Taking triathlon to a fourth dimension

by Lindy Brophy

There is more to triathlons than meets the eye. Triathletes swim, cycle and run in quick succession and it is that very succession that makes the sport a whole lot more complicated than simply swimming, cycling or running.

“There’s been a lot of research on improving the performance of runners, cyclists or swimmers,” said Dr David Bishop. “But, as the triathlon is a fairly new sport, there’s been very little work done on the combination.”

He is supervising PhD student Rob Suriano, an enthusiastic triathlete himself, whose research aims to maximise the performance of triathletes, especially in the transition from cycling to running.

“A lot of novices say that as they get off the bike and start to run, their legs feel very heavy and it’s hard to run. The more triathlons you do, the more you get used to it, but that feeling of heaviness is a clue to what’s going on inside your muscles. We want to find out exactly what is happening in the muscle and use the information to optimise performance,” said Mr Suriano.

Another PhD student, Grant Landers, is nearing the end of his research into triathlons, concentrating on the importance of the cycling leg. He has analysed the speed, energy output and overall results of a group of cyclists, runners and swimmers to create a profile of the typical triathlete.

From there, he then set about documenting the attributes of the athlete that could be managed and moulded to create an ideal triathlete’s training program.

“I analysed 1999 world cup races to determine the importance of each discipline. Run is the most important followed by swimming with the cycle ‘just a means to get from the swim to the run’. Many coaches have called the triathlon a ‘wet run’. Hence the importance of improving run performance possibly by ‘altering’ cycling mechanics,” explained Mr Landers.

The School of Human Movement and Exercise Science recently hosted French exercise physiologist Fabrice Vercruyssen, whose triathlete research has already lead to success for the French in international triathlons.

“But we’re going further than Fabrice,” said Mr Suriano, whose work dovetails with Mr Landers’. “We’ll be conducting muscle biopsies to learn about glycogen depletion to help determine optimal training and racing strategies, not just for triathletes but perhaps for other multi-discipline endurance sports.”

Mr Suriano will be testing his triathlete colleagues over the next few months as they run and cycle in the School’s physiology laboratory.

One of the variables he hopes to determine is whether high or low cadence (fast or slow pedalling) cycling provides a better transition to running. Varying cycling intensities may also have a relationship to running economy.
New beginnings are all about us at UWA in this New Year of 2002. The ‘Year of the Horse’ in the Chinese calendar, and the year of opportunity for our University.

At an institutional level, this is the year for establishing our new School structure and for nurturing into existence the ‘disciplinary groups’ which can cross formal administrative units. We hope for new efficiencies in the structure, but we predominantly look to the new structure for facilitating teaching and research in key knowledge areas. I personally believe we shall look back on these developments as a key renewal at UWA as we begin a new century in a very different world of knowledge and society to that which created the old structure a generation ago.

In more immediate and human terms there are also the new beginnings which we associate with the new students and the new staff entering UWA at this time.

We have had great demand for the roughly 2,500 first year undergraduate places, with a yet further increase in the top 1,000 students in the State choosing UWA. A survey across the Go8 universities suggests that we now broadly have the highest cut-off scores in Australia. I would like to have admitted more excellent students in many programs but we need more HECS funded places to do that – something we shall continue to lobby for strongly.

Our enrolments of overseas students is now also settled and once again we have enrolled excellent candidates with a 20 per cent increase over 2001 (since 1998 when I first joined UWA we have attracted 40 per cent more top students from the wider world). I expect our intake of 558 to grow in 2003.

Staff numbers continue to increase and our Orientation Seminar for new staff was a very positive occasion. I was delighted to meet new staff and to sense the diverse talents they bring to our University at this critical stage in our development.

Recently we also opened the new and quite superbly refurbished teaching and research centre in the historic heritage Penny Post building at Albany. We see that outreach empowering the Great Southern with our skilled graduates and key research. As the Education Minister (Alan Carpenter) said in his opening address, the UWA Centre is probably the key to Albany’s future in a knowledge-based era. The academic procession of over 200 participants, led by the Chancellor, Dr Ken Michael, and Mayor, Alison Goode, was a remarkable community celebration of education and the hope it embodies.

Back on our great campus many new beginnings were also celebrated – ranging from the launch of the multi-institutional salinity CRC in natural environmental management, to the Institute of Advanced Studies’ 2002 programs in genomics, with a capacity Winthrop Hall audience to hear a lecture by one of the world’s great authorities on the brain (Baroness Professor Susan Greenfield).

Our summer Perth International Arts Festival was one of the best ever – reflected in excellent audiences! We all have our own memorable favourites. My list would include the Mysteries by the Southern African theatre-opera company, the Mingus Big Band’s open air jazz concert at the Fremantle Arts Centre, the Chinese opera at the Mandurah Performing Arts Complex, and again, the WA Ballet performing under the stars at The Quarry.

Nationally, the AVCC began a period of ‘constructive engagement’ with the new Minister and new Ministry. I dearly hope, as not only your VC but as President of the AVCC for 2002/3, that there can now be some positive advance in addressing critical issues of funding and policy which bedevil all our universities.

More personally – summer for me included not only family and beach and books but also a short period of ‘study leave’ when I was able to complete an edited volume on the Anglo-Boer War in African history with an American colleague for publication later this year.

I hope you and your family were also able to re-charge batteries, and now return with a sense of new opportunities and new beginnings for this new academic year.

Professor Deryck Schreuder
Vice-Chancellor and President
vc@acs.uwa.edu.au
Five undergraduate lawyers are in Washington DC this week arguing their way to what they hope will be the title of best young international lawyers in the world.

UWA's team in the Jessup Moot Competition (an international law advocacy competition) last month won the Australian national trials with our best record in the 40-year history of the competition: best oralist (Lee Carroll); best written memorials (Ben Gauntlett and Adam Sharpe) and winner of the final (with speakers Lee, Lorraine Van Der Ende and Julie Taylor).

All are students in their fourth or fifth year of law studies. The team, coached by UWA graduate Jamie Edelman, started work on their entry, an extensive answer to a 20 page question on international law, the day after their final exams.

They worked together, researching, writing and preparing oral pleadings, taking just one day off for Christmas and half a day for New Year.

After presenting their 50,000 word written answer and pleading their case orally in Canberra’s High Court in February, UWA and the runners-up, the University of Queensland, were chosen to represent Australia in the US.

The Jessup Moot Competition involves 1,500 of the best law students throughout the world from more than 300 law schools. UWA has always done well but never scooped the pool nationally as this year’s team has done.

In Washington, they will compete against students from 50 other nations. It is the biggest and most prestigious mooting competition in the world.

This year, their hypothetical problem involved terrorism, state responsibility and regulation of the Internet. Part of their research was learning how 150 states would respond to terrorism.

The team was sponsored to go to Canberra by the UWA Law School. After a short rest back in Perth, they had to set about finding sponsorship for their trip to Washington. None of them had been able to work during the summer vacation, spending every day working on their entry.
It was like holding back a powerful young horse which just wanted to bolt.

When engineering student Lachlan Tomlin drove the UWA Motorsports’ Formula SAE racing car around Winthrop Hall’s reflection pond, to show it off to sponsors, university staff and students’ families, the gleaming yellow machine was obviously being held back.

But the young drivers, six of the 40 engineering students who had combined to design, build and race the car, let it go at the international Formula SAE four-day event in Victoria over the summer.

UWA finished fourth in a field of 14 Australian university teams and seventh overall, in the wider competition which included students teams from the UK, the US and Germany.

UWA Motorsport manager Alan Langridge said the students were pleased with the results and felt they could have done better with more time behind the wheel. The 2002 Motorsport group is about to begin work on a new car but with the added advantage of being able to use the current one for road racing practice, eliminating one of last year’s teams’ disadvantages.

The UWA car was praised by judges from the Society of Automotive Engineers International for its chassis and suspension design.

The WA Chamber of Automotive Industries is a major sponsor of the UWA program.
The importance of combatting dryland salinity was reflected in a recent visit to UWA by His Excellency the Governor, Major General John Sanderson.

The Governor officially launched the new Co-operative Research Centre for plant-based management of dryland salinity. Alex Campbell, the chair of the CRC, a national collaboration based at UWA, said there was no more important issue threatening the sustainability of rural communities than the integrated management of land and water resources across southern Australia.

"The CRC’s seven-year program to develop new plant-based land use systems that lessen the economic, environmental and social impacts of dryland salinity will be of crucial importance to all Australians," Mr Campbell said.

The Vice-Chancellor, Professor Deryck Schreuder, said the decision to base the CRC in WA was significant recognition of the range of outstanding research work at the University and other local research agencies.

Professor Phil Cocks, the centre’s CEO, said significant progress in the fight against salinity would require the cooperation of the whole community, through a national effort.

The new CRC is a joint venture between UWA, the CSIRO, CALM (WA), the Department of Agriculture in WA, and five other universities and research groups in Victoria, New South Wales and South Australia.

Governor launches new salinity Research Centre

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The best patterns of cadence and intensity will be determined by the levels of glycogen used by the muscles. Triathlete volunteers will have muscle biopsies taken immediately after cycling tests. Their diets will be strictly maintained during the test periods to control glycogen resynthesis.

Oxygen consumption during exercise and capillary blood samples during rest periods will also be measured.

The testing should also discover whether it is better to go easier in the cycle leg, then pick it up in the run or, if a triathlete goes hard in the cycle, will it mean fatigue in the run?

“What intensity is optimal to maximise both the cycle and run legs? That’s what we hope to achieve,” he said.

Mr Suriano hopes to work out different strategies for preserving glycogen during the cycle and see if it improves performance.

“It depends which muscle fibres get depleted, the slow twitch or the fast twitch, whether preserving glycogen will make a difference,” he said.

“This knowledge shouldn’t be trapped in academia,” Dr Bishop said. “Rob is the state coaching director for triathlon and he took over from Grant, so they’ll be able to get the results out there.

“There’s some fantastic science being done here but it is also really good practical work that can be applied to just about any level of triathlete.”

He said Fabrice Vercruyssen would probably be returning from France later in the year to work with them.

The School of Human Movement and Exercise Science hopes to establish a triathlon training centre on the UWA campus.

Head of Department, Professor Brian Blanksby, said the school had applied for funding through the Faculty of Life and Physical Sciences for a cycling training area, a secure storage facility for triathletes’ bicycles and a two-metre deep pool that would double as a training pool for water polo.

“The facility would be great for our teaching and research, and to be the home of some high profile triathletes and water polo players would also be excellent for the University. I’m sure it would attract high calibre students from the eastern states and overseas to our school’s programs, if they knew they could combine their study with high level training,” Professor Blanksby said.

Take a deep breath! Triathlete Rob Suriano is put through his paces by his PhD supervisor David Bishop.

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“...
Three years after UWA made its tentative foray into the Great Southern, the Albany Centre is booming, with 70 students, an enthusiastic staff, a place in the hearts of the locals and, now, a new and permanent home, which was officially opened with more fun than formality late last month.

The door of the old Albany Centre was solemnly locked and the key handed to the Minister of Education.

Then the town crier swung his bell to announce the start of the procession and the streets of Albany were full of colour and cheers, as a pipe band led the Chancellor, the Vice-Chancellor, the Mayor of Albany, university staff, graduates, students and their guests to the University’s new home, in the newly refurbished old Post Office.

The Mayor of Albany, Alison Goode handed over the lease of the new premises to the Vice-Chancellor and the keys to the Chancellor.

The procession of more than 240 people took half an hour to traverse the main streets of Albany, creating a carnival atmosphere.
for the celebration of the University's new permanent quarters in the southern city, on a brilliantly sunny Saturday last month.

After the official speeches and photographs, everybody was invited in for refreshments, and former government minister Kevin Prince and his wife Sheena, the founder of the Friends of UWA Albany, conducted tours of the building for the rest of the day.

Barbara Black, the Director of the Albany Centre, said it was a wonderful new start for the centre and a wonderful learning environment for the students.

“We have a lot more space, and different kinds of space now, which will be more conducive to the students mingling together,” she said.

“This had always been a public building, first a post office, then a customs house, then a courthouse. In recent times, it had housed a restaurant and a theatre company. Our making this building our home returns it to being a public building and an integral part of the city again.”

Ms Black said she liked the idea that once the building had been used for delivery of mail, now it would be used for delivery of education.

“It’s the perfect address for us, with similarities to the Crawley campus. We both have a clock tower now and look at the mailing address: 35 Stirling Terrace!”

The Albany Centre continues to grow, offering 22 new HECS places this year (including 13 school leavers), added to their 11 current HECS students and eight continuing education students.

New undergraduate students can choose from 18 first year units and three second year units, across the arts, sciences, accounting, economics, psychology and education.
From texts to tyres

students try out marketing skills

No matter how good are your textbooks, lecturers and workshops, nothing beats real hands-on experience.

Students in the Graduate Diploma in Marketing found this out with a four-month internship at Market Equity, one of WA’s best marketing services and market research companies.

Associate Professor Jill Sweeney’s students in Applied Market Research put their skills to work alongside the professionals late last year, working on real projects.

“The idea was for them to develop work-based skills, to see how work places function, to take part in teamwork, to learn about behaviour at work and see office procedures in place,” Professor Sweeney said.

Linda Yu said it was great to ‘touch’ marketing, outside of the textbooks. She comes from the People’s Republic of China where marketing is still in its infancy, and says she will take her new practical skills back home with her.

Tito Tezinde said the opportunity to work with Market Equity was “a dream come true for a marketing student”. He comes from a banking background in Mozambique.

Another student came to study marketing from a position as an assistant lecture in management at the University of Bangkok. “People come from all over the world to study marketing here at UWA,” Professor Sweeney said.

Her six graduate students worked on projects for Market Equity’s clients, including BankWest (an employee survey on their perceptions of sales efforts) and Tyre Power (a brand repositioning analysis).

“They also did secondary research, which is research at the desk rather than in the field, based on information already gathered, on international trends in vending machine use for the Lotteries Commission,” Dr Sweeney said.

Her students were all delighted with the internship and, although it was a lot of work, Professor Sweeney hopes this year’s applied market research students will have a similar opportunity.

Signalling superior service

“One of the advantages of academic life is that you can go on doing what you’ve always loved doing.”

Ian Brash, who officially retired last year from the Department of History, is now an honorary teaching fellow – and loving it.

His dedication to his teaching profession won him the Chancellor’s Medal last year. The citation read: “In recognition of your sustained and outstanding service to the University over many years, in your teaching, your postgraduate supervision and your contribution as head of department and as a member of University committees.”

A second medal was awarded last year, to the first recipient from outside the University, to James Ross, for his outstanding service to the Department of Geology and Geophysics over many years.

Dr Ross co-founded the Geology Club in 1960, a body which still remains the focus of social and academic activities in the department. He has taught in the department and was a founding member of the advisory board of the Centre for Global Metallurgy. Although working in industry, Dr Ross has devoted himself to the University, giving of his time, energy and expertise for many years.

Nominations are now called for the award of Chancellor’s Medal at the September 2002 graduation ceremonies. Information is available from Wendy Edgeley, University Secretary. Nominations close on May 17, 2002.
The academic restructure will provide new opportunities for the University to further embed equity and diversity principles into employment practices.

The new Manager, Equity and Diversity, Beverley Hill, says she will probably spend much of her year at UWA assisting senior managers, and specifically the new school office managers, with strategies to enhance the diversity of their workforce.

“It’s in part about fully tapping into the potential of all staff and ensuring that they are provided with opportunities to develop their capacities,” said Ms Hill, who has been seconded from the State Government for 12 months to take the place of equity managers Maria Osman and Sandy McKnight. Ms McKnight has resigned and Ms Osman has taken a year’s leave.

Ms Hill said that the Diversity Job Bank, a key tool in the Workforce Diversity Strategy, had already placed 40 people in work over the past 12 months. The Diversity Job Bank helps the University to employ suitably qualified people from diverse cultural backgrounds and people with disabilities who might otherwise find employment at UWA difficult to secure.

“This strategy has been lauded around Australia and some universities have sent their staff here to see it in operation. UWA has also been nominated for the Prime Minister’s Employer of the Year Award, an award that focuses on disability.

“The principle I would like to emphasise in my 12 months here is that we are not actively recruiting a more diverse workforce just because we have a social conscience, but because people from diverse backgrounds have unique perspectives and contributions to offer us in return.

“I am seeking to assist in the recruitment, development and retention of a highly skilled workforce that is as diverse as the communities it interacts with, which falls perfectly into line with the University’s policy of internationalisation,” said Ms Hill.

She also intends to progress the information that came from the Working Life Survey 2000, as well as the 2001 Evaluation of the Recommendations of the Review of Women Academic Staff (1996) and the Review of Women General Staff (1998).

“These evaluations provide rich information on where the University has made progress in advancing the position of women staff, as well as highlighting those areas where progress has been patchy or non-existent.”

Ms Hill comes to the University with 16 years experience in equity work in the public sector, most recently with the Office of Equal Employment Opportunity (OEEO), as a senior consultant to the public sector on employment issues.

A change that reflects the extension of the Equity office to include a greater focus on diversity issues is the training of 16 staff members last week to become equity and diversity contact officers.

Previously, the University supported sexual harassment officers and equity officers. Now, they are combined and staff are encouraged to take all matters of concern to these trained and committed members of staff. A poster identifying these officers will be distributed shortly.

Marion Dingo, another new employee in the Equity and Diversity office, will help to co-ordinate the activities of these contact officers. Ms Dingo, the newly appointed administrative officer, has had diverse employment experiences that will add value to the office’s operations.
A new streamlined parking administration system is allowing Unipark more time to concentrate on transport issues for the campus.

The issuing of permits, temporary permits and infringement notices are all handled in a new integrated system which is updated every 24 hours.

“In an organisation as big as this, there are new staff and students starting every day and there are also departures every day. We need access to that information to be efficient,” said Roger Davey, manager of Unipark.

With the new system, you don’t need to fill in a form to apply for a permit. All you need to supply is your name and car registration number. You can also apply for a temporary permit from your computer at home, then pick it up from the parking office on your way in.

“It saves us a lot of re-keying time so we can devote more time to supporting different ways of travelling to the University,” Mr Davey said.

More than $200,000 a year is contributed from parking funds to support the No 78 bus from Perth to the University and the No 97 shuttle bus from Subiaco.

Car pooling is still available but only one group is taking advantage of it so far this year. For details on creating a car pool (which saves money and ensures you a permanent parking bay), contact Unipark on ext 3554.

To arrange a temporary parking permit, you need the number from your sticker and the registration number of your replacement car. Fill in the application form at 3http://www.parking.admin.uwa.edu.au/unipark/temppermits.htm

Seamless enrolments just seem to happen

The first involvement with students for the year comes for many of us on Orientation Day.

Their admission and enrolment is something that has just happened while we’ve been winding up after a quiet summer.

But not so for the staff who have already had their busiest time of the year.

Wayne Betts, Manager of the Admissions Centre, said that, over the summer, the University had handled 7,692 applications for enrolment, about 5,000 of those from TEE students.

“I am always impressed with the number of people who are involved with admissions and enrolments and how smoothly everybody works together, from the faculties to student administration, from our department to the Guild,” Mr Betts said.

“It’s a big logistical task and needs cooperation from everybody. For those not involved, it might just happen, but for us, it’s a lot of hard work. And I want to say how much I appreciate the application and input from everybody concerned.

“We are all dealing with members of the public who are often anxious and usually don’t understand the enrolment procedures, so we all have to be patient.”

He said that Admissions Centre staff always returned a couple of days early from the Christmas break because January was such a busy time.

“Our staff take about 4,000 phone calls in January and each of those is usually a problem to be sorted out. I must say I’m proud of the way everybody in this office handles those calls, so calmly and cheerfully.”

Admission work starts back in about September each year when the quotas and targets are agreed and the initial cut-off scores are estimated. Now, six months later, as students settle in to their classes, admissions and enrolments staff move to a more normal workload.
The long locks of admissions clerk Victoria Wilkinson will sport a multicolour make-over next week, in support of leukaemia research.

Victoria’s father died in February, aged 67, just a month after being diagnosed with acute myeloid leukaemia.

“The weekend of the national leukaemia fundraiser, World’s Greatest Shave (or Colour), is my 25th birthday. It seemed like a sign that I should get involved,” she said.

“Dad would have hated me to cut off my hair, so I’m colouring it instead, with as many different colours as I can,” she said.

Victoria is one of an expected 40,000 people across Australia who will shave off their hair or colour it wildly to raise money for leukaemia research next weekend.

Every day, 16 Australians are diagnosed with leukaemia or a related blood disorder. Despite the best efforts of doctors and the use of new medical technologies, 25 per cent of children and 70 per cent of adults diagnosed do not survive their battle with bone marrow cancer.

If you would like to sponsor Victoria, call her on ext 3943 by Friday March 15.

“Back again. Well thank you so much for helping me to do so well in the Australian All School Athletics competition held here in Perth. Without your help it would not have been possible. Thanks”.

If you have a secret spot on campus, a favourite feature or a little-known fact to share, please send it to us: lindy.brophy@uwa.edu.au or ext 2436, fax 1192.

The archway to the quadrangle of St George’s College is the entrance to another world — or at least another century. The brick paths and colonnades transport a lunch time wanderer to the days of academic gowns and students enjoying long philosophical discussions more than drinking competitions.

Opposite the entrance is the cool solitude of the chapel with its dark polished pews and black and white marble floor. The leather-bound Visitors Book dates back more than 50 years. Early entries, in 1946, were in slightly smudged fountain pen with very few visitors from outside Australia.

The latest entries are from Japan, Chile and Texas, in biro and felt pen. A visitor from Singapore in 1985, Ng Eik Pin, made the comment “Fair Dinkum” while later that year, a young athlete, Peter Mapstone, from Sydney, wrote:

“Back again. Well thank you so much for helping me to do so well in the Australian All School Athletics competition held here in Perth. Without your help it would not have been possible. Thanks”.

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Paying an orthodox visit

Classics and Ancient History recently played host to an international leader of the Ukrainian Orthodox Church.

His Eminence, the Most Reverend Iona, Bishop of Parnassos and Ruling Prelate of the Uranian Orthodox Diocese of Australia and New Zealand, was on a pastoral tour of his diocese and visited UWA for the first time.

Associate Professor John Melville-Jones has a good working relationship with the Orthodox community both through his specialty in Byzantine history and his involvement with the recent Icons exhibition at the Lawrence Wilson Art Gallery.

Reverend Iona and Associate Professor Melville-Jones were accompanied by other Orthodox church leaders as they called on the Vice-Chancellor.
WHO NEEDS SCIENCE?

Some commentators have argued that we are reaching the end of science, that the age of discovery is closing and that there is nothing really important left to find out.

For them the great era of scientific discovery is over, what used to be called pure science is finished. What remains is merely the filling in of detail, little pieces of the jigsaw. What will be important in this century is the application of science and as the American physicist Michio Kaku puts it “we are on the cusp of an epoch-making transition, from being passive observers of Nature to being active choreographers of Nature”.

The applications of science are everywhere and are in everything that we manufacture and use to give us our current high technology lifestyle. In the knowledge society, science is viewed as a key driver of the economy, where continued improvements can only occur by continuing advances in the application of science.

Scientists have laboured at length to convince politicians and commentators of the need for a strong science base. Science, engineering and technology are now sexy and appropriately Bill Clinton waxed lyrical in his millennial address “Today as the first light falls on the new millennium, we see before us an era of unparalleled promise – fuelled by curiosity, powered by technology and driven by science”.

Less prosaically our Chief Scientist, Robin Batterham, believes that “our lives would be unimaginable without science”. Our state government is another believer in science; the Premier is the state’s first Minister for Science and has created an august body, the “Premier’s Science Council”. Conversion to science believers is no better illustrated than by the recent bidding war between the Premiers of Victoria and Queensland to put up (not ask for), money for the multi-million synchrotron facility.

And here at UWA the times they are a-changin. Gone is the old-style Faculty of Science. Now we have the Faculties of Life and Physical Sciences together with Natural and Agricultural Sciences, and not to forget that Computer Science, Mathematics and Statistics are in the Faculty of Engineering and Mathematical Sciences. Many of the traditional science departments have disappeared and new interdisciplinary schools have taken their place.

The most adventurous and probably unique, among the new schools is that of Biomedical and Chemical Sciences bringing together the departments of Biochemistry, Chemistry, Physiology and Microbiology. This new school reflects the dissolution of the boundaries between traditionally indissoluble disciplines. Already many scientists move readily between disciplines and much of their research is interdisciplinary and cooperative.

Old rigid research groups and demarcations have been replaced with fluid structures that come and go as required — reflecting perhaps that their research is of the applied rather than pure variety.

The restructuring of science positions us better to achieve success in efforts to gain external research funding. More and more the research dollars flow to applied science, to CRCs, to Centres of Excellence and to Linkage projects. Most of these are interdisciplinary, bringing together complementary skills and experience. The new schools and faculties will strengthen our competitiveness in key areas such as the biomedical sciences, biotechnology and nanotechnology. The new ARC policy of more directed research, will almost certainly help fulfil the “end of science” prophecy. If there is no funding for basic science then certainly there will be no new discoveries.

Changes in science policy and the role of science in society are reflected also in our teaching. An increasing proportion of our students are enrolled in programs that implicitly, if not overtly, point students to vocational outcomes. Very popular are the combined degrees; more and more students are pursuing Science in combination with Arts, with Commerce and Economics. These changes mean that we will need to review the objectives of our teaching programs and look carefully at the nature of research training. The new schools and faculties will help us in this. In a sense the University restructuring sets us off on an expedition from reductionism to synergy. And like the late Alex Comfort —

“We want no dead weights on this expedition,
No credulous Charlies and no nervous Nellies”
Research Grants & Contracts

ASTHMA FOUNDATION

AUSTRALIAN AND NEW ZEALAND COLLEGE OF ANAESTHETISTS
Dr J. R. Rigg and Prof. K. D. Jamrozik, Public Health and Dr P. S. Myles and A/Prof. S. Schug (external): “Preoperative risk factors, adverse outcomes and effects of epidural and spinal anaesthesia” – $15,000 (2002).

AUSTRALIAN RESEARCH COUNCIL – DISCOVERY PROJECTS

DEPARTMENT OF HEALTH AND AGED CARE: MISCELLANEOUS & NHMRC

NHMRC
Dr K. M. Kroeger (external): “Peter Doherty Fellowship novel – G Protein coupled receptor interactions and complexes with distinct function and pharmacology”.

Dr E. Mattes (external): “Training Award – General Practice Fellowship – Interventions addressing social factors to improve the health of young children and their families”.

Dr A. K. Nowak (external): “CJ Martin Fellowship - Switching to alternate genes as therapies for neuromuscular diseases”.

Dr D. Lehmann, Child Health Research. Dr A. J. Leach (external) and A/Prof. T. V. Riley, Microbiology: “Otitis media in indigenous and non-indigenous children: microbiological and immunological risk factors” – $530,000 (2002-04).

Dr P. M. Watt, Child Health Research: “Random aptamers to probe SCL function in vivo” – $270,000 (2002-04).

A/Prof. P. H. Barrett and A/Prof. G. F. Watts (right), Medicine and Prof. T. G. Redgrave, Physiology: “Role of apoCII in the regulation of lipoprotein metabolism in obesity” – $239,000 (2002-04).


A/Prof. J. Hung and Clin/Prof. P. L. Thompson, Medicine. Dr J. P. Beilby, Pathology and Dr C. M. L. Chapman (external): “Inflammation, genes and atherosclerosis” – $285,000 (2002-04).

A/Prof. P. J. Leedman, Medicine: “Novel mechanisms of hormone action” – $465,000 (2002-04).


Dr A. T. Reutens, Medicine: “Training Award – Peter Doherty Fellowship investigation of the effects of Oncostatin M (OSM) on mammary gland development and neoplasia”.

Dr M. A. Degli-Esposti and Dr C. E. Andoniou, Microbiology: “Understanding the mechanisms of cyromegalovirus induced immunosuppression: relevance to viral immuno-therapies” – $465,000 (2002-04).

Dr A. A. Scalzo and Dr M. A. Degli-Esposti (above), Microbiology: “Novel immune evasion strategy of CMV: targeting of an adhesion molecule involved in leukocyte recruitment/activation” – $390,000 (2002-2004).


Mr P. J. Franklin, Paediatrics: “Public Health (Australia) Fellowship – The effect of pollutants in the home on airway responsiveness and airway inflammation in infants”.

Prof. S. L. Prescott and Dr C. A. Jones, Paediatrics: “Fetomaternal immunological interactions in the setiology of allergic disease” – $195,000 (2002-04).

Dr P. J. Henry, Prof. R. G. Goldie and Dr P. J. Rigby, Pharmacology: “Influence of endothelin and protease-activated receptors on eosinophil trafficking in the airways of allergic mice” – $375,000 (2002-04).


A/Prof. O. P. Almeida, Psychiatry & Behavioural Science. Prof. L. Flicker (below) and A/Prof. P. J. Leedman, Medicine and Dr S. Yasikaran, Biochemistry: “Effects of oestrogen on mood, memory and quality of life of women aged 70 years or over” – $170,000 (2002-04).

A/Prof. S. Schug, Pharmacology. Dr J. R. Rigg, Public Health and Dr P. S. Myles, Dr P. J. Peyton and Dr B. S. Silbert (external): “Preoperative risk factors, adverse outcomes and effects of epidural and spinal anaesthesia” – $66,000 (2002).

A/Prof. E. Baker, Physiology: “Fellowship – Pathophysiology of liver iron overload in hereditary haemochromatosis”.

A/Prof. H. W. Mitchell and Dr D. J. Turner, Physiology and Dr P. K. McFawn (external): “Airway stiffness and bronchial responsiveness” – $300,000 (2002-04).


continued on page 4

Ulcer Bug’ Anniversary

In 1982, the world first heard about the crazy young doctor from WA who was infecting himself with an ‘ulcer bug’ to prove his theory.

Last week, the medical world celebrated the 20th anniversary of Clinical Professor Barry Marshall’s discovery of the bacteria, Helicobacter pylori, which causes gastric ulcers.

Then he was a young UWA medical graduate, working with Dr Robin Warren at Royal Perth Hospital. Their groundbreaking work has meant that most ulcer sufferers in Australia are now cured, but Hp still infects half the population of the world.

Its complete genome has now been sequenced and a vaccine is in an advanced stage.

Australian and international world leaders in gastroenterology, microbiology and genomics gathered in Perth last week for a three-day congress: HP2002. Two decades of H.pylori, to celebrate the anniversary and further their knowledge of the functioning of the human gastric mucosa.

Clinical Professor Barry Marshall and Dr Robin Warren when they received honorary doctorates from UWA.
Tuesday 12 March

IAS GENOMICS, SOCIETY AND HUMAN HEALTH SEMINAR
“The role of noncoding RNAs in eukaryotic evolution and development”, Professor John Mattick, Co-director of the Institute of Molecular Bioscience. 1pm, Simonds Lecture Theatre.

CAMPUS 11 to 25 March

BIOCHEMISTRY SEMINAR
“Using magnetic measurements to probe structure and distribution of biological iron storage compounds in situ”, Dr Tim St Pierre, Physics. 1pm, Simonds Lecture Theatre.

RESEARCH MANAGEMENT AND ADMINISTRATION OPEN FORUM
Colin Cooper, Head of Research Grants and Contracts Administration in UMIST Ventures Limited at the invitation of the Pro Vice-Chancellor (Research and Innovation) and Research Services. 1 to 2.30pm, Geography Lecture Theatre 1.

Tuesday 13 March

VOLUNTEERS WANTED
ASTHMA FOUNDATION ANNUAL STREET APPEAL
24 May 2002
Perth City and suburban areas
Contact Renee for more information:
9481 1234
renee@asthmawa.org.au

Monday 18 March

AUSTRALIAN FEDERATION OF UNIVERSITY WOMEN (WA) MEETING
“Being a Muslim woman in Perth”, three guest speakers. 7.15pm, M.E. Wood Room, St Catherine’s College.

Friday 22 March

MICROBIOLOGY SEMINAR
“Circa viruses”, Professor Graham Wilcox, Microbiology, Murdoch University. 9am, Seminar Room 1.1, First Floor, L Block, QEIMC.

Wednesday 27 March

PERTH MEDIEVAL AND RENAISSANCE GROUP A.G.M. AND TALK
A.G.M. followed by Lea MacNeil, History, on “Medieval gardens”. 7pm, Postgraduate Lounge, Hackett Hall.

Thursday 4 April

IAS GENOMICS, SOCIETY AND HUMAN HEALTH SEMINAR
“The new genetic technologies – ethical and educational issues”, Dr Kim Summers, Director, Queensland Genetics Education Program, Queensland Clinical Genetics Service. 1pm, Geography Lecture Theatre 1.

Thursday 11 April

IAS PUBLIC LECTURE
“What’s that smell?: lesbian subcultures now and then”, Professor Judith Halberstam, Literature, University of California, San Diego. 7.30pm, Geography Lecture Theatre 1.
CALL FOR PAPERS

ADVANCES IN HORTICULTURAL SCIENCE
Olive-Culture Research and Development

This call is for authors to submit Australian based R&D work in olive-culture. The University of Florence is simultaneously calling for papers on olive-culture R&D in Italy. Australian and Italian olive-culture papers will be published by the University of Florence as a Special Double Centenary Edition of Advances in Horticultural Sciences. This edition of Advances in Horticultural Science will be the milestone for Italian and Australian olive activities at the beginning of this millennium. All papers will be peer reviewed.

Expressions of Interest:
Contact Professor Stan Kailis, UWA, immediately
Email: kailis@.ca.com.au

Paper topics: Olive-culture Research and Development in the following broad areas:
- History ● Biology and Botany ● Physiology, Biochemistry and Nutrition
- Economics ● Industry Perspectives ● Germplasm Propagation
- Grove Establishment ● Orchard Management
- Harvesting and Post Harvest ● Plant Protection, Pest and Weed Management
- Olive Oil Production ● Table Olive Production
- Olive Oil and Table Olive Quality ● Education

Papers on other relevant topics are welcome.

CALL FOR PAPERS

AUSTRALIAN CONFERENCE OF ECONOMISTS
Adelaide, South Australia
30 September – 3 October 2002

BUSINESS SYMPOSIUM
“The Economic and Business Implications of the Aging Baby Boomers”
4 October 2002

The 2002 conference will include numerous sessions on the specific topics, including ‘microeconomic reform revisited’, the economics of water supply, education policy, wine economics and the Japanese economy. International visitors will include David Card (University of California at Berkeley), Ed Barbier (University of Wyoming) and Paul Mizen (University of Nottingham).

Papers on all topics are currently being sought for the Economic Society of Australia’s 31st Conference of Economists. The conference will be held in Adelaide at the Stamford Grand in the beach-side suburb of Glenelg close to the city.

Following the conference, the Business Symposium will focus on both the macroeconomic implications, as well as identifying specific implications for (Australian) business, of the aging baby boomer population.

Abstracts of no more than 300 words must be submitted for consideration by
31 May 2002

Abstracts should be sent to either:
Email ecoconf@adelaide.edu.au
Mail CoE Abstracts, PO Box 40, Brooklyn Park SA
AUSTRALIA 5032
Fax + 61 8 8352 7671

(If you send your abstract by mail please include a Windows compatible disk or CD with a copy of the abstract.)

CALL FOR PAPERS

The University of Western Australia
Convocation, the UWA Graduates Association
invites all graduates and other members of Convocation to attend its
First Ordinary Meeting
which will be held on
Friday 15 March 2002 at 6.30p.m. for 7p.m. start
at University House

Address:
“What will it be like to be old in 2020?”
Speaker:
Dr Penny Flett
Chief Executive Officer of Brightwater Care Group (Inc.) and the 1998 Telstra Australian Business Woman of the Year

For further information contact:
Felicia Symonds
Graduates Co-ordinator
(08) 9380 3006

RAINE PRIMING GRANTS

Applications are invited for Raine Priming Grants in accordance with the guidelines governing the awards, and include provision for New Project Grants as defined in the guidelines. The grants shall provide funding for research into any area of medical science that investigates the nature, origin and cause of human disease, and the prevention, cure, alleviation and combating of such disease.

Grants shall be offered for a two-year period, subject to annual review.

Grants may be used to provide funding, or part funding, of salaries for researchers and/or technical staff, minor equipment, and consumables. The research shall be carried out at, or in association with, The University of Western Australia.

Guidelines and Application Forms are available from:
Raine Medical Research Foundation
Suite 24, 95 Monash Avenue, Nedlands, WA  6009
Hollywood Specialist Centre
Telephone:  9386 9880
Fax:  9386 9522
Email:  raine@raine.uwa.edu.au

The Internet at:  www.raine.uwa.edu.au/primgrant

Application forms must be received at the above address no later than
Wednesday, 1 May 2002 at 5pm
Dr Q. Cui and A/Prof. A. R. Harvey, Anatomy & Human Biology: “Peripheral nerve grafts, neurotrophic factors, and ex vivo gene therapy in visual system repair” — $240,000 (2002-04).

Dr D. J. Green, Human Movt & Exercise Science: “Vascular effects of exercise training and lipid-lowering at rest and during exercise in hypercholesterolaemia” — $240,000 (2002-04).

NHMRC (EQUIPMENT GRANTS)

Dr G. K. Chelvanayagam, Computer Science & Software Eng., Computer, Comdek 350/64/4Gb/Rom/Zip/Win95 $350 4 2 Glenys Walter Economics 2920


Dr A. L. James, Medicine, Pharmacology: “Peritoneal dialysis” — $7,725,000 (2002-06).

Dr R. Bencini, Animal Science: “Dairy products and farming techniques for the sheep milking industry” — $105,460 (2002-05).

Redundant Equipment for Sale

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<th>ITEM</th>
<th>PRICE</th>
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<th>NAME</th>
<th>DEPT.</th>
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<td>16</td>
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<td>Lorna</td>
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Bids should be accepted by Monday 25 March with departments to have first option

Classifieds

Classified advertising in UWA News is free to all university staff.

To place your advertisement contact Joanna Thompson on extension 3029.