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It’s time to put the ‘person’ back into aged care

by Candy Gibson

The recently announced Royal Commission into Aged Care has put the spotlight on systemic failures in the sector, highlighting numerous cases of appalling practices in aged care.

The inquiry has prompted more than 5000 submissions from families, carers, aged care workers and residents, health professionals and providers.

According to a recent paper in Geriatric Nursing, co-authored by UniSA researchers Michelle Oppert, Dr Valerie O’Keeffe and Dr David Duong, the underlying cause for many of these failures relates to a lack of person-centred care (PCC) knowledge and practice in aged care facilities.

Oppert, a PhD candidate in the School of Psychology, Social Work and Social Policy and the School of Engineering, says Australia’s ageing society and the increasing number of dementia cases have created some major challenges for the sector.

“Almost four million people in Australia are over the age of 65 and by 2050, this number is expected to double. That’s a significant number of people who are going to need care, including around one million people living with dementia,” Oppert says.

Living with someone who has dementia can be challenging – especially dealing with those who exhibit aggressive behaviour – but this can be mitigated if the person with dementia is valued and respected as an individual, understood from their perspective, and included in a positive social environment, the authors say.

Known as person-centred care, this approach focuses on ensuring services are provided in a way that is respectful of, and responsive to, the preferences, needs and values of people receiving care and those who care
It’s time to put the ‘person’ back into aged care

“Person-centred care is still one of the best recognised ways to treat people with dementia, but it should also extend to any person who is receiving care or support,” says Oppert.

“It is critical to the identity of older people and those experiencing dementia,” adds Dr Valerie O’Keeffe, a Research Fellow in UniSA’s Asia Pacific Centre for Work, Health and Safety.

“Focusing on people’s memories, finding out what makes them tick and how they interact with people is so important. Taking time to build a relationship with the person, despite their dementia, is the key.”

Time – or lack of it – appears to be the major barrier to aged care workers practising person-centred care.

“Because aged care workers are time pressured and need to be highly task-focused, the social interactions with residents are compromised, hindering person-centred care.”

Additional training and a better understanding of what PCC entails would go a long way towards improving care in aged care facilities, the authors say. Additionally, this would improve aged care worker satisfaction and help retain staff.

Oppert interviewed 12 aged care workers for her study, five of whom listed English as a second language.

“There was some confusion around the definition of person-centred care and it became clear that the phrase is more talked about than implemented, because aged care services still seem to be shackled by old patterns of practices,” Oppert says.

More than a quarter of Australia’s aged care workforce are born overseas and are employed in approximately 87 per cent of aged care facilities.

Some of these workers from culturally and linguistically diverse (CALD) backgrounds did not have enough understanding and training in person-centred care, which is part of the issue, the authors say, although to some extent their own family values and respect for elders potentially make up for this.

“CALD workers may possess greater understanding of the principles of PCC due to the principles they live by in their own culture, where elders are treated with more deference than in western society,” says Dr O’Keeffe.

The paper recommends more investment in training and promoting teamwork to facilitate person-centred care in aged care facilities. These changes will enable care workers to focus on embracing individuality and a sense of belonging among residents.

Oppert presented the research at the South Australian Association for Gerontology Conference where she was awarded the Gary Andrews Student Prize for best presentation.

How we treat our elders

Did you know there are very few legal protections and safeguards in place to protect older people?

Understand the growing problem of elder abuse and what can be done to address it in the latest edition of Enterprise magazine.

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**Meet SA’s treasure keepers**
Testlab at Mawson Lakes to benefit defence and space industries

by Dan Lander

Local space and defence industries will receive a significant boost this year with the establishment of a Testlab at Mawson Lakes to prepare businesses for the fourth industrial revolution, also known as Industry 4.0.

The project, worth about $2 million, comprises investment by UniSA and the Federal Government, and will see an Industry 4.0 Testlab set up at Mawson Lakes as part of a national network of six such institutions.

UniSA Vice Chancellor Professor David Lloyd says the Mawson Lakes campus, which is located adjacent to Technology Park and more than 80 defence, aerospace, electronics, engineering and ICT companies, is being transformed into a world-leading Industry Connections Hub with a strong emphasis on Industry 4.0 technologies.

Industry 4.0 involves the advanced automation of manufacturing. The Testlab will provide local SMEs and high-tech start-ups with otherwise-unattainable access to these smart factory technologies.

It will include rapid prototyping facilities and a digital platform for precision design and visualisation with the capacity to create a ‘digital twin’ of a product – a near-real-time digital image of a physical object or process that helps optimise performance.

“Our Testlab will be one of the most advanced industry collaboration facilities in the country, providing South Australia with a gateway to the future of manufacturing and reaffirming UniSA’s position among the nation’s leading Industry 4.0 institutions,” Prof Lloyd says.
"Last year we secured a $450 million Industry 4.0 grant from Siemens and established a co-chaired Industry 4.0 research professorship in collaboration with the Brittany region in France; now we’re launching a new test facility that will give local businesses hands-on access to the technologies that will shape the future of industry.

"As the global significance of Industry 4.0 technologies continues to increase, we’re excited to be able to provide the best international and local expertise to South Australian enterprises.

"More than 90 per cent of SA’s SMEs are family owned and employ fewer than 20 staff, producing small volume bespoke components, and for these businesses with niche market opportunities, digitisation of design, product innovation, and data acquisition throughout the production process can provide key advantages over their current practices."

Industry 4.0 is rapidly transforming the supply chains of the defence and space industries. Prof Lloyd says the new Testlab will specifically support the growing number of local SMEs involved in those sectors.

“Given the state and federal governments’ objective of building an internationally competitive defence and space industry and the significant investment in that area, the Testlab’s focus will be on supporting SMEs in those supply chains," Prof Lloyd says.

Mawson Lakes being developed as industry hub

The Testlab will be operational by mid-2019 and will be a key component in the larger Industry Connections Hub (ICH) being established at UniSA’s Mawson Lakes campus.

“The Mawson Lakes campus is undergoing a series of transformations, including the introduction this year of new curriculums and facilities to support space and Industry 4.0 programs, along with the planned establishment of the Industry Connections Hub, which will integrate our work with Siemens and the Testlab and numerous other industry collaborations,” Prof Lloyd says.

The Mawson Lakes location for the Testlab and the future ICH will leverage UniSA's industry connections with co-located operations such as Lockheed Martin, Saab Technologies Australia and, in particular, the Defence Teaming Centre (DTC).

"UniSA’s strong relationship with the DTC will provide the Testlab with a direct link to local and interstate defence SMEs, allowing them to take immediate advantage of the Testlab in an open-access, non-competitive and highly supportive environment," Prof Lloyd says.

Once established, the Testlab will stimulate the transfer of Industry 4.0 technologies and expertise to other collaboration sites, and in announcing the funding, Minister for Industry, Science and Technology, Karen Andrews, indicated further federal government investment in the area may follow.
Testlab at Mawson Lakes to benefit defence and space industries
UniSA gets top marks in SA for graduate employment outcomes … again

by Adam Joyce

The 2018 Graduate Outcomes Survey confirmed UniSA as number one in the State for graduate satisfaction; for graduates in full-time employment; and for overall employment for graduates.

UniSA is the number one university in South Australia for graduate employment and graduate satisfaction in the latest graduate outcomes and student experience data from the federal education department.

UniSA also topped the State for employer satisfaction, with almost 86 per cent of employers polled through the 2018 Employer Satisfaction Survey saying they were satisfied overall with the UniSA graduates they’d employed. This puts UniSA in the top 10 universities Australia-wide for overall employer satisfaction.

The 2018 Graduate Outcomes Survey confirmed UniSA as number one in the State for graduate satisfaction; satisfaction with teaching quality; for graduates in full-time employment; and for overall employment for graduates. It also found 87 percent of UniSA graduates were employed four months after graduation.

Both reports are part of the Quality Indicators for Learning and Teaching (QILT) framework, released earlier this month. QILT provides prospective students information on Australian higher education institutions from the perspective of recent students and graduates; and employers.

UniSA Vice Chancellor Professor David Lloyd says the results show that UniSA is supporting students to develop not only their intellectual capacities, but also their
ability to make their way in rapidly changing work environments.

“We put great emphasis on providing our students with experiential learning opportunities so that they get an idea, very early on in their degree program, of what will be required in the working world – why it’s important to be able to communicate clearly, why being adaptable and creative in your approach to problems is valued and why being able to work in teams is so vital to success,” Prof Lloyd says.

“The results of these national surveys show that we are succeeding in helping our students develop and become confident, knowledgeable, capable professionals, engaged with the wider world and ready to create and respond to change.

“One of the ambitions of our new strategic plan, Enterprise25, is for UniSA to be ranked among the very highest nationally for student satisfaction and graduate employment rates. There is more we can (and will) do, but the 2018 Graduate Outcomes Survey shows that we are on the way to achieving that ambition.

“We're grateful to the many industry partners that collaborate with us to provide internships for our students, inform our curriculum, and ensure our graduates are ready to move into their chosen careers.

“Our industry-informed teaching ensures we are best placed to give our students the valuable professional experience they need in addition to their academic qualification.”

Results from the Graduate Outcomes Survey 2016-18 ranked UniSA number one in South Australia for overall satisfaction in the following subject areas (undergraduate):

- Architecture and built environment
- Business and management
- Communications
- Creative arts
- Health services and support
- Humanities culture and social sciences
- Law and paralegal studies (equal with Flinders)
- Social work

In addition, UniSA was ranked number one in South Australia for overall graduate employment in the following subject areas (undergraduate):

- Architecture and built environment
- Business and management
- Communications
- Health services and support
- Nursing
- Psychology
- Rehabilitation
- Social work
- Teacher education

Federal Education Minister Dan Tehan says graduates are putting their skills and training to good use in the workplace.

"In this country, if you have a go, you get a go and those Australians making the commitment to improve
UniSA gets top marks in SA for graduate employment outcomes … again

The Quality Indicators for Learning and Teaching are funded by the federal Department of Education and Training.

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From the Vice Chancellor more

UniSA appoints first Teaching Academic associate professor more
It was a gloriously sunny day in Adelaide as we watched Team UniSA-Australia’s men’s and women’s cycling teams whizz past our stand on Bartels Road on Sunday afternoon. Sunday’s race was the first airing for the men’s team in the TDU Classic ahead of their stage 1 race kicking off on Tuesday, and was the final race stage for the women’s team. Team UniSA-Australia’s Rachel Neylan was placed third overall in the general classification – a great result in what was a very tightly contested Tour, in this her second year riding for our team.

My personal cycling career peaked (or, more accurately, began and ended) four years ago on 17 January 2015, when I was part of the UniSA/Santos team that rode the world’s longest bike into the Guinness book of world records. (I say rode, in reality we pedalled about a dozen rotations and gingerly let gravity do the rest as we travelled the necessary 100m down Rundle Street to qualify for the official record). We gloss over the part where gravity did a little too much and we fell off on our first attempt, but four years on, we’re still the record holders. I still get occasional flashbacks to the massive ‘clong’ the near three tonne machine made as it toppled over, spilling us onto the roadside. But as they say, we got back in the saddle and we delivered the outcome.

You could look at this as a metaphor for who we are and what we do: we are super fit and fast, world leaders in our field and regularly dazzle our audiences. The cross-disciplinary academic collaboration we promote works like the best peloton does by developing complex cooperative and competitive interactions amongst our best minds for a result that reflects glory on the whole team. We have winners, stars whose efforts are supported by others. And then sometimes we try something we’ve never tried before and the thing wobbles a bit and then doesn’t take off with the speed and energy we’re used to. But we learn from it. That’s why we talk about a lifelong love of learning. It’s in our studies, in our teaching and research and in the way we live our lives. And that’s what we’re going to do more of in 2019. We’re going into a whole new way of thinking about how we do what we do, reimagining this institution for a 21st century student experience. And I believe the people we have here are the best people to bring that about. So shake the sand out of your hair and get ready to ride with the UniSA team in 2019. We’ve got more records to break, more races to win and goals to kick. Hang on ... sporting metaphors
are a minefield. You get the idea. We’re off and running. Oops. Did it again.

Professor David Lloyd
Vice Chancellor and President

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UniSA alumnus wins Fulbright scholarship

APPOINTMENTS

Head of school appointed as Pro Vice Chancellor for student engagement

ACHIEVEMENTS

UniSA alumnus wins Fulbright scholarship

Adelaide medical researcher and UniSA alumnus, Sebastian Rositano, has been awarded a prestigious Fulbright scholarship in the 2019 round of the program.

Rositano completed a Bachelor of Psychological Sciences at UniSA in 2016, before obtaining a Master of Public Health at the University of Sydney, and has since combined the two perspectives into an interdisciplinary examination of the complex interactions between population-wide policies and individual beliefs and behaviours.

As a Fulbright scholar, Rositano aims to build on previous visiting and intern roles at SAHMRI, where he looked into issues relating to adult and paediatric bullying and sexual assault within South Australia, and the World Health Organization, where he contributed to research into ethics and intersectoral governance.

In the longer term, Rositano is interested in employing psychological insights to reform governance, inform policy, and explore deeper questions across social attitudes, voting activity, ethics and political philosophy, and hopes to better understand how to ethically solve burgeoning challenges across health, justice, education and other social spheres.

APPOINTMENTS

Head of school appointed as Pro Vice Chancellor for student engagement

UniSA Head of School: Nursing and Midwifery Professor Carol Grech has been appointed to the role of Pro Vice Chancellor: Student Engagement & Equity.

Prof Grech will replace Dr Laura-Anne Bull who has accepted a role as Deputy Vice Chancellor (Students) at James Cook University.

Vice Chancellor Professor David Lloyd says Prof Grech has excelled as head of the School of Nursing and Midwifery over the past seven years.

“During this time, Carol has displayed a strong commitment to student engagement and equity issues and we welcome the skills and energy she will bring to her new role,” Prof Lloyd says.

Prof Grech’s professional and academic career spans more than 40 years as a critical care nurse, educator, academic and researcher.

She has led a number of initiatives in the School of Nursing and Midwifery to improve the student experience, including the development of an innovative teaching and learning project to create a virtual city where real and virtual worlds are merged to create a unique learning experience for undergraduate and postgraduate nursing and midwifery students.
“Carol is well published and has been involved in a number of national and international research consultancies,” Prof Lloyd says.

“She is a highly respected leader in higher education and the education and regulation of registered health professionals.” Prof Grech will commence in her new role in late January.
Mapping DNA could save billions each year in health costs

by Candy Gibson

A UniSA scientist has called for Australia to embrace pharmacogenetic (PGx) testing to deliver medication more effectively and slash around $2.4 billion wasted each year through unsafe and ineffective drug prescriptions.

Dr Vijay Suppiah, a senior lecturer in pharmacy at UniSA, says PGx testing – mapping a person’s genetic makeup – is the most effective way to ensure patients are prescribed drugs which suit their specific DNA profile.

"Most people expect that when they get a prescription filled from a pharmacy, it will be effective and have minimal side effects. Unfortunately, that only happens in up to 60 per cent of cases," he says.

"People don’t realise their genetic makeup plays a large role in whether a specific drug will work or not, or even have adverse side effects."

In an article published in the Australian Journal of Primary Health, Dr Suppiah says while heavy investment into PGx research is happening in the US and Europe, Australia is lagging far behind.

“This technology exists right now and, internationally, PGx testing is slowly evolving into a specialised area to guide drug selection based on genetic findings. However, in Australia, apart from a selected few medications, such as those in oncology, most other medical specialities are yet to be involved.”

A pharmacogenetic analysis by Deloitte Economics Australia suggests that PGx testing would deliver an economic benefit of $12 billion over five years to the national health system if it was widely adopted in Australia.
One test would help ensure patients get correct dose for life

"It would minimise adverse drug reactions, avoid wastage and improve quality of care for patients by enabling doctors to target the right drug and the correct dose for a patient. Also, PGx testing needs to be performed only once unlike blood glucose or blood pressure monitoring where patients have to do repeated testing."

PGx testing could also address issues around polypharmacy, commonly defined as the use of five or more medicines – which raises concerns, particularly for older people.

A 2018 survey of 40 elderly people in Adelaide found that almost 78 per cent used five or more medicines. Only 17 per cent were aware of the potential interactions between their medicines and just over 37 per cent said their GP had not discussed possible side effects of their medications.

"Most participants could not describe the condition for which each medicine was prescribed, which is also very concerning," Dr Suppiah says.

He says pharmacogenetic testing would help clarify the potential impact of drug interactions at the genetic level for different people.

Better understanding of drug interactions would improve treatment

A common example involves the interaction of drugs treating depression and pain.

“Some of the anti-depressants prescribed by doctors decrease the effectiveness of opioids to provide pain relief. This would result in these patients seeking out larger doses of opioids for pain relief. By knowing their genetic makeup, community pharmacists would be able to pick up this interaction and suggest alternative pain treatment. Also, patients on multiple drugs have a higher risk of falls because many drugs work centrally in the brain and dull the senses.”

People seeing several health practitioners – GPs as well as specialists – are more likely to have issues with drug interactions if there are communication gaps between health practitioners.

These risks could be curtailed if trained community pharmacists were able to implement pharmacogenetic testing within their community pharmacies, Dr Suppiah says.

“We need to do more research investigating the genetic basis of drug interactions with polypharmacy and this could lead to better tailoring of treatment based on an individual’s genetic makeup.

“If community pharmacists had access to their clients’ PGx test results in their database, they could tell straight away if a particular drug or dose is going to work optimally for that client based on that individual’s genetic makeup.”

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Almonds, grapes and cranberries may improve peak fitness more

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Bioactive components in almonds, grapes and cranberries may improve peak fitness

by Dan Lander

Almonds and some dried fruits could help maintain peak fitness in elite athletes – and UniSA researchers are putting the theory to the test.

In a study being undertaken by UniSA’s Alliance for Research in Exercise, Nutrition and Activity (ARENA), a new trial is giving volunteers the chance to take part in an elite cycling training program while testing dried fruits and almonds as part of a sports diet.

Lead researcher Professor Jon Buckley says bioactive components in almonds and certain dried fruits may play an important role in maintaining peak fitness in elite athletes.

“We are running a study of cyclists, examining whether bioactive components in foods can improve cycling performance and recovery,” Prof Buckley says.

“Almonds are a rich source of arginine and antioxidants, while grapes and cranberries are also rich in antioxidants and nitrates. Studies show dietary nitrates and antioxidants improve endurance exercise performance by improving muscle blood flow and reducing exercise-induced damage to muscle.”

Prof Buckley’s team is 12 months into the study and is currently looking for SA-based cyclists who would like to be involved in the next research phase – a five-week trial designed to examine the increased benefits of combining almonds, grapes and cranberries.

Cyclists volunteering for the trial will be put through an elite cycle training program designed by the ARENA team, while being provided a daily dose of either mixed raw unsalted almonds, dried grapes and dried cranberries – known as AGC mix – or nut-free muesli bars.
“There is emerging evidence that the consumption of almonds and grapes may improve exercise performance, but there is a lack of information regarding any benefits of cranberries or the combination of all three foods,” Prof Buckley says.

“We feel like this is a fantastic opportunity for people to be involved in research that has the potential to make a real impact on exercise performance in a simple, natural way, while providing them with information on their cycling fitness through the measurement of parameters such as VO2 max that are often only available to elite level cyclists.”

The current study is limited to male cyclists because part of the mechanism the team is investigating are the components of the foods that reduce muscle damage – and estrogen is protective against muscle damage.

Prof Buckley says that to remove any impact of estrogen on the research outcomes, the first study involves men. If it is successful, the team will run a subsequent study in females.

In order to be eligible for the study, you need to be a male cyclist or triathlete, 18-50 years old, registered with a club or competing in professional, amateur or recreational races, or performing cycling training two or more times a week.

Anyone interested in participating in the study can email Prof Buckley at Jon.Buckley@unisa.edu.au.
UniSA appoints first Teaching Academic associate professor

by Dan Lander

INSIDE UNISA

Dr Nayana Parange has been promoted to Associate Professor and appointed Associate Dean: Online Education in the Division of Health Sciences.

It’s no secret that Australia’s university sector has been confronted with fresh challenges in recent years. Rapid technical change in many industries has spawned a host of new skills requiring support and development, which has led to increased demands on both research agendas and teaching curricula.

In 2014, UniSA responded to this changing educational environment by offering academic staff the option of uncoupling research commitments from teaching outputs, introducing a Teaching Academic pathway for staff wanting to devote extra attention to curriculum development and prioritise educational outcomes.

As Provost and Chief Academic Officer Professor Allan Evans says, the initiative was designed to allow teaching academics to focus more energy on learning outcomes without hindering their career advancement.

“Previous academic appointments were either research only or full spectrum academics, who had both teaching and research obligations,” Prof Evans says. “But it was becoming increasingly difficult for all of our academics to pursue excellence in both teaching and research. Research was becoming more competitive and, as an institution, we were increasingly reliant on having great teachers committed to furthering the quality of education at the University. So, to provide people a choice in how they built their career, we created the Teaching Academic pathway.”

The pathway was introduced in UniSA’s 2014 Enterprise Agreement. The opportunity to apply for promotion as a Teaching Academic was implemented the following year, with 17 Teaching Academics promoted in 2015.

In 2018 UniSA promoted 59 academics, 13 of whom were Teaching Academics. Significantly, December 2018
saw the first Level D promotion in the Teaching Academic pathway, with Dr Nayana Parange promoted to Associate Professor and appointed Associate Dean: Online Education in the Division of Health Sciences.

"My career spans 30 years, with experience in different roles as a clinician, but I’ve always been drawn to teaching, even before I came into academia in 2007, so this seemed like a great option for me." says Assoc Prof Parange. "I feel this promotion is very exciting and humbling. It has encouraged and inspired me to continue to mentor, guide and lead colleagues. It paves the way for other academics and I want to encourage people to consider this pathway as a viable career progression pathway."

Assoc Prof Parange made the switch to the Teaching Academic pathway in 2015 and says it not only allowed her to focus on curriculum development and teaching outcomes, but also provided unique opportunities for personal and professional development.

"It’s been an incredible development opportunity," she says. "I have been involved in extensive teaching and learning committees, nationally and internationally. These have given me so much opportunity for networking and collaborating and expanding my own understanding, engaging with other academics who are passionate about teaching. Most satisfyingly, this has exposed me to ideas across disciplines, and now with UniSA Online, it’s across the whole University. It’s opened so many new directions for me."

Assoc Prof Parange’s recent promotion is acknowledgement of her ability to combine extensive clinical experience with innovative teaching practices, driving curriculum development for online programs and emphasising the importance of close industry connections in emerging educational models.

"Assoc Prof Parange has been able to develop curriculum for a professional area, sonography, that is world leading, and engages students across Australia to undertake sonography as external students – where there’s a lot of online material, but also highly integrated practical training within professional facilities," says Prof Evans.

Assoc Prof Parange suggests her success in shaping her curriculum derives as much from her passion for her profession as it does her passion for teaching.

"I have maintained my industry links and I am very active in my profession," she says. "I am on several national and international boards, and I am practising. My accreditation is current, and I do a lot of volunteer humanitarian work in my profession. I have always kept my finger on the pulse and I bring that back to the classroom, so it is all very current and very relevant."

Assoc Prof Parange says she has remained research active throughout her Teaching Academic career, including her research into the scholarship of teaching, and Prof Evans emphasises this is an important aspect of the pathway.

"This is not teaching cut free from research," Prof Evans says. "The best teaching is based in research, just as the best research derives from an interaction with practice. That’s why Assoc Prof Parange is such a great role model for this pathway – she’s research capable, with great research behind her, but also so passionate about teaching. It’s fantastic for the University to be able to reward and recognise that passion and that excellence."

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We asked a UniSA student to review MOD.’s latest exhibition

by Charlotte Lemmon

This is the next instalment in a series of articles looking at UniSA’s futuristic museum of discovery MOD., through the eyes of people of different ages – particularly younger audiences. MOD’s new exhibition, Waging Peace, prompts visitors to ask: what are your perceptions of peace?

We asked fourth-year UniSA journalism and creative writing student Charlotte Lemmon to explore MOD. and capture her reactions about the latest exhibition.

Name: Charlotte Lemmon
Age: 21
Studying: Bachelor of Journalism and Professional Writing, Bachelor of Arts (English and Creative Writing)
Interests: Anything to do with the entertainment and film industry.
Hobbies: I love to read all sorts of books and try my hand at writing in my own time.
Career aspirations: Having just completed my final semester at university, I aspire to enter the editing world in an academic or journalism role.

First impressions

As I walk through the sliding doors and into the foyer, my eyes are instantly attracted to the blue and orange banners hanging from the ceiling. I can tell the words printed on the banners are Indigenous. Resident café Food
We asked a UniSA student to review MOD.’s latest exhibition

Lore’s customers sit beneath the banners, chatting amicably. This is the first MOD. exhibition to include an exhibit in the foyer, and it’s a great addition as it encourages everyone to get involved.

The Department of Welcome

The Department of Welcome holds an extremely important message. Each banner contains an Indigenous phrase that identifies as welcoming. In this way, MOD. recognises Aboriginal and Torres Strait Islanders as the first Australians, their connection to country, and the diversity of language groups that exist within South Australia. I really appreciate this exhibit for its inclusivity, and it shows that MOD. is addressing Australia’s own internal struggles with peace.

Brand Peace

I walk into the Brand Peace room to the beat of Where is the love? by the Black Eyed Peas. A screen of symbols – pulsing along to the beat of the tune – depicts flowers, hugs, cake, and balloons as some of the many things South Australians have identified as peaceful. The research – conducted by the Ehrenberg-Bass Institute for Marketing Science – provides insight into South Aussies’ perceptions of peace. I recommend spending plenty of time wandering through this spacious room – you’ll be sure to find some statistics that surprise you!

Woltatti / Orbitopia

The preparation for Kaurna season Woltatti (pictured right), the hot season between January and March, is told through an interactive touchscreen story on a long digital screen outside the Brand Peace exhibition. I place my left hand in the designated spot, unsure of what to expect. Suddenly a fire begins and the words to the story of Woltatti appear through the mist and follow the fire’s trail of destruction. I walk down the hallway to Orbitopia, the same globe used in MOD.’s Our Sky exhibit, but with a twist. The large globe now has an emphasis on communication and satellites, provoking questions as to how space can be a place for the future of peace. The interactive globe is incredibly cool to use as it gives a visual representation of satellite data. It can show where in the world violent attacks and protests have been reported, or map out the connections of millions of Facebook friendships.

Games for Peace / crane

Following the ramp down to the Games for Peace exhibition, I spy shards of plastic hanging from the ceiling, glimmering in the sunlight. They look like a jumble of shapes with no distinct pattern, until I stand on a dimly lit triangle on the floor and look up. A beautiful paper crane has emerged, an icon recognised around the world as a symbol of peace. The crane watches over the video game stands, which are also just as intriguing. The video games are some of many which are slowly breaking the stereotype of violence and fostering understanding and empathy, requiring players to cooperate instead of compete.

Trigger warning

I head upstairs to more exhibitions, and see a TV screen telling me that Trigger Warning is about to begin. Curious, I head inside. I sit through the almost eight-minute clip, my mind scrambling to keep up with the themes, and upon exiting, my mind was whirring with all the new information I’d taken in. This is definitely one of the most confronting exhibits MOD. has. The speculative fiction film ponders the fate of the world due to the rise of social networks and the rapid spread of information. It’s definitely something that people need to see, especially those who have grown up using technology from an early age.

Polar Commons / Cosmic Living Room
We asked a UniSA student to review MOD.'s latest exhibition

The Polar Commons (pictured right) is a smaller exhibit but one of the most important, as it talks about the only place on Earth where humans have agreed to be peaceful: Antarctica. On display is environmental scientist Tim Jarvis’s gear used when he recreated Douglas Mawson’s original Antarctic expedition, and a TV screen shows Jarvis talking through his expedition. Right next to the Polar Commons is the Cosmic Living Room exhibit, a place dedicated to conversation. I sit down in one of the cupped chairs and immediately almost all the noise around me has gone, filled instead with an eerie, alien-like sound.

**Sleep Ops**

I wander into the Sleep Ops exhibit and the strange sight of a hanging, golden orb greets me. Peaceful music plays overhead, and people appear on projector screens talking about the importance of sleep and the disastrous outcomes of sleep deprivation. I sit myself into one of the smaller hanging pods, which is filled with pillows, and take some time to relax. The sounds and smells of this room are all so incredibly soothing. If you want to have the best experience in this room, follow along to the *Sleep Cycles* soundscape, a composed piece which will send you into a temporary state of slumber.

**Would I recommend it?**

I definitely recommend experiencing the second MOD. exhibition, *Waging Peace*. The exhibition will not only excite you but prompt your mind to think about things you’ve never considered before. The immersive nature of each exhibition ensures there is something to interest people of all age groups!

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![Testlab at Mawson Lakes to benefit defence and space industries](image)

**Testlab at Mawson Lakes to benefit defence and space industries**

![Southern Hemisphere Space Studies Program blasts off](image)

**Southern Hemisphere Space Studies Program blasts off**
Southern Hemisphere Space Studies Program blasts off

by Bronwyn Hurrell

The 2019 Southern Hemisphere Space Studies Program (SHSSP) has officially begun at UniSA, bringing together about 50 participants from 11 countries.

Now in its eighth year, the prestigious program is conducted by UniSA in partnership with the International Space University, based in Strasbourg, France.

More than 250 students have graduated from the SHSSP at UniSA and this year’s class is one of the largest.

They hail from Australia, Canada, China, Denmark, France, Germany, India, Italy, Malaysia, UAE and USA.

The SHSSP is part of an extensive commitment to the space industry at UniSA, which includes UniSA’s Innovation and Collaboration Centre (ICC) launching Venture Catalyst Space, an incubator program to develop ideas from entrepreneurs and start-up companies in the space sector.

SHSSP program co-director Dr Ady James is a Senior Research Fellow at University College London Department of Space and Climate Physics and an adjunct staff member at UniSA.

“The South Australia’s well-established contribution to the space industry was further recognised with the recent announcement that Adelaide will be home to the Australian Space Agency,” Dr James says.
“With a new Space Agency and the growth in interest in space in the community – especially among young people – there are opportunities for Southern Hemisphere Space Studies Program alumni to create a critical mass of expertise in a variety of areas.

“The recent extension of the ISU and UniSA relationship agreement provides an opportunity to continue to expand this productive educational collaboration to support the wider space community.”

The SHSSP is designed for professionals involved in the international space sector, graduate researchers seeking broader knowledge of international space activities, and undergraduate students in the final two years of their studies seeking exposure to the various aspects of space studies.

There are four public events:

- **Astronaut and Human Spaceflight Panel** with international astronaut Dr Paolo Nespoli at the Allan Scott Auditorium, UniSA City West Campus, from 6pm on 17 January;
- **Hazards of Human Space Exploration presentation** with guest speaker Dr Gordon Cable from 7pm on 23 January at UniSA Mawson Lakes Campus;
- **Opportunities in Australia’s Space Industry panel** at UniSA Mawson Lakes from 7pm on 31 January;
- **Interstellar Program Alpha Centauri event** with guest speaker Dr Simon Peter ‘Pete’ Worden from 4pm on 2 February at the Allan Scott Auditorium, UniSA City West Campus.

During the program, SHSSP participants will have the opportunity to design and build rockets in teams and then launch them reaching altitudes of up to 900 metres.

Participants will also launch a high-altitude balloon, which will carry a satellite payload designed to simulate a small satellite mission.

The SHSSP program runs until 15 February.

**RELATED STORIES**
Meet SA’s treasure keepers

by Annabel Mansfield

For Tony Kanellos, a favourite treasure is the pomological cabinet, displaying more than 300 varieties of papier-mâché apples and pears. Created by German company Heinrich Arnoldi & Co between 1856 and 1899, the fruit is one of the largest collections in the world and the only one known to exist outside Europe.

From the incredible fluorescence of the world’s rarest and most expensive opal to the humble qualities of a painted papier-mâché apple, South Australia’s treasures are vast and diverse. The people who care for them are bound by a passion to preserve their heritage. These are the treasure keepers.

Meet Tony Kanellos.

As manager of Cultural Collections at the Botanic Gardens and State Herbarium and curator of the Santos Museum of Economic Botany, Kanellos is custodian to a treasure trove of objects that connect us to the botanical world. Carefully curated and displayed, the collection offers important lessons about life, culture and the essential roles that plants play in human existence.

“This collection is brimming with stories about life,” says Kanellos, a UniSA graduate.

“Not just South Australian stories, but stories of all cultures – and many of the cultures that now make up South Australia.

“When you walk around this museum, you see the commonality of all cultures – we all need food, fibre, and medicine, we all need different ways to express ourselves.

“But at the heart of it, culture is humanity, and while we celebrate different cultures, all people are the same and we’ve all depended on plants since day one.”

The museum was established in 1881 to teach early colonists about the different uses of plants – for food, fibre, medicines, dyes, tools, shelter,

even musical instruments. As the only museum of its type to survive in the world, it's a repository of stories and curiosities, from the origins of gin and tonic rooted in anti-malarial drugs dispensed to British soldiers, to the seafarer's illusion of a diving mermaid conjured by the shape of the world's largest seed, the coco de mer (picture right), floating in the ocean.

Yet behind the curiosities – and the beautiful 19th century feel of the museum – is a story as important now as it was then: sustainability and biodiversity.

"Walking into the museum is like stepping back in time," Kanellos says.

“But keeping the original look and feel of the museum was intentional because we wanted to remind people how fundamental plants are to our existence and that we must appreciate and value their significance if we want to ensure our way of life.

"Of course, people didn’t use these words [sustainability and biodiversity] back then, but the concepts today remain the same."

**Culture is about the lives of everyday people**

Connecting past, present and future is a common mission for all of the State’s cultural institutions. For cultural expert and scholar, UniSA’s Professor Susan Luckman, the sharing of stories, histories and narratives is an illustration of how people make sense of the world.

“When people think of ‘culture’ they often relate this to high-end experiences, but of course culture is really just the everyday practices of people getting on with their own lives: it’s the tattoos, it’s going to the footy on the weekend, it’s everything we do that makes us human," Prof Luckman says.

“For centuries we’ve been challenging understandings of culture as the official record. We need to ensure our collections are diverse and representative of both the past and the present, because this will become tomorrow’s history.

“Increasingly, cultural institutions are doing wonderful work in this space to make sure their collections capture everybody’s stories, not just those who get to write history.”

Read the full story, and many more, in the latest edition of Enterprise magazine.

**RELATED STORIES**

- [It’s time to put the ‘person’ back into aged care](#)
- [We asked a UniSA student to review MOD.’s latest exhibition](#)
New Books

The Culture of AI: everyday life and the digital revolution

Contrary to popular wisdom, the AI revolution is not so much about cyborgs and super-robots of the future, but massive changes in the here-and-now of everyday life.

In *The Culture of AI: Everyday Life and the Digital Revolution*, UniSA’s Dean of External Engagement Professor Anthony Elliott, explores how intelligent machines, advanced robotics, accelerating automation, big data and the Internet of Everything impact upon day-to-day life and contemporary societies.

Prof Elliott’s examination of the reordering of everyday life highlights the centrality of AI to everything we do – from receiving Amazon recommendations to requesting Uber, and from getting information from virtual personal assistants to talking with chatbots.

Prof Elliott, who is also Executive Director of the [Hawke EU Jean Monnet Centre of Excellence](https://www.unisa.edu.au/external-engagement/hawke-eu-jean-monnet-centre-of-excellence) at UniSA, says the rise of intelligent machines is transforming the global economy and jobs, but there are other major challenges to contemporary societies which are unfolding in complex and uneven ways across the globe.

"Much of what passes for conventional wisdom about artificial intelligence is either ill-considered or plain wrong," Prof Elliott says.

"Movies have contributed to this misguided idea that the future will be filled with intelligent robots but the fact is that AI is here already and impacting on everything from global politics to everyday communication – including all of our social relations.

“This book explores technological innovations from industrial robots to softbots, and from self-driving cars to military drones.”

The book provides a detailed examination of:

- The history of AI and the advent of the digital universe;
- automated technology, jobs and employment;
- the self and private life in times of accelerating machine intelligence;
- AI and new forms of social interaction;
- automated vehicles and new warfare;
- the future of AI.

Visiting Professor at Oxford and Tsinghua universities Sir Nigel Thrift says artificial intelligence is an overused term which has been the subject of too many inflated claims.

“So we are lucky that in this book, Anthony Elliott expertly guides us through this thicket of hyperbole and out onto clearer ground,” Sir Nigel says.

Prof Elliott’s research on AI has also been strongly endorsed by Lord Anthony Giddens, a member of the UK Parliament’s House of Lords Select Committee on Artificial Intelligence. Lord Giddens has praised Prof Elliott’s book as “a unique and original contribution to the debate about AI now unfolding across the world”.

Testlab at Mawson Lakes to benefit defence and space industries [more]

Mapping DNA could save billions each year in health costs [more]
IN PICTURES

Santos Women's Tour Down Under 2019
Santos Men's Tour Down Under 2019

UniSA’s women’s and men’s teams have celebrated a number of successes in the 2019 Tour Down Under. Team UniSA-Australia’s Rachel Neylan secured third in the Santos General Classification behind Amanda Spratt and Lucy Kennedy; while teammate Rebecca Wiasak was named Most Competitive Rider in Stage 2 through the Barossa Valley.

In Stage 1 of the Men’s TDU from North Adelaide to Port Adelaide via Inglewood, Paracombe and Adelaide’s northern suburbs, Team UniSA-Australia’s Jason Lea won King of the Mountain.

Santos Women's Tour Down Under 2019

Photos courtesy Tour Down Under @cauldphoto
Rebecca Wiasak wins Most Competitive Rider in Stage 2. The award was presented by Anna Meares.
Rachel Neylan secured third place in the Santos General Classification behind Amanda Spratt and Lucy Kennedy.

Rachel Neylan celebrates third place overall. Photos courtesy Kirsty Baxter.
Santos Men's Tour Down Under 2019

Photos courtesy Kirsty Baxter
Team UniSA-Australia captain Neil van der Ploeg during the team presentations.
Photos courtesy Edmund Boey.