

MEDIA RELEASE

NEWS FROM THE UNIVERSITY OF TASMANIA

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ATTENTION: Chiefs of Staff, News Directors



Researchers uncover clue to understanding Tasmanian Devil disease

University of Tasmania researchers have today confirmed that a devil immunised against the Devil Facial Tumour Disease (DFTD) is almost certainly resistant to the deadly condition.

Associate Professor of Cancer and Immunology Greg Woods, from the University's Menzies Research Institute, said that one immunised west-coast devil, known as Cedric, has resisted infection from DFTD despite being exposed to the disease.

"We are 90 to 100 per cent certain that Cedric is resistant to the disease, but, as in all science, we can never be completely definitive," Ass/Prof Woods said.

"While this development does not represent a cure, it is one of the most significant scientific outcomes since the contagious cancer was first recorded on the northeast coast of Tasmania 12 years ago and is direct result of the collaborative effort through the Save the Tasmanian Devil Program," Ass/Prof Woods said.

Ass/Prof Woods said the results were achieved after Cedric and his half-brother, Clinky, were injected with dead DFTD cells last year and then challenged with live DFTD tumour cells last December.

Cedric showed an immune response, which protected him from the tumour, whereas Clinky developed a tumour after failing to develop an immune response.

Ass/ Prof Woods said Cedric's MHC (major histocompatibility complex) genes may hold the clue as to why he was able to fight the disease.

"From our latest findings, we can conclude that it is possible to make some devils resistant to DFTD by vaccination and we are hoping that, as there is more genetic diversity in the west, some devils will be naturally resistant," he said.

Senior Scientist with the Save the Tasmanian Devil Program, Professor Hamish McCallum, from the UTAS School of Zoology, said that while the result was extremely encouraging, more research was needed to further unravel the mysteries of the disease.

"Just as in human medicine, a single response does not signify a cure. It is still possible that this might be a one-off, chance event," Prof McCallum said.

“It is certainly an encouraging light at the end of the tunnel and does provide a solid base for more research to determine whether resistant devils exist in the wild and whether genetic tools can be used to identify them.”

Scientists are now examining a group of west-coast devils known as the “special six” which have DNA similar to Cedric to determine if they are also resistant to infection.

Prof. McCallum said it was hoped next week’s State Budget would include ongoing support to enable the research team to build on its results and continue the range of programs underway as part of the Save the Tasmanian Devil Program.

“We now have evidence from ongoing field studies suggesting that other resistant devils might be out there, so it is critical that the work of the project team and its collaborators be able to continue,” he said.

The Tasmanian Devil was last week declared endangered by the State Government. DFTD is estimated to have killed more than 53 per cent of devils in the wild, and has been found in 60 per cent of the state.

For more information or to make a donation to the Save the Tasmanian Devil Program, visit: www.tassiedevil.com.au

Note: Associate Professor Greg Woods and Professor Hamish McCallum will be available for interview today (Monday 2 June) at 9.30am at the Menzies Research Institute, Board Room, Level 2, 199 Macquarie St, Hobart.

*** File vision of Cedric will be available on DVD.**

Information Released by:

The Media Office, University of Tasmania

Phone: (03) 6226 2124 (Hobart) or 6324 3218 (Launceston)

Mobile: 0417 517 291

Email: Media.Office@utas.edu.au