

Key Facts about our Veterinary Research



The Dog Aging Project is an innovative initiative that brings together a community of dogs, owners, veterinarians, researchers, and volunteers to carry out the most ambitious health study of companion dogs in the world. For each of the tens of thousands of dogs enrolled in the Dog Aging Project, we collect information about their physical measurements, activity levels, health history, environment, lifestyle, and more.

Our work is centered on two fundamental goals: understanding how biology, lifestyle, and environment influence aging and intervening to increase *healthspan*, the period of life spent free from disease. We expect to gain insights that will increase our ability to prevent, diagnose, and treat age-related diseases, thereby helping our dogs, and by extension ourselves, live longer, healthier lives. Currently there are four major research components:

Project 1. Defining frailty and successful aging in dogs. Unlike in humans, there are no clearly defined metrics to determine how well a dog is aging, no canine equivalent of the *chair stand test* or *grip strength*, nor predefined age-specific ranges for clinical chemistry measures. To fill this gap, we are developing new metrics of canine aging.

Project 2. Genetic analysis of aging in dogs. Genome sequence data for the 10,000 canine participants is integrated with health measures and behavioral traits to carry out comprehensive genome-wide association studies.

Project 3. Systems biology of healthy aging in dogs. We are identifying molecular biological predictors of disease and longevity and developing an *epigenetic clock* that predicts biological age in dogs.

Project 4. TRIAD—the Test of Rapamycin in Aging Dogs. We are conducting a large-scale, double-blind, placebo-controlled clinical trial of *rapamycin*, a drug shown to increase lifespan and delay the negative effects of aging in mice. We are testing the effects of the study medication on cognitive function, heart function, immunity, and cancer incidence in 500+ middle-aged dogs.

We are actively enrolling dogs of all ages, across the US, including purebred and mixed breed dogs. We consider primary care veterinarians to be critical partners in this research. As part of our enrollment process, we obtain client consent to communicate with you, and we will keep you informed of relevant information about the study.

The Chief Veterinary Officer of the Dog Aging Project is Dr. Kate Creevy, DVM, MS, DACVIM. If you have any questions or would like to talk with us about the project, please contact the Dog Aging Project via email at team@dogagingproject.org or telephone at (979) 845-2844.