

Media Release

Chiefs of Staff, News Directors

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Research millions for safer mining, preserving marine ecosystems and fire management

The University of Tasmania is celebrating securing funding for five innovative research projects announced in today's Australian Research Council's (ARC) Linkage Projects scheme.

The ARC Linkage Projects scheme provides funding to support collaborative research between higher education, industry and business, focusing on innovation.

The ARC funding of \$2,057,620 is supported by additional industry and University contributions, bringing the total value of the projects to more than \$8 million.

Acting Deputy Vice-Chancellor (Research), Professor Andrew Wells, said the wide range of disciplines securing funding demonstrated the University's breadth of research strengths.

"This excellent result reaffirms the University's profile as an institution that carries out truly world-class research," Professor Wells said.

"Our researchers will collaborate with industry partners, and other universities and research organisations, to produce work that will have real-world impacts on our environment, society and economy."

\$394,853.00 to examine the effects of traditional Aboriginal and contemporary fire management on kangaroos

There are concerns that the cessation of Aboriginal patch burning is causing savanna kangaroo populations to decline across northern Australia. In this project, surveys will be planned to determine whether fire regime (frequency, extent, season) affects kangaroo distribution and abundance and the degree to which non-native large herbivores compete with kangaroos for forage. Experiments will also be planned to discover how the season of burning influences forage quality and quantity.

\$300,000.00 to investigate if guardian dogs can be used to reduce predation on threatened native wildlife

Guardian dogs are ancient breeds of dogs that live with livestock and protect them from wild predators. The project aims to measure the impacts of guardian dogs on distribution and behaviour of feral cats and red foxes, and monitor trial reintroductions of eastern barred bandicoots in the presence of guardian dogs. It aims to provide an innovative solution to one

of Australia's most significant conservation problems: the persistent failure of attempts to reintroduce threatened species to open landscapes with invasive predators.

\$192,767.00 to modernise Sydney's ferry fleet

This project aims to address one of the biggest risk factors to the Sydney ferry system by ensuring the waves that new ferries generate are minimised. This would reduce the impact on other users of this busy waterway or damage to the surrounding infrastructure or environment. The project is intended to predict the waves produced by any proposed ferry operation, allowing changes to be made to minimise waves during early planning stages. The new method for predicting the complex wave phenomenon is designed to provide more comprehensive and accurate assessments than conventional technologies.

\$270,000.00 to develop safer mining operations

This project will develop a new generation of sensors that will process incoming seismic waves from an active source, to accurately estimate the properties of underground rock mass in real time. This will lead to safer mining operations that will decrease the number of injuries and deaths.

\$900,000.00 to improve understanding of inshore ecosystems to better manage our living marine heritage

This project first aims to extend field datasets on the density and distribution of thousands of marine fishes, invertebrates and macro-algae. These will then be combined using recent advances in quantitative ecological modelling to describe transfer of biomass between species at hundreds of sites, with a primary focus on southern Australia. It is anticipated that this will provide site-level indices of major food web processes that, when combined with 'before, after, control, impact' data, will improve prediction of ecological consequences of fishing, climate change, pest outbreaks and pollution.

Information released by:

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