



AUGUST 2003

NEW RESEARCH CENTRE TO DEVELOP INTELLIGENT TECHNOLOGIES

Curtin's Office of R&D, the Department of Computing and the Australian Research Council (ARC) have funded a new ARC Reserve Centre of Excellence for Perceptive and Intelligent Machines in Complex Environments. The Centre will be the only ARC research centre of its type with a major node in Western Australia.

Building on Curtin's current research strengths in intelligent technologies, the Centre will conduct research in Perceptive Systems, Autonomous Systems and Distributed Intelligence. Research outcomes will have applications in health, emergency services and national security. One of the Centre's major projects will be to develop enhanced airport security systems.

Professors Svetha Venkatesh and Geoff West, from the Department of

Computing, will be the key Curtin researchers with the Centre, which will accommodate up to 24 PhD students in addition to other research staff.

Monash University, the University of Melbourne and the Australian National University will also participate in the Centre. It will receive approximately \$5 million of funding from the ARC over the next five years.



Professor Svetha Venkatesh

OFFICE OF R&D NEWS

Staff Changes in the ORD

There are a number of staff changes occurring within the Office of R&D. Professor Paul Rossiter, Deputy Vice-Chancellor, R&D, has left after seven successful years in this senior position and Matt Mulder, Data and IT Officer, has departed to begin a new life in northern WA. We wish both Paul and Matt success in their future endeavours. We have welcomed Stuart Clarke to the position of Research Grants Assistant.

Curtin's Performance in the National Competitive Grants Program

The URDC Working Party on Curtin's Competitiveness in the NCRG Program conducted a forum on 10 July to obtain feedback from researchers. The forum was attended by almost 50 staff and the information gathered has assisted in developing a discussion paper, which will be circulated to Divisions for consultation.

Review of the Research and Development Management Policy

The URDC is conducting a scheduled review of the University Research and

Development Management Policy over the next few months. This policy provides a detailed framework for the support and management of R&D activities including the costing and pricing of these activities. There will be a consultation phase across the University in August and September prior to consideration of the revised policy by URDC.

Centre for Integrated Engineering Asset Management

The University has agreed to join this new CRC as a supporting participant. Researchers in Mechanical Engineering and Applied Chemistry are likely to be involved in its cooperative research programs.

Italian-Australian Research Opportunities

In July, staff from the Office of R&D met with the Italian Scientific Attache, Mr Nicola Sasanelli, to discuss enhancing links between research groups at Curtin and universities and researchers in Italy. See www.ambitalia.org.au for more information.

DVC ACTIVITIES

A large and complex institution such as Curtin has a number of possible futures. At the very least, it could continue to operate much as it has in the past. Students would come and go largely satisfied with their experiences, good research would continue to attract external funding and infrastructure support, and the University would generally be recognised as successful and meeting society's expectations.

Beyond this 'steady as she goes' scenario might lie a future in which more emphasis is given to continuous improvement. I suspect that this is where many Australian universities are currently setting their sights, no doubt encouraged by the spectre of an AUQA review.

There is indeed a whole range of other possible futures, all of which move beyond operational excellence into the

realm of more strategic thinking.

One future might be to position the University to have a major focus on social and cultural issues, leading the debates in difficult areas such as genuine multiculturalism, equality, indigenous issues, sustainability and the ethical application of science and technology.

Another might be to develop the University as a world-leading institute for resources teaching and research that embraces agriculture, aquaculture, energy, minerals and petroleum, all within a sustainable context. Community health, e-business, ICT and biotechnology also come to mind.

What is important is that to be nationally and internationally competitive in any of these areas requires significant resources in terms of people and infrastructure. Given that we are likely always to be

faced with the dilemma of having to allocate limited resources amongst competing demands, some choice is inevitable.

I suggest that 'world class' requires effort beyond both the 'steady' or 'continuous improvement' scenarios. To get there will require a bold vision, exceptional leadership, the best people and a willingness to take risks. The Nelson Review windfall (if it actually eventuates) will provide a once-in-a-lifetime opportunity to advance the repositioning initiated through the University planning framework. Do we have the will and leadership to carry it through? What will be the longer-term cost of not doing so?

As I will be leaving the University at the end of July, I will no longer be a contributor to this internal debate. But I implore the Curtin community to



actively engage in the discussion, lest the most desirable future be lost.

In closing my final contribution to the Newsletter, I pay humble tribute to the many incredible people at Curtin and thank them for their friendship and dedication to their disciplines. You certainly deserve the best possible future.

PAUL ROSSITER
DVC, R&D

CRC UPDATE

Since the announcement of Round 8 Cooperative Research Centres (CRC) funding by the Science Minister, Peter McGauran in December 2002, Curtin staff have been progressing the establishment of those CRCs in which Curtin will participate. In this Newsletter, we present the third of three articles on the six new CRCs that are being created in which Curtin will be a Core Participant. The CRCs plan to commence operations in July and August 2003.

Desert Knowledge CRC is a totally new CRC that will be headquartered in Alice Springs. It will involve representation from Curtin's Muresk Institute, Centre for the Management of Arid Environments at Kalgoorlie, Department of Environmental Biology, School of Pharmacy and the Curtin Indigenous Research Centre. Other participants include Charles Darwin University, NT Government, CSIRO and Agriculture Western Australia. Curtin's lead contact for this CRC, Professor Murray McGregor from Muresk Institute, can be contacted on ext 4510.



Professor Jack Carlsen

The **CRC for Sustainable Tourism** is a revitalised CRC that Curtin joined late in its previous funding round.

The CRC is headquartered on the Gold Coast and will draw on research undertaken in Curtin's Divisions of Humanities and CBS with participation through Curtin's Sustainable Tourism Centre. The CRC has a large number of participants including most State and Commonwealth tourism agencies and many universities. Curtin's lead contact for this CRC, Professor Jack Carlsen from CBS, can be contacted on ext 1132.

PUBLICATIONS

The next edition of *Curtin Now*, the Office of R&D's news magazine, is available. *Curtin Now* highlights new and emerging research across the University.



GRADUATE STUDIES NEWS

- » A new Research Officer, Melissa O'Donnell, has joined the Curtin University Postgraduate Students' Association (CUPSA). She takes the place of the previous Research Officer, Paul Niesler, and will be available in the CUPSA Office (next to the Secondhand Bookshop in the Guild Precinct) from 8.30 am - 5 pm, Monday to Friday.
- » A seminar series, 'Life After Uni', is being offered by CUPSA in early August to assist postgraduate students in gaining invaluable job-hunting skills. Three sessions will be run on professional portfolio preparation, creating curriculum

vitae, and applying for jobs and interview techniques at a cost of \$10 per session or \$25 for the series. Contact Melissa O'Donnell for further information.

- » Applications for the latest round of Completion Scholarships recently closed. These Scholarships, valued at up to \$7,000, assist research students in the final stage of their thesis writing to complete within the designated time limits.
- » Divisions will mail out the Annual Progress Reports to HDR students and their supervisors in the first week of August. The reports are due on 29 September 2003.

UPCOMING EVENTS

ENRICHING POSTGRADUATE TEACHING AND LEARNING SEMINAR SERIES

The Office of R&D – with support from LIS and the Learning Support Network – will continue to present its popular monthly seminars for research students and staff. Semester 2 seminars include:

- » Preparing the Candidacy Application and Research Proposal
- » Supervising Postgraduate Research Students: Workloads and Stress Management
- » Grant Applications: Getting Started
- » Supervising Postgraduate Research Students: Mentoring and Student Motivation
- » Research Involving Humans: What You Need to Know About Ethics

Research students and supervisors can register online at lsn.curtin.edu.au/seminars/series2.html

IP AUSTRALIA SEMINAR

IP Australia (formerly the Australian Patent Office) is conducting a seminar for Curtin researchers. The seminar will provide information on issues related to the protection of intellectual property and will include presentations by IP Australia staff, patent attorneys and Curtin researchers.

8 August 2003

Contact Muriel Bijoux in the Office of R&D

RESEARCH MANAGEMENT AND LEADERSHIP 2003

This seminar is an extension of the popular Research Management and Funding 2003 seminar run by the Office of R&D in February. The new seminar is designed for senior researchers in Curtin's Research Institutes and Centres and will provide information and advice on research management in a university environment.

15 August 2003 from 9 am - 11.30 am

Contact Dr Rodney Thiele in the Office of R&D

RESEARCH DEVELOPMENTS

- » Curtin Research Fellow, Tim Dolin – from the Australia Research Institute – has been invited to present his work at the Australian Academy of Humanities at its annual symposium in November. Dr Dolin's presentation, 'A Secret History of Australian Reading', is based on research findings from his Curtin Fellowship project on the circulation of mass-market popular fiction in Australia between 1880 and 1950.
- » Professor Lesley Parker has co-authored a DEST report, *University Credit for School Students*. The report documents the results of a study that looks at current policy and practice regarding the relationship between secondary schools and universities throughout Australia.
- » Professor Svetha Venkatesh, from the Department of Computing and the Centre of Excellence for *Intelligent Process Operation Management*, is guest editor of the April-June 2003 issue of the journal

IEEE MultiMedia. The special issue focuses on computational media aesthetics, an area that Professor Venkatesh and research colleagues at Curtin pioneered.

- » Chemical Engineering's Dr Hari Vuthaluru has secured \$250,000 for a major research program with PT Berau Coal and ECN Netherlands. The project will address the remediation of ash-related problems during combustion of high sodium coals. Dr Vuthaluru has received a further \$100,000 from ECN Netherlands to set up a cost-shared PhD scholarship for work in co-firing for the coal industry.



Dr Hari Vuthaluru