Shadowing the weather … why is forecasting so hard?

by Lindy Brophy

We can put a probe on Mars and clone living animals, but accurately predicting tomorrow’s weather often seems to be beyond the realms of science.

The phenomenon is what UWA mathematician Kevin Judd calls the shadow of truth. He says weather forecasting is so difficult because we can’t really get access to the truth, only the shadow of truth.

“It is a unique science because it reveals the many ways our knowledge of reality is limited and uncertain,” said Associate Professor Judd, who became intrigued with the mathematics involved in weather forecasting about five years ago. He has recently spent a year at the Naval Research Laboratory in Monterey, California, developing his theories and techniques of prediction.

“I’m not a meteorologist, but I’m interested in the theory of prediction. I worked with an operational weather forecasting model last year in the US and got some very good results with a technique called shadowing — the phrase the shadow of truth is a pun on this.

“You have to shadow the weather patterns of the past four days before you can expect to predict four days into the future. I have been working on algorithms to do this — nobody has done it before, it’s a difficult problem.

“All the historical data that is used in weather forecasting will no longer be reliable if climate patterns change, and that’s another way the technique of shadowing comes in.”

A/Professor Judd said the Australian Bureau of Meteorology and the European Centre for Medium Range Weather Forecasting were interested in his work but the people he worked with in the US had the money to fund his research.

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“Weather forecasting is a unique science because not many areas are so publicly and thoroughly tested. But, even if we don’t have access to the truth, we still have to try, because weather is of huge social and economic importance.

“Thousands of people die and millions of dollars are lost every year, because of the weather. Agriculture of course depends on the weather, but there are mudslides, typhoons, storms, floods and droughts that kill people all over the world.

“And economic activities can be affected on a vast scale by the weather. For example, in January this year a snowstorm in Oregon closed Portland airport for two days. All the ramifications then extended throughout the US until people in Florida — where it never snows — were experiencing five-hour delays in their flights!

“Disasters at sea (like the sinking of the oil tanker Prestige) and many problems with electricity generation and distribution (such as in Perth last February) are all the result of weather.”

A/Professor Judd said the Navier-Stokes equation was developed in 1845 and was the key to forecasting the weather. “But nobody has yet been able to say whether the equation has solutions. The Clay Institute for Mathematics (in the US) posted a million dollar prize in 2000 for anybody who could prove it does or not.

“It sounds surprising that we use it to forecast weather every day but we don’t even know if it has a solution!”

So it should come as no surprise that a solution would not necessarily help forecasters in their work, and that the mathematical theory of chaos is more important in the science of weather forecasting.

“The computers used in forecasting are now 20,000 times more powerful than those used 20 years ago — but forecasts are not 20,000 times better, because the dynamics of the atmosphere are so complex,” A/Professor Judd said.

“There is a bank of computers in Reading, in the UK, used by the European Centre for Medium Range Weather Forecasting. They are so powerful that they are equivalent to everybody in the world doing nothing but eating, sleeping and arithmetic!”

A/Professor Judd became interested in weather forecasting while on sabbatical in Oxford in 1999. Some of his initial work was funded by an ARC small grant through UWA, which enabled him to present his work at a conference in the US, from where he went on to his last year’s work in California.

“I’m not telling meteorologists how to do their jobs — I’m just developing a theory of predictability,” he said.
The daughter of a professor of architecture and an opera singer, Yasmin Haskell grew up enjoying her parents’ sabbaticals in Rome. “I remember being intrigued as a child by a statue of the sixteenth-century heretic Giordano Bruno, who was burned at the stake. I later learned that he had written Latin poetry in imitation of the Roman philosophical poet, Lucretius. I suppose my interest in Renaissance Latin started there,” she said.

Associate Professor Yasmin Haskell holds the Cassamarca Foundation’s recently established Chair in Latin Humanism, and is organising a conference on *Latinity and Alterity in the Early Modern Period* at UWA in July. “Latinity,” she explains, “is the ability to speak or write Latin. Alterity means ‘Otherness’. The conference will explore Latin’s competition with other languages in the fifteenth through eighteenth centuries, its confrontation of ‘other’ worlds, for example, the New World and the New Science, and the ways in which it was used by non-Europeans and by women. We are bringing together a group of exciting scholars from around the world, from Italy, Portugal, Mexico, Germany, the US, the UK, and Australia.”

A/Professor Haskell says that Latin provides an entrée to diverse areas of interest. “It is a ticket, rather than a destination.”

The Cassamarca Foundation is a private Italian foundation which funds cultural initiatives in Italian research worldwide. UWA’s Associate Professor Loretta Baldassar is chair of the Cassamarca Australia Project Committee, which has funded positions in universities across the country. “Dino De Poli, a philanthropist who is the driving force behind the Cassamarca Foundation, is very interested in ‘Latin humanism’. UWA managed to secure the nationally competitive Chair in Latin Humanism with a mandate to spread awareness of Latin literature from the Renaissance to the present day,” A/Professor Haskell said.

She describes her field, ‘neo-Latin studies’, as a very interdisciplinary one. “In the early modern period, most scholarly, scientific, medical, legal, and diplomatic business was conducted in Latin,” she said. “There is also a vast quantity of imaginative literature in Latin — mainly poetry, but also drama and novels. Thomas More’s *Utopia* was written in Latin, Milton was torn between English and Latin verse.”

A/Professor Haskell has recently published a book on the secular didactic poetry of Jesuit priests in the early modern period, through the British Academy and Oxford University Press. “They wrote poems on everything from electricity to chocolate to the art of conversation,” she said. “Their work was almost like an early Internet!”

One eighteenth-century Latin poem was on Newtonian physics and filled ten books. It was extensively annotated by the important Jesuit physicist, Roger Boscovich. Boscovich’s notes have never been translated into English. “It’s an area that’s almost totally ignored but very relevant to the reception of science in that period.”

Later this year Professor Haskell will go to Naples to research an epidemic of mental illness that broke out in that city in the late seventeenth century. The phenomenon has probably escaped modern scholarly attention because it is reported only in the Latin writings of Neapolitan Jesuits. “So you can see how many doors this language can open,” she said.

Before coming to UWA last year, A/Professor Haskell was a research fellow in the Faculty of Modern and Medieval Languages, at the University of Cambridge. She said she was instantly impressed by the quality and quantity of early modernists (scholars researching pre-modern European literature and history) at UWA. Colleagues in the Faculty of Arts, led by Dr Pamela Sharpe, are currently applying for ARC Research Network and Centre of Excellence funding.

_Latinity and Alterity in the Early Modern Period_ is being organized in conjunction with the Institute for Advanced Studies. It will be launched by the annual Cassamarca lecture, given by Emeritus Professor Ann Moss (formerly professor of French at the University of Durham): _Other Latins, Other Cultures_. The lecture is free and open to the public and will be held in Geography LT1 at 6pm on July 12.
Vice-Chancellor’s column

Recently Federal Budget announcements relating to the Government’s Backing Australia’s Ability initiative and future arrangements for research funding have highlighted the potential impact of funding decisions on our universities and our State, and the need to act collaboratively in the current environment.

The sensitivities are well understood by those in the higher education sector and also those at the most senior levels of government, but politics and parochialism often cloud the fact that universities like ours were established to serve the State and the community of Western Australia.

It is after all our very reason for being. An objective reader of the reports and justifications for the establishment of The University in Western Australia could not ignore a key underlying reason: that it was seen as necessary for the development and growth of the State and the long term future of its people.

Now, more than 90 years on, it is rewarding to see that the continued commitment of University staff, students and graduates make to serving the State has not been diminished – it has in fact been strengthened through our aim of international excellence.

The massive growth of the State and population along with ever changing priorities for development place demands on all universities within Western Australia to be responsive, flexible and capable of developing a capacity to take up the emerging challenges of operating in a complex environment.

The benefits of collaboration between universities, State governments, their agencies and other relevant research and development bodies are clear. However, there remains a need to ensure that cooperation and partnerships are not ‘dumbed down’ to the extent that they fail to provide real strategic benefits for those involved as well as the wider community.

For the State of Western Australia to fully realise its potential, universities, business, industry, and government need to align themselves with common principles that ensure we can build a better future for the State and the community.

Understanding the nature and context of the Federal framework within which we operate is crucial if we are to maximise our efforts to increase the resources required to meet the demands of the community.

As always, our University remains ready to work cooperatively with other institutions and the community generally to achieve the shared goal of developing a better State for future generations.

Alan Robson
Vice-Chancellor

Australian-made
Designed to win

Engineering students have brought home six prizes from the international Formula SAE motor racing competition in Detroit.

It is the first time a UWA Motorsport team has been represented at the international finals. In 2002, the UWA team came second overall in the Australasian competition but was unable to take the car overseas.

The 2003 team’s biggest achievement was winning the design competition, influenced by the design and construction of the unique monocoque carbon fibre chassis – light and strong and a lot cheaper than equivalent products of the Formula One and aerospace industries.

The students also won a prize for the car’s suspension, another design prize and one for design innovation, as well as two rookie of the year prizes. These results were announced in Detroit on May 24.

Team design supervisor, associate lecturer Lynn Kirkham, said the judges’ decision on the main design prize was unanimous, “said to be rare.”

The team was less successful in the track events, with all their runs on wet track, while teams competing later enjoyed drier conditions.

UWA Motorsport 2003 came 13th overall in the international finals. The 2004 team is already working hard on its entry.
When Sylvia Hallam was granted her PhD recently, she also received a diploma that went hand-in-hand with the long-awaited award.

Her adult children presented her with a ‘Diploma of Procrastination’, as the work that finally earned her a doctorate was started 50 years ago.

Dr Hallam is 77 and, began her archaeological research around 1950. In the 1970s, she was advised to submit her published work for a PhD.

“But I just became too busy, with four children and teaching and admin and research and the politics of pre-history,” said Dr Hallam, a senior honorary research fellow in the School of Earth and Geographical Sciences.

“Anyway, what’s 35 years in archaeological time?!”

She said that not having a PhD didn’t seem to matter, as her colleagues in classics and ancient history, anthropology, and geography had recognised her archaeological research in England and Australia with an Academy fellowship and an associate chair.

“But, as I got older, it did start to matter. It remained an irritation and, after I retired, I hated being addressed as Ms Hallam,” she said.

“So I finally brought together the related work I had done on the Fens, on the east coast of England, and around York in WA. I submitted work on the shaping of two very different landscapes: the deltaic landscape around the Wash, frequented in Roman times by salters and cattle-ranching cowboys; and the coastal plains of the Australian west, opened up by Aboriginal land managers, using bush burns to create kangaroo pastures, a mosaic landscape offering diverse resources, and corridors giving access to carbohydrate staples in foothills and swamps, and to nodes in ritual and social networks.”

She and her husband, Professor Herbert Hallam, a historian, and the first three of their children migrated from the UK to WA in the early 1960s.

“Romans were a bit thin on the ground in Australia, so I changed direction in my research to the Aboriginal people,” she said.

She describes herself as “interested in man and the environment” but says she refuses to yield the word man exclusively to the male gender. “Man became an agent of change when hunters and gatherers started burning bush and forest. Man’s effect on the environment intensified when he started farming.”

Dr Hallam’s vigorous field work came to an abrupt end when she contracted diphtheria in 1983, at the age of 55. “I was partially paralysed and it took a year for me to come good. But I’ve never returned completely to the level of activity I used to enjoy, in my fieldwork, for example. So I took another change of direction, from archaeological fieldwork to ethnohistory.”

But she still walks the kilometre from home to campus and back about three days a week. Dr and Professor Hallam had moved to York to ‘retire’ but Dr Hallam moved back to Perth after her husband died, and studied theology, acquiring a Bachelor of Divinity and becoming ordained as a non-stipendiary deacon in the Anglican Church.

Then it was time to resurrect her PhD. Dr Hallam said the comments of her examiners, Christopher Chippendale and Francis Pryor, were “worth a dozen PhDs”.

“They said that my 50s fieldwork around the Wash remains still, the most extensive single archaeological survey ever undertaken in England!”

Dr Sylvia Hallam — no longer Ms Hallam

PhD at the end of a career

... a good age for an archaeologist
Lyle Palmer, one of the youngest academics to occupy a chair at UWA can thank the far-sightedness of government agencies and academic researchers who started keeping records while he was still in kindergarten.

These records, of population and health data, are unique in the world and are the reason why Professor Palmer chose to come home from his position of Assistant Professor of Medicine and Director of Statistical Genomics at Harvard Medical School in Boston to take up the Foundation Chair in Genetic Epidemiology at UWA.

At the age of 35, Professor Palmer is one of a select group of statistical geneticists worldwide who is working to make sense of the vast quantities of information currently being generated on the human genome. He also works very closely with clinical researchers to direct knowledge of the human genome towards research that will have a positive effect on human health.

"WA has an extraordinary history of population studies and a unique population-based health database that is brought together by the WA Data Linkage System, and is the envy of medical research groups around the world," Professor Palmer said.

"Apart from government-sponsored initiatives, there is also a long history of population-based research by clinical researchers in the WA. Population-based resources such as the Busselton Health Study are also internationally unique and very valuable."

At Harvard's Channing Laboratory, he worked with data from some enormous cohort studies, including the Nurses' Health Study, which has followed the health and lifestyles of 120,000 nurses from the mid-1970s.

"Most of what we know about risk factors for cardiovascular disease in women, we know from this study," he said.

"But WA's Busselton Health Study and the Raine Birth Cohort - among others - are just as valuable resources. Together with other population-based data from the rest of WA, it makes for an amazing resource. Only two or three other places in the world have similar data in terms of tracing family connections, but they don't have the linked health data.

"In Iceland, for example, they have DNA from more than half the population, but researchers have no access to population-based health data. WA is already a genetic powerhouse within Australia, and it is likely that we will eventually be aiming to establish a WA Genome Project."

"Our population is stable and representative of populations in the rest of Australia, Europe and the US, so this would be a fantastic opportunity for WA to take a leadership position in genetic epidemiology internationally."

Professor Palmer's research group is part of the WA Institute of Medical Research, based at QEII. He said that Genetic Epidemiology was currently one of the eight strategic priority areas for the entire UWA, and that the Vice-Chancellor, Professor Alan Robson, had been very supportive of his group's work at WAIMR.

"Gene technology is no longer science fiction. Genomic information is already impacting on and revolutionising epidemiology, clinical practice and drug discovery," Professor Palmer said. "Our population-based resources are a critical resource for Australia with which to fully engage in the biotechnology and genomic revolutions."

"In the future, we should be able to work out what genetic factors contribute to lifestyle diseases such as diabetes, cancer, obesity and cardiovascular problems — the conditions that are of pre-eminent socioeconomic concern in all industrialized nations. This will lead to the development of new therapies and also tell us how best to direct those therapies to the individual patients who would benefit most."

"Combining genetic knowledge with our population and health database, we can work out the best drug therapies for
If enthusiasm could turn into dollars, fundraising for the new Business School would be easy.

The Future Vision for the Business School was recently outlined at the Lawrence Wilson Art Gallery to a gathering of academics, the business industry and other University staff, who were inspired by plans to make UWA’s Business School one of the best in the world.

A high powered drive to raise funds for the school’s new building on the south-east corner of campus is under way. But, as Vice-Chancellor, Professor Alan Robson, said the vision is not just about building a new home for the school, but about building a reputation as a high quality business centre.

He urged staff to get behind the project. “Embrace the vision and help the Business School to achieve its full potential,” he said.

Chair of the Business School Board, investment banker Mark Barnaba (above) said his goal was to see UWA’s Business School placed three, five and 100. “That’s in the top three business schools in Australia (and I believe we already are); in the top five in Australasia and in the top 100 worldwide. I believe we can meet this challenge,” he said.

Dean of the Business School, (otherwise known on campus as the Faculty of Economics and Commerce) Dr Paul McLeod, said he was recently asked why he wanted to embark on the journey of building a new school.

“It’s because we want to be competitive, to have exceptional things to offer, to give our staff the opportunity of being the best and to offer world class facilities to our students,” he said.

Dr McLeod talked about the excellent decision to build the economics building in the centre of the campus nearly 40 years ago. “I hope that, in another 40 years, people will be talking about our vision, in 2004, to develop a far corner of the campus, which will become an icon both for UWA and for business studies internationally.

“We are doing this for the next generation as much as for this one,” he said.

The Business School Board members are also directors of the UWA Business School Foundation, administered by the Office of Development. The project is being managed within the Business School by Tracey Horton, and in the Office of Development by Rhonda Flottmann and Melissa Cummins.
WebCT is one of those phrases which suddenly caught on at UWA last year and anybody who wasn’t quick enough to ask what it was probably feels left behind.

WebCT stands for Web Course Tools, and is a system adopted by the University and most universities and TAFE colleges in Australia, for teachers to expand and extend their teaching skills.

Diana Jonas-Dwyer, a former sports scientist who moved into information systems, then into the area of university teaching and learning before joining UWA last year, leads the WebCT team in the Centre for the Advancement of Teaching and Learning. Other team members are Yvonne Button, Allison Coleman, and Damyon Wiese.

WebCT is an online learning management system that provides academic staff with a framework in which to locate their coursework and to manage communications with their students. It can be used to complement and support in-class teaching. Ms Jonas-Dwyer is careful to point out that the system was created specifically with education in mind and was designed to have a pedagogical focus.

She said that UWA staff were using WebCT in a variety of ways: to deliver Web-supplemented units (where student access to WebCT is not compulsory); Web-dependent units, (where some compulsory work is on-line) and fully on-line units.

WebCT was developed in 1997 at the University of British Columbia, Canada, by a computer science teacher who wanted a better way to use the Web for teaching purposes and threw out the challenge to his students to design a system.

“We pay a licence fee to use WebCT and encourage staff to send them suggestions for change and improvement, which are responded to in future upgrades,” Ms Jonas-Dwyer said.

With a focus on education rather than computer skills, WebCT is very easy to use. If academics want to open a chat line for their students, they don’t have to configure it. It can be done with one mouse click.

Ms Jonas-Dwyer said the system was great for group activities and presentations, discussions with students, and providing extra information.

“The biggest user of WebCT at UWA is the Arts faculty, which had its own home-grown system before they changed everything over to this system. The idea of everybody using the same system is to encourage centralising our efforts and improving processes,” she said.

Professor Shelda Debowski, Director of Organisational and Staff Development Services (of which CATL is a part) said the WebCT team had achieved a lot in its first year, including 190% increase in use of the system, a full staff development program on both the pedagogy of e-learning and hands-on workshops in using the technology, as well as establishing both staff and student support web sites.

“I am hoping that, as more staff become familiar with the system, they will see the opportunity to reflect on their teaching and start to incorporate WebCT into the curriculum in an integrated way,” Ms Jonas-Dwyer said.

“Our focus is to help staff see how they can use WebCT to improve teaching and learning, not just to include the latest technology because it’s there. This system is stable and reliable and we provide excellent support for the academic staff,” she said.

CATL runs WebCT courses each semester. More information about the system can be found on the WebCT website, www.webct.com
Australian work on breeding a rotation crop could save an important basic food for a developing country.

Professor Kadambot Siddique, Director of the Centre for Legumes in Mediterranean Agriculture (CLIMA) has recently returned from chickpea experiments in Bangladesh, where 422 of the 500 new breeding lines had been contributed by Australian breeding programs.

In Australia, chickpea is a potentially lucrative export crop but is currently more likely to be grown as an alternative to lupins as part of crop rotation.

In Bangladesh, chickpea is an important low-cost protein and carbohydrate source. But botrytis grey mould (BGM) has all but wiped out chickpea crops in that country.

“Sporadic outbreaks in Australia have showed that it can cut yields from 10 per cent to up to 90 per cent,” Professor Siddique said.

CLIMA is taking part in the project in Bangladesh because field experiments here are likely to be hindered by the presence of Ascochyta blight, a disease not found on the subcontinent.

Strategies are being trialled in BGM disease nurseries at two locations in Bangladesh to formalise a management system for the mould when it exists, and to find genetic sources of BGM resistance.

UWA staff and students are in Oregon this week, competing in a sporting competition that is as much about logistics and strategies as it is about skills and fitness.

The first of the XAdventure Raid 2004 international series is in the US; the second is in Europe next month, then the final (Oceania) leg will be held in Kalbarri in September.
The hard grind of getting the all-encompassing Student Information Management System (SIMS) fully operational is now well advanced.

Although SIMS will not ‘go live’ until April next year, project director John Murray says the huge task of data migration is due to be finished by mid-July. “And the configuration of thousands of program options is pretty much complete,” he said.

Installing the new system, transferring all the historical data and configuring the system to work best for UWA has kept the SIMS team (now up to 24 members) busy for nearly 18 months.

Their next challenge is exhaustively testing the system and providing training to staff and students.

“We don’t expect there to be any surprises,” Mr Murray said, “but we know there will be some minor hiccups in the new system. Eight universities in Australia are now using Callista software, and besides some initial teething problems, they are all now operating smoothly.”

He said the support of and collaboration between the universities had been a great advantage. “ECU is currently lending us somebody to help with our test planning,” he said.

Mr Murray also commended his staff, whom he said were “an excellent team, very dedicated and knowledgeable about the business of the University.”

Wayne Betts has recently been seconded from the Graduate School of Management to handle training for users of SIMS. He will soon release a sandbox version of Callista to selected stakeholders — a version of SIMS that can be played around with, without any damage being done to it.

“The first people to be able to get their hands on it and get the feel of it will be members of the SIMS Stakeholders’ Reference Group,” Mr Murray said.

“Then Wayne will be developing a training plan that will swing into action later this year. Initially, there will need to be some informal training for people to be able to test the system, starting with staff in Student Administration.

“After that, there will be a couple of hundred ‘power users’ who will need to be trained in using the Oracle Web Forms interface, and around a thousand less frequent users, who will need less training, to use the Staff Connect web interface version of SIMS.”

Mr Murray said The University of Western Sydney and Deakin University had collaborated with UWA to create the user-friendly Staff Connect web interface.

“SIMS is a complex and flexible system with many screens, but for Power Users there are many shortcuts and it is quick and easy to jump from one screen to another. Staff with simple one-off enquiries and students should easily be able to navigate their way through the web interface,” he said.

“In parallel with testing and training, we will be planning and defining the future support structure to take over when the Implementation Project finishes in the middle of 2005. Some of the seconded staff have already indicated that they want to be part of the permanent support team; others will return to their substantive positions. We don’t know yet how it will work out,” he said.

An unanticipated complication has been the introduction of the Higher Education Support Act, which means that Callista Software Services will be providing additional updates to its system in August and October 2004 and February 2005. “We have to plan these changes into our extensive testing program,” Mr Murray said.
Finding and keeping the best

Nearly ten per cent of UWA staff have been employed at the University for 25 years or more.

But two recent seminars run by Human Resources focused on recruitment and retention because such longevity at a workplace is rapidly being rejected as a viable option for younger workers.

Annette Black, manager (personnel), said a University committee for recruitment and retention of staff had recommended changes in these areas, and the seminars were to bring management staff up to speed with current and forthcoming changes.

“We particularly need to attract and keep in our employment the younger generation since they are tomorrow’s talent. We are always looking to position the University as an employer of choice.” Ms Black said.

Deans, school managers, members of the University executive and representatives of all areas on campus attended the seminars at Currie Hall. They learned about the new strategic directions of Human Resources (HR) at UWA, new induction processes, the revamped HR website and e-recruitment.

The HR website has links with a company which supplies relocation assistance. “Until now, we had focussed on providing assistance to new staff from overseas or the eastern states, by moving their families and furniture. Now in addition we can provide further assistance to help people settle more quickly into UWA and Perth. The relocation company provides helpful information, via the website, about Perth, its suburbs, its services and its culture.

“It can provide information about schools, language transition, career opportunities for the new employee’s partner, home search, furniture rental and more. It’s a more complete service for new University employees.”

New induction services for staff now include specific orientation sessions for staff that target leadership, teaching and learning, research, and services. There is a web-based check-list for experienced staff who are helping new staff to settle in.

More changes will soon be coming in the area of rewards and recognition, via the performance management review. The Recruitment and Retention Committee has also recommended a review of the existing methods used to attract new staff: advertising, publicity and the UWA website.

“We have had great feedback from the staff who attended the seminars and many of them have offered their sections or schools for pilot recruitment and retention programs,” Ms Black said.

Science buff’s ashes scattered at Gingin

Tom Hemsley loved everything to do with science and was waiting for the hot weather to finish so he could visit the Gravity Discovery Centre at Gingin.

But the Perth man (pictured) died in January without visiting the research centre he had read so much about. So his wife and daughters asked Professor David Blair’s permission to scatter his ashes at the Gingin site.

Last month, just a couple of days after what would have been his 76th birthday, Tom Hemsley’s ashes were scattered beneath a tree on the property.

“You really have no idea how much your research affects the community,” said Professor Blair who has suggested to Tom’s widow, Valerie Hemsley, that she might like to erect a plaque on the site of her husband’s remains.

“Tom wasn’t interested in anything but science,” said Valerie.

“Whatsoever anybody was talking about, Tom would turn the conversation to science. He worked in science-related jobs all his life, from laboratory work in England, to the Defence Standards Laboratory in Maribyrnong, Victoria, then finally as a technical sales rep in Perth, selling scientific equipment to customers including mining laboratories and UWA.

“He’d read all about the gravity research going on at UWA and Gingin and he felt so proud that it was here and not somewhere else in Australia.

“We planned to go up to Gingin, but we were waiting for the weather to cool off, then Tom died in January. When we were thinking about where Tom might have liked his ashes scattered, our daughters said: ‘Let’s take him up to Gingin Mum’. So I wrote to David Blair and he was very happy for us to do it,” she said.
UWA website hits WACA Ground for six

On a warm day back in February 2004 a near capacity crowd gathered at the WACA Ground to watch the visiting Indian cricket team receive a pummeling from the Australian cricketers.

While it probably passed without mention on the day, the number of spectators at this match dwarfs the crowd that would have gathered 110 years earlier to watch the very first match played on the WACA Ground turf in February 1894. The first grandstand wasn’t built until the following year and only seated 500 people but in 1897 a crowd of 5,000 turned out to watch the first day’s play by the visiting Eastern Colony teams. The current record crowd for a one day cricket match at the WACA Ground was set twenty years ago in February 1984 and stands at 27,057 - Australia vs West Indies - we won by 14 runs.

On an average day the size of this crowd is easily eclipsed by the number of people visiting The University of Western Australia’s website. Excluding students and staff on the campus network, somewhere in the region of 58,000 people from Australia and international visitors from more than 100 countries around the world visit the website every day. That’s more than double the WACA Ground record.

What information do we convey to these visitors? If they come seeking wisdom, how well do we deliver on the promise implied in our motto? Do we clearly and unambiguously provide visitors with an online experience commensurate with our standing as an internationally recognised research-intensive university of excellence? Are we capitalising successfully on the unique marketing opportunity we have to communicate with this audience that has chosen to visit our university?

The extraordinary number of visitors to the University’s website would indicate that the site represents a valuable resource but the experience of those familiar with navigating the site, and likely that of the casual visitor, is often one of frustration at the difficulty of finding sought after information. A survey of 200 visitors during last year’s Expo indicated that while prospective undergraduates and other casual visitors generally held our website in good regard, current staff, students and prospective postgraduate students were notably more critical of the navigability and the lack of ease with which they could find information on the website. These latter results are reflected in the recent AUQA report which confirmed that the University should continue “to increase the usefulness of its website, which contains an impressive amount of information, by making it easier to navigate and to search”.

In order to accomplish this objective, the University is committed to developing a user focused website. Information in a user focused website is structured in a fashion that addresses the needs of individual visitors or user groups rather than reflecting the structure of the organisation and the sections that make up the organisation. Most visitors to the University website, whether external visitors or staff and students, don’t have a detailed understanding of the structure of the University, nor should that knowledge be required in order to find information on the University website. Yet, because most of the information maintained on the University website is arranged according to the underlying administrative structure, a detailed knowledge of that architecture is almost a prerequisite for navigating the current website with anything approaching success.

In the past 30 months, with the uniform application of University branding and faculty sub-branding elements to almost all publicly available websites, the University has made tremendous strides towards offering a consistently branded online presence. The challenge for the University is to extend the burgeoning awareness that all the sites that make up the University website need to form a coherent whole towards the development and maintenance of a contiguous map of key knowledge across the University website.

This map will assist visitors to navigate and discover the information that they are seeking regardless of whether the information is maintained in its entirety by a single part of the University or, as is most often the case, is shared and drawn from a number of parts of the University. The development of models and systems for maintaining and sharing information in a consistent fashion and a format appropriate for a broad range of web visitors will require significant cooperation and agreement across the University but the benefits derived from common structural elements and nomenclature, from sharing structured information resources, will ensure that we provide an online experience and resource befitting a leading Australian university.

Cakes on campus for cancer

One of Australia’s Biggest Morning Teas on campus yielded a big surprise.

The Centre for Water Research (CWR) held a banana cake competition and received 11 entries from schools and centres across campus, which were tried and tested by about 60 guests.

All the ‘judges’ donated to cancer research and enjoyed 11 different varieties of banana cake. The clear winner, by a big majority of votes, was the banana nut cake with coconut frosting, baked by final year environmental engineering student Aaron Veale.

“Who said engineers can’t cook!” his supporters demanded.

CWR’s morning tea, one of thousands across Australia, raised about $200. Another fund-raising morning tea was held at University House, with a similar attendance and fund-raising.

“It was a lovely atmosphere,” said University House manager Jeremey Murray. “And it was great to know that, while the members were enjoying similar attendance and fund-raising.

Winning baker and engineering student Aaron Veale didn’t have many left-overs to take home.

Continued on back page
Monday 14 June
INDUSTRIAL RELATIONS SEMINAR
‘Workplace bullying in tertiary education’, Mr Paul McCarthy, School of Management, Griffith University. 1pm, Woolnough Lecture Theatre, Geology Building.

CIVIL AND RESOURCE ENGINEERING SEMINAR
‘In situ stress estimation: from overcoring, to hydrofacturing, to borehole breakouts’, Professor Bezalel Haimson, geological Engineering Program, University of Wisconsin, USA. 3pm, Room 105, Civil Engineering Building.

ASTHMA AND ALLERGY RESEARCH INSTITUTE MEDICAL RESEARCH SEMINAR
‘SymbioticA: research in art and science’, Dr Stuart Bunt, Anatomy and Human Biology. 12.30pm, Joske Seminar Room, Medicine, Fourth Floor, G Block, SCGH.

Monday 14 to 29 June
CHANNELS OF HISTORY EXHIBITION
The Curator, Trish FitzSimons, filmmaker and academic, will speak about the exhibition. Channels of History, a social history exhibition about the women, land and history of the Channel Country of central Australia that offers a fresh perspective on these issues. Channels of History consists of elements of an art installation, alongside text and image panels, an interactive documentary component, and a writing desk where the public can both find out more about additional sources on the Channel Country and themselves participate in the task of historical writing and research. Channels of History is about women making history in both senses of the word. Their stories beg to be heard, understood and added to. Please RSVP by 14 June to 6488 1340 or ias@admin.uwa.edu.au. Location: The Constitutional Centre of Western Australia, 1 Parliament Place (corner Havelock Street), West Perth.

Tuesday 15 June
PUBLIC LECTURE
‘Braided channels: the documentary project meets exhibition practice in a digital media context.’ You are invited to a public lecture in association with a touring exhibition of Channels of History (Constitutional Centre, Havelock Street West Perth 14–29 June 2004), by the curator Trish FitzSimons, filmmaker and Deputy Head, Griffith Film School, Griffith University, Queensland. All welcome, no reservation required. 6pm, Geography Lecture Theatre 1.

Friday 18 June
LAWRENCE WILSON ART GALLERY FLOOR TALK
‘The politics of environment and culture in Bali’, Associate Professor Carol Warren, Murdoch University. 1pm, LWAG.

Tuesday 22 June
KYLE ORATION 2004
The Vice-Chancellor, Professor Alan Robson AM, and the President of the Rotary Club of Perth, Barry Barr, request the pleasure of the company of you and your guest at the Kyle Oration 2004 to be presented by Graeme Samuel AO, LLM 1977, Chairman, Australian Competition and Consumer Commission: ‘Competition and the Australian way of life’. In this oration Graeme Samuel will discuss the changes in the Australian economy over the past two decades and the benefits that these reforms have brought to most Australians, but also the need for Australia to take control of these changes to ensure the benefits are distributed as widely as possible. 8pm, Social Sciences Lecture Theatre.

Wednesday 23 June
AUSTRALIAN FEDERATION OF UNIVERSITY WOMEN (WA) ANNUAL DINNER
6.30 pm for 7 pm start at the Karrakatta Club, Sherwood Court, Perth. Cost: $50 (inc. GST) for 3-course meal, wine and soft drinks. Guest speaker: Dr Fiona Wood: ‘Striving for excellence: What is the cost?’ Enquiries to Karen on 9386 3570. RSVP by Friday 18 June.

Friday 25 June
CLIMA SEMINAR
‘Beating false breaks: the scourge of annual legume pastures’, Dr Graham Taylor; ‘Agricultural experiences in Iraq’, Trevor Flugge. 4pm, CLIMA Seminar Room.

Monday 28 June
ASTHMA AND ALLERGY RESEARCH INSTITUTE MEDICAL RESEARCH SEMINAR
‘Cancer clinical trials’, Professor Michael Millward, Medicine and Pharmacology. 12.30pm, Joske Seminar Room, Medicine, Fourth Floor, G Block, SCGH.
UWA Press congratulates all our authors shortlisted in this year’s Western Australian Premier’s Book Awards, and especially category winners John Dowson and Mark Greenwood.

“The standard and variety of entries this year is again testament to the great body of work produced in Western Australia.” Sheila McHale, Minister for Culture and the Arts

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Because quality matters
The Flinders University Archaeology Society is pleased to announce the 2004 National Archaeology Students’ Conference (NASC), to be held on 28–30 September at Flinders University in Adelaide, South Australia. NASC provides a biannual forum for archaeology students from all levels—undergraduate and postgraduate—to present papers and posters on their current work and gain feedback from a panel of academic faculty judges. NASC allows students of archaeology and related disciplines to gain experience presenting at an academic conference. While work submitted to NASC is expected to be of a relatively high standard, this conference is meant to be a user-friendly educational experience, without the intimidation of a more mainstream event. Presentation of a paper or poster at NASC allows students to begin building their curricula vitae in preparation for their future careers.

While the conference is to be held in Australia, the organising committee is actively seeking participants from around the world. Students from India, Chile, and England are planning to attend, as well as students from around Australasia.

For more information, including conference fees, registration and accommodation, please visit our web site: