticipate any problems in obtaining blood from your pet. Blood will be drawn by a trained individual using standard techniques. Occasionally there is some temporary swelling or redness at the site of the sampling.

**Compensation:** There is no cost to you for participating in the study. You will be responsible for all other charges associated with your dog’s care.

**Confidentiality:** The information about your dog that we collect in the course of this study will be confidential. If we publish results of this study neither your name nor your dog’s name will be used.

**Voluntary Participation:** Participation in this study is voluntary. You will not be penalized in any way if you elect not to participate. If you elect to participate, you are free to withdraw at any time.

**Please do not hesitate to contact us if you have any questions or concerns about this study:**

The researcher conducting this study is Dr. Michael Conzemius. Alexa Hart is the research coordinator for this study. Please feel free to ask any questions regarding the study at the time of your visit. If you have questions later, you may contact us at the numbers listed below.

**Investigator:** Michael Conzemius, DVM, PhD, DACVS - phone: 612-626-8387

**Clinical Research Coordinator:** Alexa Hart – Office phone: 612-624-5695

Email: Hart0318@umn.edu

**Institutional Animal Care and Use Committee:** 612-626-5654

**I understand the above information and agree to participate in this study.**

yes  no

\_\_\_\_\_  
Client Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Attending Veterinarian or Technician

\_\_\_\_\_  
Date