Regional Universities Network

MEDIA RELEASE

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REGIONAL UNIVERSITIES NETWORK SHOWS STRENGTH IN STRATEGIC RESEARCH

The latest Excellence in Research for Australia (ERA) 2012 results confirm the strength of research undertaken by members of the Regional Universities Network (RUN) in areas of strategic importance.

The Chair of RUN, Professor David Battersby, said ERA 2012 highlighted the significant growth of quality research at regional universities.

"We are delighted with how our universities have performed. Much of the research undertaken at RUN universities has a high impact in our regions and more broadly. It is focused on pressing regional, national and global concerns. It covers issues including food and water security, climate change, social cohesion, health and well being, environmental and resource management, and technology," Professor Battersby said.

"Our universities have excelled in ERA 2012 in a range of disciplines. Compared to ERA 2010, we have had a six-fold increase in our 5s (well above the international benchmark), a 50 per cent increase in our 4s (above the international benchmark) and a 90 per cent increase in our 3s (at the international benchmark)."

Southern Cross University has had an outstanding result with Geochemistry, Forestry Sciences, Crop and Pasture Production, Zoology, Earth Sciences and Agriculture and Veterinary Science being assessed as being well above the international benchmark (5), Nursing and Biological Sciences assessed as being above the international benchmark (4), and Tourism and Studies in Creative Arts and Writing assessed as being at the international benchmark (3).

Southern Cross University Vice-Chancellor Professor Peter Lee said, "This is a tremendous result for Southern Cross University. We have placed a strong emphasis on building our research capacity and these results are evidence of the contribution we are making both regionally and internationally."

CQUniversity has performed at or well above the international benchmark in four areas of research. Nursing research continues to perform at the international benchmark. In addition, research performance in Applied Mathematics, Agriculture and Land Management, and research allocated to Other Medical and Health Science has been deemed to be ranked at the highest levels of performance - well above the international benchmark.

The University of the Sunshine Coast received a 4 in Agricultural and Veterinary Sciences and a 3 in Biological Sciences, and the University of Ballarat retained the international benchmark standard in Human Movement and Sport Science and gained international

benchmark standing in Clinical Science.

The University of New England performed at or above world standard in 17 disciplines, up from seven disciplines in 2010, with world standard research spanning the sciences, law, policy and administration, the arts and humanities. Research in Pure Mathematics and in Zoology is rated above world standard.

The University of Southern Queensland was ranked at world standard across the discipline areas of Mathematical Sciences, Physical Sciences, and Agricultural Sciences.

Professor Battersby said, "Given that much of the regional universities' research investment is deliberately focused on maximising its practical impact, we welcome the incorporation of broader impact measures in future assessments of research, as has been flagged by the Minister for Industry, Innovation, Science, Research and Tertiary Education, Senator Chris Evans.

"Such impact measures would provide a more comprehensive picture of the current research effort while complementing the current ERA process which is, after all, a retrospective measure.

"We welcome Senator Evans' announcement that there will be a third round of ERA in 2015 and we will work with the ARC during its consultation on the inclusion of impact measures to further enhance the measure.

"RUN universities are growing our research effort in new areas of strategic importance via collaboration within the network and more broadly with other Australian and international universities.

"The recent Collaborative Research Network (CRN) funding has provided new investment in research in RUN universities and is already paying off in terms of attracting outstanding researchers, enhancing the profile of research, increasing research funding and publications and developing collaborative partnerships.

"Research is integral to being a university - it enables the attraction of quality academics, the building of institutional quality and capacity, and is essential for research training and for regional industry and innovation.RUN universities are committed to growing our research effort for our communities, regions and the nation."

Profiles of some of the best and brightest researchers at Regional Universities Network universities appear below.

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www.run.edu.au

Regional Universities Network

MEDIA RELEASE

Regional universities hold some of our best and brightest
Some of the nation's top researchers work at regional universities. Here are some profiles of just a few. They are all available for interview (see each university's contact officer(s) in the relevant section).

CQUniversity
High-voltage impact
One of CQUniversity's pioneering researchers, Professor Peter Wolfs has returned to Rockhampton to direct an electric power engineering research program. His focus areas include Smart Grids, Distribution Engineering, power electronic applications in distribution engineering and renewable energy, electrical engineering applications in railway systems, and energy efficiency in the built environment.

More details and photo available at: http://uninews.cqu.edu.au/UniNews/viewStory.do?story=10154

Awake at the wheel: tackling the dangers of shiftwork
CQUniversity's Engaged Research Chair Professor Drew Dawson has been driving human factors and safety research from his base at the Appleton Institute for Behavioural Sciences in Adelaide. Shiftwork may be a cornerstone of the resources boom, but there are serious questions to be answered about its effect on miners' productivity, fatigue and alertness levels. Professor Dawson and his team are currently examining if split shifts may be one answer to the problems.

More details and photo available at: http://uninews.cqu.edu.au/UniNews/viewStory.do?story=10172

For more information or to arrange an interview
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Southern Cross University
Saving our wetlands
Professor Richard Bush is the co-director of Southern Cross GeoScience, which is a major contributor to the ERA success in the field of geochemistry. His research addresses declining soil and water quality in landscapes, specifically acidification of coastal floodplains and its impacts on wetland and estuarine health and salinisation of inland soils and rivers, including the Murray-Darling Basin.

From the cabbage patch: mapping the brassica genome
Professor Graham King is the director of Southern Cross Plant Science, which has been a major contributor to the ERA successes in the top five rating in the field of crop and pasture production and in forestry sciences. Professor King has wide experience in using quantitative genetics, genomics and computational biology to characterise genetic variation underpinning crop traits and domestication, and to

understand how plant genomes respond and adapt to environmental signals. Over the past two decades Professor King's development and characterisation of brassica genetic and genomic experimental resources has enabled detailed analysis of the genetic basis of physiological and developmental traits, and resistance to diseases. He has made extensive use of comparative genomics, and developed informatic resources to allow navigation from trait loci to underlying genes. Professor King is currently focusing on seed development and composition in the brassica family.
http://www.scu.edu.au/news/media.php?item_id=2621&action=show_item

Sustainable forest management
Professor Jerry Vanclay is the head of the School of Environment, Science and Engineering and SCU's research in forest management. He has been a major contributor to the ERA success in forestry sciences. His research interests focus on information systems for forest and land use management. Jerry is a member of the advisory group to the European Forest Institute's EFIMED, a member of the IUCN Commission on Education and Communication, and a director of the Water and Carbon Group. He also co-authored Realizing Community Futures, a guide to the use of participatory modelling for better environmental outcomes. Recent research includes mixed species plantings, competition indices and participatory modelling.
http://www.scu.edu.au/news/media.php?item_id=4621&action=show_item

Where there's a trill there's a way: Australia the cradle for world's songbirds
Professor Leslie Christidis is the director of the National Marine Science Centre, within the School of Environment, Science and Engineering. His research is looking at the origins and adaptation of Australasian birds. His main interest is looking at the environmental and evolutionary processes that have and will generate diversity. Part of his research has demonstrated that Australia was the cradle of the world's songbirds. He conducts field work throughout Australia and Papua New Guinea.

For media interviews or more information
Contact: Sharlene King, Southern Cross University. Ph: 66203508. Mob: 0429 661 349.

University of Ballarat
A shed-load of benefits for men
Professor Barry Golding is a pioneer of the Men's Shed movement in Australia. The men's shed movement has quickly become the biggest male-specific health giving initiative in nations in which men's sheds have so far spread. In 2007 Professor Golding undertook the first ever national research study into the benefits of men's sheds. Today there are more than 1000 men's sheds programs worldwide, including around 100 in Ireland and 30 in New Zealand. These men's sheds have been shown, largely through Professor Golding's research, to be particularly transformative of the lives of men not in paid work.

Probing immunity in fight against cancer
Associate Professor Stuart Berzins has established a new research group in Ballarat investigating the human immune response to cancer. His research group is internationally

recognised for studies of regulatory immune cells, and he has recently published primary research and review articles in leading international journals that have greatly improved the understanding of how human immune responses against cancer are regulated. The research group has been at the forefront of studies characterising the development and function of regulatory immune cells in humans, and is now working to translate exciting preliminary studies to directly benefit human patients. His translational research includes involvement in clinical trials investigating new treatments for patients with haematological cancers (in collaboration with clinical researchers at Peter MacCallum Cancer Centre) and type 1 diabetes (Walter and Eliza Hall Institute), and addressing the issue of whether regulatory immune cells are important factors in cancer in humans.

For more information or to arrange an interview
Contact Matthew Freeman, Media and Communications Officer, University of Ballarat. Ph: 03 5327 9510. Mob: 0408 519 674. Email: m.freeman@ballarat.edu.au

University of New England
Redrawing the map: unlocking the secrets of animal breeding
Professor Brian Kinghorn's research involves theoretical quantitative genetics and design of animal breeding programs. This includes: integration of different technical, logistical and cost issues into a unifying dynamic decision framework; information systems to aid detection of genes of major effect and to exploit molecular techniques; optimisation of complex systems; exploiting novel animal reproductive techniques; gene mapping and genomic selection; computer simulation of animal breeding programs; and industry application of breeding programs.

Tie those kangaroos down: native animals and environmental change
Professor Geiser is Director of the Behavioural and Physiological Ecology Research Centre (BPE). The major scientific goals of BPE are to investigate behavioural and physiological adaptations of native Australian animals living in various habitats. It aims to investigate the impact environmental changes, such as climate change and habitat degradation of woodlands and forests on behavioural and functional adaptations of native birds and mammals. The Centre integrates aspects of foraging ecology, dispersal patterns, thermal biology, stress biology, evolutionary biology, parasitology, and energetics to make predictions of how changes to the current landscape and climate will affect survival of native birds and mammals.

For more information or to arrange an interview
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University of Southern Queensland
Combined vaccine targets two deadly diseases
Professor Michael Kotiw from the University of Southern Queensland (USQ) leads a team of national and international researchers developing a recombinant vaccine which aims to provide universal protection against both Hepatitis B virus (HBV) and Streptococcus

pneumoniae infections in the one molecule. HBV is a worldwide cause of liver failure and predisposes patients to the development of liver cancer, whilst the bacterium S. pneumoniae is a worldwide cause of lethal respiratory infections such as pneumonia, but is also a major cause of debilitating inner ear infections (otitis media – OM) in young children. The project specifically targets the high incidence of OM in Indigenous Australian children where the prevalence is five times higher than in the rest of the Australian population.

Growing farming efficiency
Craig Baillie is the Director of the National Centre for Engineering in Agriculture (NCEA) which researches irrigation modernisation, precision agriculture (targeted management of farming inputs) and on-farm energy use. Particular research activities include the development of enabling technologies for precision agriculture, improvements in on-farm energy use (machinery and irrigation), alternative energy including fuels and bio resources.

For more information or to arrange an interview
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University of the Sunshine Coast
Profiting from sex change
USC Research Fellow in Aquaculture Dr Tomer Ventura is investigating how to induce gender change in crustaceans. This research could help boost seafood production and provide new ways to control invasive crustaceans.

More details at: http://www.usc.edu.au/university/news-and-events/news-archive/2012/research-to-help-induce-sex-change-in-lobsters.htm

Squeezing secrets from sponges
USC Lecturer in Molecular and Cellular Biology Dr Scott Cummins is studying the chemical signalling of sea sponges. This research will provide insights into how cells communicate and the role this has in human health.

More details at: http://www.usc.edu.au/university/news-and-events/news-archive/2012/research-to-uncover-how-cells-communicate.htm

For more information or to arrange an interview
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