



2004 Awards for Outstanding Achievement in Collaboration in Research & Development and Education & Training

Applications were sought earlier this year and were judged by an experienced panel of judges comprising:

- ❖ Professor Leon Mann, Professorial Fellow, School of Behavioural Science, University of Melbourne (*Chairman*)
- ❖ Dr Annabelle Duncan, Chief of Division, Molecular Science, CSIRO
- ❖ Dr Bob Frater AO, Vice-President - Innovation, ResMed Ltd
- ❖ Ms Lesley Johnson, Director of Strategic Initiatives, Australian National Training Authority
- ❖ Mr Peter Laver, Chairman, Australian Building Codes Board
- ❖ Associate Professor Jane Munro, Head of College & CEO, International House, University of Melbourne
- ❖ Dr Peter Scaife, Director, Centre for Sustainable Technology, The University of Newcastle

The criteria for evaluation included:

1. Innovativeness
2. Strength of the relationship between collaborating partners
3. Outreach inclusion (e.g. overseas - to other groups, companies)
4. National benefits
5. Cultural impact on the partner/organisation.

The Hon Peter McGauran MP, Minister for Citizenship and Multicultural Affairs, presented the Awards at a gala dinner at the Shangri-la Hotel in Sydney on Thursday, 18 November 2004.

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Winning entries are:

Best Research & Development Collaboration

Winner: Monash University and Norwood Abbey Ltd

Title: **Rebuilding Immunity for Better Health**

The thymus is the engine room of the immune system, being the exclusive site of production of T cells. It severely atrophies from puberty such that by the mid-20's, it functions at less than 10% of its youthful maximum. Research has shown that sex steroids are a major inhibitor of the function of the thymus.

Our studies have shown that temporary inhibition of sex steroids using an analogue of Luteinizing Hormone Releasing Hormone (an existing treatment for hormone responsive cancers) causes restoration of the thymus in animal models; and in human clinical studies we have good evidence for renewed thymic function. This program is focussed on rejuvenating the immune system for treatment of cancer, infectious diseases, autoimmune conditions, transplantation and other areas of immune deficiency.

Honourable Mention:

Australian Catholic University, Dept of Education & Training (Victoria), Catholic Education Office (Melbourne) and Association of Independent Schools Victoria.

Title: **Early Numeracy Research Project (ENRP)**

The ENRP enhanced teacher capacity to deliver improved learning outcomes in numeracy for children in the first three years of schooling. The cross-sectoral project involved 35 'trial schools' and 35 carefully-matched "reference schools" throughout Victoria, 353 teachers and over 11,000 students. Key features included:

- A research-based framework of "growth points" in young childrens' mathematical learning
- A one-to-one, forty minute, task-based mathematics assessment interview for use by teachers
- A multi-level professional development program for teachers, coordinators and principals
- Detailed case studies of effective numeracy teachers and schools
- An intervention program for students having difficulty in mathematics in the early years

Related projects have been implemented subsequently in nine other countries.

Honourable Mention:

Brisbane Airport Corporation (BAC) and Queensland University of Technology (QUT)

Title: **Brisbane Airport Corporation/Queensland University of Technology Collaborative Partnership**

The BAC/QUT collaborative partnership seeks to implement world best practice to transform Brisbane Airport to an Airport City. It is based on a shared vision of mutual benefits to ensure a whole of organisation involvement for excellence in the management of a modern international airport through robust scientific enquiry and academic rigour. For BAC to achieve its vision of the best Airport City in the world and as a model for other international airports, it needs to develop best practice management based on extensive research. It is not feasible for a business organisation to undertake research in the diversity of disciplines relevant to the operation of an international airport and the building of an Airport City. Consequently, QUT is effectively the R&D Arm of BAC. In turn, for QUT, Brisbane Airport is the 'living laboratory' where it can strengthen its leadership position in the delivery of multidisciplinary real world research outcomes, which are of relevance to society.

Best Education & Training Collaboration

Winner: School of Agricultural Science (University of Tasmania), Tasmanian Alkaloids Pty Ltd, Botanical Resources Australia, Australian Hop Marketers, Simplot Australia Pty Ltd, Serve-Ag Pty Ltd, Impact Fertilisers Pty Ltd, Essential Oils of Tasmania Pty Ltd and State Dept of Primary Industries, Water and Environment

Title: **Science Lectureship Initiative: Partnerships in Tasmanian Primary Industry Science Education (HEIP)**

Nine local primary industries combined forces with the School of Agricultural Science, to address the shortage of tertiary educated science graduates seeking work in primary industry, as well as promoting in schools, the value of and excitement of careers in primary industries. This was achieved by developing two programs, one to increase student awareness of the available science careers in primary industry (Education Program), the other program to deliver tertiary modules relating to the needs of current staff in industry (Industry – AgPD Program).

As a result of this collaboration between industries, educators and the University, the project has caused a significant and positive attitudinal change in teachers and students towards potential career options in primary industries and has also greatly contributed to the further education of primary industry field staff.

Honourable Mention:

Musculoskeletal Research Unit (La Trobe University), Access for All Abilities (Ballarat Regional Area: Pinarc Support Services), Cardiopulmonary Research Unit (Alfred Hospital), Ascot Vale Sport & Fitness Centre, Association for Children with a Disability, Australian Barbell Co., School of Human Movement & Sport Sciences (University of Ballarat), Physiotherapy Dept (Box Hill Hospital), Cerebral Palsy Support Network, Council on the Ageing, Jointcare, Multiple Sclerosis Society Vic., One80 (Belgravia Leisure) Fitness Club, Royal Children's Hospital Vic., Scope (Vic) Inc., Victorian Sport & Recreation Assoc of Persons with an Intellectual Disability Inc (Vicsrapid), Washington University (St Louis, USA), Wodonga Regional Health Service and Womensport & Recreation Victoria Inc.

Title: Physical Activity for People with Disabilities

This program generates health, social and economic benefits for Australia by increasing the uptake and maintenance of physical activity as a healthy life-style choice for people with disabilities. It is widely recognised that participation in regular physical exercise regimes such as strength and aerobic training programs can have health and social benefits for individuals as well as economic benefits for society. Research has shown that this is also true for people with disabilities. Despite this, people with disabilities remain more sedentary than the rest of the community. This innovative network of projects provides a best practice model of focused and ongoing collaborations that draw together the different perspectives and skills of clinical researchers, business people, service providers and local communities to develop, disseminate and promote evidence based and feasible strategies to increase and maintain physical activity for people with a range of different disabilities.

**Best Collaboration involving a CRC –
Research & Development or Education & Training**

Winner: CRC for Polymers, Olex Australia Pty Ltd, Monash University, University of NSW, RMIT University, CSIRO Manufacturing Infrastructure & Technology and DSTO

Title: **Ceramifying Polymers**

Olex, a participant in the CRC for Polymers identified a need for a plastic material that could transform in a fire into a ceramic, and hence provide a radical new solution to the requirements of the fire performance cable market. Fire performance cables are specified to enable emergency services to continue operation in a fire, in order to save lives. Working in collaboration with the research partners listed, Olex developed and, in July 2003, launched Pyrolex™ Ceramifiable® cables which has been an instant success. Already over 12 major public buildings have used this cabling and Olex forecast resultant sales of \$75 million and 20 new jobs over the next 5 years. Additionally, global licences are being negotiated and a spin-off company has been formed to explore markets outside cables (such as building panels, door seals, roof tiles). Compared to existing solutions, the resultant technology performs better, is faster and cheaper to produce and easier to install. A true “world first”, replacing 20 year old technology.

Honourable Mention:

Monash University, Griffith University, CSIRO Land and Water, The University of Melbourne, Melbourne Water, Brisbane City Council, NSW Environment Protection Authority, Victorian Environment Protection Authority, Ecological Engineering Pty Ltd, WBM Oceanics Pty Ltd, Sinclair Knight Merz and EarthTech Pty Ltd

Title: Fast Tracking Advances in Urban Stormwater Management

Stormwater pollution represents the biggest threat to waterways in urban areas. The ability to tackle this problem has been limited by an inability to predict the (a) quality of water emanating from urban catchments, and (b) performance of alternative strategies to reduce pollutant loads. CRC researchers and industry developed a 'vision' for a software tool that would give the water industry (local and state agencies, consultants) a user-friendly system for designing "best practice" stormwater management systems to protect the environment. Development and testing of the new software, along with collection of the vast amount of data necessary to underpin it, was undertaken as a complete partnership, resulting in a tool which is both scientifically rigorous and focussed on the needs of industry. The product is now widely used throughout Australia, giving agencies much greater confidence, and a 'common language' on which to base stormwater management decisions.

**Best International Collaboration –
Research & Development or Education & Training**

Winner: University of Newcastle, Novo Nordisk Education Foundation (India) and Novo Nordisk India Pte Ltd

Title: Diabetes Care Program

There are approximately 31.6 million diabetics in India but only a limited number of trained medical practitioners to manage the disease. Access to postgraduate medical education in diabetes for primary care physicians, who treat the majority of diabetic patients in India, is also limited. A collaboration between the pharmaceutical company Novo Nordisk India Pte Ltd and the University of Newcastle has produced an accessible postgraduate degree in Diabetes Care that commences as a non-award certificate course in India and concludes by distance learning in Newcastle. Key achievements of the program are the training of 593 doctors in diabetes care at certificate level and 124 doctors at Graduate Diploma/Masters level, the development of innovative learning materials suitable for use in other countries, the training of Indian clinicians in problem-based and self-directed learning methods, the strengthening of relationships between Novo Nordisk and medical practitioners in India and the establishment of fee paying degrees in Diabetes Care at the University of Newcastle.

Best Collaboration with a Regional Focus

Winner: Victoria University and the Murray Valley Training Co Ltd

Title: The Swan Hill-Horn of Africa Employment Relocation Community Building Program

The project aims to relocate members of the Horn of Africa community (HA), who are 70% unemployed in the Cities of Maribyrnong/Dandenong, to the job rich regions of Loddon, Mallee, and Murray for long-term settlement in a planned and strategic way. This is done by the Murray Mallee Training Company (MMTC) in partnership with Victoria University which in turn has a partnership with the Horn of African Communities Network (HACN). This project is based on specific job projects for the Swan Hill area, with 24 HACN members already in employment. The project is also designed to build community and community capacity of both the Horn of African and Swan Hill communities. Strategically utilising the dual-sectors of the University, and drawing on its interdisciplinary expertise, the project involves a six-stage program coordinated between the partners. It aims to attract external funding with \$300,000 obtained to date. The projects reflects Victoria University's community engagement with its region.

Honourable Mention:

Australian Sheep Industry CRC, Australian Wool Innovation, University of New England, NSW TAFE, Department of Agriculture, WA and University of Tasmania

Title: National Program of Sheep and Wool Education

Market failure in sheep and wool education has been widely recognised by industry stakeholders.

AWI and the Sheep Education Program staff have been closely collaborating to improve the expertise and skills of the sheep industry workforce to assist the industry develop to its full potential.

Collaboration has occurred in the development of complementary organisation strategic plans for education and training, co-management of scholarship programs and Education Advisory Committees and co-funding of projects. Schools projects emphasise opportunities for 'high-tech' careers. VET and undergraduate programs provide national support and resource material for lecturers, teachers and trainers to ensure that students have access to current information presented in an interesting way. School students and university undergraduates have access to scholarships and professional development at undergraduate, honours and postgraduate levels.

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Note your diary – applications for next year's Awards for Outstanding Achievement in Collaboration in Research & Development and Education & Training and Best Entrepreneurial Educator of the Year will be called in **May 2005**.

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Executive Director

Business/Higher Education Round Table

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