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At the Olympics, stadium staff in high noise environments such as beach volleyball, used a version with built-in two-way radios.

While Mr Miller is immersed in technology innovation in the US, Sensear’s operations are still run from Perth, with the manufacturing of the electronics and software done here.

“This is where our research is done and we still have good relationships with the universities, and we’re committed to being a good Australian-made product,” he said.

The device is promoted now as an advantage to workplace productivity, as well as a safety product. Earlier this year, Sensear won a prestigious international Frost & Sullivan excellence award for its devices, which now have the capacity to upload software and enable two-way radio and wireless Bluetooth communication.

Most of the market opportunities are in the mining sector, as an ‘intrinsically safe’ product.

It is used in mining operations in Peru enabling workers who are grinding copper ore to communicate in a noisy environment without removing their hearing protection. In Singapore, workers in an oil rig engine room can also communicate effectively in an environment where ‘intrinsically safe’ protection is required.

In the US, tree surgeons are using the hearing protection with Bluetooth capability; road workers rely on it in their highly noisy and dangerous environment; and maintenance workers in the heating ventilation and air conditioning industry ensure they don’t miss important calls on their mobile phones while protecting their hearing.

Another significant Sensear milestone in 2012 was the granting of a US patent to the company by the US Patent and Trademark Office, based on the original patent applications filed here in Perth in 2005.

“It is fantastic to see UWA technologies having significant societal and economic impact,” said Dr Andy Sierakowski, Director of UWA’s Office of Industry and Innovation. “That is why we do technology transfer from the university to the private sector in the first place.”

By Lindy Brophy

Listen to this: another gold for Australia

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The two lives of Clint Bracknell are on a collision course for 24 September.

The musician and academic from the School of Indigenous Studies has been nominated for a prestigious Helpmann Award for the music he composed and performed for the theatrical production of Shaun Tan’s *The Red Tree*. But he won’t be able to make it to the glittering awards night at the Sydney Opera House because he’ll be on a camp with his students in Albany.

Assistant Professor Bracknell coordinates the unit Knowing Country: The Dreaming and Darwin in the Indigenous Knowledge History and Heritage major and the camp is an integral part of the course for his first year students. Clint, the musician, has already won a WAMI (Western Australian Music Industry) award for his work in the rhythm and blues band *Boom! Bap! Pow!* This Helpmann Award nomination is for the Best Original Score in an Australian show.

It is the 12th annual presentation of the Helpmann Awards to artists involved in all areas of live performance from theatre and music to opera and ballet. *The Red Tree* has been nominated for four Helpmann Awards, in the categories of Best Scenic Design, Best Lighting Design, Best Original Score and Best Presentation For Children.

Clint is nominated alongside such theatrical luminaries as Cate Blanchett and Colin Friel.

He wrote and performed the music for *The Red Tree* (along with two percussionists, David Salvaire and Dylan Hooper) in a Barking Gecko Theatre Company production in Subiaco last year. It was revived during the 2012 Perth International Arts Festival and also performed in Albany, as part of the PIAF Great Southern Program.

“It’s the first time I’ve done something like this,” he said. “I was going to say no when I was approached because I thought I was too busy at Uni, but by the time I’d finished talking to the director, I already had ideas.”

The show, like Shaun Tan’s award-winning book, had few words. Clint composed the music and lyrics for five songs and what he describes as atmospheric music for the rest of the production.

He sang the songs and played the guitar, accompanied by the percussionists on original instruments made from industrial machinery. “It was a bit of a junkyard orchestra!” he said.

Clint says he rarely writes down his music, committing his songs to memory. Alongside music in his head and his heart is language, especially his own language of the Noongar country.

“Language is passion of mine,” he told UWAnews last year. “The philosophy of language and how it can uncover different ideas.

“The beauty of the Noongar language is that it is born of this place.” And this language and the knowledge it helps to uncover is what Professor Bracknell will be sharing with his students while his co-nominees are walking the red carpet at the Opera House.
More models to choose from and much quicker charging are encouraging Australians to buy electric cars.

Although electric vehicles (EVs) represent a tiny percentage of the market, it is a fast-moving one.

The Crawley campus has a charging station which is mostly used by Electrical Engineering students who are working on EVs, and other members of the WA Electric Vehicle Trial.

But Thomas Bräunl, co-director of the trial and Director of the Renewable Energy Vehicle Project (REV) in the School of Electrical Electronic and Computer Engineering, said private owners of EVs in Perth could use this and all 23 charging outlets in the city once they had signed up for a swipe card.

“At the moment, it is a free service, and a full charge takes only three hours, so it is a very attractive prospect for people with electric cars,” Professor Bräunl said.

There are probably fewer than 50 privately-owned EVs in Perth and 11 in the trial. “Both Mitsubishi and Nissan have recently released EVs but they are quite expensive for small cars, around $50,000, but this price will come down quickly as the technology improves and more people buy them,” he said.

Private owners who charge their EVs at home overnight still need to have their cars plugged into a power source for about 10 hours.

But the station at UWA, under the Computer Science building, does a full charge in just three hours.

“Quite often we are faced with the choice of two different world standards in a new developing technical area, unsure which one will be adopted,” Professor Bräunl said.

“Remember having to make the choice between VHS and Beta; Blu-ray and HD DVD? The same is currently happening with EVs. There are two competing standards for EV charging. Type 1 supports only single-phase charging and is the US/Japanese standard, while the European standard Type 2 supports either single or three-phase charging. Since Australia (unlike the US) has a three-phase power grid, the choice seems to be obvious, but as Australia has not yet officially adopted either standard, we currently see a mix of EVs and charging stations being imported into the country.

“So it is good to know that the recently-installed EV charging station at UWA is an IEC Type 2 station that can charge either type of EV. Equally important, it is a Level 2 charging station (7.7kW), which reduces the charging time from around 10 hours for a full charge on a standard power outlet to only three hours.”

The UWA charging station is part of a network of 23 EV charging outlets all over Perth. This network has been funded by an ARC Linkage project with partners UWA Engineering, UWA Business School, Murdoch University, WA Department of Transport, CO2Smart and the Australian EV Association, with external partners City of Fremantle, City of Swan, RAC, MainRoads, WaterCorp, The West Australian, Energy Made Clean and station sponsor Galaxy Resources.

The stations are networked and transmit their data to a server in Electrical, Electronic and Computer Engineering, where user data and load profiles are being analysed by PhD student Stuart Speidel.

“This gives us a valuable insight into the requirements of EV charging infrastructure for the next two decades, when we expect millions of EVs, which will have a significant impact on the electricity grid,” Professor Bräunl said.

“Power companies were concerned that the necessity of a 10-hour charge would mean everybody would charge overnight and create another peak in power usage. But the shorter charge now available means people can charge their cars while they work. The peak time for our trial charging stations is around noon.”

The EV Charging Linkage project cooperates closely with the WA Electric Vehicle Trial, co-directed by Professor Bräunl with additional partners City of Mandurah, City of Perth, WA Department of Environment and Conservation, Landcorp and Telstra.

The first EV trial in Australia started in 2010 and uses 11 Ford Focus cars, which have been converted to electric drive by local company EV Works.

Charging station locations and further information is available online at: theREVproject.com/trials/charging-trial.php
Developing a ‘leadership culture’

Paul Johnson
Vice-Chancellor

A recent workshop run for the University’s highly successful Leadership Development for Women (LDW) program provided an opportunity to consider leadership issues in an increasingly competitive higher education environment.

It’s an environment in which we have to meet the challenges of balancing the University’s traditional functions of academic scholarship and research with the need to respond directly and rapidly to new opportunities, and the need to generate revenue and to lead and manage effectively.

The challenges we face can best be met by a commitment to encouraging a ‘culture of leadership’ which recognises that we must all lead in our way and not simply look to the Executive, or the Deans, or our administrative managers for leadership.

We should consider how to empower all staff to embrace leadership and responsibility, as well as building relevance into all our actions so that we build better mechanisms to capitalise on new opportunities and meet the challenges of change.

Education is becoming more influential than ever in the construction of knowledge economies and democratic societies. Opportunities arise from the convergent impacts of globalisation, the increasing importance of knowledge as a principal driver of growth, and the information and communication revolution.

In the words of Charles Darwin: “It is not the strongest of the species that survive, nor the most intelligent, but those most responsive to change.”

If we are to achieve the aim of being counted among the world’s top 50 universities by 2050 we must capitalise on change as a most vital ingredient in the on-going development of UWA.

We must embrace reforms in a way that continues to allow us to address our mission of international excellence. Responsiveness to change is now clearly critical for Western Australia if we are to remain a prosperous and progressive State.

But responsiveness also increasingly means more than just working smarter, co-opting new systems and technologies, being more customer-focused and being more pro-active in new markets.

Fundamental change is also now involved, as major organisations such as ours both come to operate in new ways and also change the character of organisational cultures, particularly by encouraging leadership.

At UWA we must continue to work to remove lingering structural barriers that impede the careers of staff or constrain their opportunities to contribute fully.

In this way we can meet our key University priority which is to recruit, develop and retain the highest quality staff, many of them with leadership qualities, and to provide a working environment that enables all staff to optimise their contribution to the University.

A lifetime of research on stage

Miranda Grounds has become the first woman to present the Mauro Lecture at an international meeting of biologists in Italy.

Professor Grounds, from the School of Anatomy, Physiology and Human Biology, has devoted more than 40 years to skeletal muscle research. She began her work less than 10 years after Alexander Mauro, an American professor of biophysics, discovered the satellite cell and launched the field of satellite and stem cell research with a simple paper published in 1961.

The Federation of American Societies for Experimental Biology named the keynote lecture at its annual international conference after Mauro, who was also the co-inventor of the radio-frequency cardiac pacemaker, one of the world’s first pacemakers.

Professor Grounds presented From symbiosis to sarcopenia: Over 40 years of skeletal muscle research in Lucca earlier this month.

(Sarcopenia is the loss of skeletal muscle mass as a result of ageing.)

“I presented my adventures in skeletal muscle research, that have focused mainly on in vivo studies in mice related to factors controlling the damage, repair and maintenance of normal, diseased and ageing skeletal muscle,” she said. “The paper also focused on potential treatments for animal models of human Duchenne and other muscular dystrophies.

“This started with myoblast (satellite cell) transfer experiments leading to current controversies in stem cell therapies, combined with years of exploring the cell biology of skeletal muscle regeneration.

“The therapies shifted to drug interventions to target inflammation and oxidative stress, in parallel with basic research that engaged with challenges of the matrix, tissue engineering, molecular analyses and the intrigue of factors controlling muscle mass especially with respect to ageing and sarcopenia.”

The academic selected for the honour of presenting the lecture is one whose work on satellite cells spans decades and who can offer new researchers a historical context for the evolution of techniques in the field.
New look Octagon prepares for starring role

Expect a lot more activity soon in the Octagon Theatre – and in all the theatre venues on the Crawley campus.

University Theatres is ramping up its role from simply providing venues, to presenting its own shows.

“We’re not actually producing our own shows from scratch, but we’re going out there and finding plays, concerts, comedy, dance and other programs that suit our venues, rather than sitting back and waiting for the phone to ring,” said Madeline Joll, patron services manager for University Theatres.

She expects a big increase from next year in the number of shows presented at the Octagon, the Dolphin, the New Fortune and other UWA venues.

“The Octagon is only used for 50 to 60 nights a year for professional performances,” Madeline said. “Our new theatre manager, Rob Lines, is very keen for that to increase.”

The Octagon presented the first of its own shows last year: a play called Love Letters and then a stand-up comedian in early 2012. “The Mandurah Performing Arts Centre called us about Love Letters and asked if we could provide a Perth venue, and that was the start of it,” Madeline said. “Coming up in the next couple of weeks we have Tom Burlinson at the Octagon and Katie Noonan in Winthrop Hall.

“Next week we’re going to Darwin for Long Paddock, where theatre producers pitch their shows to presenters and we choose what we’d like to put on in our theatres.

“We’re going to have to hold back a bit though because the Octagon will be closed for about nine weeks for extensive renovations, from December, ready to reopen for PIAF.”

The auditorium will be gutted, the seats replaced and configured slightly differently, with another row added at the back. The foyers will be refurbished to match the new auditorium. (The stage was rebuilt last year with an alumni grant.)

“So it’s a new era for University Theatres, with a new manager, a refurbished Octagon and our new role as presenters,” Madeline said.

As presenters, the University Theatres staff provide technical, audio and lighting set-ups, supply specific stage settings for individual shows, manage the ticketing, the publicity and all marketing for the performances.

“One of the trickiest things has been negotiating the artist contracts,” said Madeline, who is close to finishing a Masters in arts management at the Western Australia Academy of Performing Arts.

“Presenting a show means that we buy the show and take the risks. If it’s popular, we make a lot more money than we make from simply hiring out the venue. If it’s a flop, we lose money. But it means we will have a lot more say in what’s on and that the venues will be used a lot more. It’s very exciting for us.”

The new manager, Rob Lines, is a recent arrival from the UK, with an extensive background in theatre.

“My instinct is that there is a lot of potential here and an audience, but it is not about what I think is best,” he said. “Madeline is the main programmer and she will be listening to what people want and how they react to what we put on. “But we can’t push the agenda until we have a refurbished theatre. The Octagon is a great venue but, like all of us, it’s showing its age!”

Now We’re Swingin’ a musical pastiche of swing music performed by Australian actor and singer Tom Burlinson and an eight piece band, will play at the Octagon on Saturday 1 September.

Katie Noonan and Karin Schauupp will perform Songs of the Southern Skies in Winthrop Hall on Friday 28 September. Bookings for both shows can be made at the BOCS office in the Octagon (open each day from noon) or on 9484 1133.
Lauren Hollier’s success in UWA’s Three Minute Thesis competition might just have something to do with her gender.

Her research in the School of Psychology on the difference in language development between boys and girls asks if testosterone is the key.

So the PhD student’s winning way with language may have started when she was a toddler, with less testosterone but a bigger vocabulary than little boys of the same age.

Lauren is in the third year of a combined Clinical Masters and PhD in Psychology and is supervised by Associate Professor Andrew Whitehouse and Professor Murray Mayberry.

“I didn’t tell either of them that I was entering the competition until about a week before the presentations,” she said. “Then they were both too busy to come!”

Lauren’s PhD research subject is *Fetal Testosterone Exposure and Language Development: Is Atypical Cerebral Lateralisation the Linking Mechanism?* This was simplified in the 3MT to Boys, Girls and Language: Is Testosterone the Key?

Here is a slightly edited version of her winning presentation:

“Have you ever seen young children playing? You’ll often see girls, say about two years old, who have their dolls and toys spread out around them, having a tea party. And you might hear them saying things like: ‘Would dolly like some more tea?’ ‘Would teddy like three more cake?’ You might see boys of the same age playing with cars, and they might be saying something like ‘vroom vroom.’

“What could be causing this difference? Why is it that young girls seem to have a better vocabulary than boys of the same age?

“One suggestion is how much testosterone these children are exposed to in the womb. We know that boys are exposed to much higher levels of testosterone prenatally than girls are. And this may be what’s underlying the difference in the rate of language development.

“So we looked at this using blood taken from the umbilical cord at birth to measure testosterone, and compared it to a vocabulary measure, which was taken when the children were two years old.

“We found that higher levels of testosterone did indeed predict a smaller vocabulary at age two in boys. So this tells us that higher levels of testosterone may be having a negative impact on the rate of language development.

“The next step is how does testosterone actually affect language development? One theory is what’s called cerebral lateralisation, essentially, asymmetry of the brain. Most people use predominantly the left side of their brains while processing language. And it’s been suggested that atypical cerebral lateralisation (using both sides of your brain equally or using more of the right side) while processing language may underlie delayed language development or even language impairment.

“My aim is to look at this using a neuroimaging technique to determine what side of the brain people use during a language task. I will be doing this with 23-year-olds whose umbilical cord blood was collected at birth. This allows me to directly compare the relationship between early hormone exposure and subsequent brain development. If it is found that higher testosterone is related to atypical lateralisation it will take us one step closer to understanding why girls develop language faster than boys.”

Lauren won $3,000 to further her research and will represent UWA in the Trans-Tasman Three Minute Thesis finals at the University of Queensland on 11 October.

“I don’t want to change my presentation much, but I’m happy to take advice on how I can get some references to autism (which is part of my research) into it. It was so hard to get it down to three minutes and that was one thing that I reluctantly left out,” she said.
Immersing himself in the Arab culture of the West Bank was a perfect springboard into his art studies for Honours student Joshua Baker.

Joshua spent two months as a volunteer in a community centre in the Palestinian territory, teaching children to play the guitar. It was part of a trip to the Middle East that included Iran, Turkey, Jordan and Egypt before returning to UWA to his research into Islamic art.

“I took a year off to travel before starting my Honours research and I was looking for volunteer opportunities in the Middle East, so I could get a real feel for the region and get a visual and geographic context for my studies,” said the fine arts student.

“I’ve always played the guitar so when I found Music Harvest, a community centre in Nablus in the West Bank which engages volunteers to teach instrumental music to local children, it was perfect.”

Joshua taught about 20 children, between the ages of eight and 17 at the centre and also went into primary schools where he had another 60 students.

In return for his work, Joshua was given accommodation and the chance to learn Arabic and have lessons on the oud, a traditional musical instrument.

“Music Harvest is a charitable group that was set up a few years ago and is registered in Ireland,” Joshua said. “While I was there, there were several Belgians and Irish people, all in their 20s, all teaching music. The centre provides guitars, violins, drums, pianos and of course the oud.

Music Harvest is a non-profit independent charity that recruits international volunteers to teach music in under-resourced communities of the Middle East. Go to musicharvest.org or email Joshua at bakerj09@student.uwa.edu.au for information.
A jump in the share price of a pharmaceutical company has signalled significant success for medical researchers at UWA, in their quest to treat Duchenne Muscular Dystrophy (DMD).

A 150 per cent jump in the trading price of Sarepta Therapeutics shares last month came after clinical trials at the Nationwide Children’s Hospital in Ohio US offered the first evidence that the antisense drug Eteplirsen had a significant positive effect on DMD patients.

Professors Sue Fletcher and Steve Wilton, from the Australian Neuromuscular Research Institute (ANRI) and UWA’s Centre for Neuromuscular and Neurological Disorders, have been working for years on the idea of enabling the production of the protein dystrophin, which is missing in patients with DMD.

Clinical trials on a compound developed in their laboratory, which has been licensed by UWA to Sarepta for development, have been run in the UK in 2009–10, and the US over the previous nine months, the research supported mainly by two US National Institutes of Health grants.

This latest trial involved treating patients with an exon-skipping compound once a week over 36 weeks. The boys were assessed by the ‘six minute walk test’ and those who received the treatment were able to walk 69.4 metres further than the boys who were on a placebo.

“The magnitude of this clinical benefit is an unprecedented treatment effect in DMD,” said Dr Jerry Mendell, Director of the Centers for Gene Therapy and Muscular Dystrophy at Nationwide Children’s Hospital.

“This result represents a major advance in the pursuit of a disease-modifying treatment for this severe, progressive and life-threatening disease. The six-minute walk test results with Eteplirsen, combined with its safety profile to date, make Eteplirsen the most promising advance to treat the underlying cause of muscular dystrophy I’ve seen in my more than 30 years in the field.”

DMD is a rare, degenerative neuromuscular disorder causing severe, progressive muscle loss and a premature death. DMD affects approximately one in every 3,500 boys worldwide. It is associated with specific inborn errors in the gene that codes for dystrophin, a protein that plays a key structural role in muscle.

At least three boys with DMD are born in Perth each year. They are usually in a wheelchair by the age of 12.

DMD affects all muscles, including the heart. Eventually progressive muscle weakness leads to heart failure.

Assisted ventilation, medications and good clinical care improve the health and extend the lives of DMD sufferers, but the condition is terminal, and death usually occurs before the age of 30.

Professor Fletcher explained that exons are the protein coding components of...
genes. The large dystrophin gene has 79 exons and a complex expression pattern. "Many different dystrophin gene lesions can cause DMD, but the most common mutations flank exon 51 and disrupt the gene message. Our therapy works by tricks the cell machinery into skipping that exon and linking the remaining exons in such a way that the integrity of the gene message is restored and the code for the protein ‘makes sense’, much like arranging words to link together to make sense of a sentence. The objective of the therapy is to restore some functional dystrophin production and slow down or stabilise muscle deterioration in DMD, giving the boys and young men a better quality of life. The difficulty in developing therapies of this nature is that different mutations require the design and development of different antisense compounds.

"Although a relatively small number of these drugs could help more than 70 per cent of DMD cases, many different antisense compounds will be required for all the other boys who have less common mutations."

The research group is collaborating with a clinic at the ANRI in the QE II Medical Centre, for young men in WA with DMD. "They are keen to take part and contribute to the research," Professor Fletcher said.

"The clinic staff and potential participants are waiting for test compounds to be made available. The process of drug development is costly, and Sarepta Therapeutics has already put over $100 million into the development of Eteplirsen."

The group has had difficulty winning adequate funding in Australia and has been supported mainly by US and European agencies, complemented by funds from special interest charitable groups in Victoria and WA.

Simon Handford, Associate Director of the Office of Industry and Innovation, the technology transfer office of UWA, explained that the licence with Sarepta had been crucial in terms of allowing for the technology to be given a chance of being translated from an idea in the lab to a treatment for patients.

"Drug development is notoriously challenging, with huge costs and complex regulatory approvals to overcome. Partnering is usually the only way that a university can access the funds and expertise required to conduct the necessary clinical trials and this recent result with Eteplirsen is a huge step forward to seeing a treatment developed at UWA being used to benefit patients."

Umbrellas took the place of balloons but the crowd at Open Day seemed just as happy.

The staff volunteers were more concerned about the rain than the visitors were, until it became apparent that UWA’s Open Day would be its usual success, despite the weather.

A display of evil-looking medieval weapons lured male high school students into the Arts building courtyard where they became engaged in discussions about the early modern period, in which UWA arts academics are leaders.

A floating shark drifted around the undercroft while above it, in Winthrop Hall, children lined up to get their arms set in casts by medical students: another generation delighted by this demonstration.

Budding artists stood at easels in the University Club, trying their hands at still life drawing, while listening to talks on why it is so much fun to study fine art at UWA.

Business was brisk at the southern end of campus, signalling a continuation in high numbers of school leavers choosing to study commerce.

All the food outlets were jam-packed all day, a good indicator that visitors had come to stay and were not going to be deterred by wet weather.

Once again, it was a day to feel proud of UWA and of the efforts of all our colleagues who worked so hard before the event and volunteered their time on Open Day.
Managing water across borders

Water knows no political boundaries.

River catchments extend through two, three and up to ten countries in Europe, creating a potential headache for water management systems and policy-makers.

Research Professor Jeff Camkin, who has a background in water policy and governance, has won an Australian Endeavour Executive Award through which he will help build collaboration with European countries, specifically on the Iberian peninsula, on water management by sharing the skills and experience for which Australia is respected.

The Endeavour Executive Award provides professional development opportunities for high achievers, with a focus on building skills and knowledge through a host work environment.

Professor Camkin has travelled, studied and consulted in water management and policy all over the world, including a 2004 Churchill Fellowship to South Africa, Brazil and the US.

“Everywhere you go you can learn something. While Europe is more policy-driven, Australia is typically driven by the urge, once a problem is identified, to have a go and find a solution. As such, we can both learn from each other,” he said.

There is a lot of interest from Europe in Australia’s water management, especially in the face of climate change. “In the south we have a similar climate to Spain and Portugal, with common challenges of declining rainfall, seasonal shifts and more extreme events. For both regions this requires changes to farming systems and new approaches to urban water.”

Professor Camkin has been lecturing at Portugal’s University of Algarve for a couple of years, through the European Union’s Erasmus Mundus program, which funds joint postgraduate programs with universities around the world. He is also Australian Coordinator for UNESCO’s Hydrology for the Environment, Life and Policy (HELP) Program.

His four-month Endeavour fellowship brings together UWA’s Centre of Excellence for Ecohydrology, UNESCO and Professor Camkin’s host organisation, Portugal’s National Laboratory of Civil Engineering.

“My aim is to support ongoing mechanisms for exchange of experiences and learning between Australia and Europe,” he said. “I hope to create specific programs and projects which harness Australian experiences to help address the challenges of climate change, population growth and water availability.

In recent years, his focus has been on bringing together research, policy and stakeholder interests, including business and educational exchange.

Professor Camkin expects his fellowship to result in more joint research proposals with European partners, teaching exchange programs and extended networks for core partners, associated organisations and individuals.

On 2 August, he delivered a lecture in Faro, Portugal, on water governance. Presentations on ecohydrology in Australia to the University of Algarve, and workshops in Barcelona and Lisbon are also part of his Endeavour Award program.

He welcomes interested individuals and organisations to contact him at jeff.camkin@uwa.edu.au or, while he is away, contact Neil Coles Director of the Centre of Excellence for Ecohydrology at neil.coles@uwa.edu.au
While Sir John Winthrop Hackett probably spent his final years watching benevolently over the University he funded, his wife was otherwise occupied.

_Australian Household Guide_, edited by Lady Deborah Hackett, was published in 1916, the year of Sir John's death. UWA has two copies in the Scholars' Centre, rediscovered recently as centenary activities and publications are researched and organised. (One is dedicated to Edith Cowan.)

Lady Hackett, at the age of just 28, became known as the Australian Mrs Beeton for her book, a 1,136-page compendium of recipes, domestic advice, household lore and handy hints. Despite her youth, she was already a mother of five children and had a reputation as a remarkable society hostess.

WA historian Prue Joske observed that it “broke new ground in treating problems faced by Australian mothers and families day by day, year by year.”

As Lady Hackett wrote in the preface: “Of the making of cookery books, there is literally no end. They fall from the press thick as autumn leaves … the present work however is not merely a cookery book but a book on household management.”

The first half of the book, written by experts in many fields and edited by Lady Hackett, has chapters on _Hints Upon Personal Appearances_, _What Young People Should Know_ (an extremely short and not very informative section on sexual health), _Backyard Poultry Keeping_, and _How to Do the Washing_ (including gathering equipment for melting soap and making starch).

A chapter on _General Hygiene_ recommends the best choice of house design and soil (“dry and porous”) on which to build it.

There is a long chapter on home nursing, with tips for looking after patients suffering from diphtheria and tuberculosis. A ‘cure’ for the common cold is still in vogue today: “A hot bath followed by a drink of hot home-made lemonade and 24 hours in bed will often cure an incipient cold.”

Even nearly 100 years ago it seems housewives were interested in nutrition. A chapter is devoted to the percentages of water, protein, carbohydrate, fat and ash contained in a huge variety of foods.

Lady Hackett’s 3,000 recipes cover everything from homemade fish paste to puff pastry, from wedding cakes to cooking mutton. A section of French cookery includes galantine of lamb breast and choux pastry, with some of the recipes written in French.

A second edition of the Guide was published in 1940 to raise money for the Australian Red Cross and its efforts during World War II. The name was changed to _Lady Hackett’s Household Guide_ even though, by then, she had remarried and changed her name to Deborah Buller-Murphy.

The publishing expenses were covered by advertisements which are as amusing and interesting as the editorial. They include ads for Kodak cameras, women’s fashions, pianos, the Commonwealth Bank and the Savoy Hotel.

The charity edition of her book raised the fantastic sum (in those days) of $10,000.

If you would like to learn how to clean a white parasol, treat acne (with mercury), disguise mutton as goose or increase a nursing mother’s milk (by drinking stout), let Lady Hackett be your guide.

_Australian Household Guide_ was brought to light by Senior Honorary Research Fellow John Melville-Jones in his research for a book on Hackett: the man, the bequest and the Hackett memorial buildings. It will be published next year as part of the Centenary celebrations.
There were no tears over silver medals at the English Australia Olympics at UWA earlier this month.

While our students, staff and graduates competed in London, students from the Centre for English Language Teaching (CELT) joined international students from six other language colleges to celebrate the Olympics and compete in some international games of their own. More than 120 students from 32 countries laughed as much as they played while competing in the limbo, fly, egg and spoon race, sack race, tug-o-war and ball games, escaping the rain in the big indoor venue at the School of Sport Science, Exercise and Health.

Probably the most difficult task of the afternoon for many of them was repeating the Olympic Oath – in English of course.

This is the second time CELT has organised an international games. Last year, students played a soccer tournament on Riley Oval, inspired by the recent World Cup.

Organiser Fiona Taylor, CELT’s student activities coordinator, said the noise, chaos and difficult logistics were worth it, to see the smiles on the students’ faces.

“Everybody really enjoyed themselves,” she said. “It is important that they learn more than just the words of a language; that they get involved in activities with other students, make friends and, in this case, understand how Australians love their sport.”

Kaplan International Colleges won the day, with UWA coming second. Peter Rogers, Principal of Kaplan, said: “What an amazing three of hours of competition, all teams desperate to win but a great spirit amongst all students. So much noise from such a mixture of countries. Students loved the authentic Olympic atmosphere, complete with team uniforms, torch parade and the athletes’ oath.”

There were more medals and cups presented than there would have been in a day of competition in London.
Next year’s Centenary will mark a change in the history of Currie Hall when it will be re-named University Hall.

The old name will be retained with the existing administration and dining building known as Sir George Currie Hall. Chris Massey, Director UWA Student Residences, said the University’s decision to change the Hall’s name represented a wonderful opportunity to strengthen links between the Hall and the University.

“Next year’s Centenary will mark a change in the history of Currie Hall when it will be re-named University Hall.”

The expansion is the most significant change in the history of the Hall since the 1960s and University Hall represents the next chapter in UWA’s student accommodation offering.

“We anticipate the new name will further build on the college community identity for students, staff and alumni.”

The project is now 10 months into the construction program, due for completion early next year, with each of the three new buildings currently built to level three.

“Address the conference, as she has just returned from a senior post with ASEAN, with a useful policy-maker’s perspective,” Professor Stone said.

She and Professor Beeson are planning to publish some papers from the workshop.

“We encourage other UWA academics to become involved in GR:EEN,” she said. “Anybody in the general social science field can become engaged with GR:EEN and there are regular calls for papers for a lot of workshops and seminars. Mark and I can’t get to all the events, so we would welcome interest from others in areas such as business, geography, communications and Asian studies.”

She said the advantages of being part of the European Commission project, which spreads across 16 international universities, included access to resources and research projects, publication opportunities and policy-relevant research.

A key feature is a new landmark entrance, which will be accessible via the Mounts Bay Road/Stirling Highway pedestrian underpass.

Inspiration for the new entrance has been drawn from the colonnades and cloisters existing across campus as well as the Five Lamps of Knowledge, a mosaic representing five of the seven virtues of wisdom, with maidens holding lighted lamps, located above the Great Gates at Winthrop Hall.

The glazed tower entrance is a modern take on a lantern.

Director Campus Development Rowan Maclean said the team involved had been very focused on ensuring the design and architectural treatments were of a high quality.

“The entrance will enhance the connectivity between the colleges, the community and the University,” she said.

“It will reflect the prominence of Winthrop Hall and create a modern yet identifiable relationship with the campus.”

The new name, University Hall will be introduced in 2013, aligned with the centenary and the opening of the new student accommodation. You can watch construction time-lapse footage via the Campus Development and the Hall websites.
It’s your (working) life

Have you ticked the boxes yet?

UWA’s three-yearly Working Life survey is up and running and the more people who complete it the better picture of UWA can be created.

What’s good about working at UWA? What’s not so good? And what would you like to change?

This is your opportunity to be heard about what it is actually like to work at UWA. The Working Life survey also gives us a chance to reflect on all the positives of working in and being part of a University community.

Rod Dewsbury, Associate Director, HR Policy and Planning, wants views from all perspectives. About 40 per cent of staff completed the 2009 survey and he hopes to increase that figure this year.

“It will take about 20 minutes,” he said. “It’s not a long time when those minutes can influence how you spend most of each working day.”

Prizes of iPads are offered as an incentive to take part.

You have until Friday 31 August to respond, so what are you waiting for?


RESEARCH GRANTS

ARC LINKAGE PROJECTS

Dr Pauline Grierson, Professor Shaun Collin, Professor Peter Davies, Plant Biology (School of), Natural Resource Management (Centre of Excellence in), UWA Oceans Institute: ‘Ecological responses of native fishes to dynamic water flows in northwest Australia’—$400,000 (2012-14)

Winthrop Professor Andrew Millar, A/Professor Rudolf Grimm, Dr Thomas Biddulph, Plant Energy Biology (ARC Centre for), WA Department of Agriculture and Food, University of California, Davis: ‘Functional network analysis of plant metabolism in response to salinity and temperature through targeted proteomics’—$450,000 (2012-14)

Dr Roger Jones, Associate Professor Michael Renton, Brenda Coutts, Plant Biology (School of), WA Department of Agriculture and Food: ‘Determination of factors responsible for aphid-borne pea seed-borne mosaic virus epidemics in peas and development of effective virus management tools’—$111,000 (2012-14)

Winthrop Professor David Blair, Associate Professor Li Ju, Andrew Sunderland, Ray Lockwood, Physics (School of), Fugro Airborne Surveys Pty Ltd: ‘High performance Electromagnetic Airborne Mineral Exploration for Discovery of Deep Earth Resources’—$330,000 (2012-14)

Winthrop Professor Colin Raston, Dr Killugudi Swaminatha Iyer, Chemistry and Biochemistry (School of), UWA: ‘Application of microfluidics in engineering functional noble metal nano-materials’—$240,000 (2012-14)

Winthrop Professor Hans Lambers, Dr Kingsley Dixon, Sir David Read, Plant Biology (School of), WA Botanic Gardens and Parks Authority (Kings Park): ‘The role of mycorrhizal fungi in the nutrition of temperate terrestrial orchids’—$415,000 (2012-14)

Dr Andrea Emberly, Dr Sally Treloyn. Winthrop Professor Jane Davidson, Associate Professor Kathryn Marsh, Associate Professor Robert Faulkner, Patsy Bedford, Siobhan Casson, Graduate School of Education, Music (School of), University of Sydney, University of Melbourne, Kimberly Language Resource Centre: ‘Children, Knowledge and Country: Evaluating and developing music-based strategies for teaching and learning in remote Aboriginal communities in WA’—$215,115 (2012-14)

Assistant Professor Brendan Graham, Winthrop Professor Andre Luiten, Professor Michael Johns, Winthrop Professor Eric May, Adjunct Professor Ken Marsh, Dr Einar Fridjonsson, Mechanical and Chemical Engineering (School of), Physics (School of): ‘Avoiding Cryogenic Solids Formation in Liquefied Natural Gas Production’—$822,689 (2012-15)

Winthrop Professor Stephen Powles, Andrew Wells, Plant Biology (School of), Nufarm Australia Ltd: ‘Identifying the biochemical and molecular bases of 2,4-D herbicide resistance in the economically important weed Raphanus raphanistrum (wild radish)’—$285,000 (2012-14)

Winthrop Professor Lorenzo Faraone, Winthrop Professor John Deli, Buddhika Silva, Professor Jaroslaw Antoszowski, Professor Mariusz Martyniuk, Professor Adrian Keating, Winthrop Professor Yinong Liu, Dr Robert Basedow, Electrical, Electronic, and Computer Engineering (School of), Mechanical and Chemical Engineering (School of), Goodrich Corporation ISR Systems: ‘An investigation of novel Microelectromechanical Systems (MEMS) based technologies for Visible-NIR spectroscopic imaging’—$490,000 (2012-14)

Winthrop Professor Hans Lambers, Associate Professor Megan Ryan, Professor Edward Barrett-Lennard, A/Professor Philip Brookes, Professor Mark Tibbett, Plant Biology (School of), WA Department of Agriculture and Food, Rothamsted Research, Cranfield University: ‘Farming in a biodiversity hotspot — harnessing native plants to reduce deleterious off-site phosphorus flows’—$390,000 (2012-14)

Associate Professor Guijun Yan, Dr Chunji Liu, Dr John Manners, Dr Catherine Feillet, Plant Biology (School of), CSIRO, Institut National de la Recherche Agronomique: ‘Characterisation of a major quantitative trait locus on wheat chromosome 3BL responsible for Fusarium crown rot resistance’—$380,000 (2012-15)

When life is not plain sailing...

The Employee Assistance Program offers free confidential counselling to UWA staff and immediate family, for personal or work problems.

To arrange an appointment contact one of the following service providers:

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<tr>
<th>PPC Worldwide</th>
<th>UWA Counselling and Psychological Service</th>
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<tr>
<td>Tel: 1300 361 008 (24hrs)</td>
<td>1st Floor, Social Sciences Building, South Wing</td>
</tr>
<tr>
<td>Web: au.ppcworldwide.com</td>
<td>Tel: +61 8 6488 2423 (Office Hours)</td>
</tr>
<tr>
<td>Web: counselling.uwa.edu.au</td>
<td>Web: counselling.uwa.edu.au</td>
</tr>
</tbody>
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For further information on the UWA Employee Assistance Program see safety.uwa.edu.au/policies/eap

Data Collection Services

SAVANT specialises in fast, accurate, and cost-effective data collection using the latest in sophisticated technology.

SAVANT services include:
> Research Design, Question Development, Questionnaire Design
> Paper Questionnaire Printing and Distribution
> Scanned Paper: Data Collection (1000 doubles-sided pages/hour)
> Online Data Collection [see www.savant.net.au/example]
> Statistical Analysis and Reporting

SAVANT specialises in paper and online surveys and clinical data sheet collection.

SAVANT has assisted with over 50 NHMRC, ARC, UWA-funded and postgraduate research projects.

For further information, please contact:
Dr Shane Langford or Jeanette McQueen
Suite 14, 37 Brown St, EAST PERTH, WA 6004
[08] 9325 1500 | www.savant.net.au
NEED A PHOTOGRAPHER?

Prize nights, book launches, significant visitors and events: most staff want them captured by a photographer.

The University does not have an official photographer, but Public Affairs can provide advice and recommend a range of professional photographers.

Contact UWA Public Affairs for more information:
Kate on 6488 7302 or Jeantine on 6488 8000.

CALL FOR NOMINATIONS TO THE ACADEMIC BOARD

NOMINATIONS ARE INVITED FOR THE ELECTION OF ACADEMIC STAFF AND GENERAL STAFF TO THE ACADEMIC BOARD

Elections will be carried out by postal ballot in these two categories. Research staff should apply in the relevant category according to whether they hold an academic or general staff appointment.

Further details of the requirements in each category, nomination forms and optional proformas for summarising prior experience may be found at the Academic Policy Services website: aps.uwa.edu.au/home/uwas_committee_system/board/elections/callnomin

Given that there is considerable gender imbalance on the Board, nominations from women are encouraged.

Completed nominations forms, together with optional experience summary proformas, must be returned to the Academic Secretary, Syliva Lang, by 5pm Monday 10 September 2012.

Prospective nominees should note that the Academic Board has four scheduled meetings per year, at 2:15pm on the third Wednesday of March, June, September and November. The meeting dates in 2013 will therefore be: 20 March, 19 June, 18 September and 20 November.

Information on the Board can be found at: aps.uwa.edu.au/home/uwas_committee_system/board

UWA Historical Society

WHITFIELD AND HACKETT: A CHAT AND A STROLL

Sunday 26 August at 2.30pm

Irwin Street Building

John Melville-Jones will present a thumb-nail sketch of founding Professor Whitfield and a short talk about the Hackett buildings. This will be followed by an escorted stroll, under the archways, from the Irwin Street building to Whitfield Court.

UWAHS members: free; others are invited to contribute $5.

Book your place by calling 9384 6166

Inquiring Minds

A NEW LECTURE SERIES, FOCUSING ON THE MOST EXCITING RESEARCH AT UWA, STARTS ON WEDNESDAY 29 AUGUST.

Inquiring Minds is the result of collaboration between the Institute of Advanced Studies, the Graduate Research School and the Centre for Software Practice.

The inaugural lecture will bring the SKA to the audience. It is arguably the biggest and most exciting project at UWA for many years, but a lot of people don’t understand it.

Director of the International Centre for Radio Astronomy Research and Professor of Astronomy and Astrophysics, Peter Quinn, will help to explain it.

This first lecture will be in the Octagon Theatre at 6pm, introduced by Robyn Owens, Deputy Vice-Chancellor Research.

Entry is free but please reserve your place through the booking office at the Octagon, open Monday to Friday 11.15 – 4pm, or on 6488 2440.

IN A CAMPUS EMERGENCY

DIAL 2222

Security staff will call the emergency services, direct them to you and come to help you while waiting for their arrival.
By Winthrop Professor Ray da Silva Rosa

UWA shares a common purpose with the Australia Council: to achieve international excellence. A recent review of the Australian Council endorsed ‘excellence’ as the basis of its grants and claimed that due to the Council’s funding “Australia now punches far above its weight on the international arts stage”.

Aspiring to “punch above one’s weight” seems a characteristically Australian ambition but achieving excellence has universal appeal. Indeed, a few years back Cornell University Parking Service won an award for excellence for achieving a remarkable level of efficiency in restricting motor vehicle access.

US literary academic Michael Berube noted that “excellence could just as well have meant making people’s lives easier by increasing the number of parking spaces available to faculty. The issue here is not the merits of either option but the fact that excellence can function equally well as an evaluative criterion on either side of the issue of what constitutes ‘excellence in parking’ because excellence has no content to call its own”.

Endorsing excellence as the basis of grant giving may be a politically expedient way of avoiding the tricky issue of formulating a rule to decide which arts projects to fund – to its authors’ credit, the Australia Council review noted many respondents had identified the vacuity of excellence as a criterion – but is such evasion appropriate for a university? Actually, the problem for UWA is not so much evasion but rather the sleight-of-hand by which ‘excellence’ gets defined in particular ways inimical to its values.

For instance, UWA has set its sights on being a top-fifty university as measured by the Academic Ranking of World Universities (ARWU) but the ARWU does not rate the Arts and Humanities “because of the technical difficulties in finding internationally comparable indicators with reliable data”. Nor, despite its pretension to being an ‘academic’ ranking, does the ARWU give any weight to teaching and learning. The unpalatable consequence is that should UWA choose to follow an ‘efficient’ path to improving its ARWU ranking it is likely those activities and pursuits not covered by the ARWU system will get short shrift. Their excellence, defined in ways other than the ARWU system, will be seen as beside the point or, at best, subject to continual call for justification.

The conflation of what is capable of being recognised as ‘excellent’ with what is measurable and subject to audit and control is the heart of the problem.

The eminent early 20th century economist Frank Knight was scathing in his assessment of the saying, often attributed to Lord Kelvin, that “where you cannot measure your knowledge is meagre and unsatisfactory”. In labelling this view misleading and pernicious, Knight pointed out “in the field of human interests and relationships much of our most important knowledge is inherently non-quantitative, and could not conceivably be put in quantitative form without being destroyed. Perhaps we do not ‘know’ that our friends really are our friends; in any case an attempt to measure their friendship would hardly make the knowledge either more certain or more satisfactory”.

If a university motto or marketing slogan is necessary, UWA has a perfectly adequate one. ‘Seek wisdom’ is a beguiling description of what is distinctive about what we do at UWA – in the Arts, in Business, in Physics, the Humanities, in Agriculture … in all areas. It doesn’t pointlessly elevate one form of knowledge above others. It may even prompt us to aspire not so much to ‘punch above our weight’ but rather to ‘pull our own weight’.

Let us ditch the banality of ‘Achieving Excellence’ and return to ‘Seek Wisdom’.