Local football and netball stars are among the first people in the world to benefit from UWA-based medical technology.

One in four athletes, across all disciplines, suffer tendon injuries at some time in their career and they are the most difficult to treat.

Now they can be treated with an injection of their own tendon stem cells. The technology for autologous tenocyte injection and collagen scaffold device were developed by a team led by Winthrop Professor Ming-Hao Zheng, director of the Orthopaedic Research Unit in the School of Surgery.

That technology has now been acquired by Orthocell, a company based in the Fiona Stanley Hospital and Murdoch University precinct, which is listing on August 2014.

Orthocell can take the pain out of sore shoulders: as Robyn Owens, Paul Anderson and Ming Hao Zheng remind us as they sign the technology release.

New treatment gives people with pain a sporting chance

By Lindy Brophy

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continued on page 2
New treatment gives people with pain a sporting chance

continued from page 1

is taken from the patient with a needle. It is then sent to Orthocell labs where tendon stem cells are grown from the tiny tissue. A few weeks later, these patient’s own cells are injected into the site of the damaged tendon and the healing process begins.

“Research is not just for publications,” he said. “It is to help society. The joy is in the process and the trials and seeing it all come together at last and work to improve somebody’s life.

“My focus is on translating the research into benefits for the patient.”

Ortho-ATI has been used to treat hamstring injuries, chronic tennis elbow and damage to the rotator cuff tendon, resulting in pain in the shoulder.

“Shoulder pain is the third most common ailment presented to a GP,” Professor Zheng said. “And 80 per cent of shoulder pain can be traced to the rotator cuff tendon.”

“The acquisition of collagen scaffold device and tendon stem cell therapy by Orthocell enables the company to become a global key player in regenerative medicine and stem cell therapy,” said Paul Anderson, CEO of Orthocell.

Simon Handford, UWA’s Associate Director Research Development and Innovation, worked with Professor Zheng and Mr Anderson on the acquisition.

“It’s been a great pleasure working with Zheng and Paul, and in many ways this has ticked all the boxes when it comes to technology transfer,” he said.

“Without the involvement of Orthocell, these patented technologies would not have been able to be worked through from the proof-of-concept to the final clinical trials.

“It’s also been pleasing to see them do more research at UWA and to develop new products. And of course there are now a dozen or more jobs in biomedicine in Perth created by Orthocell. And maybe a treatment for my own dodgy shoulder!”

The tendon transplant, known as Ortho-ATI, has received a licence from the Therapeutic Goods Administration. Professor Zheng explained the process: a tiny amount of healthy tendon tissue from the stock exchange within the next few weeks.

About 15 years after Professor Zheng and his collaborators began working on the project, 200 patients in Australia, Hong Kong and Europe have received the treatment after TGA approval in 2010. At a cost of around $3,200, the treatment has been shown to be effective, in patients who have suffered years of pain and disability and for whom other conservative treatments have failed.

At least two high profile AFL players from Perth have been successfully treated but we can’t identify them.

“The acquisition of the technology by Orthocell enabled us to go global and complete the process of double blind randomised clinical trials in the Netherlands,” Professor Zheng said.

“It is a process that is similar in concept to bone marrow transplant that began in the 1960s for leukaemia patients. We didn’t re-invent the wheel but we did invent new ways of growing the tendon stem cells from tiny needled biopsied tissue.”

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The story of mutiny and massacre that surrounds the 17th century Dutch ship Batavia is at least vaguely known by many Western Australians and most historians.

Less well known is the name of the island on whose reefs the ill-fated Batavia passengers and crew were shipwrecked. Beacon Island, located in the Houtman Abrolhos off the Western Australian coast, became the final resting place for the Dutch East India Company Retourschip after it went wildly off course on a voyage to the Dutch East Indies.

Last year a tooth, dating back to the 1600s, was found on the island by Dr Jeremy Green and a research team from the WA Museum (WAM). It indicated a possible burial ground nearby.

Earlier this year, the WAM team asked members of UWA Geophysics if they could undertake geophysical remote sensing surveying of the area to search for remains of the massacre victims.

Winthrop Professor David Lumley, Chair in Geophysics at the Schools of Physics and Earth and Environment, mounted a geophysical expedition to the island with Associate Professor Jeffrey Shragge, Research Assistant Professor Nader Issa and PhD candidate Thomas Hoskin, along with Dr Green and WAM staff.

Dr Green explained that the tooth had been discovered in an area that was a nesting ground for the wedge-tailed shearwater, which burrows into the ground to lay its eggs.

“The birds tend to extract small objects from the ground and it was thought that the tooth might have been loosened from a jaw and exhumed during the burrowing process,” he said.

“The area where it was found has fairly low vegetation so it was ideal for geophysical remote sensing surveys.

We put together a small Geophysics team and the expedition took shape,” Professor Lumley said.

The team conducted multiple complementary geophysical surveys, including high-resolution ground penetrating radar (GPR), terrain conductivity, magnetics, and metal detector along with differential GPS for accurate positioning.

“The GPR surveys allow the team to make 3D images in the top couple of metres of soil and rock, which can be used to locate buried objects, excavations, grave sites and so on,” he said.

“The conductivity and magnetometer surveys allow the team to make maps of anomalous electrical and magnetic properties in the subsurface, which can be indicative of buried objects and disturbed soil/rock zones. Metal detector surveys can help identify and discriminate between buried magnetised and non-magnetised objects,” Professor Lumley explained.

Although the geophysical data processing and analysis is still under way, Professor Lumley said that preliminary results suggest that “the geophysical data have imaged several buried anomalies that could be consistent with possible shallow grave sites – especially in the GPR images and conductivity maps. The data sets will be further analysed by the team and targeted for future archeological investigation by WAM staff on subsequent trips to the island.”

Professor Lumley said further geophysical surveying would be conducted on Beacon Island later this year and next, as part of an ARC Linkage Grant, Shipwrecks of the Roaring 40s, led by UWA Archaeology Professor Alistair Paterson with a (metaphoric) cast of thousands.

The expeditions will include UWA academics and staff from Geophysics, Forensic Science and IVEC @ UWA. Also involved will be WAM, the British Museum, Flinders University, East Carolina University, Curtin University, The Australasian Institute for Maritime Archaeology, Tasmania Parks and Wildlife Service, various Dutch archives and heritage agencies, and a local film production company.

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The care of the University’s animals is officially the best in Australia.

UWA’s Animal Care Services (ACS) has become the only institution in Australia or New Zealand to be granted international accreditation by the Association for Assessment and Accreditation of Laboratory Animal Care (AAALAC).

The laborious and meticulous process took the staff at ACS about four years to complete, including inspections by auditors from Singapore and New Zealand, refinement of programs, staffing structural changes, updating of management systems and the production of a detailed 500-page report.

Dr Malcolm Lawson, Director of ACS, said he was very proud of his staff’s achievements. “We have really great people working in animal care. They really know what they’re doing and are dedicated to providing the absolute best environment for the animals.

“We are now able to respond to international funding agencies who want assurance that everything we do for and with our animals is at the highest level of care and welfare. We are totally accountable, everything is in place, and I believe it gives UWA a competitive advantage in attracting research funding and with animal welfare assurance."

Dr Lawson said it was an enormous effort to document all the structures and management procedures and to prove a well-rounded and effective animal ethics committee.

“In one way, there wasn’t a lot we had to do to achieve accreditation because we already work to a very high standard. But it was a lot of work to document it all and we are all very busy, which is why it took us so long.”

He said requests for accreditation had been getting more and more frequent. “It was an expensive process but we needed to get it done.”

The letter of commendation specifically mentioned the “excellent environmental enrichment program, evidenced by the use of enrichment play pens for rabbits … paper tunnels and huts, red plastic igloos, shredded paper and chewing blocks for rodents … the ventilated trolley for transporting rodent cages … and the conscientious and dedicated animal care staff …”

Auditing was done by Dr Leslie Retnam, the Director of Veterinary Services, Biological Resource Centre, Singapore, and Dr Virginia Williams, Chair National Animal Ethics Advisory Committee, Wellington, New Zealand.

The ACS will be formally audited every three years to keep its accreditation current.

The letter went on to say: “Council has no further recommendations to offer for improvement of the animal care and use program at this time ... we wish you continued success.”

Dr Lawson said some institutions had limited accreditation because they dealt only with one type of animal, usually mice. “We have thousands of animals from mice to sheep and everything in between, which makes it even more demanding to achieve,” he said.

The staff themselves are well cared for too. Dr Lawson and his management team help their staff to get relevant qualifications that give them a career path. They have also developed a relevant health and safety program because working with animals can be a risky business and a high level of occupational health and safety is an important part of the accreditation process.

“We take far more responsibility than just feeding the animals and cleaning their living space,” he said. “Animal care and welfare is very challenging.”

The letter of approval from AAALAC headquarters in the US highlighted outstanding contributions by Simone Chapple, ACS’s facilities manager, Dr Lauren Callahan, the attending veterinarian, and Professor D’Arcy Holman, as Chair of the Animal (research) Ethics Committee.

Professor Robyn Owens, Deputy Vice-Chancellor (Research) said: “I am very proud of our ACS team and I look forward to the many international research opportunities that this accreditation will facilitate.”
Welcome back to the second semester. I hope that many of you, like me, were able to take a break with your loved ones and have returned refreshed to engage in more world-class teaching, research, innovation and creativity.

Despite the sadness that the MH17 disaster brought to all of us, we owe it to those who have lost their lives to make the most of ours.

We started the year with the news that three of our disciplines, Psychology, Education, and Earth and Marine Sciences, had been ranked in the world top 40, according to this year’s QS World University Rankings by Subject.

These achievements, along with our current position at number 91 in the Shanghai Jiao Tong University rankings, don’t come easily. It was with pride in our abilities that we took on the 2014 academic year.

We soon heard that 11 of our alumni were among the 40under40 winners. Business News identifies and celebrates WA’s leading business entrepreneurs under the age of 40, and their alma mater celebrated with them.

After the Federal election, the Minister for Foreign Affairs Stephen Smith retired from politics and we were fortunate that he chose to join the University from which he graduated. He is now a Winthrop Professor of International Law, where his experiences in foreign affairs and trade, defence and science are a great asset.

In the Zone in May saw the biggest diplomatic delegation ever to visit WA. The 80 Ambassadors and Heads of State gathered at UWA to assess the opportunities for business and investment in WA and throughout the region.

Also in May two of our internationally acclaimed physicists, Winthrop Professors Michael Tobar and Eugene Ivanov won a prestigious Clunies Ross Award for their cutting edge technology which is already used by the defence sector.

I joined Julie Bishop, the Minister for Foreign Affairs and our local Federal MP, to unveil the foundation stone of a $62 million marine research centre. The Indian Ocean Marine Research Centre will bring together 240 of the world’s leading scientists in impressive purpose-built facilities to ensure we retain our place at the top of the world in earth and marine sciences.

In June, Professor Peter Klinken became the third UWA researcher to be appointed to the highly-respected position of Chief Scientist for WA. The former head of the Perkins Institute (previously the WA Institute for Medical Research) has ambitions to turn Perth into a centre for innovation and creativity, moving from the successes in oil, gas and mining to creating new industries in biotechnology. I am sure the University can support him with this bold plan.

I was delighted with the news that six of our academics had been recognised among the most influential in the world, topping the 2014 Thomson Reuters list of highly-cited researchers.

Congratulations to all those whose hard work and dedication makes UWA the leading institution of which we are so proud.

I hope this semester will bring as much success.
A co-operative solution for ailing economies

An economic model conceived by weavers in the US in 1857 could offer one of the best solutions to the ‘jobless recovery’ following the global financial crisis.

The co-operative, a business run by and for its members, has been the focus of a research group in the Business School for the past three years.

Professor Tim Mazzarol and his colleagues have been learning more about what sustains co-operatives and mutual societies and have now established the Co-operative Enterprise Research Unit (CERU).

“Co-operatives are primarily distinguished from investor-owned companies by their democratic governance, with one vote to each member, regardless of that member’s stake,” Professor Mazzarol explained.

“They are equally about economic and social outcomes, unlike shareholder-driven companies which just want a return for investment.

“If that was the only business model, our world would be more competitive and less convivial place,” he said. “I don’t have a problem with those companies, but that’s the reality.”

The research unit wants to help co-ops in Australia and around the world to realise their social and economic potential during what has been flagged as the Co-operative Decade. The partners involved hope co-ops will address high unemployment in many countries.

“Some of the biggest companies in the world are co-operatives: Credit Agricole, a bank in France; Fonterra, a dairy company in New Zealand; and Murray Goulburn, the fruit-growing and canning co-op in New South Wales.

“WA has the biggest co-ops in Australia in Co-Operative Bulk Handling (CBH) and the Royal Automobile Club of WA.”

He said a co-op was as much about a mindset as a business: working together for a common cause and for each other.

“CBH is a simple example. Wheat farmers used to move their grain in jute bags but in 1933, they decided they wanted to follow a Canadian model and move their grain in bulk. No individual farmer could afford to build the silos and bins, so they pooled their resources to do it. CBH is owned by the farmers, run by the farmers to service the farmers.”

Professor Mazzarol said to get a co-op going needed willingness within the community to work together, a capacity for finance and management and the ability to create the wherewithal to make it happen.

“This means it is not always the perfect business model. In some cases, a not-for-profit (NFP) is what’s needed, if a community is disadvantaged and doesn’t have the ability to set up a co-op. A NFP is purely a social enterprise funded by philanthropy and often supported by government.”

He sees a role for co-ops in developing economies which were ruined by the GFC several years ago.

The members of the CERU plan to launch a leadership program for co-ops and mutuals, and hope to work with the Institute of Agriculture to enhance rural farming communities in WA and South-East Asia, using co-operative enterprise principles.

The unit grew out of an ARC research grant and an industry linkage grant several years ago. Professor Mazzarol has been interested in and involved in co-ops for a long time and now has a network of 30 to 40 people who are keen to turn the subject into a prominent business discipline.

The International Co-operatives Alliance (ICA) has declared the next 10 years the Co-operative Decade. As part of this focus, CERU is doing a national industry benchmarking study in conjunction with the Business Council of Co-operatives and Mutuals, the University of Sydney and ICA. This project aims to map the size and structure of the sector and its economic and social contribution to the national economy.
Visiting academics are already taking advantage of the hotel-style short stay accommodation in the revamped St Catherine’s College.

The former women-only college is the only UWA residential hall to offer this service.

It is also the only one with a bright red and orange internal tubular slide between the first and ground floors.

Construction has recently finished on the $43 million project, half of which was funded by the Federal Government’s National Rental Affordability Scheme. The population of St Catherine’s has increased from 160 to 400 students and, for the first time, it includes male students.

“Men make up 30 per cent of the residents,” said Head of College Fiona Crowe. “The percentage will gradually increase.”

She said students and alumni were consulted about all the changes, from the very beginning of the project, seven years ago.

“We also visited lots of colleges around Australia, we spoke to the Deans at UWA to see what they wanted from a residential college, and we involved our near neighbours as well.

“The students said they wanted to be able to visit each other in their rooms at night, wearing their pyjamas, without having to go outside, so all the wings are internally connected. They wanted hard flooring so they could slide around in their socks! They asked for friendly connected common spaces where they could bump into each other. And they opted to get rid of the swimming pool in favour of facilities that everybody would use year-round, including more open-plan common areas, sound-proof music rooms and two roof gardens, one with a vegie garden and fruit trees, which has bean bags and outdoor movies in the summer.”

The college will soon apply for a bar licence and the students have agreed it will be called Bridie’s, after Ms Crowe’s much-loved German short-haired pointer.

The Deans had said there was nowhere for short-stay academics on campus. “Now all their needs are catered for by the University Club and St Catherine’s,” Ms Crowe said.

Art work by former Indigenous students and current residents will soon adorn the walls. And the students will soon take part in their own version of My House Rules, where groups will be given small budgets to decorate common areas.

They will also join with Friends of Kings Park and students from Landscape Architecture to complete native gardens and landscaping around the new wings. The gardens will feature the college’s emblem, the banksia.

Each of the seven wings has been named with the word for “home” in seven different languages. “We want to offer the students an international experience but our places go first to domestic students: Indigenous, rural, interstate, students with disabilities and young women studying non-traditional courses including sciences, engineering and information technology.

“We had 979 applications for 400 places this year,” Ms Crowe said. Apart from the buildings, the grounds and the food, the college offers hundreds of programs and services including 84 academic tutorials each week, and a new men’s health and wellbeing program.

“What we’re doing here ties in with UWA’s wish for the University to be more collegiate,” she said. “All the great universities in the world are collegiate. When the extensions at St Thomas More are finished, there will be 2,000 UWA students living in colleges at the edge of the campus.

“And I understand UWA has plans to eventually double the availability of community living.”

The new entrance foyer is reached from Park Road, but if you wander in from Stirling Highway and get lost, you can always take a short cut back to the ground floor via the slide, which Ms Crowe said was inspired by a similar one at Google headquarters in Berlin.

“Apparently you go much faster in an academic gown!”
Perth people may have become complacent about water use since desalination boosted our supplies in recent years.

But UWA Law School academics and water law experts Alex Gardner and Michael Bennett say that desalination is only part of the solution to a dwindling water supply in a drying climate.

They have spent the past 12 months drafting proposed water law reform recommendations for the south west of WA, which they have recently presented to the State Government.

Associate Professor Gardner and project researcher and PhD scholar Mr Bennett recommend greater flexibility in water resources law.

“New water laws are needed to meet the challenges of groundwater management in a drying South West,” Professor Gardner said.

Their report is based on what they see as a ‘binding duty’ by the State Government to recognise and consider climate change and the fact that it is already affecting the South West and its groundwater supplies.

The average winter rainfall has declined by 17 per cent since 1970, with a 50 per cent reduction of runoff into reservoirs and a greater use of groundwater. At the same time, less rainfall has meant less recharge of underground aquifers.

One of their first recommendations for law reform is that domestic garden bores, often seen as the preserve of the privileged, should be better regulated.

“Our water laws should stop domestic bores from being put into areas where they will have unacceptable impacts, such as near wetlands,” Mr Bennett said.

They want to see flexibility for the government to adjust the amount of groundwater allowed to be taken, in response to seasonal circumstances. “This includes a better mechanism for temporarily accessing extra groundwater in times of severe drought, as long as it is replenished in relatively wet years,” Professor Gardner said.

He said the National Water Initiative model, built around the concept of water users holding tradeable shares to a sustainable consumptive pool, should be introduced for suitable groundwater areas in the South West. (Most of the other states have adopted the NWI model.)

“Across the South West (including Perth), self-supply from groundwater – bores owned by mining companies, industry, agriculture and others – is around twice as much as the amount of water from public water supply.

“For most of these water users, desalination is not the answer to our drying climate. We are going to have to manage our groundwater resources sustainably for the long term.”

The graph shows that Perth rainfall has declined faster than predicted in 1987 by CSIRO. The bent black line shows those predictions (a 20 per cent decline)
Mr Bennett said their project tried to go further than the NWI, to help the State Government create and reform laws that are appropriate for our State.

They referred to the South West, a global biodiversity hotspot, and its reliance on groundwater flows.

“Urban environments are also feeling the stress, as there is less groundwater to irrigate public open spaces which mitigate the impacts of summers that are becoming hotter and drier,” Professor Gardner said.

Their reforms would help to protect public environmental assets such as wetlands.

“Perth used to be famous for its lakes,” he said. “Now so many of them have dried up. I used to water ski on Lake Gnaragara as a child. Now it is just a dry basin. Part of that is over-extraction of groundwater in a drying climate.”

As well as broader regulatory coverage, better groundwater planning and flexible water access entitlements, the report looks at productive and efficient use of groundwater through greater use of water markets.

“Water trading has been possible since 2001, but there are some barriers to that trade that we would like to see lifted,” Professor Gardner said. “We recommend the legislation should include the capacity to remove the current requirement that a purchaser must be an owner or occupier of the land from which the water will be taken.”

An example of water trading is when a land developer wants groundwater for a housing project but all the water for that area is already allocated. The company can buy a water allocation from somebody else, for example a nearby market gardener who is not using all the allocation.

“We also recommend that water should generally be released by the government through methods like auctions, rather than issued free to the first person to apply for it,” Mr Bennett said.

The report, while aimed at State public servants and politicians, is accessible to a general readership. It is at law.uwa.edu.au/research/water-resources-reform/framework

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Greg Skrzypek describes his biogeochemistry discipline of stable isotopes as a narrow field with very broad applications.

Associate Professor and ARC Future Fellow Dr Skrzypek, with Dr Pauline Grierson and Douglas Ford, run the stable isotope laboratory on the Crawley campus that is otherwise known as the West Australian Biogeochemistry Centre.

“Our lab is one of the few places in Australia that provides open access to stable isotope analyses for academics, government and industry from WA and around the country,” he said.

Stable isotopes are non-radio-active isotopes, which don’t decay over time. Their ratios in the environment are perfect tracers of many processes that are not detectable using traditional chemistry.

A/Professor Skrzypek is also convener of the 9th International Conference on the Applications of Stable Isotope Techniques to Ecological Studies (IsoEcol 9), which is currently running at UWA (3-8 August 2014, www.isoecol2014.org).

It is the first time the conference has been held in Australia and it is thanks to his perseverance.

“I applied, unsuccessfully, twice for a development grant from the Perth Convention Bureau (PCB) to go to this conference overseas,” A/Professor Skrzypek said. “After my second application had been turned down, PCB contacted me and generously offered to pay for my air fare to attend the last IsoEcol conference two years ago in France. That’s where I successfully promoted WA as the next conference destination.”

Of the 135 delegates attending IsoEcol in Perth, about 20 per cent are students and thanks to the Australian Institute of Nuclear Science Engineering (AINSE) the conference organisers were able to provide travel grants to Australian and New Zealand students. Other sponsorship allowed registration fee waivers for students from developing countries including Mexico and Guatemala to come to IsoEcol 9.

The conference’s major sponsors are UWA, Sercon (which produces instruments for stable isotope research), Rio Tinto, AINSE and CSIRO. It is co-organised with CSIRO and Rio Tinto.
A book such as Hans Lambers’ beautiful new publication *Plant Life of the Sandplains in Southwest Australia* would usually signal the end of a journey. But for this adopted sandgroper, the gorgeous book – a fusion of coffee table tome and academic rigour – it is a good start for the plant biologist’s next challenge.

That challenge is to get UNESCO World Heritage listing for the South West.

“Our South West is unique and mega-diverse. It is already recognised as one of the world’s biodiversity hotspots, and it deserves to be protected and celebrated,” said Winthrop Professor Lambers.

“The region is similar to the sandplains of South Africa and Brazil, where I have collaborators. The environments function in the same way but support different plant species and families. Brazil locations have World Heritage listing and I see proud signs to that effect on every national park. I see what it does for the people of the region and the tourist industry and I am working towards attaining it for our South West.”

Professor Lambers said he expected the process would take about two years and that the book would help to pave the way.

“World Heritage listing will pose no threat to mining or agriculture as neither industry operates in the area. It can only be a good thing, especially for the State Government, because it will put WA on the map and make it more attractive for eco-tourism, all with no money spent by the Government.”

Professor Lambers came to UWA from the Netherlands just 16 years ago. He had fallen in love on his first visit with the native plants – and the woman who was to become his wife – in 1980. After postdocs in Melbourne and Canberra, he returned to the Netherlands, then settled in Perth in 1998.

When he first came here, he didn’t recognise any plants in WA but said he thought they were all ‘magnificent’.
Professor Lambers worked briefly at UWA with Emeritus Professor John Pate in 1980 and it is Professor Pate’s 30-year old book *Kwongan: Plant Life of the Sandplains*, that this new book replaces.

“John wrote the preface for this book I have edited, which has many contributors,” Professor Lambers said. “A cast of thousands have made this book possible, including collaborators from the Department of Parks and Wildlife, the Department of Agriculture and Food, Kings Park, ANU, the Smithsonian Institute and colleagues at UWA.

“The next ‘chapter’ – getting World Heritage listing – will need almost as much support, from people such as Peter Veth in Archaeology, Don Bradshaw in Animal Biology, Stephen Hopper in the Centre of Excellence for Natural Resource Management, and colleagues in geology and history.”

Professor Lambers has been wanting to put this book together for many years. “There is so much more knowledge available. For example, it took me 10 years to work out why the South West has so many non-mycorrhizal plants. It’s because they are so good at mining the poor quality soil for the nutrients they need. It now seems such a simple answer but nobody knew it.”

Only when he stood down after 11 years as Head of the School of Plant Biology, did Professor Lambers have the time to devote to the book.

He still teaches undergraduates as well as supervising graduate students.

“You want all your best lecturers in front of first year students because most of them put their hearts and souls into their assignments and they deserve the best.”

He said he started studying animal biology as an undergraduate in the Netherlands. “I thought animals were interesting … and they were, but the people teaching were dull and boring. And the plant people were fun. So I changed to plant biology.”

The cover of *Plant Life of the Sandplains in Southwest Australia* is illustrated by Western Australia’s leading botanical artist Philippa Nikulinsky and Professor Lambers is thrilled with it. “It only cost me a lunch with French champagne at my place,” said the man who counts barbecuing as one of his Australian achievements.

It is published by UWA Publishing and will be out next month, at a retail price of $69.99. There is a discount for UWA staff if you order online at www.uwap.uwa.edu.au and use the promotional code UWASTAFF: And you can pre-order NOW, without waiting for September.
“Do I have enough Super to retire?”

That’s the first question most people ask as they head towards the age of 60.

And although staff in Human Resources advise also thinking about the psychological impact of retiring, they recognise that superannuation is an important issue for an ageing population.

UniSuper has appointed an on-campus superannuation consultant, Tricia Bailly, who is now at UWA for three days every week.

She will be working alongside Celine Gaudin, Employee Benefits Manager – Human Resources, to support staff with any general questions about superannuation and more specific queries as they head towards retirement.

“It has been a common but wrongly-held belief that HR was looking after employees’ super” Celine said. “Although we can assist on processing contributions to UniSuper from your pay, we are not able to advise on any other aspects of superannuation. It’s great to have Tricia on campus to provide this level of advice.”

Tricia is licensed to give free general advice and will help staff to make appointments for full financial advice.

“While financial security is a major factor in deciding about retirement, it’s not the only factor,” said Emma Badminton, Workforce Planner, in Human Resources.

“The psychological impact of retiring is just as important to consider.”

“Like the rest of Australia, UWA has an ageing workforce and the fifth of our staff who are over 55 need to plan what they are going to do when they retire, not just how they are going to fund their retirement,” she said.

Emma is running projects, including the Retirement Intentions Survey (conducted in September last year), to support all parts of the University with staff transitioning into retirement (TTR). She recommends that, if you have an idea of what you want to do when you retire, extended periods of leave like long service leave can let you experiment and see if you will enjoy it.

The UWA website has a page called Departing Staff that can help with planning TTR (www.hr.uwa.edu.au/working/departing).

“We advise starting to think about it up to 10 years before you plan to retire,” Emma said.

“Staff might be concerned about the impact on their careers of discussing their plans with their manager 10 years before they plan to retire. But if they are considering going part time or making other lifestyle changes as part of their TTR plan, the sooner they have the conversation the more likely their plans may be supported,” she said.

It may be difficult for staff and managers to have that conversation but it helps both to plan better for the day it happens.

“We want to create a pro-active retirement culture that supports staff and their managers to discuss late career plans with retirement,” Emma said.

Tricia can provide information from the superannuation aspect about TTR and the tax benefits of accessing super while still working.

Celine said that HR could arrange for UniSuper to visit off-campus centres such as Albany or the hospitals. “We also have online webinars, for those who are not working on the Crawley campus and can’t take advantage of the seminars we provide,” she said.

But of course superannuation is not just about staff who are planning retirement.

“I would love to meet young staff members and help them to set up their superannuation plans,” Tricia said. “Young people tend to see superannuation as a retirement plan. But it’s a fabulous tax-effective investment,” she said.

Tricia is available on campus every Wednesday, Thursday and Friday. Contact her at tricia.bailly@unisuper.com.au or by phone on 0400 651 215.
Marine and water scientists are working with their counterparts at Stanford University under a new partnership between the institutions.

And the big winner out of the collaborations will be the environment.

Peter Davies, Pro Vice-Chancellor (Research) said he hoped the partnership would move toward answering some of the big sustainability questions around fresh and marine water.

“As one of the world’s top 10 universities, we look to Stanford in a lot of ways: to see what they are doing that we could do. And they have learnt that the more you collaborate, the better linked you are and the higher ranking you will achieve,” Winthrop Professor Davies said.

“At least one UWA staff member from each project will go to Stanford, and one from Stanford will come here.

“Like us, they are asking global questions and, through UWA, Stanford researchers get access to very different study sites from their own, including the Indian Ocean, one of the least studied oceans in the world,” he said.

The first of the current projects is a study of ocean reef interaction and connectivity, involving a big UWA team that includes Winthrop Professor Greg Ivey from Civil, Environmental and Mining Engineering, and Winthrop Professor Malcolm McCulloch and Professor Ryan Lowe from the Oceans Institute (OI) and Earth and Environment.

Associate Professors Alex Gardner from the Law School and Anas Ghadouani, Director of the CRC for Water Sensitive Cities, are leading the UWA team in research into regional resilience in management of water resources and services in the face of climate change.

Professor Ghadouani is also involved in looking at managing the emerging threat of algal toxins from harmful algal blooms.

An ocean observation project that will develop a concept for monitoring a global network of marine protected areas is led by Professor Jessica Meeuwig from OI and Animal Biology.

And Professor Alistair Paterson in Archaeology is collaborating in a case study in Mauritius to help safeguard fragile lagoons.

The projects are under way for a total of just under $145,000.
A graduate student who was initially refused entry to the University has won the prize for the highest contribution to the MBA program.

Hossein Sedaghat arrived at UWA from Iran with very little English. “I could barely understand what Phil Hancock was saying at my first lecture in the Business School,” he said.

“I listened over and over to the lecture, I spoke English as much as I could, the professors here have helped me to improve my writing and, eventually, I ended up with excellent results, the highest mark in some of my classes.”

Hossein, who ran his own IT solutions business in Iran, won the Charles Harper Prize after throwing himself into his course, earning high distinctions, taking on two internships and voluntary work including acting as the student representative on five University committees and panels.

He said he wanted to come to Australia to consolidate and improve his business knowledge, create a professional network and gain international work experience. He said he had been offered scholarships to the business schools at the Universities of Melbourne and New South Wales.

“But, the week before we came to Australia, my wife, who works in human resources in oil and gas, got a job in Perth. So I applied to UWA – and was rejected. They told me the University had stopped admitting Iranian students.

“I persevered. I think I called everybody in the International Office, until they finally said they would try to help me and would I please stop calling them.”

It cost Hossein $60,000 – all his savings – to study at UWA. “Although the MBA program is not aimed at international students, like the program at UNSW, this is a first class business school with great professors and I’m glad I came here.

“But it was very difficult at first.

“I wanted to come here to make business contacts. So from my first day I started forcing myself to meet people, to talk to people, to get involved.”

He joined the Graduate Management Association, which holds networking events for students and ended up spruking for them at orientation events. This led to an invitation to be the student rep on the Teaching and Learning Committee, followed by the teaching Award Panel, EQUIS Accreditation panel and UWA Facilities Management committee. Hossein has also given presentations at Orientation Day and talks on getting connected and improving your professional networks.

Last year he was one of three students who volunteered to work for Gerard Daniels, the international executive search company. They developed a plan for the company’s LinkedIn presence, then were offered a contract to develop their social media plan.

Hossein also did some volunteer work with some Indigenous communities, researching their relationships with mining companies.

“I have a drive for team work, leadership and communication,” he said.

“I already have the technical side sorted and I believe I can create work and opportunities for myself.”

He has already developed a market entry in the Middle East for MagnePath, new medical software for MRI machines, to take Magnetic Resonance Imaging to the next level. “I learned about MagnePath’s start-up company through my contacts, so I did a six-month project with them and prepared e-presentations for them,” he said.

After completing his MBA, with an e-marketing course on the side, Hossein return to Iran late in June to see his family. He said that, on his return, as soon as he was working as a consultant, he would start mentoring business students.

“My mentors have helped me so much and the Business School has helped me to meet people,” he said.

“I have come a long way from the student who couldn’t finish his first exam here because it took me so long to write my answers in English!”

Rapid rise for MBA student
When close to half a million people visit the IGA Perth Royal Show in spring, they will experience the results of a Masters of Asset Management from UWA.

The new CEO of the Royal Agricultural Society of Western Australia (RAS) and boss of the Show, Peter Cooper, recently completed the degree (Masters of Business and Engineering Asset Management) with Professor Melinda Hodkiewicz in the School of Mechanical and Chemical Engineering.

He says he now feels better placed to do everything his wide-ranging job involves.

“I initially did an MBA which, while beneficial, still left me wanting something more specific to the assets management environment that I had worked in for many years,” he said.

Mr Cooper has responsibility for all the assets on the 30 hectare site. “Although the RAS owns the site and the infrastructure, the showgrounds are essentially a state asset – everybody in WA has a vested interest, so it’s a big responsibility.

“Doing the Masters bolstered my ability to look at the big picture and to make better use of data to make better decisions.”

This is timely as the RAS has just completed a concept plan for the future of Claremont Showground that will involve staged redevelopment of the site which has been home to the Royal Show and other community events since 1904.

“It will be a road map for the organisation to travel on for the next 100 years so we can make decisions with a long term view. We will be able to upgrade current facilities and services to the grounds. Our objective is to add value to this site and hopefully identify opportunities that will add value to WA,” he said.

“I was the only student in the Masters program who was not an engineer, but assets are assets no matter where you work and in what field,” he said. “Project management was a great skill I redefined during the course. I call it ‘stacking bricks in your head’, asking the question, how did we get here from there?”

The core business of the RAS is educating people about agriculture. Aside from the agricultural attractions and competitions at the Show, Mr Cooper and his staff coordinate a program for primary school students. The FarmED learning experience will visit 60 schools this year, presenting a two-hour program, complete with animals, to teach children where food comes from. They also teach children about farm technology. The Show itself, which had 451,000 visitors last year, is a huge logistical exercise. “It would knock your socks off to learn what goes into planning, organising and running the Show,” Mr Cooper said.

As well as the main event, Claremont Showground is the host and venue for many expos including the big Caravan and Camping show, Hot Rods, Pregnancy and Babies, the Breast Cancer long table lunch, the Red Cross fashion weekend, and big music festivals.

“The Big Day Out, which used to attract more than 40,000 people, is not what kids want these days. They like more exclusive boutique festivals, which attract between 5,000 and 10,000 people at a time,” he said.

On top of the Show, the special events and the education programs, there is maintenance and development of the grounds and buildings. And there are regular activities including horse riding classes and indoor roller hockey and skating. The RAS is also hosting the Claremont Football Club while its grounds are being redeveloped.

“It took me three years to do the Masters while I was working full time,” he said. (Mr Cooper was the Chief Operating Officer at the RAS before recently taking on the role of CEO.) “There were some weekends when I’d be studying and I’d look out the window to some beautiful weather and wonder what the hell I was doing.

“But I can’t recommend it highly enough.”
Every day is busy at the book sale

Old books become old friends

The University Save the Children book sale is a campus institution and this month, its 50th anniversary will be celebrated by the thousands of regulars who turn up every year and take home armloads of books.

But it is not only the readers who return again and again – but the books!

The dedicated band of 50 University branch volunteers who spend all year sorting the donated books say that they see some of the same books turning up each year. They recognise their pencilled prices on books that people have donated, others have bought, read then donated back again.

Adults who were first brought to the sale in the Undercroft by their parents are now returning with their own children and some are working as volunteers to support the sale that filled their shelves with books and their lives with joy.

The first book sale on campus, in 1964, raised £101 and the organisers would have been thrilled. Over the past few years, they are disappointed if they don’t reach $250,000. Last year the total was $289,000.

More than 100,000 books, sorted into more than 50 categories will be unpacked from 4,500 boxes over the six-day sale which starts at 5pm on Friday 14 August.

It continues through the weekend, with the doors opening at 6am on Saturday and 8am on Sunday. From Monday to Wednesday, opening time is 9.30am, Tuesday is half-price day and Wednesday, when the sale closes at 3pm, is Bargain Box day.

The sale raises money for local programs in Perth, helping newly-arrived migrant families; in the North West, working with Indigenous families and children; and in South East Asia, contributing to an international emergency relief fund.

As well as the volunteers who sort the books, around 130 people, some of them students, volunteer during the sale.

Rare book experts queue around the Reflection Pond on the opening night, hoping to find a treasure when the doors open. But boxes of books (and CDs, LPs, sheet music and DVDs) are unpacked throughout the sale, so there will be treasures to go around for everybody.

Bigger and better staff development scheme

Professional staff development is always a win-win situation.

The staff member wins, acquiring new skills to take on new challenges; the University wins with better-trained and more satisfied staff.

Now the prizes are even bigger.

The new Professional Staff Development Fund (which replaces the Staff Development Grants Scheme) has significantly expanded in resources and structure.

Annual funding has now been increased from $50,000 to $200,000. The maximum amount for an individual grant is $1,500 for general requests and $3,000 for activities that focus on laboratory skills or develop the skills of technical staff.

There is no longer a minimum FTE criteria or restrictions on courses that lead to a formal qualification.

Some large grants have been set aside: $30,000 to assist individuals or groups who need support for activities that enhance skills and knowledge, contributing to the work and productivity of the University; and up to $50,000 to group development which requires an expert to be brought to UWA for training on campus.

For more details, please see hr.uwa.edu.au/development/grants/grants

If you have any questions, please contact Kenn Martin at kenneth.martin@uwa.edu.au

Applications for the next round of grants close on 19 September.
Take your place at the sushi train and taste something new

Open Day offers something new every year.

This year the new experiences include The UWA Difference panel discussion in the Octagon Theatre; radio station 92.9FM broadcasting all day from the campus; and an opportunity to share your open day fun on social media through #UWAOPENDAY.

We, who work, study or who graduated from UWA understand what is meant by The UWA Difference. On Open Day, on Sunday 10 August between 1 and 2pm, we will be letting others into the secret.

A panel including graduate Stephen Smith, former Minister for Foreign Affairs and Trade now a Winthrop Professor in the Law School, Guild President and current student Tom Henderson, outstanding teaching graduate Rebecca Halse and Vice-Chancellor Paul Johnson will discuss how studying at UWA prepared them for their careers and helped them to discover opportunities in life.

This session should be excellent for families of students considering UWA. They will be able to ask the panellists questions at the end of the discussion.

This year, organisers are hoping that not only school leavers but mature-age people will use Open Day to find out more about further study. With the half-cohort from schools expected to affect undergraduate numbers next year, 2015 could be the perfect time for University staff to look at doing some postgraduate study.

Postgrad study can open unimagined worlds of opportunities, and studying where you work makes it convenient as well. Find out about courses and scholarships from any Faculty or from the Future Students marquee.

Another new service is a continuous shuttle bus between the Reid Library and the Nedlands campus, to encourage people to visit Architecture, Landscape and Visual Arts, where they can take part in 3D printing, drawing classes and the virtual tour that is currently part of the Venice Biennale of Architecture.

Bring along your family, your neighbours and your friends and surprise yourself by learning something new about your University.

Open Day is Sunday 10 August 10am to 4pm. Go to openday.uwa.edu.au and follow the sushi train.

Camp helps with big decision time

Just as they start to drive, study for final exams and think about voting for the first time, school leavers also have to make decisions about their future.

The multitude of choices, coinciding with coming-of-age and rites of passage, can be bewildering.

So UWA has instituted Excellence Camp, a three-day seminar for the cream of school leavers. Each school in WA, public, private, metropolitan and rural, was asked to nominate a high-achieving student and they spent three days on the Crawley campus during the school holidays.

Julie Peterkin, Manager Prospective Students Office, said the camp was aimed at students who were likely to be eligible for courses such as the prestigious Bachelor of Philosophy and Assured Entry Pathways into Law, Medicine, Dentistry and Engineering.

The 60 students built a robotic arm in Engineering; tried suturing and keyhole surgery techniques in Medicine; worked with 3D printers and laser cutting machinery in Design; investigated hazardous waste spills in Population Health; and filmed and edited an iMovie in Arts.

They learned about college accommodation, scholarships and Study Abroad opportunities.

Ms Peterkin said that, after the camp, two thirds of the students said they were more confident about their University choices. “Of the seven percent who said they were less confident, all of them cited too much choice as the reason,” she said.
Clarification

Concerns expressed about research by Emeritus Professor Dick Mizerski, reported in UWAnews last month, have been allayed.

As reported Professor Mizerski is not part of a tobacco lobby, but in the past he has received funding for his research from tobacco-related industries.

The University deemed he had not breached UWA’s policy on funding from the tobacco industry when he accepted a paid consultancy from Philip Morris International several years ago.

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Challenges create exciting possibilities

Winthrop Professor Ian McArthur
Director Office for Operational Excellence

While this is definitely not my last word, I am happy to have an opportunity to talk about the Functional Review Program in my role as Director of the Office for Operational Excellence.

I am sure most UWA staff are aware of the massive challenges the Australian Higher Education sector has been facing due to increased competition, innovative use of technology and the reduction in public funding. The possible deregulation of Higher Education is a major new challenge. To meet these challenges the Office for Operational Excellence (OOE) was established earlier this year by the Vice-Chancellor, tasked with overseeing the Functional Review Program. This Program aims to deliver the operational excellence required in the core non-academic services to allow UWA to continue our success well into the future.

Those of you who attended one of our recent open forums would have heard about the outcomes of Stage 1 of the Program, which finished in early June and involved a high level diagnostic of current processes. We knew going into Stage 1 it was going to be a big job, but I doubt any of us anticipated it would be as hectic as it was.

Stage 1 kicked off with a week of planning, followed by an intensive five weeks of interviews and workshops (84 of them to be exact) which required calling in many favours to ensure representation from across the University community. Looking back, I am incredibly impressed with the support and enthusiasm shown by staff. Even at very short notice, people made themselves available for workshops and/or took the time to assist the OOE team in identifying the appropriate people for the many engagements. Without this support, we would never have been able to deliver Stage 1 on time, so this really has been a team effort.

These 84 engagements gave a high-level view of University processes that has allowed the Executive to broadly identify current service gaps, inefficiencies and duplication of effort. We learnt a lot from Stage 1, not only about opportunities for improvement, but also about areas in which we have already achieved, or are working towards, best practice.

In fact, our partners in Stage 1, EY, made it clear that their highest commendation was that UWA has a culture that cares and serves. I won’t go into further detail on the commendations and affirmations here (the full list is available on the updates page of the OOE website) but it was very pleasing that staff and students took the opportunity to identify areas or individuals providing an excellent service.

Most of all, and I speak on behalf of the whole of the OOE team here, it was incredibly encouraging throughout Stage 1 to see UWA staff looking to the future and embracing the potential to change. I think we are all aware of clunky processes that could be improved, and the VC is providing this opportunity via the Functional Review Program.

The next stage in the Functional Review Program is about to start. This will run over five months and will involve a detailed diagnostic of the functional areas chosen by the UWA Executive after reviewing the output from Stage 1. Designated Stage 2A, this will involve identifying the services, experiences and outcomes UWA must deliver to meet the challenges in the higher education sector, end-to-end mapping of current processes that cut across many organisational units, and identifying potential opportunities within these processes. This work is a step toward delivering the operational excellence that will underpin achievement of our strategic goals in education, research, and community engagement.

Stage 2B of the Functional Review Program, which will kick off early in 2015, will involve the detailed design of new processes informed by the outputs of Stage 2A and will be followed by Stage 3 which will be implementation.

The University Executive is committed to achieving a step change in process and culture through the Functional Review Program in order to remain on the trajectory to be a top 50 University by 2050. I look forward to your engagement and involvement in this exciting opportunity to chart the future for UWA.