Tuesday, 1 November 2016

From plankton DNA to outer space, University secures $9 million for new research

The University of Tasmania has secured $9 million for projects ranging from using [illegible] to develop an Australian plankton record stretching back 1000 years, to using [illegible] to map remote vegetation and provide early warnings of droughts, diseases and pests.

This funding was won in the latest round of the Australian Research Council's major grants program, announced today by the Federal Education and Training Minister Senator Simon Birmingham.

University Vice-Chancellor Professor Peter Rathjen said the projects would add to the globally impactful research currently underway in Tasmania.

"The work that our academics do here in Tasmania answers questions, and poses new ones, that are crucial to Australia and the international community," Professor Rathjen said.

"Securing funds from the Australian Research Council is very competitive and our success confirms our place as a cutting edge research-led institution."

Fifteen University of Tasmania projects were funded across the current schemes totalling over $6.8 million. The grants bring with them additional block funding, which takes the total value to the University and the State to just over $9 million.

Deputy Vice-Chancellor (Research) Professor Brigid Heywood said the projects highlighted the University's research strengths, particularly in the Environment, Antarctic and Sustainability, and the Marine, Antarctic and Maritime clusters.

"This is a small snapshot of the work that our academics are driving, and the investment in research and innovation that is underpinning Tasmania's future," Professor Heywood said.

"[illegible]; with these projects, and many others, Tasmania will continue to play a key role in building a successful future."

Some of the projects funded include:

Professor [illegible] Australian plankton recor[illegible] 1000 years by using DNA technology to examine sediment depth cores. Long-[illegible] essential to understand how disruptive algal and jellyfish blooms, introduced species and increased human use of coastal resources affect dynamic plankton ecosystems.

Dr Zbynek Malenovsky will develop algorithms to map vegetation stress [illegible] indicators from space-borne missions' optical observations of Earth, paving

inaccessible Australian and Antarctic areas. More accurate and timely remote sensing maps of early stress symptoms will provide early warnings of droughts [illegible] when and where to protect ecological functions of wild [illegible] and help to [illegible] increase agricultural food production.

Dr Kate Booth will analyse house and contents insurance to advance strategic disaster management. By understanding the geographies of under-insurance, the aim is to improve disaster policy and practice, and reduce the [illegible] householders.

Associate Professor [illegible] will lead a project testing how suppressing invasive prey – rabbits – [illegible] predators – [illegible] – on native wildlife. The [illegible] of cats is difficult at large-scales but rabbit control is feasible. The aim is to prov