

The Origin of Modern Dogs

January 15, 2016

My eldest son recently bought a puppy. It was his first dog and he was quite excited about taking responsibility for an animal. He spent a lot of time researching different breeds before making a selection.

Dr. William Raszka, Associate Editor, Pediatrics

Content License: FreeView

Article type: [Blog](#)



My eldest son recently bought a puppy. It was his first dog and he was quite excited about taking responsibility for an animal. He spent a lot of time researching different breeds before making a selection. Of course, he was not terribly excited by my suggestion that he simply go to the rescue shelter and adopt a “mutt.” After all, the only dog we, as a family, had ever owned had been a “mutt,” an unknown mix of dog breeds, and simply a fantastic animal and member of the family. That led me to contemplate the differences between “pure bred” and mixed breed dogs.

How different was a German Shepard from a new crossbreed such as the labradoodle? Where had dogs originated, if not cross bred for specific traits such as looks, hypoallergenicity, or shedding tendencies? I am not the only one to ponder these thoughts. The origin of modern dogs has long intrigued scientists. For the most part, scientists have agreed that modern dogs are descended from gray wolves but when and where gray wolves became domesticated has been the source of controversy.

However, as reported in The New York Times (Science: October 19, 2015), a recent large study suggests that modern dogs most likely originated in Central Asia. The researchers analyzed non-sex chromosomal DNA, DNA from the Y chromosome, and mitochondrial DNA from more than 4,500 dogs representing 161 breeds and 549 village dogs (or “mutts”) from 38 countries. Using techniques similar to those used by scientists studying the origin of the human species, they were able to conclude that dogs most likely originated in Central Asia at least 15,000 years ago. Because of the study design, the researchers could not exclude the possibility that other ancient lineages developed and died off, or that ancestral dogs were brought to Central Asia and then migrated outward from there. Still, the study is impressive given the number of samples and types of DNA examined.

As for my son, he is not too concerned with when and where dogs became domesticated, but is thrilled that his new dog is so playful and loving.

Further Reading

- [Early Exposure and Sensitization to Cat and Dog: Different Effects on Asthma Risk After Wheezing in Infancy](#)
- [Therapy dogs can have calming effect on nervous pediatric patients](#)
- [Pediatrics on Facebook](#)
- [AAP Journals on Twitter](#)

