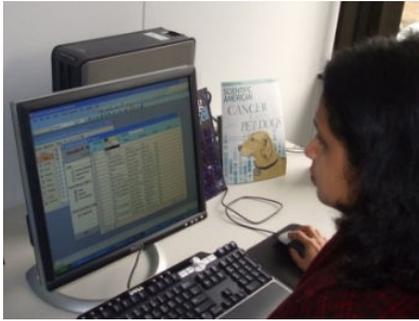


## About The Center for Exceptional Longevity Studies



**The Gerald P. Murphy Cancer Foundation's** Center for Exceptional Longevity Studies seeks to identify important genetic and environmental determinants of healthy longevity and to better understand the complex relationship between aging and cancer. The Center is the home of **The Exceptional Longevity Database** — the first systematic study of exceptional longevity in pet dogs. This one-of-a-kind resource is documenting intriguing similarities between the longest-lived humans and dogs, shedding light on the basic biology behind

why we age. While the scientific community looks for reliable research approaches to verify exciting scientific leads, we see enormous value in studying pet dogs living with their owners as a natural aging laboratory. There is a big payoff for validating this kind of innovative thinking — an opportunity to promote healthy longevity in both pets and people.

Historically, researchers have found it difficult to identify cancer resistant populations for in-depth study. The oldest-old Rottweilers provide investigators with an opportunity to study cancer-resistant individuals within a cancer-prone breed. *The majority of these highly successfully aging dogs have figured out how to keep cancer at bay, hold it in check.* Through research — the detailed examination of tissues and careful identification of markers circulating in blood — we hope to find the keys that will unlock the mechanism of how they do it, so our pets (and us) can walk around with cancer as a nuisance instead of lethal killer. That is why we have established the **Longevity Biorepository** at the Center for Exceptional Longevity Studies, which represents the world's first collection of blood cells, serum, autopsy tissues, and DNA from exceptionally long-lived dogs. Guided by the oldest-old dogs, we hope to uncover the secrets of elite aging and cancer resistance — not just living longer, but living longer, healthier lives. *We will gain new clues to developing practical interventions to reduce cancer risk in pets and people.*

But the activities within the Center go beyond research to place a high priority on education. Because most DVMs receive no formal training in the biology of aging and longevity as part of their veterinary curriculum, the Murphy Foundation developed the first **Gerontology Training Program for DVMs**. Practicing veterinarians come to the Center for Exceptional Longevity Studies to become the go-to experts in companion animal gerontology in their communities. They are schooled in taking a life-course perspective on aging the view that early life events significantly influence adult health outcomes, such as disease risk and longevity. More recently the educational energies of the Center are being shifted to focus on transforming **K-12 science education** as a means of improving the ability of the public to respond to new information. Finally, through Dr. Waters' ongoing participation in the National Cancer Institute's Summer Curriculum in Cancer Prevention, the Center is committed to developing internationally the capacities of cancer prevention scientists-in-training to work in the underexplored intersection of aging and cancer.