MEDIA RELEASE

NEWS FROM THE UNIVERSITY OF TASMANIA
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ATTENTION: Chiefs of Staff, News Directors

Researchers close to providing first Tasmanian devil disease diagnostic test

University of Tasmania research is showing it will soon be possible to screen captive and wild Tasmanian devils for the Devil Facial Tumour Disease (DFTD) before they develop the cancerous tumours.

Separation scientists at UTAS have achieved the significant breakthrough in DFTD research, with preliminary results indicating a pre-tumour diagnosis can be achieved and tests for the disease could be available in six months for widespread use by wildlife management specialists and researchers.

The major DFTD research milestone, in collaboration with the Department of Primary Industries and Water and its Mount Pleasant Laboratory, is expected to underpin all future investigations into the mysterious deadly disease.

Dr Robert Shellie, from the Australian Centre for Research on Separation Science (ACROSS) within the UTAS School of Chemistry, today confirmed that the two-year project is close to producing undisputed evidence of DFTD diagnosis before the appearance of facial lesions.

“Until now, unless a Tasmanian devil has a visible tumour, there has been no way of knowing or even guessing if an animal is infected,” Dr Shellie said.

“While this development is not about finding a cure for DFTD, our unique analysis of the blood applied to samples from the Tasmanian devil will set a platform for future research into the disease, including disease suppression and monitoring insurance populations.

“One of the consequences of studying the blood of devils using separation science methodology is that we now have the scope to regularly test animals in captivity to ensure they are free of the contagious cancer.”

Dr Shellie said the research, funded by an Australian Research Council Linkage Project, involved the analysis of 100 blood samples from DFTD-affected areas across Tasmania.

The application of separation science to create the DFTD diagnostic test involves the separation of complex mixtures into their components, followed by the measurement of the amount of each component present. Through these methods, the UTAS research team developed the approach that provides a simple DFTD numerical score.

Dr Shellie said while the results are extremely encouraging, continued analysis and additional funding will be required to enable the research to be applied to devils in the wild.

“In the next six months we’ll be analysing blood samples of 1000 devils to validate our research,” he said.

Dr Shellie said they also required a specific instrument to be able to conduct work in the field.

“Our test is fast, taking about three to four hours to produce a result and reduces the time needed to hold each devil; it’s non-invasive - one drop of blood from an ear-prick; and you don’t need a PhD to use it,” Dr Shellie said.

This project has also been supported by funds donated to the Save the Tasmanian Devil Appeal as part of the Save the Tasmanian Devil Program.

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

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