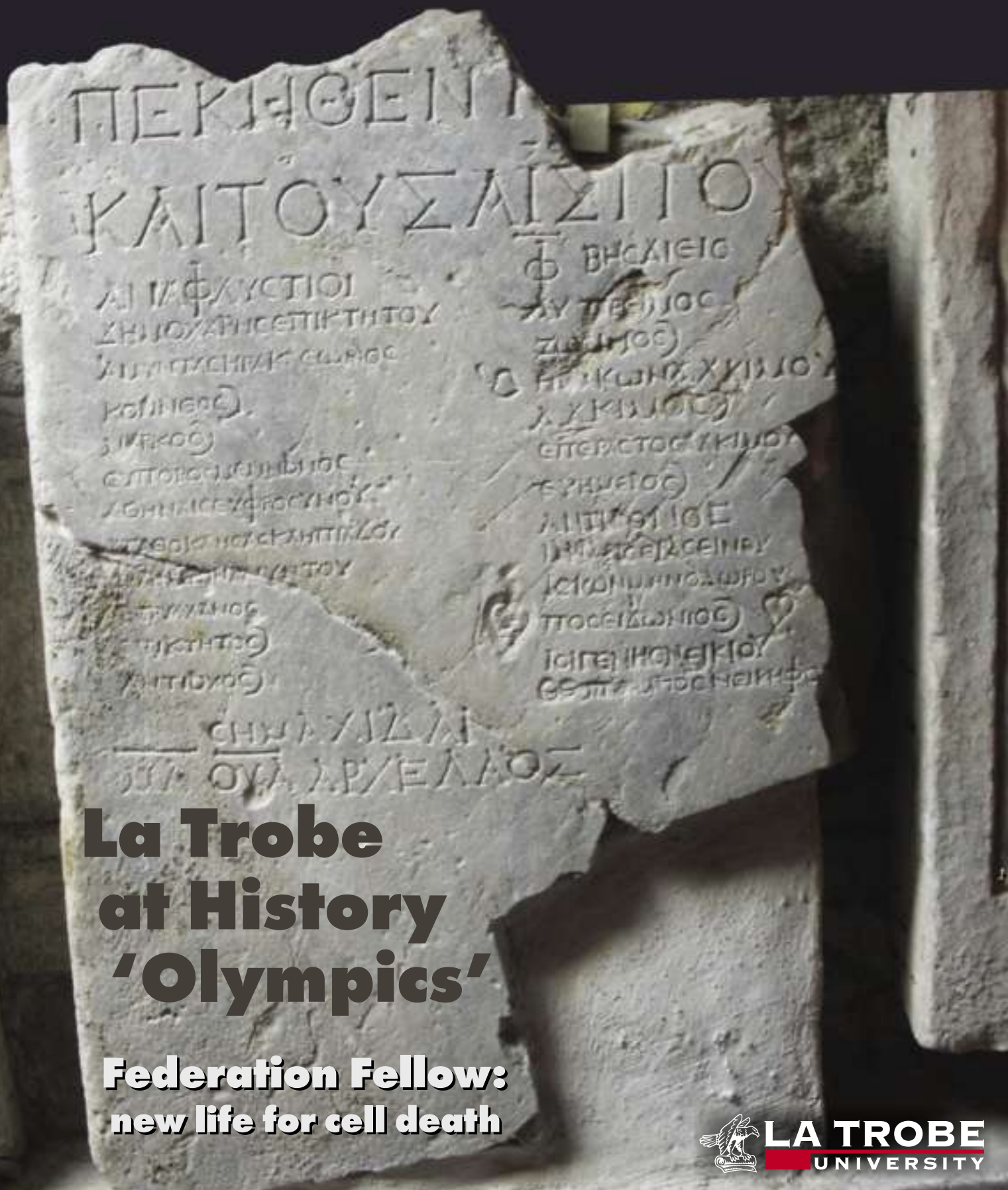


Bulletin



La Trobe at History 'Olympics'

**Federation Fellow:
new life for cell death**



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Cover: A list of Athenian councillors, c. 110 AD, from the Agora in Athens, see *La Trobe at History Olympics*, – page 5.

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Largest group of INU scholarship winners heads overseas

La Trobe University has awarded the highest number ever of its International Network of Universities (INU) – Vice-Chancellor's Targeted Travelling Scholarships.

Twenty-eight scholarships were recently presented to high achieving undergraduate students to spend one semester at an INU university of their choice. Subjects completed by the students overseas are credited to their courses

Congratulating the winners, La Trobe University Vice-Chancellor, Professor Michael Osborne, said students improved their employment prospects by studying part of their courses in universities in other countries.

'It is increasingly important for students to add an international dimension to their studies because more and more employers are looking for people with international experience and the capacity to work in the world at large. So the employment situation is much enhanced for those who have some experience in the global arena.'

Professor Osborne is President of the INU, a consortium of quality universities in Australia, Asia, Europe and America, and one of the architects of the scholarship scheme designed to encourage more Australian undergraduate students to expand their horizons by doing at least a semester of their degree in another country.

The largest group, of eight students,

is going to James Madison University, USA. Six each are going to the University of Leicester, UK, and Malmö University in Sweden, while others are destined for Hiroshima University, Japan, and Budapest University of Technology and Economics, Hungary.

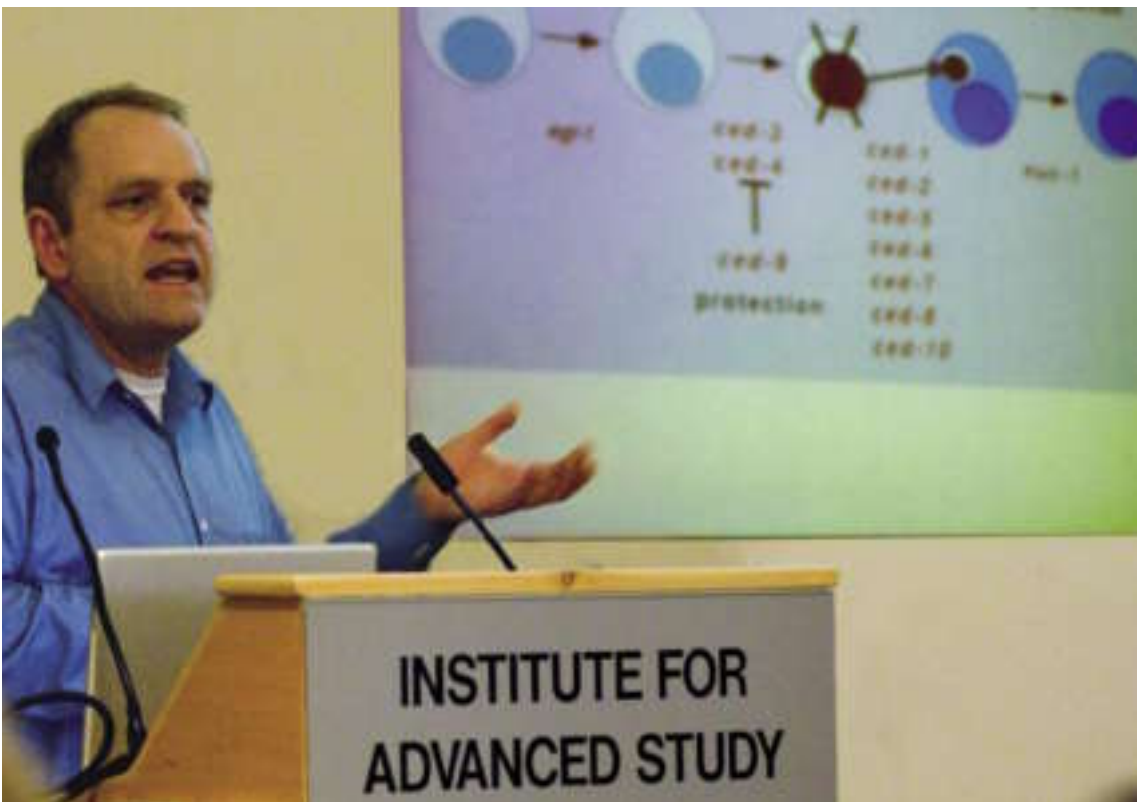
For the first time this year, the INU exchange program includes Jönköping University, in Sweden, where three students – two in nursing and one in prosthetics and orthotics – are attending the School of Health Sciences, one of the largest schools for health care in Sweden known for its high academic quality and long experience of education and research.

Students from every faculty of the University are represented among the scholarship winners. Their overseas courses range from the applied, behavioural and medical sciences, to tourism, sport and leisure management, as well as arts, business, computing, and electronic engineering.

Four students from the Bendigo Campus, and one each from the Shepparton and Albury-Wodonga campuses, are among this year's scholarship winners, as well as several Melbourne (Bundoora) Campus students who come from regional areas. ●

Most of this year's winners with Vice-Chancellor Osborne, centre rear.





Professor Vaux: bringing new life to cell death research.

Significance of suiciding cells

LA TROBE University's Faculty of Science and Technology has been successful in attracting one of Australia's elite scientists – Federation Fellow Professor David Vaux.

A member of the Walter and Eliza Hall Institute, Professor Vaux is a world expert on the molecular mechanisms of programmed cell death. He joins La Trobe in 2006 to take up the prestigious five-year fellowship.

Funded by the Federal Government, the Australian Research Council's Federation Fellowships are worth quarter of a million dollars a year. They attract top research talent to Australia and help local world-leading researchers to continue their work in Australia.

Dean of Science and Technology, Professor David Finlay, says Professor Vaux will be based in La Trobe's Department of Biochemistry, but will be working closely with researchers across a range of disciplines.

To inform other La Trobe scientists and the wider community about his research, Professor Vaux delivered a public seminar in July, at the University's Institute for Advanced Study, detailing one of the most exciting research areas in biochemistry today – the reasons why millions of cells in our bodies are produced and die every second.

He said cell death and survival are vital elements in the quest for the causes and treatment of different forms of cancer and other diseases. He discussed the significance of the process of programmed cell death in normal development and the consequences of failures in this program in disease.

'A million cells are produced every second by cell division. At the same time a million cells commit suicide by a process called apoptosis,' he said. 'When cells fail to die when they should, they can develop into cancers. In heart attacks, stroke or

neurodegenerative diseases, many cells appear to activate their self destruct mechanism to die unnecessarily.

'Drugs that can cause cancer cells to kill themselves, or drugs that prevent cells from dying when they shouldn't, would make a major impact on many important diseases. Understanding the molecular mechanisms of cell death is the first step towards developing these drugs.'

Professor Vaux has made seminal discoveries to assist understanding of the molecular mechanisms of programmed cell death that has important implications in the treatment of diseases resulting from defective cell death.

While a postgraduate student, he discovered the first molecular component of the cell death mechanism. The resultant paper in the scientific journal *Nature* in 1988 has been the most highly cited paper from Australia in the last 20 years. This discovery was

followed by many others that have illuminated the role of apoptosis in normal development and disease.

Professor Vaux has won many prizes, culminating in the 2003 Victoria Prize.

Four of this year's Federation Fellowships were awarded to expatriate Australians returning to Australia from leading positions at international organisations, including Harvard and Oxford universities.

Fifteen Fellowships, including Professor Vaux's, went to researchers living in Australia who have 'demonstrated excellence and conducted outstanding and ground-breaking research', and five to foreign nationals who will bring their research talent and experience to Australia.

These research projects, and their practical applications and outcomes can be expected to deliver long-term benefits to the Australian community. ●

Dean of Education **appointed**



DR LORRAINE LING has been appointed as Professor and Dean of the newly established Faculty of Education of La Trobe University.

The Faculty of Education operates on all campuses of the University but is based at the Bendigo Campus.

Announcing the appointment, the Vice-Chancellor, Professor Michael Osborne, said: 'I am naturally delighted that the University has managed to secure the services of such an

experienced scholar for this very significant position.

'Professor Ling has been very active both in the region and on the international scene, notably in Vietnam and China, and she is ideally placed to enhance and expand the operations of the already very vibrant Faculty of Education.'

Professor Ling will be based at Bendigo and takes up her duties immediately.

The location of the Faculty headquarters at Bendigo reflects the very strong tradition of Education in

Bendigo, stretching back for well over a century.

The strength of the Bendigo base for Education is highlighted by the fact that two of the constituent Schools of the Faculty are located there and both are due to advertise professorships shortly.

In addition, the Pro Vice-Chancellor and Head of Campus, Professor Peter Sullivan, is a well-known researcher in Education and a member of the team of experts of the Australian Research Council. ●

New Head

for Shepparton Campus

MS ELIZABETH LAVENDER has been appointed to head La Trobe University's rapidly developing Shepparton Campus.

She will succeed Professor Brian Graetz who, after a lengthy and successful spell at Shepparton, is to take charge of the development of the new City Campus of the University.

Announcing the appointment, the Vice-Chancellor, Professor Michael Osborne, said: 'I am delighted that Elizabeth Lavender has agreed to accept this exciting opportunity to play a leading role in shaping the new University campus at Shepparton.

'She has worked extensively in the region, and is currently the Deputy Dean of the Faculty of Health Sciences and serves on the University Council.

'She has the essential attributes and experience to oversee the development of the new campus.

'The University has had a presence in Shepparton for quite some time, but has been based largely in borrowed or shared facilities. A new phase is about to begin, as the University develops an independent campus and looks to expand its programs appropriately. In this context the appointment of an experienced and committed Head of Campus is most welcome.' ●



Dual role for consumer advocate

LEADING AUSTRALIAN consumer advocate, La Trobe University Adjunct Professor of Law, Chris Field, has taken up a Western Australian Government appointment to that State's Economic Regulation Authority.

As a member of the new independent regulator of WA's gas, electricity and rail industries, he will put into practice his commitment to the value of independent regulation of markets.

'Independent regulation serves the long-term interests of consumers,' he says.

A La Trobe Arts/Law Honours graduate, he was the Executive Director of the Consumer Law Centre Victoria and national media commentator on consumer issues. The Centre established Victoria's largest free consumer legal practice to help low income earners. It also raised more than two million dollars for consumer research, policy development, projects and public advocacy of major consumer issues.

Professor Field has also served for the last four years

as Chairman of the Australian Consumers' Association and is a Director of both the Energy and Water Ombudsman Victoria and the Consumer Utilities Advocacy Centre. One of the original La Trobe Law degree graduates in 1995, he says he looks forward to developing his role with the University following his appointment last year as Adjunct Professor of Law.

'The WA appointment is a half-time post, and my work at La Trobe University to prepare today's students to be tomorrow's public interest advocates is something to which I am deeply committed.' ●



La Trobe at History 'Olympics'



La Trobe University was strongly represented at the recent 'Olympics of History' – the largest group of historians and scholars from related disciplines ever assembled in the Southern Hemisphere.

Held in Sydney and opened by the then NSW Premier, Bob Carr, the 20th International Congress of Historical Sciences drew 1,500 delegates from more than 70 countries. The five-yearly event had previously always been held in Europe or America.

La Trobe participants included University Vice-Chancellor and classical scholar, Michael Osborne; Head of Historical and European Studies, archaeologist Tim Murray; historians Marilyn Lake and Angus McGillivray; classicist Sean Byrne and philosopher, Behan McCullagh.

Sponsored session

La Trobe University also sponsored the major congress session on Ancient History: *The Foreigner in Antiquity*. It was led by Professor Michael Osborne and included leading scholars from the UK, USA, Belgium, Greece and Denmark as well as Sean Byrne from La Trobe University.

Professor Osborne is a well-known

classical scholar specialising in Greek history and epigraphy and he was most recently honoured in Australia by the prestigious NIKE Award for services to Hellenic Studies.

His work, *Naturalisation in Athens*, published by the Belgian Royal Academy, deals with the problems of integrating foreigners into the State in antiquity. It is regarded as the definitive work of scholarship in its field.

Professor Osborne with Sean Byrne has also carried out a comprehensive study of the inhabitants of ancient Athens, in two volumes, published as *A Lexicon of Greek Personal Names Volume II Attica* (Oxford) and *The Foreign Residents of Athens* (Leuven).

Professor Osborne is a foundation member of the International Advisory Committee for a project publishing all the known inscriptions of ancient Athens and with Sean Byrne is currently producing the two volumes encompassing the third century BC.

Milestones in archaeology

Professor Tim Murray addressed a session, *History, Anthropology and Archaeology*, convened by Alain Schnapp. Director of the National Institute for the History of Art in Paris, Professor Schnapp, was awarded an honorary doctorate by La Trobe after the congress (see next page).

Professor Murray's primary research is in the history and philosophy of archaeology, and he is editor of the multi

award-winning five-volume *Encyclopedia of the History of Archaeology*. His new history of archaeology, *Milestones in Archaeology* is to be published late this year. One of his research projects in urban archaeology was recently selected as one of seven from throughout Australia by the Council for the Humanities, Arts and Social Sciences for its report on commercialisation for Education Minister, Brendan Nelson, (see previous issue of the *Bulletin*). Professor Murray spoke to the conference about the relationship between archaeology, history and anthropology.

Citizenship and gender

Professor Marilyn Lake – whose research interests include the historical and transnational representation of race and gender – was invited to join an international panel of historians to discuss the theme 'Civil Society: Citizenship, Gender and the Public Sphere'. Her most recent book was the prize-winning biography *FAITH Faith Bandler Gentle Activist*.

Professor Lake currently holds an Australian Professorial Fellowship and is writing three books: *A New World for White Men*; *Special Friends: Fraternal Yearning Across the Pacific*; and *Mr Deakin's Tragedy*. She is also editing a collection of papers for the *Australian Academy of the Humanities* called *Memory, Monuments and Museums*, based on the Academy's last annual symposium

Continued page 14



Professor Murray, left, reads the citation prior to the University's award to Professor Schnapp, standing centre.

Inaugural Jim Allen Lecture Images of the Classical World

A NEW PUBLIC lecture series to bring archaeological scholars of significant international reputation to Australia to enrich teaching and research was launched by the University in July.

Named 'The Allen Lecture', the event honours one of Australia's pre-eminent archaeologists, La Trobe University Foundation Professor of Archaeology, Jim Allen.

Professor Jim Allen was appointed Foundation Professor of the Department of Archaeology at La Trobe in 1985 and, from 1993 until his retirement from full time academia in 1998, he was an Australian Research Council Professorial Fellow at the University.

During his long archaeological career Professor Allen was most famously associated with two major research projects: the Lapita Homeland Project (based in Melanesia) and the Southern Forests Archaeological Project (based in Tasmania). In 1998 he was appointed Professor Emeritus in La Trobe University and

is currently also a Fellow in the Centre for Archaeological Research at the ANU and Research Professor in Anthropology at the University of Utah, USA.

The inaugural lecture was given by the Director of the National Institute for the History of Art in Paris, Professor Alain Schnapp who spoke on *Vestiges, Monuments, and Ruins: East faces West*. An internationally recognised historian of archaeology and classical archaeologist, and also Professor of Archaeology at the University of Paris 1 (Panthéon-Sorbonne), he has conducted excavations in Italy and Greece, most recently publishing reports of the excavations at Itanos in Crete.

His work interprets Greek images and their use to explain the social history of ancient cities. Some of it, on the representations of hunting and female youth in the Greek world, deals with the use of hunting and erotic imagery. His later research concentrates on the link between the symbolism of the body and civic space

and the interpretation of traditional Greek imagery from antiquity until the Age of Enlightenment. Professor Schnapp was awarded the honorary degree 'Doctor of Letters' by the University in recognition of his contribution to the study of archaeology in Europe and Australia. La Trobe University Head of Historical and European Studies, Professor of Archaeology, Tim Murray,

who hosts the new lecture series, said Professor Schnapp contributed to the study of archaeology at La Trobe 'as a source of advice and by demonstrating the great benefits that can flow to archaeology through a meaningful intersection with art history and the traditions of antiquarian scholarship'. ●

'tis men, not walls, a city make

Another visitor during July was Professor June Allison, from Ohio State University and the American School of Classical Studies at Athens. She gave a public lecture on the *Narrative Construction: The Siege Walls at Troy and at Syracuse*.

Focusing on Thucydides' story of Athens' disastrous expedition against Syracuse in 415-413BC, which makes extensive use of Homeric elements, Professor Allison examined similarities between the camp Athenians built on the plain outside Syracuse and the walls constructed by Achaeans around their ships outside Troy.

She said both authors created a 'reversal' whereby the invaders, the Achaeans and the Athenians, become 'besieged' by the very people they came to invade: the Trojans and the Syracusans. At the close of their desperate retreat Thucydides manages to undermine the meanings Athenians had come to associate with their ships and self-confidence: it is men that make a city, not walls! Professor Allison's visit was hosted by the University's National Centre for Hellenic Studies and Research, and the Australian Institute of Archaeology. ●

Million dollar COLLABORATION for malaria vaccine

COLLABORATIVE RESEARCH between two La Trobe University biochemists and a structural biologist from the Walter Eliza Hall Institute of Medical Research (WEHI) could accelerate the development of an effective anti-malarial vaccine, and provide an early diagnostic test to confirm it is working.

The three scientists – Professor Robin Anders, Associate Professor Dr Mick Foley, both from La Trobe’s Department of Biochemistry, and Professor Ray Norton from WEHI – have been awarded a five-year \$US 1 million grant by the US National Institutes of Health to research the structure and function of two malaria parasite proteins involved in the interaction between the disease and induced immunological responses.

By studying in detail the structure and behaviour of two surface proteins present in the virulent malaria parasite *Plasmodium falciparum* – antigens AMA-1 (Apical Membrane Antigen-1) and MSP2 (Merozoite Surface Protein 2) – the group aims to identify which parts of the antigen molecules are ‘recognised’ by which antibodies triggered in the immunological response to infection.

The scientists aim to differentiate molecular parts recognised by antibodies that protect against infection, from those recognised by antibodies that are ineffective or even counter-protective. They believe this will explain which parts of the antigen molecule the malaria parasite tries to change to avoid being destroyed by the human body’s immune response.

‘Infection is always an arms race,’ says Dr Foley. ‘If we get invaded by a pathogenic organism, we make an antibody response to it. Those antibodies try to kill the pathogen, the pathogen then tries through evolution to avoid that immune response.’

‘In malaria, we don’t know what sort of immune response is protective, and which are the important immune molecules we need to inject into people, so the structural and immunological work funded under this grant hopefully will give us that information,’ he said.



The new research will extend almost two decades of collaboration between the scientists, originating in a vaccine development program undertaken by the Walter Eliza Hall Institute and the Queensland Institute of Medical Research in the early 1980s.

The MSP2 antigen – cloned by a PhD student in Professor Anders’ laboratory in 1988 – has recently shown some efficacy in controlling the growth of the malaria parasite in infected humans. Research at La Trobe within the CRC for Vaccine Technology’s malaria vaccine development program aims to develop an improved version of the MSP2 vaccine,

for clinical trial within the next 12-18 months.

The group hopes their new research will not only lead to the use of one or both antigens as critical components of an efficient vaccine, but also to developing a simple diagnostic test which will establish if someone inoculated with the vaccine is effectively protected.

The group is one of a handful around the world attempting to define the structural properties of the antigens AMA-1 and MSP2.

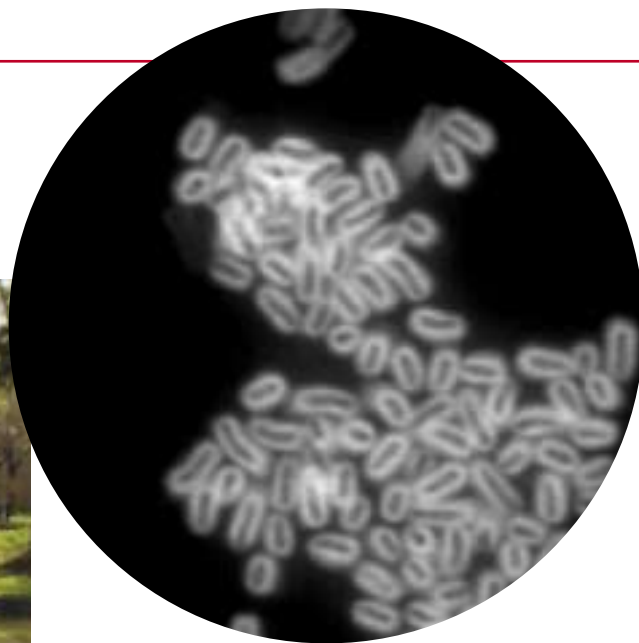
‘With the solving of the malaria

Continued page 11



Dr Foley, left, with Professor Anders and, inset, Professor Norton.

A tale of two polysaccharides



From left, front Dr Stanisich, Professor Matthyse, PhD scholar Sanja Aracic, and Professor Stone.

If there's a case to be made for science imitating nature, it's scientists in labs who have to make it happen – watching, waiting, and tweaking to find out just how nature does it.

In the case of experiments under-way in La Trobe's microbiology department, it also involves a measure of nano-scale skulduggery – cloning synthetic genetic material and switching the synthetic bits with natural material excised from a string of bacterial DNA, to test their role.

It's all in a day's work for visiting US geneticist and IAS Distinguished Fellow Professor Ann Matthyse from the University of North Carolina, and her collaborators at La Trobe, Emeritus Professor in Biochemistry, Bruce Stone, and molecular biologist, Dr Vilma Stanisich, from the Department of Microbiology.

What is likely to happen, they know, is that the cells of the plant-colonising *Agrobacterium* will get very confused. Instead of directing the production of cellulose, a polysaccharide which helps the *Agrobacterium* bind to the roots of plants, they will probably send out a different set of instructions, resulting in the production of a different polysaccharide, called curdlan.

Studies at La Trobe have shown that both polysaccharides help the bacterium to survive in the soil, but why the

Agrobacterium produces two so closely related substances is a biological mystery.

If the DNA switching trick works, the team will then reverse it, to see what happens when the cells are tricked into thinking they should produce cellulose; and if they do, science will be well *en route* to explaining how and why the organism synthesises both polysaccharides, when one might do.

Apart from a theoretical interest, why do we want to know? Because the results could help to improve agricultural disease control.

The likelihood is that plants all over the world cheerfully co-exist with these soil-dwelling bacteria, because they protect their hosts from disease.

Like 'good' bacteria in the human gut, they probably colonise the roots of plants to guard against pathogens invading the plant's 'digestive tract' where it is most vulnerable – using polysaccharides to bind and form a protective barrier over surfaces of the root system.

The hypotheses guiding these experiments might arguably never have happened independently of the collaboration between La Trobe and the University of North Carolina; they are the direct result of the scientific synchronicity that brought these scientists together.

Professor Matthyse and her colleagues at the University of North Carolina were investigating the synthesis of one polysaccharide, and Professor Stone and Dr Stanisich at La Trobe, the other. When the three researchers discovered two years ago they had been simultaneously

investigating two separate if inextricably linked processes of the same organism, they quickly recognised the value in collaboration.

'The more we talked it over the more evident it was there were experiments we needed to do that none of us could tackle on our own, but all three of us could do together,' says Professor Matthyse.

'Almost nothing is known about why a particular protein synthesises one type of polysaccharide and a related protein synthesises another type.

'We've been looking at the synthesis of one polysaccharide, cellulose, and they've been looking at the synthesis of a closely related polysaccharide, curdlan. Nobody else has a system where they've got two proteins so closely related, made by the same organism, which synthesise different but related molecules.'

Because both teams have now invested more than a decade in separate research, they clearly have a few hunches about the likely outcomes from their integrated work, but Professor Matthyse says they're still 'prepared to be surprised.'

'Results so far indicate that the switching experiments will work.'

These results, she says, are interesting 'because if you want to make synthetic polysaccharides it helps to know how the bacterial cell does it.'

Customers of applied science may be interested too in their application for medical and industrial use – particularly the US Department of Energy, which is interested in the potential uses of cellulose as an alternative energy source. The Department funds Professor Matthyse's work in the US. ●

Mitochondria research

Understanding Dr Jekyll and Mr Hyde

MITOCHONDRIA, say La Trobe University researchers, Drs Mike Ryan and Ann Frazier, are the Jekyll and Hyde of our bodies.

Mitochondria are organelles, highly specialised structures essential to the viability of our cells – but their activity can be both good and bad.

They play a fundamental role in providing energy for the cell but they also contain proteins that can be ‘poisonous’ and, when released, can cause the death of the cell.

Dr Ryan and Dr Frazier,

of La Trobe’s School of Molecular Sciences, have embarked on a four-year research project aimed at improving understanding of the machinery by which mitochondria operate.

There are many important long-term implications in this work, including the treatment and possible prevention of mitochondrial disorders as well as Parkinson’s diseases and some forms of cancer.

Dr Frazier, an American biochemist who completed her PhD in Germany, recently won a Human Frontiers Science

Program (HFSP) fellowship to perform research in Dr Ryan’s laboratory.

The goal of the Fellowship is to promote the development of a global network of talented young scientists by enabling postdoctoral fellows to obtain training in a new area of research in an ‘outstanding laboratory’ in another country.

Dr Frazier opted to use the grant from the Strasbourg-based organisation to work at La Trobe. She had previously collaborated with Dr Ryan while working in Germany and visited his laboratory last year as part of an ARC-Linkage International grant awarded to Dr Ryan.

As well as the HSFP grant, Dr Frazier has also won a La Trobe University postdoctoral fellowship. ‘The La Trobe fellowship scheme is an excellent initiative by the University and I am very grateful for the award,’ Dr Frazier said. A combination of these grants will extend her work at Bundoora to at least four years.

She and Dr Ryan, a senior lecturer who specialises in mitochondrial biogenesis, explain that mitochondria are like energisers in our cells. ‘They are complex because they not only grow and divide, but they also fuse together. These changes are important for supplying energy to all parts of the cell,’ Dr Ryan said.

‘We are looking at the machinery involved in how they divide and how they distribute themselves inside our cells. If we know the basics, we can understand how changes in mitochondrial morphology occur in more specialised cells. For example, sperm cells contain fused

mitochondria that wrap around the base of the tail and supply energy for their swimming,’ Dr Ryan said.

Here is where the Jekyll and Hyde factor emerges because while the body benefits from the energy provided by mitochondria, it suffers when they play their other role – causing cell death. Regulated cell death is important during embryonic development and in removing old cells in our bodies as new ones are made. The problem is that cancers also form when not enough cell death takes place. There is evidence that cell death is caused by changes in the morphology of mitochondria.

Dr Ryan’s team also collaborates with researchers from Melbourne’s Royal Children’s Hospital (RCH) with the aim of helping the one in 5,000 babies born worldwide with a mitochondrial disease.

Such diseases are classified as energy generation disorders and result in babies being unable to sufficiently utilise their muscles and nerves. There are also common neurodegenerative disorders associated with abnormal mitochondrial metabolism, often resulting in a fatal outcome.

The La Trobe team is working with Dr David Thorburn of RCH’s Murdoch Children’s Research Institute, examining skin cells from patients with mitochondrial disease to determine which defects are present. Both aspects of mitochondrial biogenesis are funded by separate grants from the National Health & Medical Research Council. ●





Helping Counsellors counsel

A LA TROBE UNIVERSITY psychologist is collaborating with American and Canadian colleagues in research to assist counsellors and psychotherapists to better assist those who seek their help.

The project, which began three years ago, aims basically to understand the thoughts, feelings and emotional processes of people suffering from a number of forms of distress.

According to Dr George Wills, Coordinator of the Master of Counselling Psychology program in La Trobe University's School of Public Health, a fuller understanding of such feelings and emotional processes enables counsellors to better pinpoint the source of emotional problems – and hence to treat them more effectively.

'Human distress is usually caused when people lose touch with themselves,' Dr Wills explains. 'Our research is attempting to find out why by concentrating on examining in depth a small number of cases rather than superficially surveying a large number.'

The project expands Dr Wills' career-long interest in humanist-existential approaches to psychotherapy to include research into areas described as 'Process Experiential Therapy' and 'Emotion Focused Therapy'.

These approaches have been developed by his collaborators, Professors Laura Rice and Leslie Greenberg (York University, Toronto) and Professor Robert Elliott (University of Toledo, Ohio).

Professor Elliot visited La Trobe in 2000 as a

Distinguished Visiting Fellow and worked with Dr Wills' students on several projects.

Dr Wills said the approaches emphasised the relationship between the therapist and client, the client's capacity for personal growth, and the importance of giving attention to psychological processes in clients in accounting for treatment outcome variance.

In collaboration with Professors Elliott and Greenberg, Dr Wills has been coordinating a set of research projects with La Trobe students in the Master of Counselling Psychology, the Doctor of Clinical Sciences and PhD programs.

These include inquiries into the experiences of adolescent depression, men's uncontained anger, post-natal depression in Vietnamese women, parents of children suffering from the

terminal condition hypoplastic left heart syndrome and men and women diagnosed with body dysmorphic disorder.

'Let me give you an example here in Australia where we have a large Vietnamese population. Traditionally Vietnamese women take problems like post-natal depression to very close friends or relatives – and would never dream of broaching their problems with a stranger, even a well qualified professional. If psychotherapists or counsellors were not aware of this, they would make little progress and would not know why.

'All collaborators are gathering and sharing reliable information about client experience that can be used to assist professional counsellors

better to empathise with the experiences of different groups of people,' Dr Wills said.

'Better empathy means better counsellor-client working alliances and deeper client experiential understanding of their conditions, which permit clients to move on from feeling stuck with their distress.

'At the moment we are starting research into the detail of therapist experience of working with depression in adolescents and of depressed adolescents' experiences of working with the therapist.

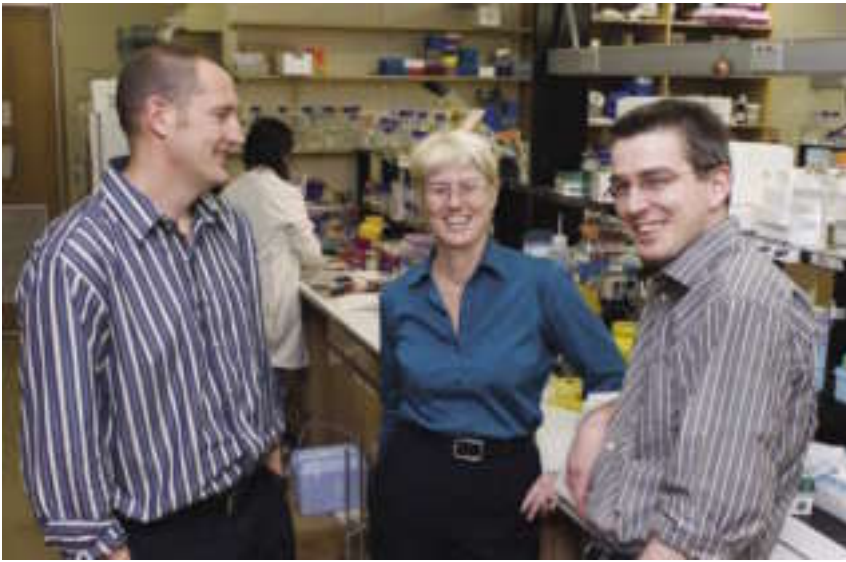
'Often what therapists think most strongly influences client outcomes is not what clients think produces constructive change. As professionals, we could assume that we really know, but in this research we intend to begin to find out.

'The research is being conducted using "post-positivist" methodologies. These methods permit researchers to find out, in great detail, what processes occur during therapy. Later we intend to conduct research of a more normative kind employing the information we are currently gaining.

'Research conducted mainly in Europe, the United States and Canada is revealing that outcome effects on clients with many different presenting difficulties are at least comparable to other approaches to therapy, including cognitive behaviour therapy.

'There is plenty of evidence that generic qualities are what accounts for outcome and that the most likely form these qualities take is derived from therapist sensitivity to clients, clients' interest in recovering from distress and having the social supports that enable this to happen.' ●

Major development in coherent x-ray science



LA TROBE UNIVERSITY is one of a number of Australian and overseas universities and other organisations sharing a \$9 million Australian Research Council grant over five years to develop a Centre of Excellence in Coherent X-Ray Science.

Deputy Director of the Centre, La Trobe Professor of Biochemistry, Professor Leann Tilley said: 'The ARC funded Centre will

bring physicists, chemists and biologists together to develop fundamentally new approaches to probing biological structures and processes.

'It combines world-class expertise in imaging, structural biology, laser science and molecular theory. The project will develop novel high-resolution imaging and probing using the Australian Synchrotron, and ultimately x-ray lasers to determine the

structures of important targets for drugs whose molecular architecture cannot be seen with current techniques.

'An overarching scientific aim of the centre is the determination of the structure of membrane proteins,' Professor Tilley said. The Centre's Director is Professor Keith Nugent, Federation Fellow in Physics at the University of Melbourne. La Trobe's departments of Physics

and Biochemistry will participate in the program scheduled to start later this year. University Queen Elizabeth II Research Fellow, physicist Dr Andrew Peele, explained that x-ray sources were becoming ever brighter, and x-ray lasers would be available in the next 10 years.

'These sources will open up whole new areas of investigation such as the structural determination of

proteins not amenable to conventional methods,' Dr Peele said.

Another La Trobe academic involved in the research will be Dr Mike Ryan of the Department of Biochemistry (see 'Mitochondria Research', page 9).

Collaborating or contributing organisations include Melbourne (host institution), Swinburne and Monash universities; CSIRO divisions of Health Sciences and Nutrition and Infrastructure Technology; the Australian Synchrotron Research Program; Walter and Eliza Hall Institute of Medical Research; Riken National University of Singapore; Lawrence Livermore National Laboratory, Advanced Photon Source, Chicago; and the Victorian Department of Innovation, Industry and Regional Development. ●

Photo from left, Dr Peele, Professor Tilley and Dr Ryan: many branches of science are converging to probe biological structures and processes.

MALARIA VACCINE *Continued from page 7*

genome in 2002, we've got all this data about the sequence of the genes, but the challenge in the post-genomic era is finding out about the structure of the proteins these genes encode,' says Professor Robin Anders. 'If you look at the different genomes that have been solved and what proportion of genome has now been translated into structures of the proteins, the malaria field is abysmally behind.

'We've only just got the first complete structure of one antigen considered a malaria vaccine candidate, so there's a real need for more structural studies to inform the vaccine development, and perhaps even to open up avenues to more therapeutic approaches using drugs.'

While an understanding of the immunological interaction between antigens and antibodies might not affect the timing of the development of a 'Mark 1' anti-malaria vaccine, it would enable an early diagnostic test to assess if that vaccine works, Professor Anders says.

'Then maybe the Mark 2 vaccine further down-field, say five years beyond that, will be changed in light of that information'.

The scientists also anticipate being able to define some of the functional behaviour of malarial antigens – a research bonus not anticipated in their original funding proposal.

'It's very exciting,' says Dr Foley. 'The information we have will make that hit and miss nature of developing a vaccine much more rational.'

Collaboration between the three scientists began when Professor Anders and Dr Foley began working together on malaria in 1987. Professor Anders' involvement in Melbourne's protein chemistry community led to his research links with Professor Norton, and their small collaboration on malaria research 15 years ago also expanded.

Common interest led to a collaboration integrating Professor Anders' protein chemistry and immunological work, Dr Norton's structural nuclear magnetic resonance expertise, and Dr Foley's diagnostic research in peptides that interact with malaria proteins. ●

Understanding Indonesian Politics

SPECIALIST in Indonesian politics, senior lecturer Dr Angus McIntyre, has published a book that helps Australians understand the history of the Indonesian presidency.

Dr McIntyre's interest in the region goes back to his undergraduate days, subsequent research in Indonesia in the 1960s and then his MA studies at Yale University, where he attempted to reconcile his field work with theories of political science.

Mindful of 'the irreducible importance of the individual actor in history', Dr McIntyre blends political biography and political history, placing Indonesia's presidents within local frameworks and the global biographical literature on political leaders.

The Indonesian Presidency shows how Indonesia's 1945 constitution provided first for the personal rule of presidents Sukarno and Soeharto and then facilitated the shift towards constitutional rule that marked the



presidencies of B J Habibie, Abdurrahman Wahid, and Megawati Sukarnoputri.

The study elevates the personalities of Sukarno and Soeharto into key factors explaining the character of their respective 'Guided Democracy' and 'New Order' regimes and argues that in 1957 Sukarno began fashioning his system of personal rule, to the detriment of Indonesia's parliamentary democracy.

Another historical turning point was 1998, when rudimentary constitutional rule reappeared. The shift since, from personal to constitutional rule, has its personal counterpoint in the relationship between Megawati and her father – which makes Dr McIntyre's blend of history and biography an extremely useful tool for understanding the Indonesian presidency and modern Indonesian politics.

The Indonesian Presidency: From Personal toward Constitutional Rule (Rowman & Littlefield, 2005.) ●

Death and loss

Leading Australian sociologist and La Trobe University Professor of Palliative Care, Allan Kellehear, has produced another book to improve our understanding of death and loss, two issues of major significance to public health. Titled *Compassionate Cities: Public Health and End-of-Life Care*, it is published by Routledge in Great Britain.

The book is a critique of current public health understanding of health and lifestyle and offers an alternative model of practice. It links palliative, bereavement and aged care with issues such as religious tolerance, refugee and indigenous dispossession, and third-world politics to sketch a new way of viewing end-of-life care as a public health issue for the 21st century.

Death and loss continue to be misunderstood despite being the most universal and routine human experiences, says Professor Kellehear. 'For too long we have viewed death as the enemy of health when in fact it was illness and disease that properly occupied that place.

'We often identify death as a threat to, or a failure of, public health policies and initiatives. But this too is untrue. The aim of all health care has always been to prevent premature death and unnecessary harm and to promote feelings of well being.

'End-of-life care, in all its endlessly diverse expressions in daily life, should be the serious subject of public health investigation, policy and practice,' he says.



Greeks in Australia

Professor Anastasios Tamis' latest book, *The Greeks in Australia*, was launched recently by former State Premier, Jeff Kennett at

a ceremony held at State Parliament House. Mr Kennett described it as 'a good read' for both Greeks and non-Greeks which takes 'takes the reader on a journey' as remarkable as the journey taken by Greek immigrants when they set out for Australia in the hope of a better tomorrow'.

Numbering approximately half a million, the Greek community in Australia comprises the second largest ethnic minority after Italians.

Published by Cambridge University Press, the book details the contributions made by Greeks to Australia from the early days of settlement, through two large waves of migration in the nineteenth and twentieth centuries, to today. It also examines conditions in Europe that led

to migration and the ways in which the Greeks have maintained a solid sense of Greek cultural expression in Australia.

Wealth redistributed

Recently retired after 36 years at La Trobe, economist Michael Schneider, has published his latest book, *The Distribution of Wealth*. Mr Schneider uses data from 15 countries to demonstrate how inequality in the distribution of wealth varies between different parts of the world and changes over time.

He discusses why distribution is unequal, whether it should be unequal, and how it could be changed. Mr Schneider also compares distribution implied by alternative views of society and discusses means by which distribution could be altered – and whether less unequal redistribution would, in time, reduce the amount of wealth available.

The book is aimed at economists, particularly those in the fields of welfare economics, distribution theory, heterodox economics and the history of economic thought, as well as sociologists, political scientists and philosophers. ●

Running for East Timor

LA TROBE UNIVERSITY lecturer in health psychology, Dr Sandra Tunley, has helped the new nation of East Timor to get up and running. In May last year Dr Tunley, from the Bendigo Campus, went to East Timor for the Alola Foundation to promote a breastfeeding program.

Set up by East Timor's First Lady, Kirsty Sword-Gusmao, the foundation initially dealt with problems of sexual and gender-based violence experienced by women and girls of East Timor. It now addresses wider women's issues, including the health of newborn babies.

Dr Tunley returned to East Timor in May this year to follow up on the original breastfeeding program, now established in many districts, and to promote a new venture called 'Ten Healthy Habits'.

'East Timor is slowly rebuilding,' she says, 'but people are still hungry, and have only basic shelter. There are few jobs and the nation's best hope lies in education and training.'

Dr Tunley, accompanied by former colleague Wendy Sheldon, was well aware there were limits to what they could do to help in two weeks – but they hoped that they could achieve a little in addition to their professional role. Their opportunity came when they met East Timor Olympian, Aguida Amaral, who, with her husband Antonio, trains children to run in the mountains. The children trained in thongs or bare feet.

Dr Tunley emailed her colleagues on the Bendigo campus asking them to pledge \$5 for a pair of shoes. Minutes later 12



Aspiring East Timorese athletes hold up some of their new running shoes, with Ms Amaral, second row, second from right.

pledges arrived. Within 24 hours there was enough money to buy 150 pairs.

With the help of Ms Amaral, shoe sizes were obtained that afternoon, and twelve dozen pairs of running shoes were purchased. Three days later the shoes were on the feet of the aspiring athletes.

'Even two weeks can make a difference,' says Dr Tunley. ●

Helping hand for a little ray of sunshine

LITTLE SHIRLEY YAPEA from isolated Mondo Ando village, five hours by four-wheel drive from Goroka in the Papua New Guinea Highlands, now has a chance of a normal life.

But until La Trobe University lecturer in Nursing and Midwifery, Ms Nola Aicken, met her in May 2004, Shirley faced a life of pain, seriously impaired movement, and social ostracism.

Reduced mobility in the PNG Highlands, where most people walk everywhere and work on their feet, means social stigma and poverty.

Ms Aicken, from the Bendigo Campus, who was spending two weeks with a volunteer team of midwives at the Goroka Hospital, found Shirley, aged 10, the only child in a crowded adult surgical ward.

'It was very much a third-world hospital ward. Amid the decay, death, and ambience of hopelessness, I saw a little girl sitting on her bed, smiling. Among the desolation she was little ray of



sunshine,' said Ms Aicken. 'It was the following day when I visited her again, that I fully realised her plight. She was not covered with a sheet and I saw the severe burns to her lower limbs.

Shockingly burned in January that year from a kerosene spill that had set fire to her nylon clothes, she had been given little chance of pulling through. Despite the lack of antibiotics, pain relief and appropriate

dressings, Shirley survived against all odds. Ms Aicken decided Shirley needed better treatment, and when she returned to Australia, contacted Rotary.

Rotary clubs in Goroka and Bendigo responded and, with the assistance of Rotary Medical Aid for Children, Shirley's fare to Australia was raised and Ms Aicken arranged for her admission to St John of God Hospital, Bendigo, where medical staff donated their services.

When Shirley arrived in Bendigo in early in May she could barely move because of three open wounds on her legs. Two weeks later she underwent a major operation and skin grafts.

'She is now walking normally,' said Ms Aicken. 'Although she still has considerable scarring, she has the chance to lead a normal life, thanks to the help of so many generous people.' Shirley returned to Papua New Guinea at the end of July with her aunt who had accompanied her to Australia. ●

Boost for physiotherapy & nursing in regional Victoria

Regional physiotherapy and postgraduate nursing students will benefit from a new teaching and research facility at Bendigo Hospital – a partnership between La Trobe University and the Bendigo Health Care Group.

Health Minister, Bronwyn Pike, recently open the \$900,000 refurbishment which will accommodate the new La Trobe University - Bendigo Health Care Group School of Physiotherapy and Clinical Nursing School.

Professor of Health Sciences, Hal Swerissen, said the facility comprises clinical laboratories, tutorial and lecture rooms.

‘This partnership bridges the divide between theory and practice by bringing the schools into a hospital environment,

giving students daily interaction with clinicians and clinical practice. It also provides opportunities for increased teaching and research in Bendigo.’

Clinical Nursing accommodates postgraduate nursing students in critical care, midwifery, mental health, maternal and child health and clinical education.

Dr Helen McBurney, Associate Professor of Physiotherapy, said the School of Physiotherapy at Bendigo has increased access for regional students to one of the University’s most popular courses.

It provides opportunities for 30 students to complete their last two years of study



Health Minister Pike and La Trobe Dean of Health Sciences, Professor Stephen Duckett.

in Bendigo based full-time at the Bendigo Health Care Group.

‘Until now, they could complete clinical placements in Bendigo but there had been no facilities for full-time education,’ Dr McBurney said.

Support for the refurbishment and salaries has come from the Department of Human Services. The Helen McPherson Smith Trust has helped fund new physiotherapy equipment for the new facility. ●

La Trobe at History ‘Olympics’

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the *Narrative Constraints on Historical Understanding* at a session titled *Between Social Science and Literature: the Changing Place of History*. He argued that simple historical narratives must be augmented by psychological, ideological, structural and other contrastive explanations if the importance of the events they describe are to be fully understood.

Soils and fields

Associate Lecturer in History, Angus McGillivray, gave a paper titled, *Soils and Fields: Material Culture and the Spatial Patterning of the British Settlement of New South Wales*, providing a new perspective on early agriculture and land settlement. A Western

District farmer and passionate historian, Mr McGillivray is completing a PhD on ‘Agricultural Imperialism in the Antipodes: Convicts, Cultivation, and Transference of Civil Society’ under the supervision of La Trobe Professor of History, Alan Frost.

Book launch

The conference also provided an international platform to launch a new book by La Trobe historian, Dr Jim Hammerton. Titled *Ten Pound Poms: Australia’s Invisible Migrants*, it was launched by Michelle Rayner from the ABC History Unit. The book is based on a five-year, two-nation research project into post-war British migrants in



Australia, and was co-authored with Dr Alistair Thompson from Sussex University.

Previous launches of the book were at Australia House, London, and at the Immigration Museum in Melbourne, where it was launched by Shadow Immigration Minister, Julia Gillard. ●

Ron Elisha launches EINSTEIN LECTURES

Melbourne’s multi-award-winning and internationally-performed playwright, Ron Elisha, delivered the first in a series of four La Trobe University Einstein Physics Lectures in August.

Titled *Defying Gravity*, the lecture was part of the University’s contribution to Australia’s ‘Einstein Year’ celebrations. With the play *Einstein* among his major successes, Ron Elisha explored why that name has become a synonym for genius. He discussed Einstein the person, his relationships with his family, his colleagues and his discoveries.

A general practitioner, Ron Elisha has won four Australian Writers’ Guild Awards (AWGIES) for best scripts for works for stage and television, including the Major Award in 1982 for his play *Einstein*. ●

Brotherhood in its true sense

The word 'brotherhood', because of its modern connotations of secrecy and intrigue, has lost its true meaning of fraternity and good will.

But in one context at least the word has maintained to the full its true meaning. That is in the Brotherhood of St Laurence, one of Australia's largest welfare organisations.

Although an independent body, the Brotherhood has been closely linked with the Church of England since its foundation in 1930 in the New South Wales industrial city of Newcastle.

Since then it has a proud record, not only of looking after the physical and spiritual welfare of those in need, but

material or memories of the early days of the Brotherhood.

The Brotherhood's aim of preventing the creation of situations in which poverty breeds, is encapsulated in the words of its founder, Father Gerard Kennedy Tucker: 'I don't want the Brotherhood to drive an ambulance to the bottom of the cliff. I want it to build a fence around the top of the cliff to stop people falling over'.

The organisation's motto: 'Working for an Australia free of poverty' also reflects the

assembled the poor of Rome before the imperial palace, declaring them the Church's real treasure.

The Great Depression was at its height when Father Tucker, strong willed and compassionate but possessing a stutter that almost made him inarticulate, looked for a way to help the poor in his parish of St Stephen in Adamstown, a working class area of Newcastle.

He formed the Brotherhood as a religious order but concentrated on the more

unemployed men and boys and even a housing settlement at Carrum for poor families.

Father Tucker was always to the fore, often annoying those in high office with his words and actions – like organising 'sit-ins' to try to stop families being evicted during the 1940s.

Although founded as a religious order, the Brotherhood became a secular organisation after World War 11, but continued to expand its work until it became one of Australia's largest charitable organisation in terms of the number of people it employed. Currently it has 600 full time and part time employees.

Father Tucker led the Brotherhood until 1970. Other leaders have included Archbishop Peter Hollingworth, later to become Governor General, and Mr David Scott, long associated with Community Aid Abroad which was also founded by Father Tucker.

The Brotherhood differed from other religious-based social welfare organisations like the Salvation Army and the St Vincent de Paul Society in that it developed an influential research and advocacy role.

Dr Trembath and Father Holden received an ARC grant over two years to produce the history. The Brotherhood contributed as did La Trobe University by offering office facilities and administration assistance. The overall management of the project is in the hands of Professor Judith Brett and Dr Trevor Hogan, both from La Trobe's School of Social Sciences. ●



of fearlessly advocating social change for a fairer and more inclusive society.

The full story of the work of the Brotherhood is about to be told with the publication next year of the Brotherhood's history, co-authored by La Trobe University Politics Program research associate, Dr Richard Trembath.

The other co-author of the book, which is as yet untitled, is Melbourne church historian, Dr Colin Holden. Both men are keen to hear from anyone who may have interesting

founder's aims.

Providing often unpalatable advice to all levels of government on how poverty could be prevented or eliminated has occasionally led to its leaders being strongly rebuked by politicians.

But to date its leaders have been spared the fate of its patron saint, St Laurence, who, when ordered in the third century AD by the Emperor Valerian to hand over the Church's valuables, was slowly roasted alive when he

practical aspects of charity – directly providing food and shelter for the growing numbers of new poor who had lost their jobs.

Three years later it spread to Melbourne when it established St Mary's Mission in Fitzroy to help the poor and homeless victims of the Depression who congregated in that inner city area.

With 30 per cent of the workforce unemployed when the Depression reached its peak, the Brotherhood set up hostels for homeless

Darebin La Trobe Acquisitive Art Prize

Unsettling our sense of reality



'Significant cultural events are an important part of the University's education and community outreach.'

THE UNIVERSITY'S award for the 'Best Work' in this year's City of Darebin La Trobe University Acquisitive Art Prize has been won by Viki Petherbridge, above.

Valued at \$5,000, the prize was for a photograph titled, *And She Was (Homage to Talking Heads)* described as evoking 'the disturbing images of Man Ray and Magritte' unsettling 'our sense or reality'.

Nusra Latif Qureshi won the 'Emerging Artist' award worth \$3,000, for a digital print on paper *Island Dream 1*.

The winning works and those of the other 46 finalists were exhibited at the Bundoora Homestead Art Centre during July and August.

La Trobe University Vice-Chancellor, Professor Michael Osborne, congratulated participants for their 'innovative, evocative and challenging' entries.

'Since 1997 it has been rewarding to follow the progress of past participants, many of whom are now showing their works in commercial, regional and state galleries,' he said.

'Significant cultural events – such as the Acquisitive Art Prize – are an important part of the University's education and community outreach program. In addition to a vibrant exhibition program, La Trobe University is committed to the arts through its academic pursuits.

'Visual Arts education is taught at the Bendigo and Mildura campuses while Art History is taught at the Bundoora Campus. Through this spread of metropolitan and regional commitment, students from diverse locations are able

to fulfil their artistic visions.'

Mayor of the City of Darebin, Cr Diana Asmar, said the prize celebrated the best of contemporary art practice throughout Victoria. 'Darebin has a long-standing reputation for supporting both established and emerging artists, and the prize.'

The final judging panel comprised Geoffrey Edwards, Director, Geelong Gallery; Anne Virgo, Director, Australian Print Workshop Inc; and artist, Mark Schaller. ●