

Can cats' genomes help fight human diseases?

Scientists have recruited a new ally in their battle to fight disease: domestic moggies. They believe the genetic profiles of cats contain crucial clues about diseases to which humans and felines are both susceptible. These illnesses include diabetes, asthma and some causes of blindness.

To exploit the connection, researchers have launched a genome sequencing project, called 99 Lives, which aims to determine the exact genetic profiles of 99 domestic cats. The results should provide them with data that could generate new medicines for treating both cats and humans for such illnesses, they say. In addition, the project should provide data that will help zoologists track down the evolutionary origins of the domestic cat.

“Until now, genetic research on humans’ companion animals – pets such as dogs, cats and rabbits – has concentrated, almost exclusively, on dogs,” said Stephen O’Brien, a geneticist based at the Theodosius Dobzhansky Centre in St Petersburg.

“There has been widespread sequencing of canine genomes, as a result. Given dogs’ susceptibilities to certain cancers, the benefits were clear. But cats were ignored, and that was wrong, for they suffer from many diseases that humans also contract, from diabetes to the feline form of Aids. They have a lot to tell us.”

An example of this shared susceptibility to disease is provided by polycystic kidney disease (PKD), a key cause of renal failure in cats and in elderly people.

Read full, original article: [Cat genes could hold vital clues to treatments for human diseases](#)