

Hope for koala as scientists make genetic breakthrough

■ **Melissa Davey**

Scientists have sequenced the genome of the koala, winning a global race to unravel its genetic blueprint.

The achievement, announced on Tuesday, will allow researchers to diagnose and treat two diseases threatening to wipe out the vulnerable species.

A leader of the research team and professor of microbiology, Peter Timms from the Queensland University of Technology, said it

was “only right” his team had achieved the breakthrough on the native Australian mammal before teams in the US and Europe.

Professor Timms said sequencing the koala genome had unlocked many secrets of the animal’s immune system “virtually overnight” and allowed the researchers to develop vaccines.

Koala populations in Queensland and NSW have been crippled by the sexually transmitted disease chlamydia. In Victoria, the numbers

have have been less affected. The disease has effects such as infertility and blindness. The koala retrovirus is also a big threat, a disease that integrates itself into koala DNA, causing tumours.

“We’re trialling chlamydia vaccines as we speak,” Professor Timms said. “While habitat destruction is an important aspect reducing koala numbers, despite everything we’ve tried, we can’t seem to turn that one around.

“But when it comes to diseases – we’ve actually got a chance here.”

Vaccines would initially be trialled in koalas brought into animal welfare centres, he said.

