

# **GOLDEN RETRIEVER LIFETIME STUDY**

Launched in 2012, the Golden Retriever Lifetime Study enrolled **3,000+ golden retrievers**, ages 2 months to 2 years old. The Study collects health, environmental, nutritional and behavior data over the course of each dog's life. This comprehensive data will help researchers identify nutritional, genetic and environmental risk factors for cancer and other important diseases in dogs.

# **WHAT'S NEW**

# **Golden Oldies**

Morris Animal Foundation is enrolling healthy golden retrievers over 12 years of age as a comparison control group for the current cohort. The Foundation-led team will compare the genetics of Study dogs that died from cancer with older golden retrievers that have never been diagnosed with cancer. This project will help speed up the discovery process for potential cancer risk factors in golden retrievers and inform canine cancer studies.

Genotyping

In 2019, Morris Animal Foundation partnered with the V Foundation to raise \$2 million for the genomic sequencing (detailed genetic makeup) of dogs in the Study. Morris Animal Foundation has explored available genotyping technologies and is finalizing a plan that will maximize the collected genetic material to achieve Study goals and propel future cancer research.

# Nested Studies

Nested studies are smaller studies using data and/or samples from the Golden Retriever Lifetime Study. Using Study blood samples, Canadian researchers at the University of Guelph are working toward developing a blood test for early diagnosis of lymphoma in dogs.

# **Publication**

As part of the Study's recruitment process, the Foundation compiled a large database of golden retriever owners whose dogs either did not qualify to be in the Study or did not make the enrollment cut-off date. Colorado State University researchers used this tool to recruit golden retrievers to study T-zone lymphoma in dogs. Dr. Julia Labadie, an epidemiologist and lead author of the publication, is the newest member of our Study team.

Genome-Wide Association Analysis of Canine T-Zone Lymphoma Identifies Link to Hypothyroidism and a Shared Association with Mast-Cell Tumors (BMC Genomics, July 2020)



# STUDY OUTCOMES

#### **FUNDING**

SINCE 2012:

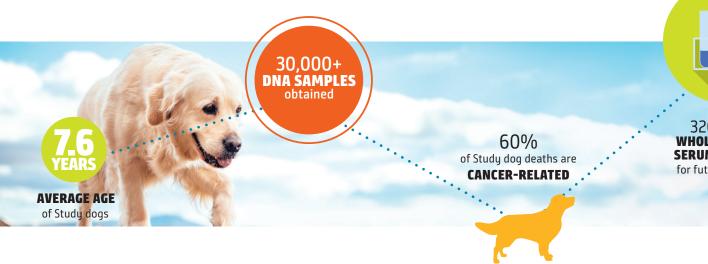
**\$32 MILLION** projected cost \$23 MILLION raised

\$9 MILLION additional funds needed

#### **DID YOU KNOW?**

In addition to the Study's four end-point cancers - lymphoma, hemangiosarcoma, high-grade mast cell tumors and osteosarcoma - the Study team is closely following all

cancers diagnosed in Study dogs.





326,000+ **WHOLE BLOOD & SERUM SAMPLES** for future research

**PRIMARY CANCER DIAGNOSES** 

**HEMANGIOSARCOMA** (51 deaths)

**LYMPHOMA** 

**HIGH-GRADE MAST CELL TUMORS** (3 deaths)

**OSTEOSARCOMA** (2 deaths)

234 TOTAL DEATHS FROM CANCER & OTHER CAUSES

#### THANK YOU TO OUR DEDICATED OWNERS & VETERINARIANS

The Study would not be possible without the passionate dedication of our hero dog owners and their veterinarians. And, of course, our amazing 3,000+ golden retrievers.

### **PLATINUM PARTNERS**

**FOUNDING PARTNER** The Mark & Bette Morris Familu Foundation







#### THANK YOU TO OUR PARTNERS

The Golden Retriever Lifetime Study is the first Morris Animal Foundation study designed, funded and run by the Foundation. Thank you to our partners who help make the Study possible.

#### **GOLD SPONSORS**

**Golden Retriever Foundation** Hadley & Marion Stuart Foundation **GOLDEN CHAMPIONS** 

Mars Veterinary

#### ABOUT MORRIS ANIMAL FOUNDATION \_\_\_\_\_

Morris Animal Foundation's mission is to bridge science and resources to advance the health of animals. Founded by a veterinarian in 1948, we fund and conduct critical health studies for the benefit of all animals.

Contact us at mailbox@morrisanimalfoundation.org, 800.243.2345 or 720 S. Colorado Blvd., Suite 174A, Denver, CO 80246.