



## RESEARCH

**The University's research mission is:**

To advance knowledge and understanding through regionally inspired research and research training which meets the highest international standards for quality and applicability.

### **The objectives**

During 2003, the University continued to develop the objectives underlying the University's Research and Research Training Management Plan. They are:

- Identify and focus resources into research directions that have the greatest potential for early and rapid development and that have synergies locally and internationally.
  - Achieve performance targets for research related income, refereed publications, research student enrolments, research degree completions.
  - Diversify research income streams.
  - Develop further strategic relationships and collaborations for research and consultancy with industry and other government agencies, especially those within the region.
- Access grant funding agencies beyond the ARC and NHMRC.
  - Enhance research achievements of academic staff.
  - Maintain efficiency by preparing and submitting funding applications which are highly competitive and appropriately directed.
  - Improve the standing and reputation of the University as a significant provider of quality research outcomes and contributor to the region.
  - Train postgraduate research candidates for careers as scholars, researchers, professionals and industry leaders, particularly within the region.

Through its teaching the University strives to develop the skills and knowledge of its research higher degree students. A research higher degree graduate of the University will have the following attributes:

Attributes	The University commitment
Adopt the principles of lifelong learning	Academic staff will lead by example
High level written and oral communication skills and a sound understanding of current communication technologies	Orientation program for new and existing postgraduate students
The ability to critically analyse information and to constructively accept criticism of their own work	Mechanisms for interaction between students and staff, for example, regular Faculty-based seminars and the research training symposium
An understanding of research methodologies and their practical application, the necessary interpersonal skills for successful teamwork and the courage and confidence to work alone where required	Multidisciplinary team-based projects, establishing Research Institutes and Research Centres and providing workshops and specialist courses on research methodology for research students
Extensive knowledge in the subject area supported by a sound general knowledge	Supervisors with the requisite knowledge and skills
Project, time and organisational management skills.	Providing workshops for research students

## The achievements

- The Sunshine Coast Research Institute for Business Enterprise (SCRIBE), the University's first research institute, delivered its first annual report to the Research Management Committee. The first Director of SCRIBE was appointed in February 2003.
- A comprehensive proposal was finalised for the establishment of the University's second research institute, the Institute for Sustainability, Health and Regional Engagement.
- The new Centre for Multicultural and Community Development (CMCD) secured a number of significant external research and consultancy grants.
- A comprehensive proposal was finalised for the establishment of the University's second research centre, the Centre for Healthy Activities, Sport and Exercise (CHASE).
- The National Seniors Productive Ageing Centre successfully completed a number of research projects, including a major study of seniors and the workforce.
- Several groups of researchers across the three faculties developed plans for multidisciplinary research programs that will help to further concentrate research effort and provide bases for collaboration both internal and external to the University.
- A number of large, external funded research grants were successfully completed, including a study of the state of South East Queensland waterways and a study of the genetic diversity of Australian lungfish.
- The management of research higher degrees was streamlined and a new automated system put in place to support administration of research higher degree candidates.
- A new system for gathering and responding to candidate feedback on research training experience was implemented.
- External income in all key research areas – research grants, research publications, and scholarships – increased at a higher rate than in 2002.
- Support for supervisors and research higher degree candidates was further enhanced with the introduction of an annual research training symposium.
- A significant number of new adjunct appointments were added to the list of senior academic staff taking an active role in supporting the development of research in the University.
- A number of researchers applied for Australian Research Council grants for the first time.
- A number of new research collaborations and partnerships were developed and secured through the signing of memoranda of understanding.
- A new internal research grants scheme designed to support researchers preparing to apply for external research grants was fully implemented for the first time.
- Research facilities on Fraser Island were further developed and a significant number of research projects were conducted through these facilities.

# RESEARCH

## Research training

In 2003, 79 candidates were enrolled in higher degrees by research, a 20 percent increase on 2002 enrolments. These candidates were undertaking Doctor of Philosophy, Professional Doctorate, and masters level programs spread across the three faculties and a range of discipline areas. Most candidates were associated with areas of research strength through the University's research institutes and centres.

Twenty research training places provided were by the Commonwealth in 2003.

In 2003 the University provided a Research Training Symposium and workshop programs on research commercialisation, research software tools, qualitative and quantitative research methods, preparing a literature review, and using online research resources.

## Research income

Institutional Grants Scheme		
2001	2002	2003
\$51,080 (Small Grants Scheme)	\$119,186 (Small Grants Scheme)	\$128,019

Research Training Scheme		
2001	2002	2003
\$192,000	\$305,954	\$434,959

Research Infrastructure Block Grants		
2001	2002	2003
\$481	\$3,997	\$5,092

The following external grants are some of those received in 2003:

- Professor Rod Simpson received a National Environmental Protection Council (NEPC) consultancy of \$160,000 to examine the association between air pollution and health in Australian and New Zealand cities.
- Dr Wendy Barron received a consultancy project (\$12,078) with Maroochy Shire Council for a review of the "Kenilworth spray or not to spray policy".
- Mr Michael Berry received a \$5,000 State RADF grant to commission, write and post-produce a *Tourism Promotion Film for the Aугathella Community*.

- Mr Michael Berry also received a \$15,000 grant from State Innovations to supervise the production of a film *The Last Crush* and an associated website by students and staff of the University.
- Mr Kevin Todd received \$42,000 from SSEArts (Arts Council of England) in partnership with New Greenham Arts for a Project/Exhibition/Seminar during 2003/04.

## Research partnerships

The University continued to be active in securing and maintaining productive research partnerships. The University currently has partnerships with the following organisations:

- Area Consultative Committee
- Australian Macadamia Society
- Australia Zoo
- Bribie Island Aquaculture Centre
- Caloundra-Maroochy Water Supply Board
- Community Solutions
- Environmental Protection Authority
- Kingfisher Bay Resort and Village
- Maroochy Horticulture Research Centre
- Nambour General Hospital
- Pumicestone Catchment Association
- Queensland Department of Environment
- Queensland Department of Primary Industries and Fisheries
- Queensland Department of Primary Industries and Fisheries, Southern Fisheries Centre, Deception Bay
- Queensland Forest Research Institute, Gympie
- Queensland Parks and Wildlife Service
- Sunshine Coast Subtropical Fruit Association
- Surf Lifesaving Queensland
- Underwater World

## Research institutes and centres

### Sunshine Coast Research Institute for Business Enterprise (SCRIBE)

Based in the Faculty of Business, SCRIBE's mission is to be a major catalyst for creating collaborative infrastructure for regional and business development through its research, consulting and community service activities.

Key research and consultancy projects completed during 2003 included:

- The Industry Cluster Development Project funded by the Queensland Department of State Development resulted in the identification of potential industry clusters on the Sunshine Coast and the factors leading to successful cluster development.
- The Sunshine Coast Information and Communication Technology Business Capabilities and Perceptions Survey jointly funded by the Queensland Department of State Development and the Queensland Industries Information Bureau.
- The Maleny Cymbidium Growers Survey jointly funded by the Sunshine Coast Area Consultative Committee and the Caloundra City Council on the potential for industry expansion.
- Assessment of a Community Telco to assess the feasibility of establishing a community telecommunications provider on the Sunshine Coast.
- Evaluation of Maroochy Tourism and Economic Levy projects which involved assessment of benefits of levy supported projects and business views on preferred activities.

Key initiatives included:

- Formation of the *Sunshine Coast Economic Practitioners Forum* with representatives of all local government authorities and Cooloolool Shire, the Sunshine Coast Area Consultative Committee and the Department of State.

- Formulation of *Friends of SCRIBE* to engage students from all faculties in activities such as:
  - Australian PGA golf tournament evaluation
  - Top 100 Business Awards
  - Noosa Tourism Board's annual Tourism Indicators Survey
  - Caloundra Tourism, Tourism Indicators Survey
  - ACCLAIM Training (Faculty of Arts students)

## Institute for Sustainability, Health and Regional Engagement

Development of the Institute for Sustainability, Health and Regional Engagement occurred during 2003.

The aim of this institute is to promote and support international quality research that improves understanding of the environment and human health, and the interaction between the two, thereby contributing to enhanced human and environmental wellbeing.

This institute will be funded by a seed grant from the University of \$150,000, and an additional \$55,000 and two Teaching and Research Fellowships from the Faculty of Science. The Institute will operate from the Faculty of Science and approval will be sought in 2004.

## National Seniors Productive Ageing Centre

The National Seniors Productive Ageing Centre (NSPAC) is a major Australian community development initiative. It was established in August 2002 as a collaborative partnership involving National Seniors Association, the Australian Federal Government and the University of the Sunshine Coast.

The Centre's Productive Ageing Charter is to advance the active participation of seniors (50 years and over) as contributors in the economic, social and cultural development of the nation.

Key research and consultancy projects in 2003 included:

- A major innovative study *Mature Age Employment: From Redundancy to Reconstruction* provided a new



*Research centre created to protect Fraser island's future. Minister for Education, The Hon Anna Bligh, MP (centre) with University of the Sunshine Coast Honours student Julie Waldron and Kingfisher Bay Resort Head Ranger Colin Anderson.*

*planning framework* for studying mature age employment; identified ten dimensions of potential employment to meet the pending unprecedented labour shortage facing Australia and provided a range of practical recommendations that have culminated in requests from government and private sector organisations across the nation to provide professional development seminars to senior management.

- Related research into the indicators of successful ageing, danger signals approaching retirement and the range of social disorders associated with sustained unemployment. The work has been highly sought by employers around the nation as a staff development training tool.

## Centre for Multicultural and Community Development

The Centre for Multicultural and Community Development (CMCD) was officially launched by the Premier of Queensland, the Hon. Peter Beattie in April 2003.

The overall mission of CMCD is to contribute to the development of a society in which individuals and communities have the skills and capacities to participate fully in social, economic, cultural and political life, as well as to develop a society that values diversity and difference.

Research and consultancy projects include:

- *Multicultural Family and Community Development Project*, funded by the Commonwealth Department of Family and Community Services, to identify the parenting needs of people from culturally and linguistically diverse (CALD) backgrounds within Queensland.
- *Community Engagement Project* funded by the Policy Research, Department of Premier and Cabinet, aims to research the best practice strategies for engagement by government for people of CALD backgrounds.
- *Achieving Structural Change Project* funded by Multicultural Affairs, Queensland, identifies best practices in advocacy and empowerment to achieve change in organisational structures.
- *CALD Women's Engagement Project* funded by the Office For Women, identifies strategies for best practice to enable women of CALD backgrounds to participate in government structures.
- *CALD Women's Participation* aims at building the capacity of CALD women to better engage with government processes and participate in decision making that impacts on their lives.
- *Volunteer Project* funded by the Department of Families, aims to develop capacity through training and leadership to the volunteer members of ethnic communities.
- *Youth Project* funded by Brisbane City Council, aims to develop capacity of young people from five ethnic communities to articulate their needs, develop opportunities and skill them in key areas such as leadership.
- *Community Relations Project* aims to promote dialogue and debate around the concepts of multiculturalism and acceptance of difference.
- *Rural Capacity Building Project* undertaken in collaboration with a rural non-government agency aims to examine regional collaboration of



# RESEARCH

universities with community organisations.

- *Multicultural Sector Development Project* aims to identify the gap of skills and resources in multicultural sector and to provide training support to the staff and volunteer working with diverse community groups.

## Research Facilities

Formally opened in March 2003, the University's Fraser Island Research and Education (FIRE) Centre is the only such research facility to be established on World Heritage listed Fraser.

Undergraduate and postgraduate students from the University of the Sunshine Coast and other universities use the centre to access a unique study environment focussed on the understanding and management of fragile coastal ecosystems.

The FIRE facility has dedicated buildings for research and education at Kingfisher Bay Resort and Village on the west coast of Fraser Island and, from early 2004, at Dilli Village on the Island's east coast.

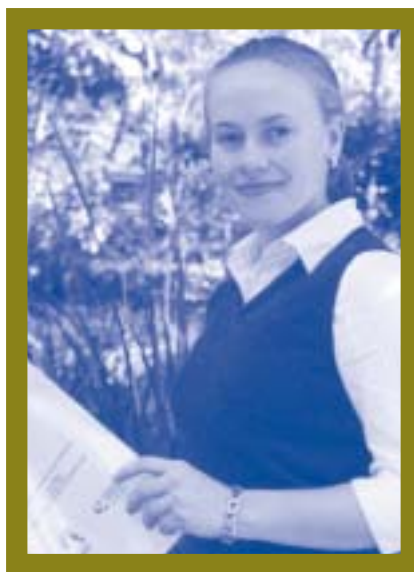
Planning undertaken in 2003 for the FIRE facility include:

- Development of partnerships between universities engaged in world heritage site research, including Wyoming University (USA), Turku University (Finland) and Krueger National Park (South Africa).
- Collaboration with Queensland Department of Education, Chancellor College and the Kingfisher Bay Resort and Village to develop and implement educational packages for Dilli Village.

## The future

### University-wide research

- Formally establish the Institute for Sustainability, Health and Regional Engagement and Centre for Healthy Activities, Sport and Exercise.
- Submit major research proposals to the Australian Research Council for funding for projects related to the economic development of the Sunshine Coast region.
- Implement automated systems to support the administration of research grants, research publications and research ethics.
- Strategically plan and establish new research collaborations and partnerships with external agencies and corporations.
- Further develop the education and research facilities on Fraser Island.



*New research reveals true health cost of annoying insect bites. Jessica Howie's research reveals the health damage that midges cause.*

## Research institutes and centres

### Sunshine Coast Research Institute for Business Enterprise (SCRIBE)

- Launch the inaugural annual *State of the Region Conference*.
- Initiate the *Sustainable Business Forum* with the support of the Department of State Development and Maroochy Economic Development Board.
- Initiate a *Sustainable Business Research Project*.
- Expand the *Friends of SCRIBE* range of activities.

### National Seniors Productive Ageing Centre

- Maintain communication links with Australian seniors.
- Expand collaborative research activities with other organisations (local, national, international) across a range of research projects.
- Provide policy and program advice to organisations, governments and advocacy groups representing seniors.
- Prepare training/education materials in relation to seniors.
- Collaborate with public sector Commissioners for Public Employment and private sector organisations to advance the employment prospects of mature age workers.

### The Centre for Multicultural and Community Development

- Host a multicultural families conference in July 2004.
- Conduct a seminar series, and produce more publications, including a text on international community development.