Puppy Love

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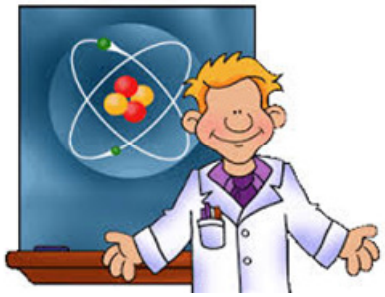

Perfect Legs?

We all love our doxie's short little legs, it is part of the charm of being a dachshund, but to genetic scientists it is technically a developmental disorder. Research conducted by the *National Human Genome Research Institute*, has identified a gene mutation that created the short-legged canine. It turns out that the stubby legs of a dachshund were acquired by an extra gene that disrupts the legs growth during fetal development by the overproduction of a protein. This same growth disorder in humans is commonly called dwarfism. The discovery of this gene mutation in canines is very valuable to genetic scientist studying the aspects of how this same gene mutation affects human growth and development. Historically, the dachshund's short legs have given them the status of being a long lasting breed because of their hunting prowess due to their ability to move briskly through thick brush, dig holes with large, shovel like feet, wiggle into tight places, and to catch and follow a scent due to its closeness to the ground. Germany is credited with the origin of the dachshund breed developed 300 years ago. Today, they are not used as much as hunters, but are much loved members of their family, with perfect little stubby legs.

Ollie at home with his mom in Tennessee.

Dogs leave paw prints on our hearts.

Do dogs have the same kind of DNA as humans?

The answer is yes and no. A gene is a basic physical and functional unit of heredity made up of DNA. All living things are made of the same DNA building blocks repeated and jumbled up in a simple language with only four letters: A, T, G and C. Human DNA has a total of 3.3 billion letters, a dog's DNA has 2.8 billion letters. If you printed human DNA on paper, with 50 letters per square inch, the piece of paper would be 8 times the size of a football field. 25% of a dog's DNA exactly matches human DNA. 75% of a dog's DNA has tiny changes compared to a humans across 25,000 genes resulting in two very different organisms.