



Genetic Testing

Connie's Weekly Newsletter

Genetic testing is in the spotlight once again, this time with the help of actress Angelina Jolie. You may recall Angelina sharing recently her bold choice to undergo an elective double mastectomy after discovering through DNA testing her genetic predisposition to breast cancer. The impact of this announcement on the future of genetic testing has already been coined "The Angelina Effect", also the title of a cover story for a recent edition of Time Magazine.

Like Angelina, I too am a BRCA1 positive woman, which means I carry the same genetic mutation. The BRCA1 mutation greatly increases a woman's risk of developing breast and/or ovarian cancer in her lifetime. Doctors tell me that I have as much as an 87% chance of developing breast cancer and a 50% chance of developing ovarian cancer.

The BRCA1 gene is also hereditary, which explains why my sister and two of my cousins were diagnosed with breast and ovarian cancer all within the same year. Sadly, only my sister is still with us today. Faced with so many members of our family having been diagnosed with cancer as early as their 30's, it all became more real, and so my family and I began discussing genetic testing in more detail and decided it was best to take a proactive approach. My sister was tested first and once found to be positive, I along with my four other sisters and extended family were also tested.

Before you start to panic, remember that only 0.24% of all women carry this mutation. Two different ethnic populations are known to carry the mutation at higher levels than the general population; those of us with French heritage, which traces back to a subset of those who emigrated from France between 1608 and 1759 to what is now the Canadian province of Quebec, and those of Ashkenazi Jewish decent.

In college, I loved genetics and the simple, but powerful building block that is our DNA. Genetic testing is becoming an important part of diagnosing and treating diseases. There are over 2,500 genetic tests available now with more being added every day. Of those ailments mapped, one fifth of them are treatable.

What I appreciate about genetic testing is that it gave me and my family the knowledge and power to take better control of our health, something those that we lost did not have the chance to do. My daughter was able to receive expert advice on everything from when to have children, to having a prophylactic double mastectomy as Angelina did. I too was able to make informed decisions about my own health choices.

You may be thinking, what does genetic testing have to do with my shelter's needs? While writing this article I started to think about the association between genetic testing and the mapping of the human genome, and the more recent mapping of the canine genome. While genetic testing is now widely available, we are moving towards a time where genetic testing will be as pervasive as the x-ray and will play a major role in how we manage our healthcare, and our pets.

An aggressive shelter testing and sales program utilizing The Wisdom Panel Shelter Dog DNA Kit can offer multiple benefits to shelters and adopters:

- Offering mixed-breed dog owners the chance to learn more about their pet's genetic background, including the history of the breed(s). This comprehensive breed identification DNA test provides a greater insight into a dog's ancestry, revealing common physical and behavior traits most commonly associated with that breed(s). Genetic testing for dogs is a valuable resource to have, and with ongoing research being done every day, the future of canine genetic testing looks that much brighter.

- From a training perspective, knowing and understanding your dog's unique social behavior can help you to better respond to their specific needs. For instance, Shetland Sheepdogs are easily trained and very responsive to human behavior, while some dogs like the Basenji are more independent and can sometimes be perceived to be aloof.
- Allowing adopters' of dogs to extend beyond the proactive, preventative healthcare, to better reactive care in the unfortunate event the pet should get lost and require medical attention. The possibilities are endless, imagine having your dog's DNA test results stored and shared in both the **PetPoint** and **24PetWatch database**, and with pet owner permission, veterinarians would also be able to access this information to ensure the lost pet receives the best care for their unique needs, using a Bluetooth capable scanner.

Here is something to think about, human genetic testing costs approximately \$3,000, while you can get your dog tested for under \$100. Adopters can save money right away with knowledge of an illness or hereditary condition, and over the course of the pet's life make informed, proactive decisions regarding their animal companion's health – helping save money, and lives.

Take advantage of the knowledge and power that comes with DNA testing, purchase your kits today for either resale or for staff to use on their own shelter dogs. The sale of DNA testing kits offers an excellent way to improve your bottom line.

I see the future of genetic testing for animals to be one of information and choice, just as human genetic testing has been for Angelina, my family and I. Finding out that the dog you adopted is 3/4 Boxer will empower you to make sure you examine your dog regularly for mast cell tumors (a cancer that Boxers get at a much higher incidence than other breeds). This knowledge enables us to proactively engage with veterinarians to ensure our dogs live happier, healthier lives. Let's make sure that owners are properly prepared for from a knowledge standpoint, and a financial standpoint. Pet insurance is also a great option for all dog owners, especially those that are predisposed to hereditary conditions.

Did you know?

You can get your dog's DNA test results delivered to you in as little as 4 business days? [Click here](#) to learn more and to read about our exclusive offer when you purchase a new 12 pack of DNA kits.

Sincerely,

Connie Howard
Director Animal Welfare Relations
Pethealth Inc.
Office: 1-866-630-7387 ext 617
Mobile: 1-720-459-0959
Email: connie@petpoint.com