

Gene genie out of the bottle for koala disease fight

Rob Kidd

A DISCOVERY by Queensland scientists could save Australia's iconic koala from a premature end.

World-first research by Queensland University of Technology and the Australian Museum has unearthed the koala interferon gamma (IFN-g)

gene. The gene, which plays a key role in the threatened marsupial's defence against cancer and other ailments, could be crucial for understanding how and why koalas respond to infectious diseases.

QUT's Professor Peter Timms said the gene would prove vital in the battle to find a cure for diseases like

chlamydia and Koala Retrovirus (KoRV), which ravage the species.

"Virtually nothing is known about the immune system of the koala and the absence of information has been a major hindrance to our efforts to understand how chlamydia and KoRV infections lead to such debilitating disease in this native species," he said.

"We also know that genes such as IFN-g are very important for controlling chlamydial infections in humans and other animals. Identifying these in the koala will be a major step forward in understanding and controlling diseases in this species."

The data sets came from tissues of Birkie, a koala euthanased after a dog attack.



BEARING UP: Professor Peter Timms has helped in a breakthrough that will maintain the health of the koala population suffering from chlamydia and Koala Retrovirus.

Picture: Russell Shakespeare