New VC queries federal funding

Monash University has a new vice-chancellor, Professor Richard Larkins AO. In a speech on his first day in office, Professor Larkins told a breakfast gathering of staff and students that Monash was the best-placed Australian university to become a great international institution.

However, he questioned how the current federal government proposals on higher education funding would allow any of Australia’s universities to compete with the best international universities.

"The current proposals on higher education funding formulated by federal Education Minister Brendan Nelson provide particular challenges for universities," he said.

"Current levels of public funding will not permit any of our universities to compete with the best international universities, so changes are required.

"The internationalisation of our universities has been of immense benefit for many reasons but should not be seen as a solution to gross under-funding from government sources.

"We should continue to advocate for enhanced government funding. It is a sound investment, as demonstrated by students who have taken the decision to make a substantially greater government – as opposed to private – commitment to the costs of tertiary education. Ireland, Singapore, and Scandinavian countries and Switzerland are a few examples of this.

"Throwing more of a (financial) load on students creates perverse incentives for them to opt for high-earning jobs, which may have little community benefit, so allow them to repay debts.

"An example is the difficulty of involving medical graduates in the US in academic medicine. Instead, their preference is for highly remunerative procedural specialties to allow debt to be repaid more quickly.

"In New Zealand, students debt has led to a substantially increased brain drain, at more and more able graduates leave New Zealand to escape or freeze their student debt."

"And there was no question that Australian universities would need to be more self-reliant. "We must be more active in raising funds from our alumni, from industry, from our state and commonwealth governments and from other benefactors."

Professor Larkins has enjoyed a distinguished career in scientific research and academic management.

"Before taking up his appointment at Monash, he was dean of the Faculty of Medicine, Dentistry and Health Sciences at the University of Melbourne.

After being the National Health and Medical Research Council of Australia from 1997 to 2000, president of the Royal Australian College of Physicians from 2000 to 2002, a member of the Prime Minister's Science, Engineering and Innovation Council from 1997 to 2000, and a member of the National Aboriginal and Torres Strait Islander Health Council from 1997 to 2000. He was appointed an Officer in the General Division of the Order of Australia in 2002.

Support needed for bush nurses

The quest for life on Mars

Professor Larkins: Priorities are excellence in taking and research. The lands that were chosen by a team of political scientists, who spent many hours scrutinising images of Mars, were "moving Alps, Italia, United Kingdom, Italy, "Watching this space: Two Mars Exploration Rovers (MERs) are expected to land on the planet early next year, after a seven-month journey. The landing sites were chosen by a team of more than 30 scientists, who spent many hours scrutinising images of Mars. Among them was Mr Marion Anderson, a lecturer in Monash School of Geosciences, who was the only Australian on the MER group. The MERs will help answer the question - is there a chance of finding life on Mars?" See page 7.

Bob Barley, a veteran at Monash's Centre for Medical and Radiation Studies in Rural Health, said the study found that bush nurses have had advanced medical and pharmaceutical knowledge. But the team was a new recommended to DHS that bush nurses go through the formal process required to become enrolled nurse practitioners, who are able to prescribe certain medications and do blood tests and X-rays.

"A rural nurse would normally do a physical assessment of a patient's condition, which might include diagnosis and treatment, and also discuss that information with a doctor if one is available."

"Bush nurses also provide first responder or emergency care, such as RF and communications. If, for example, there is an accident in a rural area, the bush nurse provides emergency care until an ambulance arrives."

"There are 80 bush nurses in Victoria and if you look at the task they're serving, they're doing a fantastic job," Mr Barley said. "As fewer doctors are going to isolated areas, bush nurses are providing much needed care for these small communities."
Recognition for women managers

Business

Melbourne businesswomen with Monash University connections have been honoured in this year’s Women Chiefs of Enterprises International awards.

Ms Rachel Snell, a Monash graduate in industrial engineering, won the award for emerging CEO for 2003.

As a manager for automotive trimmings manufacturer Silcraft, Ms Snell is responsible for about 150 staff and the daily operations of various departments. She says women in her field are rare.

"Hopefully, this award will inspire other women to achieve in areas that have traditionally been dominated by men," she said.

After she graduated from Monash in 2000, Ms Snell joined Silcraft as an industrial engineer. She was later appointed manager of the company’s industrial engineering section before taking up her current role as manager of the company’s production section.

"Monash equipped me well for my career — the subjects taught and the way they taught them prepared me for my work environment," she said.

Ms Kristina Karlsson, a guest speaker in retail management studies at Monash University, has worked for KiK X, supplies quality stationery for the growing home office market.

"Being an occasional speaker in Monash’s retail management studies lets me give back some practical knowledge to students who, like me, want to start a business and see it thrive," Ms Karlsson said.

Women Chiefs of Enterprises International (WCEI) was founded in Australia in 1985 as a non-profit international organisation, and its mission is to assist the foundation’s efforts in taking up the current role as manager of the company’s production section.

Ms Snell said that gaining the trust of the war on terrorism was difficult, as it was unrealistic to assume there would be no terrorist acts in the future.

"We can look at two recent instances in the US — the sniper attacks and the blackout. These cases could easily have been acts of terrorism," she said.

"We have to accept that these things will continue to happen and that they could be the result of terrorism."
A Monash professor has created an odour-seeking robot that may one day replace sniffer dogs in detecting drugs, explosives and gas leaks.

Associate Professor Andy Russell of Monash’s Intelligent Robotics Research Centre has designed the RAT (inertive autonomous sniffing robot) that is able to sniff its way through a maze of tunnels to track down a chemical scent.

Dr Russell’s compact ‘sniffer-bot’ could replace dogs for drug searches at airports, detecting explosives in buildings and identifying dangerous gas leaks.

In laboratory demonstrations, the 100 mm diameter robot uses four tiny motors, which can twist, turn, spin and move it “airflow and ‘whisker’-to navigate through a series of interconnected passageways to find the target chemical, camphor.”

Dr Russell believes the robots will eventually have many advantages over sniffer dogs. “The dogs have drawbacks: sniffing dogs is difficult and expensive to procure exactly which individual brain molecules. This centre could bring together people who are demonstrating how failure to synthesise the molecule might affect a patient,” Dr Rosa said. “Ultimately, such collaborations could hasten the development of treatments for these processes.”

Although the medical faculty has initiated the Centre for Brain and Behaviour, the centre is not solely focused on medical aspects of brain research. It has also been attracting researchers who work in engineering, robotics and computer vision, and Dr Rosa is keen for others to join.

He expects the centre will be the first port of call for industry and government agencies looking for scientists able to tackle questions relating to brain research.

“If there is a brain-related problem that needs addressing, they only need contact the centre and we will put them in touch with the right people,” Dr Rosa said.

A free symposium and public lecture were held to mark the official opening of the centre. The lecture was given by Baroness Susan Greenfield, best-selling author and director of the Royal Institution of Great Britain, on the subject “Tomorrow’s people: how 21st-century technology is changing the way we think and feel.”

Contact: Penny Fannin
Ph: (61) 3 9905 3252

Dr Marcello Rosa, interim director of the centre, said it had already attracted more than 150 senior scientists, honorary and PhD researchers from 21 of the university’s departments and research centres.

“There are a lot of people at Monash who are working in brain research, and this centre will bring them together, fostering collaboration and leading to more comprehensive and successful research programs,” Dr Rosa said.

As well as coordinating Monash neuroscience research, the centre and its members will also work with groups from other institutions such as Prince Henry’s Institute of Medical Research, Monash Medical Centre and The Alfred hospital.

For example, we have scientists who are investigating the biodiversity of individual brain molecules. This centre could bring them together with people who are demonstrating how failure to synthesise the molecule might affect a patient,” Dr Rosa said. “Ultimately, such collaborations could hasten the development of treatments for these processes.”

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A Monash lecturer’s PhD on the history of Australia’s representation at one of the world’s premier visual arts biennale, the Venice Biennale, has featured highly regarded contemporary art.

The difficulty in choosing artists has been made of the selection process, but the work presented in Venice has been a fairer and better deal with expert evidence.”

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New centre serves community

Psychology

The Monash University Clinical Psychology Centre (CPC), which provides high-quality psychology services to the Victorian community, officially opened last month.

The centre, in Clayton Road, Clayton, offers psychological assessment, treatment and consultation in three specialized areas of clinical psychology - child and family, health and medical, and forensic psychology.

It also provides advanced professional training for postgraduate psychology students. The first intake, from the Monash University doctor of psychology degree, started work at the centre in February.

Centre director Associate Professor Sandra Lancaster said there was a great need for more psychological services in the southern metropolitan region of Melbourne and the centre was committed to establishing links with local community agencies.

"The CPC provides psychological services to all ages for a wide range of psychological problems including depression, anxiety, coping with grief and loss, trauma, adjustment to medical conditions, parenting and relationship difficulties," Dr Lancaster said. "Assessment and treatment is also provided for children and adolescents with learning, emotional, social and behaviour problems."

She said that to maintain best-practice standards, the CPC would also undertake research that led to a better understanding of psychological problems and how they could be treated. The University's School of Psychology, Psychiatry and Psychological Medicine operate the CPC.

Referrals to the centre are increasing with local community agencies, GPs and schools keen to take advantage of the high-quality services provided.

"It's good to know there is a service that is readily accessible and able to look after children - and teens - who are struggling," Ms Hanly said.

Feedback is almost immediately. Patientzone - a service that provides information to clients and the medical community - has been extremely positive.

"Many innovative ideas have been developed to help patients and carers. From posters to online information tools," Ms Hanly said. 

Ms Christine Hanly, a team leader at Anglicare Parentcare - a service that provides information and advice on raising children - said several of their clients had been referred to the CPC as they could receive professional psychological care almost immediately.

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Learning to live with spam

"Spam, spam, spam, wonderful spam!" So sang the Monty Python comedy crew back in the 1970s, long before email, as we know it today, existed. Now, for most PC users, spam—unwanted commercial email—is far from wonderful, but according to Mr Chris Avram, associate dean, Graduate Studies, in Monash IT faculty, we are going to have to learn to live with it.

Regardless of what new technology comes along or which laws governments introduce, spam won't go away. It will continue to impact on everyone who uses a computer. For individuals, spam means clutched mailboxes, a slowed operating system and a route for viruses and the money trail, starting with a reasonable speed. For companies, spam means high costs involved in employing full-time detection teams and installing extra software such as firewalls. IT policies prove fruitless because the spammer profit will be stopped. And for those who have made money by using infrastructure without permission in an unanswerable way, it may be made to pay for that use and the costs incurred in preventing the spam environment, the greater the kudos from unless they are virus-protected and anti-spam software will allow penetration tests to one or two people or a group, but there are other spammers, contrived by the desire for kudos or simply wanting to have fun at the expense of others, who are almost impossible to track down. A spammer operating within his small anti-social community can gain status by creating and successfully spreading a virus. The tougher the technical and regulatory environment, the greater the kudos from the spammer's peers. Later operators get their kicks from the amount of misery and inconvenience they cause.

There is one thing that all spammers have in common and that is their ability to prey on human weakness. They know, for example, that while companies and individuals will be compelled to organise themselves in more secure but less convenient ways. At the moment, equipment suppliers do not make it easy for PC users to combat spam. Often there are filters built into a system but actually turning them on is not straightforward. People should have access to a simple, user-friendly set-up that can intercept spam without making them feel put off. Organisations have other options to consider. They can establish an infrastructure to check email in and out and check inside emails for viruses and unwanted software. They also need to introduce IT user policies to ensure their own staff do not abuse the system. Those who do should face sanctions. But above all, governments need to step in and impose regulatory constraints while victims should have the statutory right to recover their costs.

Where a spammer is out to make money, the best way to find that person or organisation is by following the money trail, starting with the victims who are duped into paying for a product or a service. Find where the money is going and you find the spammer. Any other form of pursuit is likely to prove fruitless because the spammer will simply jump from web address to web address, never staying in one place long enough to be caught out.

Once found, those who have made money by using infrastructure without permission in an unanswerable way should be made to pay for that use and the costs incurred in preventing the spam environment, the greater the kudos from unless they are virus-protected and anti-spam software will allow penetration tests to one or two people or a group. But there are other spammers, contrived by the desire for kudos or simply wanting to have fun at the expense of others, who are almost impossible to track down. A spammer operating within his small anti-social community can gain status by creating and successfully spreading a virus. The tougher the technical and regulatory environment, the greater the kudos from the spammer's peers. Later operators get their kicks from the amount of misery and inconvenience they cause.

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But above all, governments need to step in and impose regulatory constraints while victims should have the statutory right to recover their costs.
Projecting ideas into print

Nord Australian printmaker Neil Emerson is the latest participant in the 2003 Arts/Designer in Residence Program conducted by Monash University's Faculty of Art and Design. Mr Emerson took up his appointment last month and will be in residence until early October. He is the first printmaker to be involved in the program.

"My field of practice is unpredictability-it involves print media, either explicitly or implicitly, but also merges an installation format with a variety of other media and environments. This can be encouraging for students developing a number of discipline areas simultaneously," he said.

During his stay at Monash, he will be teaching a class of mixed-level students as well as working on his own projects. "Students will have the opportunity to observe me at work and attend structured classes where I can project my ideas about developing a practice and demonstration techniques I use in my work."

According to Dr Caroline Day, co-ordinator of the printmaking studios at the Department of Fine Arts at Monash's Caulfield campus, the participation of Mr Emerson is timely.

"Neil's involvement comes at a very exciting time for printmaking at Caulfield. We have recently moved into our new purpose-built studios as part of the new Fine Arts complex at Caulfield," she said.

Monash is also reintroducing printmaking as a three-year Bachelor of Fine Arts major next year, following a resurgence in interest in the practice of printmaking in contemporary art.

Contact:
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Harnessed forces of nature-Dr Dan Wollmering's 'Surge One' on display in Guilin, China.

"Neil's work is highly regarded, and the students will benefit immensely from his stay at Caulfield," Mr Durre said. "He has exhibited widely, and his works are held in major collections in Australia.

"The Monash University Museum of Art holds 'Gai Nan Fong 1994 (Passion South Wind),' a sculptural installation involving biographical pieces by Neil, which featured in the opening exhibition at Monash's Prato Centre in 2001."

Mr Emerson studied printmaking in New South Wales and Sydney, and in 2001 completed his master of visual arts at the University of Sydney.

He has participated in artist-in-residence programs around the world, including in Japan in 1998 where he learned the techniques of traditional Japanese woodblock printing.

"The Arts/Designer in Residence Program at Monash is designed to complement international study programs developed by the Faculty of Art and Design.

"Australian students stay on campus at the faculty apartments in Caulfield and spend their time teaching, researching, and learning. Since its inception in 2000, the program has attracted respected artists and designers from around the world."

- Karen Sleightensteth

"This gives the audience a sense of the complexity of that society. It is too simple to see the entire society as possessed by evil, what is interesting is how far they allowed themselves to be deceived. And there were people, like those in the White Rose - who knew what was happening and who attempted to stand up against it."

The story was written by Harry Allen, a lecturer in theatre studies at Nanyang Academy of Fine Arts in Singapore, and prominent Melbourne writer Craig Christie, with music by composer Andrew Patterson.

Students worked with the writers in a series of exploratory workshops, gaining a unique insight into the process of developing a new script and putting together a show.

- Diane Squires

Standing up to Hitler

What would today's university students do if confronted by the atrocities of Hitler and the Nazi movement? More than 60 Monash University drama students found themselves exploring this question while rehauling their latest production, The White Rose.

The musical production, which has been written for and in collaboration with students in the Centre for Drama and Theatre Studies, will be staged in the Drama Theatre at the Monash Performing Arts Centre in September. It is based on true events in Singapore, where the students will perform four shows in the city's major performance venue.

The musical is based on the true story of a group of Munich University students, known as the White Rose, who formed an underground movement in the 1940s challenging the policies and beliefs of Hitler and the Nazis.

The students distributed leaflets throughout southern Germany opposing Hitler's policies and criticizing Germans for doing nothing to stop the Third Reich. They were executed in 1943 for their actions.

Director of the production, and of the Centre for Theatre and Drama Studies at Monash, Professor Peter Fitzpatrick said the students performing in The White Rose identified with the German students. "These aren't distant martyrs-they were the same age as our students, getting up to the same crazy stuff that our students do. They were obviously very bright and brave, but they were only in their early twenties.

"The play has made our student company confront the question of what they would do in the same situation."

Despite the serious content of the performance, Professor Fitzpatrick said there was an uplifting element to the story, as it deals with individual freedom and the courage of young people to stand up for their beliefs.

"In the show, we look at individual choices made and the notion of community-the irrational power of a lot of people joining together in song against the voices of individuals expressing their views," he said.

Contact:
peter.fitzpatrick@arts.monash.edu.au
Ph: +61 3 9905 2133

Show Notes:
What: The White Rose
When: 10 to 13 September
Where: Drama Theatre, Performing Arts Centre, Caulfield campus
Who: For bookings, contact +61 3 9905 2970.

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For two days in early June, rain soaked the air force station at Cape Canaveral, Florida, delaying the launch of NASA's latest hope for finding water on Mars. But on 10 June, the skies cleared and 'Spirit', one of two Mars Exploration Rovers (MERs), was launched on 100- 12 attempts to land on opposite sides of Mars in January 2004. The landing sites were carefully chosen by a group of more than 30 scientists who spent many hours scrutinising images of Mars' surface for suitable sites for the rovers to land. Among them was Ms Marion Anderson, a lecturer in Monash's School of Geosciences, who was the only Australian on the MER landing site selection group. Over two years, the group members studied thousands of images of the surface of Mars that had been gathered from previous Mars missions as they attempted to find landing sites that would help answer the question that has entranced the public for decades - is there a chance of finding life on Mars? Given previous failures with Mars landings, it was important the group make the right choice.

"Of all the probes sent to Mars, fewer than half have made it and of 12 attempts to land, only three craft have landed for more than a few days," Ms Anderson said. The first missions to examine the Martian surface were NASA's Viking landers in 1976. They collected soil samples to test for evidence of life. Of the three main experiments performed, two showed no evidence of life and the third was inconclusive. But that inconclusive result is still casting doubt among scientists that there once was, or might still be, life on Mars. The MER rovers, testing the limits of robotic field geologists, will examine the chosen sites for clues to the past history of water on Mars, and to evidence of life. "On Earth we need water to have life, so one of the goals of Mars exploration is trying to find evidence of water." In 2001, the group called the 28 possible landing site contenders down to four primary sites and two back-up sites, with the aim of selecting two final sites. "We're looking for places that would be safe for the rovers to land, but would still have enough rocks to provide evidence of water activity if it was to be found," Ms Anderson said.

The MERs' geological studies, scheduled to last three months, are designed to find physical evidence of water activity on Mars from billions of years ago, when the planet was thought to have been wetter and warmer - and possibly inhabited by microbes. The rovers are expected to last until April 2004. They each weigh 175 kilograms, are 1.5 metres tall, 2.3 metres wide and 1.6 metres long. "Martian dust will slowly build up on the rover's solar collectors and will eventually block the energy needed to recharge the batteries that they need to move around," Ms Anderson said. For this reason, dust levels and wind strength were two of the factors considered by the group deciding on landing sites for the MERs.

"On earth we need water to have life, so one of the goals of Mars exploration is trying to find evidence of water."
A new theory to explain the formation of the mountains of Western Europe has been developed by Monash University scientists. Until now, geoscientists have worked on the basis that mountain ranges such as the Alps were formed when the tectonic plates carrying Europe and Africa came into collision.

But PhD researcher Mr Gideon Rosenbaum and Professor Gordon Lister from the School of Geosciences have found that the mountains were formed with smaller, faster-moving fragments of the tectonic plates colliding about 30 million years ago.

Mr Rosenbaum, who has studied the western Mediterranean mountain belts over the past three years, said the fragments were about the size of Tasmania or Corsica. "We've re-constructed the movements of the tectonic plates in the Western Mediterranean, and the results have forced us to re-think all our theories on how this area was formed," he said.

Mr Rosenbaum used a reconstruction tool called PLATYPLUS, developed by Monash University to produce computer-generated movies showing the tectonic history of the region. "Soon after we started putting data together, we realised that over the last 50 million years, fragments of Italy, North Africa and Spain moved independently relative to the large tectonic plates of Africa and Europe.

"The southern part of Italy, for instance, was originally located adjacent to the southern coast of France, 800 kilometres from its present position. It's been a big surprise to the geoscience community. We were thrilled to see the complexity of tectonic movements that occurred as mountain ranges were built during a relatively short period of time."

"I found there are not enough Victoria, over three years. the previous year to formulate 'what if?'

"At a time when Victoria is still in the grip of drought, the option for farmers to plan effectively for the worst case would appear to be invaluable."