ARC Storytime

Australian Government
Australian Research Council

JANUARY 2008

RESEARCH in the national interest – enabling the future

Desalinating wastewater for use in horticulture

ARC-funded researchers at **The University of Adelaide,** in collaboration with United Water International, have demonstrated the technical and economic feasibility of desalination of wastewater for use in horticulture. The researchers, who piloted the technology at the Bolivar wastewater treatment plant, have established optimal methods for achieving the levels of water salinity required for different crops, and processes for storage and delivery to horticultural producers in the Virginia area of SA.
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Anti-ageing and healthy ageing

ARC-funded researchers Associate Professor Brett Neilson and PhD student Beatriz Cardona from the **University of Western Sydney** are studying the attitudes of users and practitioners of anti-ageing medicine and comparing the messages of the industry's promotional materials to government healthy ageing policies. The research findings will inform policy debate on health care for Australia's ageing population and feed into health promotion campaigns to help consumers evaluate product marketing claims.
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Nurse-led model for chronic disease management

An ARC-funded research team, led by Professor Desley Hegney from **The University of Queensland,** is developing and trialing a new model of general practice health care for patients with chronic disease. The research will determine if it's feasible for a GP to delegate the day-to-day care of patients with Type II diabetes, ischemic heart disease and hypertension to a practice nurse, and if this approach is acceptable to patients and health professionals. The new model has the potential to free up GP time for other patients.
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Beijing history and Chinese identity

ARC Federation Fellow Professor Geremie Barmé from **The Australian National University** is investigating the influence of Beijing on contemporary Chinese national identity, the historical context for this, and its significance in the period surrounding the Beijing 2008 Olympics. His new book, *The Forbidden City*, traces the history of Beijing's famous walled palace complex and will be published in Australia in March 2008.
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Smart transport solutions

ARC-funded researcher Dr Stephan Winter from **The University of Melbourne** is investigating solutions to the complex challenges that sprawling cities are creating for urban mobility. He is developing software to enable ad-hoc communication within mobile sensor networks. This could be used for communication within shared-ride systems that would help make our transport networks more efficient and reduce the need for individual traffic.
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Uncovering the causes of tropical bird decline

Preliminary results of an ARC-supported study indicate that finch species living in areas with frequent fires show elevated stress during the late dry and early wet seasons, and that this could be a cause of population decline. Research leaders Professor Stephen Garnett from **Charles Darwin University** and Dr Sarah Legge from the Australian Wildlife Conservancy are investigating the causes of declining populations of seed-eating birds in the tropical savannah areas of Northern Australia. Focusing on tropical finch species, they are studying the effects of cattle grazing and fire history, and why the population health of some species remains unaffected while others are declining.
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New wind power technology developed

A team of ARC-funded researchers at **Curtin University of Technology** have developed new technology capable of extracting more energy from small-scale wind turbines, especially in low wind-speed conditions, and supplying it efficiently to electricity grids. A spin-off company, Regen Power, has been established to market the technology.
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New techniques for gold and copper detection

Mining companies are uncovering previously hidden deep earth resources using new cost-effective mineral detection techniques developed in collaboration with ARC-funded researchers at the **University of Tasmania** and industry association, AMIRA International. The new techniques can be applied to rocks collected during routine chip sampling and grid drilling to improve the detection of gold and copper deposits in areas where ore zones are difficult to identify.
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