A comprehensive study of feline DNA answers a multitude of questions about the origins of cats. A study out of the University of California at Davis, School of Veterinary Medicine analyzed 39 genetic signposts in samples obtained from cheek swabs of cats from more than 1,100 individuals representing 22 breeds, feral cats, and mixed breeds from all over the world. This study confirms findings from a prior study which stated cats were domesticated about 10,000 years ago in the fertile crescent. The new study narrowed the source of domestication to Turkey. It is generally hypothesized that cats and humans developed a mutually beneficial symbiotic relationship when humans evolved from a nomadic lifestyle to an agricultural one. When humans stored food crops they attracted rodents which, in turn, attracted cats, and all parties benefitted from this new relationship. As humans migrated to different parts of the world, cats followed.

“Today, cats can be divided genetically into four broad groups: those from Europe, the
Researchers were surprised to find that many breeds did not originate where we thought they did, and breeds we thought were very different are actually undistinguishable genetically. Also, the study found that some breeds have very little genetic diversity, which is reflective of interbreeding. Breeders can use this knowledge to develop healthy breeding programs, thus reducing the prevalence of disease.

*Washington Post* writer Rob Stein and UC Davis School of Veterinary Medicine researcher Monika Lipinski conducted an on-line discussion session answering public questions regarding the study. Many people asked questions geared at how closely related certain breeds are, or the origin of a particular breed. Some people were curious about the extent to which the personality traits of their cats were inherited, and how much ‘wildness’ or ‘tameness’ cats exhibit. Ms. Lipinski points out that the tamer of the wild cats were the ones which would have been most likely to approach humans, and humans, in turn, would have chosen the tamest cats to keep, thus perpetuating this genetic tendency in future generations. The issue of genetic diversity within a breed were brought up, and writers questioned the ramifications of such diversity (or lack of) on the health of their kitties. The researcher reiterated that the less genetically diversity in an individual, the greater the likelihood of disease. Genetic diversity within a population was also mentioned when the question was raised as to how the study showed that domestic cats originated in Turkey. Because diversity accumulates over time, the population showing the most diversity is the oldest. Some asked about color variations, we do not know what ancient cats looked like, but many of today’s colors and patterns (such as tabby markings) have been selectively bred.
I found the article to be fascinating because the study answers so many questions regarding the history of the domestication and selective breeding of cats—a creature to which I have been closely tied for my entire life. My parents had a cat before children, and my entire family still has multiple cats to this day! I found the on-line discussion which followed to address many of the same questions that I had also. I was a little disappointed that there was no discussion of the health problems that arise due to the breeding for certain traits. For example, the flat face of the Persian leads to respiratory problems. Also, we have seen how breeding for a long body and short legs has led to back problems on Daschund and Basset dogs, so why would we attempt the same thing in cats? I am curious if there is any correlation between color and temperament in cats. Having worked in veterinary medicine, it sure seems that orange males are quite sweet, and tortoise-shell cats are rather short-tempered. Even though the scientific findings in this study do not directly relate to human genetics, I feel that when we take an animal into our home we are bound to do all we can to understand and care for that creature. The writer response and array of questions raised clearly shows a public interest in this topic. From a medical standpoint, any increase in data collected on feline genetics might one day be helpful in understanding or recognizing certain diseases. We know that the HIV virus is very similar to the feline leukemia virus, and while the study did not look at feline diseases, a comprehensive data bank of kitty DNA might some day come in handy.