Infectious cancer contains 11k-year-old dog genes

Call it the Methuselah mutt. There are genes from a dog that lived 11,000 years ago in an infectious cancer that forms tumours on the genitals of dogs today. The cancer genes therefore preserve information about early domesticated dogs.

Canine transmissible venereal tumour (CTVT) is one of only two known mammalian cancers that can move from animal to animal through physical contact. The other is a cancer transmitted between Tasmanian devils when they bite each other. A genetic analysis suggests that CTVT originated about 11,000 years ago, surviving the millennia by moving from dog to dog during mating.

“These tumours are in dogs all around the world, yet they all originate from one single dog that lived all those years ago,” says Elizabeth Murchison of the Wellcome Trust Sanger Institute in Hinxton, UK.

Read the full, original story: Infectious cancer preserves dog genes for 11,000 years