

May/June 2010

## Research News

  
Southern Cross  
UNIVERSITY

DIVISION OF RESEARCH

Pro Vice Chancellor (Research)  
**Research Directions**



**Professor Neal Ryan  
PVC (Research)**

**Welcome** to the Division of Research May-June update

The national research issues are currently high on the agenda for Southern Cross University. Staff will be aware that Excellence in Research Australia (ERA) is being implemented, in full, and that SCU is required to meet June deadlines. It has been very pleasing to see staff come forward with publication outputs for recording that had not previously been recorded. The data collection is one component of ERA. More broadly, ERA signals an important change in the way that we assess research in Australia. We are also required to make important strategic decisions regarding the discipline and sub-discipline areas where we concentrate our research efforts.

I am aware of discontent among SCU researchers, and researchers nationally, regarding the ranking of our publication outputs. However, it appears that the Australian Research Council (ARC) has made a determination of journal quality that will be used as the basis for the current round of ERA. Our task now is to maximise the way we organise our data.

The second important development is the release of Collaborative Research Network (CRN) funding. This funding is available to low research intensive (measured by National Competitive Grant activity) universities, such as SCU, to build their research capacity. The funding is targeted and our application needs to be consistent with our broader development of areas of research strength and a demonstrable research collaboration with our partner institutions.

Finally, the second half of 2009 and the first half of 2010 has been dominated by Cooperative Research Centre (CRC) activity. Staff will be aware from the VC's Update that we were an essential participant in three successful Cooperative Research Centres (CRCs) last year. We are currently essential participants in four CRC bids and possibly another two. I will release further details of these bids as they evolve. (Refer to the RCSU update page 4)

The bar continues to be raised for research in Australia but SCU's commitment and strategy gives me every confidence in our ability to respond.

### Grant application frenzy

It has been a busy start to the year, with the lodging of more than 50 grant applications and expressions of interest submissions between January and April. These included 20 ARC Discovery applications where SCU is lead and three applications in collaboration, as well as two Future Fellowship applications.

Two NHMRC Project Grants applications and one Career Development Award nomination were submitted, along with eight expression of interest submissions and six seeding grant applications for the NSW Environmental Trust's Environmental Research Program and a further two applications for its Environmental Education Program.

Applications and preliminary applications have also been made for Hermon Slade Foundation, Australian Flora Foundation, Sports Research and Injury Prevention, FAST (French-Australian Science and Technology Program), Queensland Department of Justice and Attorney-General grants, and under the NCCARF Climate Change Adaptation Research Grants Program. One expression of interest and one proposal were also submitted for Caring for Country grants and one partnership application, one program application and one application with SCU as collaborator under the National Homelessness Research Program.

## A new era in research

In response to the recently approved Research Entity Policy, our two established special research centres and three existing research centres were formally approved, along with four new research centres and five new research clusters. This brings our framework in line with the university's strategy to maintain or establish areas of research strength at each of the three main campuses and will enhance our international reputation for high-quality research and its practical applications. The other significant change in recent weeks has been the transfer of the Centre for Plant Conservation Genetics (CPCG) from the Division of Research to the Faculty of Arts and Sciences. This move is designed to increase SCU's research capacity through collaboration between two of our key research centres and also to strengthen the nexus between research and teaching. We are planning to establish a Research Centre for Plant Sciences in the near future, which will partner the CPCG and the Centre for Phytochemistry and Pharmacology.

SCU's accredited research entities are as follows:

### Special Research Centres

- **The Centre for Plant Conservation Genetics** delivers innovative solutions in research, education and the commercialisation of plant molecular genetics, and provides sustainable outcomes using leading technology, expertise and partnerships. Acting Director Emeritus Professor Peter Baverstock is overseeing research that focuses on the application of next generation DNA sequencing to plants, including biofuel species, sugarcane, rice, wheat, native grasses, coffee, almonds and rainforest species.



- **Southern Cross GeoScience**, with professors Richard Bush and Leigh Sullivan as directors, conducts research that contributes to the understanding and improved management of our land and water resources, with particular reference to the impact of human activity. Its core research strengths are in the study of acid sulphate soils, aqueous environmental chemistry, floodplain biogeochemistry and hydrology, fluvial geomorphology and riverine processes, redox geochemistry of iron, and sulfur biomineralisation in soils/sediments.

### Research Centres

- The **Research Centre for Phytochemistry and Pharmacology**, under Acting Director Associate Professor Brad Granzin, continues to undertake fundamental and applied research to produce value-added products based on bioactive natural extracts. The centre specialises in the chemical analysis and pharmacological testing of plants and plant extracts.
- The **Centre for Gambling, Education and Research**, headed by Professor Nerilee Hing, pursues excellence through research and education relating to gambling, its operations, management, policy and impacts. Its research and activities aim to inform and foster academic scholarship, responsible industry practices, responsive community services and considered policy-making.
- The **Coastal Biogeochemistry Research Centre** is the only research group in Australia specifically dedicated to understanding how physical, geological, chemical and biological processes (biogeochemistry) impact on coastal ecosystems. The centre, under the directorship of Professor Bradley Eyre, works to improve the management of tropical coastal waterways affected by nutrient enrichment and other stressors.

- The **Research Centre for Children and Young People** promotes the status and voice of children and young people through its research, education and advocacy activities. Under Director Professor Anne Graham, its team of interdisciplinary researchers aim to work collaboratively with practitioners and policy-makers to enhance the wellbeing of children and young people in their families, schools and communities.
- The new interdisciplinary **Research Centre for Tourism, Leisure and Work**, headed by Professor Kerry Brown, incorporates research and extension in the areas of tourism, leisure, sport and work with a focus on planning, policy, management for tourism, sport, leisure and organisations in regions that promote community connections and development. The centre will contribute to social and economic development and foster innovation in research and practice through connecting researchers of varying experience.
- The new **Environmental Innovations Research Centre** aims to lead research into the interface between environmental science, management and policy, and is headed by Professor Jerry Vanclay. It seeks to develop understandings of ecological principles and human behaviour associated with environmental and natural resource management and to apply these findings to environmental and natural resource management, policy development and practice.
- The new **Marine Ecology Research Centre** builds on the internationally recognised marine research reputation of the School of Environmental Science and Management by incorporating the Whale Research Centre and Coral Reef Research Centre. Its Director is Professor Peter Harrison.



## Research Clusters

- **Health and Wellbeing** aims to undertake scholarly research that is meaningful to the health needs of people, families and communities within the Northern Rivers region and beyond. The centre, headed by Professor Iain Graham, will concentrate on clinical, health service, health policy, health promotion and disease prevention research, as well as research to address the structural and systemic factors that impact on health and wellbeing more broadly.
- The **Higher Education Policy and Practice** research cluster will have a strong focus on attracting external research funds, encouraging publication in highly regarded journals, supporting doctoral and other research students and a series of research seminars on higher education policy and practice. Headed by Professor Martin Hayden and Associate Professor Sharon Parry, it will foster a monthly forum for members and other academic staff.
- **Enterprise and Regional Development**, headed by Professor Stephen Kelly, will operate under the auspices of the Regional Futures Institute. It aims to become a centre of excellence for basic and applied research focused on public and private enterprise in regional Australia. It will bring together a confederation of academics working within a specific theme, facilitate the provision of resources and promote convergence of academic endeavour.
- **Health eRegions**, headed by Professor Peter Croll, aims to provide world-leading ICT research facilities for improving the quality of life and health for individuals in regional Australia. It will endeavour to facilitate leading-edge research, seek commercial support and funding, connect with the local community and develop novel ICT solutions.
- **Neuroscience** seeks to understand the brain functions that mediate self-awareness and awareness of others in healthy and in diseased and injured brains. The research program headed by Associate Professor Rick van der Zwan will investigate the neural correlates of perception, action, cognition, consciousness and social cognition, and of neurodegenerative diseases affecting these functions.



**Director  
Steve Williams**

## Research and Commercial Services Unit

The Research and Commercial Services Unit has been extremely busy, with a clear focus on major strategic activity to support the university's key research objectives. The year began with a major grants application period, including ARC Discovery grants and ARC Linkage applications for round one. Securing National Competitive Grants is a key university and sector-wide measure of research success and the implementation of the Federal Government's Innovation Review includes ERA (Excellence in Research Australia). Both of these have been a major focus for the year to date.

As part of the Innovation Review, the CRC program has been revamped and application rounds are now annual rather than every two years. SCU uses the CRC program as a major pillar of research activity. Relative to our size, SCU has one of the highest participation rates for CRCs in the sector. This year we are a part of four bids and a major participant in three of them. These CRCs include our key areas of research strength and cover environmental science, complementary medicine, creative industries and cellulosic-based biofuels.

The Research and Commercial Services Unit continues to upgrade and enhance its services to researchers, their partners and all major university stakeholders. Providing accurate and timely research-related data is an essential service delivered by the Division of Research. The division is in the process of implementing a Research Management System (RMS) that will provide key management data to the university. It will also provide the definitive reports for ERA and other required Federal Government management data reporting. The RMS rollout will be staged, starting with ERA (current activity), Publications (mid-year), Projects and Grants (by the end of the year) and Higher Degrees and Ethics next year.

The Sustainable Research Excellence (SRE) is another Federal Government (DIISR) initiative to better understand the real costs associated with universities undertaking grant-based research. SCU has just completed the first of two government surveys that will capture research time and activity associated with research. The division thanks all those that have taken part and encourages similar participation for the next survey mid-year.



**Director  
Prof Phil Hayward**

## Research Training Unit

New manager of research training, Julia Cook, joined the Research Training Unit on May 17. She will be working with Professor Phil Hayward on staff professional development and help to develop more in-depth monitoring of student progress and overall program quality control.

The new International Research Excellence Scholarship (IRES) scheme for international students has commenced and has just awarded its first scholarship to Swiss-born Laure Despland, who is undertaking a PhD with SCU in Environmental Science/Microbiology. Coincidentally, Laure has been selected to present a paper at the World Water Congress and Exhibition, a top-tier international event to be held in Montreal in September. The paper concerns the pellets she has developed for the secondary treatment of wastewater.

Director Phil Hayward has recently visited DBA partner organisations and conducted process briefing sessions in Hong Kong, Singapore and Kuala Lumpur.

Supervisor training sessions are scheduled for September 29 at the Coffs Harbour campus, October 1 and 29 at the Lismore campus, and October 22 at the Gold Coast-Tweed campus. All SCU supervisors are required to attend.

## Excellence in Research Australia

ERA will assess research quality within Australia's higher education institutions using a combination of indicators and expert review by committees comprising experienced, internationally-recognized experts. ERA evaluation is based around eight Discipline Clusters, which when combined will represent the full spectrum of research, including multi/cross/inter-disciplinary research. Each cluster will be evaluated on a number of metrics, including research personnel, research outputs, applied measures and research income. The research outputs include books, book chapters, journal articles, conference publications and four categories of creative works.

SCU's faculties, schools and library are working with the ERA project officer to collect and verify missing research outputs. A selection process is underway for the outputs that will be tagged for peer review and made available for viewing by ARC in SCU's repository. Field of research codes are also being finalised across the ERA matrix. The university will review the ERA draft submission in May and it will be submitted via the ARC's online submission system (SEER) in early June.

All research disciplines will be evaluated by ERA in 2010, which will result in the publication of the first ever picture of the quality of research in Australia's universities against national and international benchmarks.

## Farewells

In May SCU farewelled Professor Robert Henry, who is now heading the new Queensland Alliance for Agriculture and Food Innovation at the University of Queensland. This institute incorporates researchers from UQ and the Queensland Department of Industries and Fisheries. Professor Henry came to SCU in 1996 to establish the Centre for Plant Conservation Genetics (CPCG) and has enjoyed a distinguished career and many internationally acknowledged research achievements. He was instrumental in SCU becoming the major university partner in the Grain Foods CRC and successfully created a research team that is active internationally. His association with SCU will continue through our ongoing involvement in biofuels and other collaboration. Emeritus Professor Peter Baverstock will act as CPCG Director until Robert's replacement is appointed.

In June we also bid goodbye to Judi Summers, who has been instrumental in shaping the Division of Research during the past 16 years. Judi began her employment at SCU as personal assistant to Professor Peter Baverstock at the then Graduate Research College, which boasted just three full-time staff. In 2007 she assumed the role of Executive Officer of what had expanded to become the Division of Research. Judi's intimate understanding of the corporate history of the Division has been highly valued throughout her SCU career, especially during recent restructuring. Judi's shoes will be filled by Nicole Rice, formerly of the CPCG.

## Calendar

The mid-year round of the APA scholarship closes on May 31.

Upcoming grant opportunities:

- ARC:
  - Discovery Indigenous (May 2010)
  - Linkage Round 1 (May 2010)
  - LIEF (Linkage Infrastructure, Equipment and Facilities) (May 2010)
- Collaborative Research Network
- NHMRC Program Grants
- UNESCO-L'Oreal International Fellowships
- Leukaemia Foundation National Research Program.

For information (including internal deadlines) on any of the above schemes, please contact the Grants Team (part of the Research and Commercial Services Unit) via email [grants@scu.edu.au](mailto:grants@scu.edu.au) or extension 79361.

For grants available through the **Australian Competitive Grants** Register, go to:

[http://www.innovation.gov.au/ScienceAndResearch/programs\\_funding/Pages/AustralianCompetitiveGrantsRegister.aspx](http://www.innovation.gov.au/ScienceAndResearch/programs_funding/Pages/AustralianCompetitiveGrantsRegister.aspx)

**Australian Research Council** (ARC) grant information is available at: <http://www.arc.gov.au/ncgp/default.htm>  
**National Health & Medical Research Council** (NHMRC) grant information is available at: <http://www.nhmrc.gov.au/grants/index.htm>

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### General Information

We welcome any contributions staff would like to make to *Research News*, especially identifying opportunities to engage in collaborative projects, to join in with joint research proposals or to inform staff of other research opportunities which might exist. *Research News* will provide one means of communicating research across the university.

If you wish to contribute to future *Research News*, or have suggestions on how to improve the way in which we inform staff and students on research activity, please contact Nicole Rice – [nicole.rice@scu.edu.au](mailto:nicole.rice@scu.edu.au) – or phone 02 6620 3809.

### Website

The website of the Division of Research is regularly updated. It provides all the latest research news and forms, as well as a link to this newsletter. The website is: <http://www.scu.edu.au/research>