

Rottweiler Longevity Research Recognized by USA Today, Good Morning America, and Beyond

In March 2010, I packed my bags and set out on an inspiring journey. More than 4200 miles of driving, three planes rides, and 22 days later, I had visited 15 of the longest-lived Rottweilers in the United States. From Boston to Seattle, **The Old Grey Muzzle Tour** enabled me to engage in a series of eyewitness encounters with a special group of Rottweilers that had lived to at least 13 years — equivalent to 100 year-old people. My research group has been studying aging and cancer in Rottweilers for many years. But this spring we saw a new imperative: Medical records and phone interviews are fine but there is just no substitute for firsthand observation. I needed to go muzzle-to-muzzle with each of these exceptional dogs in their homes.

The payoff was big. We established the **Biorepository At Murphy (BAM)**, the world's first collection of annotated biospecimens (serum, blood cells, DNA) from these longest living dogs. On a scientific level, what could be better than trailblazing the development of a national resource for scientists trying to understand what it takes to age more successfully. On a personal level, I will forever cherish the warmth I received from the gracious owners who invited me into their homes. And the precious hours spent communing with those exceptional spirits were, as they say, "Priceless."

In September 2010, I returned to Seattle where The Old Grey Muzzle Tour concluded, to deliver two talks at the Annual Scientific Meeting of the American College of Theriogenology. I was invited to speak there because the Murphy Foundation's research in Rottweilers that link keeping ovaries longer and living longer (published last December in *Aging Cell*) has sparked a new dialogue. Especially among theriogenologists — the subset of veterinary specialists that focus on reproductive issues. Speaking to the OBGYNs of the veterinary world, I tried to keep my message clear and to the point. Our data from Rottweilers, the results from a study of 29,000 women, and ovary transplantation studies in mice, are all pointing in the same direction: *Ovaries are not just about reproduction. Ovaries are part of a system that regulates longevity.* If you believe like we do in this possibility, then new questions emerge: Should we preserve or perturb the system? Is spaying really a longevity-promoting procedure for bitches? Stated more precisely, **how many years should bitches keep their ovaries to optimize their chances of reaching ripe old age?** For certain, our work has generated a brand new set of questions. And the Murphy Foundation is now working hard, leading the way to advance our understanding in this new research direction.

The Old Grey Muzzle Tour was featured by **USA Today** and **Good Morning America**. But beyond the media attention, there is another barometer by which a scientist's worth is measured — recognition within the scientific community. So I am compelled to say a few words about the scientific recognition we have received for our trailblazing work on longevity in dogs. In

January 2010, I was invited by the **National Academies of Sciences** to write a paper about the value of pet dogs for studying human aging, as a part of a special compilation of articles on animal models of human aging. Thirteen years ago in 1997, the last time the compilation was crafted by scientists in the aging field, dogs were missing in action; dogs were not perceived as able workhorses in this field of science. Today, thanks largely to our pioneering work in Rottweilers, that has all changed. Move over worms and flies, and make room for man's best friend to teach us about the aging process. My scientific article, entitled "Aging Research 2010: Exploring the Pet Dog Paradigm" will appear in the December 2010 issue of *The ILAR Journal*.

I would like to finish here by saying that from The Old Grey Muzzle Tour, to the ovary story, to placing pet dogs front and center in the arena of aging research, we are innovating the way aging research gets done. It takes courage and stamina to innovate and lead amidst change. Rottweiler enthusiasts, especially those who recognize the constant state of flux in which a scientist-discoverer finds himself, frequently ask me: "**Dr. Waters, how much longer do you intend to study Rottweilers?**" It takes me no time at all to share my conviction. I tell them: "As long as our discoveries in Rottweilers are changing the way we think, and as long as we are changing the way other scientists think about aging and cancer, then we are staying right where we are." TV commercials tell us that moms and their kids who skin their knees and elbows are stuck on Band-Aids. You might say we are stuck on Rottweilers—savoring the wild ride that comes from being stuck and fast moving at the same time.

Thanks again to the Rottweiler Health Foundation. We appreciate the vast number of Rottweiler owners who are watching our work with such great interest. Your unwavering support is what helps to make these trailblazing efforts possible.

For more information on our ongoing studies of exceptional longevity in Rottweilers, visit our website at www.gpmcf.org. Do you own a Rottie that has reached the age of 13? If so, please contact us.