

Expanded efforts to sequence cat genomes may provide clues to human disease

Cats may have beaten dogs on the Internet but felines have been a rare breed in genetics labs compared with their canine counterparts. Now, at last, cats are clawing their way into genomics.

At a meeting this week in San Diego, California, a close-knit group of geneticists unveiled the first results from an effort to sequence the genomes of 99 domestic cats. The work will benefit both humans and felines, the researchers say, by mapping the mutations underlying conditions that afflict the two species, such as kidney disease.

In 2004, a team led by geneticist Leslie Lyons of the University of Missouri in Columbia (and owner of two female cats, Withers and Figaro) discovered that mutations that cause polycystic kidney disease — a major cause of renal failure in older individuals — occur in the same gene in humans and cats⁴. Cat versions of type 2 diabetes, asthma, retinal atrophy and numerous other conditions have close similarities to human disease. Cats can also become infected with a virus that is closely related to HIV and experience symptoms similar to those of people with AIDS.

Lyons' team is cobbling together funding from anywhere it can find it. The researchers are asking private owners, breeders and even pet-food companies to donate the U.S. \$7,500 needed to sequence the genome of a single cat, which could be one of a donor's choice.

With the money raised so far, the team has sequenced the genomes of 56 cats, including fancy breeds such as Burmese; cats with specific diseases; and a kitten named Dragon and his parents Ares and Marcus — the hope is to use the feline trio to narrow down the genetic basis for traits they share, such as their silver, curly coats.

Read full, original story: [‘I can haz genomes’: cats claw their way into genetics](#)