

news

July 2017

> from the University of South Australia



HEALTH

Scientifically engineered nanoparticles to improve treatment for cancer

UniSA researchers have found a way to get scientifically engineered microscopic molecules to attach to cancer tumours to increase the effectiveness of radiotherapy – a major milestone it is hoped will lead to increased survival rates with fewer side effects from treatment. [more](#)



SCIENCE AND TECHNOLOGY

How to solve \$30bn 'wear and tear' problem for Aussie mining [more](#)



HEALTH

What's UniSA's game changing tech to treat prostate cancer? [more](#)



SCIENCE AND TECHNOLOGY

iPad app for French trains named crème de la crème [more](#)



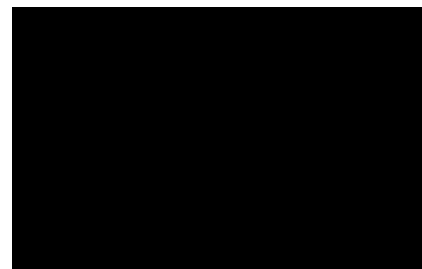
INSIDE UNISA

From the Vice Chancellor [more](#)



INSIDE UNISA

The latest achievements and announcements [more](#)



Eight months' construction in under 80 seconds [more](#)



MENTAL HEALTH

Suicide education program gives meaning to mateship

[more](#)



INSIDE UNISA

UniSA's new leader of counselling to focus on student empowerment

[more](#)



ART AND DESIGN

Family's refugee story helps student design award winning poster

[more](#)



COMMUNITY

Midwifery students experience birth care around the world

[more](#)



SCIENCE AND TECHNOLOGY

UniSA low cost satellite tech named best new business

[more](#)



COMMUNITY

Sharing knowledge and experiences with our nearest neighbours

[more](#)



NEW BOOKS

The latest books from UniSA researchers

[more](#)



INSIDE UNISA

Highlights from the Media Centre

[more](#)



IN PICTURES

Images of Research photography competition

[more](#)

Your UniSA News community
TOTAL AUDIENCE REACH **107,619**

[top](#)



How to solve a \$30bn 'wear and tear' problem for Aussie mining

[Back to story index](#)

by Adam Joyce



SCIENCE AND TECHNOLOGY

UniSA's Dr Colin Hall, LaserBond's Peter Mutty and Boart Longyear's Peter Kanck with a "Down-The-Hole" drill bit at the field trial at Brukunga in the Adelaide Hills.

UniSA researchers are working with the mining industry to tackle a \$30 billion national problem – wear and tear.

The effect of abrasion means drilling components are quickly worn and need to be continually fixed or replaced, significantly impacting drill rig productivity and safety.

[Future Industries Institute](#) Senior Research Fellow Dr Colin Hall says research into methods to reduce wear and extend the life of components is crucial for the ongoing competitiveness of Australia's mining industry.

"Abrasion wear is estimated to cost up to four per cent of Australia's gross national product," Dr Hall says.

UniSA is part of a cooperative research centre project (CRCP) which is attempting to address this challenge through cutting-edge laser surface engineering innovation and development. The Federal Government's CRCP grants support short-term industry-led collaborations to develop new technologies, products and services in an effort to boost the competitiveness, productivity and sustainability of Australian industries.

"Even modest increases in wear life of critical components translate into significant increases in productive drilling time and reductions in exploration costs," Dr Hall says.

UniSA, [LaserBond](#) and [Boart Longyear](#) received \$2.6m from the government to support a multi-party \$8.3m three-year collaborative project.



Members of the Wear Life Performance cooperative research centre project at the Copper to the World conference, held in Adelaide at the end of June.

The project aims to extend the life of drilling components, reduce the time between equipment changes and increase the hours a drill is available for use. The end product will be tested in Boart Longyear's drill rigs.

Field trials of advanced coated components used for drilling for mining are already underway at a former mine at Brukunga, near Nairne, in the Adelaide Hills.

CRC chair Allan Morton says the project will lead to more work for the manufacturing, mining, engineering, technology and services sectors.

“If you can reduce the cost of drilling, you can explore more,” Morton says. “If you explore more, you find more. Finding more means you end up with more mines. More mines mean more jobs, more exported product.”

International experts recruited to support project

UniSA and LaserBond have appointed two world-leading researchers in advanced coating metallurgy and surface engineering to work for the centre.

Dr Christiane Schulz is a coatings development engineer currently working with a leading international advanced materials manufacturer where she develops novel metallurgical coatings for a range of heavy industries. She will work as a metallurgist coatings researcher in the Future Industries Institute.

Dr Thomas Schlafer currently works with a coating systems supplier where he is head of research and development. He will work for LaserBond as manager of research and development projects, focused on the development of the cladding cell system.

The cooperative research centre will focus on:

- The study of multimodal wear in drilling and mining (corrosion, abrasion, erosion, impact)
- Development of advanced customised alloy cladding materials
- Design of new components utilising next generation additive laser manufacturing processes.

What is laser cladding?

Laser cladding is a high-performance additive manufacturing procedure, which uses precisely-controlled energy from a high power laser to metallurgically-bond a surface material (or cladding) to an underlying surface. This provides very high performance surfaces to new parts, extending their operating life.

With this precise control, a welded or metallurgical bond is achieved with minimal impacts and effects of heat on both the substrate and surface material.

RELATED STORIES



SCIENCE AND TECHNOLOGY

iPad app for French trains named crème de la crème

[more](#)



SCIENCE AND TECHNOLOGY

UniSA low cost satellite tech named best new business

[more](#)

[Disclaimer](#) | [Copyright](#) | [Privacy](#) | [Web accessibility](#) | [CRICOS Provider no 00121B](#) | [Contact UniSA](#)

[Site help](#) | [Open Day](#) | [UniSA Events Calendar](#) | [Read this page](#)

Latest content revision: Thursday, 13 July 2017



University of
South Australia

What's UniSA's game changing tech to treat prostate cancer?

[Back to story index](#)

by Georgia Aish



HEALTH

3D Histech Panoramic confocal scanner

UniSA is purchasing an advanced imaging machine that will help researchers accurately detect prostate cancer to reduce unnecessary surgery and improve treatment for patients.

With a significant contribution of \$250,000 from [The Hospital Research Foundation](#), UniSA has secured a [3D Histech Panoramic confocal scanner](#) to assist its groundbreaking work in prostate cancer imaging. Prostate cancer is the second most common cancer in men worldwide, leading to more than 300,000 deaths per year.

Professor Doug Brooks from the School of Pharmacy and Medical Sciences says the new piece of equipment is a game changer for their research program visualising prostate cancer.

"We are developing several technologies to accurately visualise the disease process in prostate cancer patient samples to confirm diagnosis, help determine the size of the cancer, define tumour architecture and determine if the cancer is aggressive," Prof Brooks says.

"We are also developing new imaging agents that ultimately will mean we can visualise cancer in a live biopsy from a patient."

"Although these new imaging technologies have specific applications for prostate cancer, the technology will apply to other cancers, giving this project wider potential in cancer imaging."

More than 1.1 million people around the world are diagnosed with prostate cancer each year.

UniSA has a specific translational research program aiming at developing new detection and visualisation technologies to predict which patients need immediate radical intervention.

With proof of principle already established, state of the art imaging equipment is needed to translate the new technologies ready for clinical practice.

"A specific infrastructure requirement was identified that would boost our imaging capacity, so thanks to the generosity of The Hospital Research Foundation, the equipment can now be used to facilitate the technology development in a pre-clinical study, ready for use in clinical setting," Prof Brooks says.

UniSA's Pro Vice Chancellor Health Sciences, Prof Robert Vink, praised the support of those enabling the research to move forward.

"We offer great thanks to The Hospital Research Foundation who have partnered with us to fund this machine," Prof Vink says.

"With their generous support, we are able to take research and technology developed here in South Australia and apply that to make a real difference to patients."

THRF chief executive officer Paul Flynn says his organisation is proud to enable the purchase of the confocal scanner.

"This piece of equipment is essential in changing the way clinicians diagnose and predict the aggressiveness of prostate cancer. It will help to save lives."

Tweet

Share

1

RELATED STORIES



HEALTH

Scientifically engineered nanoparticles to improve treatment for cancer [more](#)



INSIDE UNISA

The latest achievements and announcements [more](#)

[top^](#)



iPad app for French trains named crème de la crème

[Back to story index](#)

by Adam Joyce



SCIENCE AND TECHNOLOGY

A French train driver being guided by the UniSA developed iPad app, which helps them efficiently drive high-speed TGV trains. The speedometer shows the train's speed approaching 300km/h.

An iPad app developed by UniSA researchers is helping high-speed train drivers in France to drive more efficiently and by doing so helping the national rail operator save millions of Euros in energy costs – and earning them a major award.

The [Energymiser software](#) runs on iPads deployed to 2000 high-speed (TGV) train drivers across France, giving them real-time advice on the optimum speed, to increase fuel efficiency while staying on schedule.

In June, France's national state-owned railway company, SNCF, was named company of the year by the [Forum of Energy Managers](#) for its use of the system (which it calls "Opti-conduite"), receiving an Energy Time Award for Energy Management and Performance. The annual award is presented to a company with remarkable and innovative achievements in the fields of performance and energy management.

UniSA Associate Professor Peter Pudney says UniSA and its commercial partner TTG Transportation Technology are continuing to work with SNCF to deploy the system on other train services throughout France.

Asc Prof Pudney says the route and geometry of each high-speed rail line is recorded in the software, and the system uses the data to continuously recalculate the ideal train speed to smooth acceleration and braking, saving up to 10 per cent in energy consumption.

The software is also installed in more than 1000 passenger and freight trains in Australia and the United Kingdom, with the French version, in the form of an iPad app, being the latest version.

"The driver advice software was developed by UniSA's Scheduling and Control Group over many years, and has been deployed around the world," Asc Prof Pudney says.

“Working with SNCF, we integrated our driving advice software onto their iPads. Each SNCF train driver has an iPad that shows the route and timetable information as they are driving.

“Our software calculates how a train should be driven in order to ensure that the train arrives at each timing point on time, and uses as little energy as possible.”

The system uses GPS to monitor the progress of a train journey, and continually calculates the most efficient way to complete the journey taking into account track gradients, speed limits, power limits and the timetable. It then advises the driver when to apply power, when to maintain speed, when to coast and when to brake, as well as displaying real-time information about the route and journey.

[Tweet](#)

[Share](#)

RELATED STORIES



SCIENCE AND TECHNOLOGY

How to solve \$30bn ‘wear and tear’ problem for Aussie mining [more](#)



SCIENCE AND TECHNOLOGY

UniSA low cost satellite tech named best new business [more](#)

[top^](#)

[Disclaimer](#) | [Copyright](#) | [Privacy](#) | [Web accessibility](#) | [CRICOS Provider no 00121B](#) | [Contact UniSA](#)
[Site help](#) | [Open Day](#) | [UniSA Events Calendar](#) | [Read this page](#)

Latest content revision: Thursday, 13 July 2017



University of
South Australia

Our Survey Says...

[Back to story index](#)



INSIDE UNISA

Family Feud (or [Family Fortunes](#) as it was known in my neck of the woods) was one of my favourite shows when I was growing up. The battle to be the first to the buzzer to win the right to answer the questions, the occasional unintentional-wholly-inappropriate-but-hilarious responses to seemingly innocent questions, the play-at-home guessing what would be the top score ...

It made for good TV and I really liked the noise the big 'X' made when it appeared on screen – immortalised by Les Dennis in an episode of *Extras* years later.

Why am I sharing this? Well, [we asked all of our people what they thought of UniSA's organisational culture](#) and our survey results are now in. (For the statistically inclined, our 2321 respondents represents a 76 per cent participation rate of all continuing and fixed-term staff. For the less statistically inclined, that's not too shabby.)

And our survey doesn't say ehh-uhh.

Those who got the Family Feud intro will have made the appropriate noise in their heads. To the others, my apologies.

Our survey says that we have developed our culture remarkably over the past three years – since our last deep dive in 2014. We have improved significantly in 11 of the 12 key areas assessed by the [Denison survey tool](#), and held steady in the 12th – core values – an area for us to focus on in the coming months and years. The survey says that ours is an organisation in which employees are highly engaged. That they are energised around customer focus and team orientation. It illustrates an increased sense of empowerment; people are developing capabilities and making change happen. It says that ours is an organisation where we have a long term strategy which is appreciated and understood; where we learn continually as an organisation to adapt and improve as we deliver; and where we communicate well with one another. And that we feel involved in the successes of our university.

There are of course areas for improvement – we need to continue to work on accountability – and to call out the

behaviours we do not want to see modelled in our workplace. That's a job for all of us. Together we shape and drive our collective culture. That culture will sustain us in good times and in bad and I believe it is to be celebrated. The sense of pride I feel from the privileged position of leading this amazing organisation is not experienced by me in isolation. Pride in the success and achievement of our University is evident throughout the survey data and the free text commentary.

Of course, this is just a helicopter view of the data, freshly presented to the [Senior Management Group](#) for the first time this week. The HR team will be working hard in the coming weeks and months to visit local areas and to work through the survey data in detail and we will continue to build on our magnificent momentum as we enter our next stage of strategic planning. The first cab off that particular rank will be a whole-of-institution conversation around the mission, vision and values of a university of enterprise. We'll do that when the weather starts to warm up again. We'll link that to our past [Unijam data](#) and our cultural barometer to chart a course for the coming years that builds on everything we have achieved together under [Crossing the Horizon](#). And we will take the University to even greater heights.

I've no doubt we will succeed. The survey says that our foundations are rock solid. I've no doubt that we will be first to the buzzer each and every time. (I don't know who's on the opposing family team though – let's just assume it's everybody else in the sector.)

So thank you for your talents and your tenacity, your efforts and your successes. UniSA is far more than the sum of its parts – thanks to you, its staff, your engagement, your confidence, your belief in one another and your willingness to achieve.

Professor David Lloyd
Vice Chancellor and President

Tweet

Share

RELATED STORIES



INSIDE UNISA

The latest achievements and announcements [more](#)



MENTAL HEALTH

Suicide education program gives meaning to mateship

[more](#)

[top](#)



news

July 2017

> from the University of South Australia

Achievements and Announcements

[Back to story index](#)

AWARDS

- [Lecturer and PhD candidate awarded two accolades](#)
- [Fellowship for researcher looking at fetal heart development](#)
- [Award winning paper reveals need for increased outpatient heart care](#)
- [UniSA celebrates NAIDOC and two scholars' successes](#)
- [Architecture award for book telling Canberra's story through 100 homes](#)
- [UniSA success at the South Australian Architecture Awards](#)
- [UniSA consumer behaviour specialist a 'standard' above](#)
- [Mark Kimber a finalist in national award for excellence in photographic portraiture](#)

ANNOUNCEMENTS

- [Vale Bill Cossey AM](#)
- [UniSA debuts at 36 in THE Asia-Pacific University Rankings](#)
- [WOMADelaide Planet Talks podcasts out now](#)
- [Scholarships for SA students to study at UniSA space school](#)
- [UniSA collaborates with Dublin City University on water](#)

APPOINTMENTS

- [Chancellor to chair new Defence Cooperative Research Centre](#)
- [HPE business leader heads up UniSA executive education](#)

AWARDS

Lecturer and PhD candidate awarded two accolades

Nursing lecturer and PhD candidate Deryn Thompson has been recognised for her work helping families manage eczema and received a scholarship to travel to the United States to further her work in allergy nursing and dermatology.

Thompson has been awarded an Australian Dermatology Nurses' Association USA Nurses Scholarship, which ensures Australian dermatology nurses can build their international contacts to pursue professional development and networking opportunities.

Thompson has more than 20 years' experience in allergy nursing and 10 in dermatology. With the two fields now overlapping in many areas, the scholarship will allow her to attend the American Dermatology Nurses Congress in the United States next February.

"I will be able to network with USA dermatology nurses establishing links for them in Australia while learning from experts in the field," she says.

"I will also highlight the post graduate Professional Certificate in Allergy Nursing course run by UniSA to attendees."

Thompson has also received a Women's and Children's Health Network (WCHN) award for outstanding consumer care contribution.

Through her work with families to maximise their skill development in managing a complex and chronic condition



(eczema), Thompson says the award is really a tribute to the parents' hard work.

"This award highlights how significant effective parent and patient centred care is to parents and children learning to manage their eczema.

"Often people are unaware of the significant psychological and financial impact this condition has on children and their families.

"This is why we strive to help them develop the skills to master the necessary care."

The [Australian Dermatology Nurses' Association](#) (ADNA) aims to promote the development and recognition of the nurses' role in dermatology for the benefit of the patient and to promote the education and professional development of nurses working in dermatology.

Fellowship for researcher looking at fetal heart development

Work to understand how the fetal heart can develop normally with much less oxygen than an adult heart uses has received a boost, with a UniSA researcher receiving a fellowship to support her research.

UniSA researcher Professor Janna Morrison's work may lead to the development of non-invasive approaches to detect and treat abnormal fetal heart growth in animals and humans.

Prof Morrison is the Head of the Early Origins of Adult Health Research Group in the School of Pharmacy and Medical Sciences and Sansom Institute for Health Research.

She has been awarded one of 91 new [Australian Research Council \(ARC\) Future Fellowships](#) for a project aimed at understanding how the fetal heart develops normally in an environment with much less oxygen than what an adult heart operates in.

The Future Fellowships scheme supports research in areas of critical national importance by giving outstanding researchers incentives to conduct their research in Australia.

The aim of the Future Fellowships scheme is to attract and retain the best and brightest mid-career researchers.

Prof Morrison has been awarded \$987, 972 to support her salary and some related project costs over the next four years.



Award winning paper reveals need for increased outpatient heart care

Work on a way to measure access to outpatient cardiac rehabilitation services has revealed that such services are underutilised – and earned a UniSA research recognition for the best professional paper.

UniSA researcher Dr Deborah van Gaans from the Centre for Population Health Research has been awarded the Best Professional Paper Award for 2017 by the editorial board of the *Journal of Spatial Science*.

The award is for a paper Dr van Gaan, wrote along with Professor Andrew Tonkin from Monash University and the late Professor Graeme Hugo from the University of Adelaide.

The paper, published in the journal in March last year, describes the development of a spatial model to measure the accessibility to existing Phase 2 (out-patient) cardiac rehabilitation services.

"Currently Phase 2 Cardiac Rehabilitation services are underutilised and improving access will be necessary because of ageing of the population and falling case-fatality rates," Dr van Gaans says.

"The model was developed by integrating the socioeconomic information gathered by a health service survey and incorporating a distance decay model.

"We used a geographic information system to combine both geographic and socio-economic aspects of accessibility.

"It's very pleasing to have our work recognised with this award."

The paper can be viewed [online](#).



The award for Best Professional Paper is made every two years based upon Professional Papers published in a 24-month period.

UniSA celebrates NAIDOC and two scholars' successes

A researcher whose work has helped address health problems in Aboriginal communities has been named South Australian Aboriginal Scholar of the Year – an award sponsored by UniSA.

The scholarship, which rewards academic contribution, is presented as part of NAIDOC Week.

UniSA Pro-Vice Chancellor Aboriginal Leadership and Strategy, Professor Irene Watson, says the national celebration of Aboriginal cultural and intellectual contributions to the nation is important for UniSA.

“One of the ways we mark the week is as a key sponsor of the (NAIDOC) South Australian Aboriginal Scholar of the Year award,” Prof Watson says.

This year's winner was Professor James Ward from the South Australian Medical Health Research Institute (SAMHRI). In 2014 he was appointed as the Head of Infectious Diseases Research Program - Aboriginal Health at SAMHRI, under the leadership of Prof Steve Wesselingh. In the past five years he has progressed research in the areas of sexually transmissible infections (STIs), blood borne viruses (BBVs), vaccine preventable diseases and offender health – with a goal to improve health outcomes across the Aboriginal community.

Prof Watson says Prof Ward's drive and success are an inspiration for all Aboriginal students and the right kind of example for others to follow.

“At UniSA our goal is to become the University of Choice for Aboriginal and Torres Strait Islander students and through true partnerships with Indigenous communities and organisations, we want to strengthen the pipeline from high school through to postgraduate studies by encouraging and supporting the best and brightest young Aboriginal and Torres Strait Islander people,” she says.

Meantime, UniSA graduate Dr James Charles was named the national Scholar of the Year at the NAIDOC awards in Cairns. Dr Charles was recognised for his contributions to culturally-appropriate healthcare. He is a Kurna man from Adelaide and currently works at Charles Sturt University as a lecturer and podiatrist.

UniSA is expanding its commitment to providing respect and opportunities for Aboriginal people and cultures through the development of a “stretch” Reconciliation Action Plan, where the University will commit to the objectives of the new Universities Australia Indigenous Strategy.



Professor James Ward from the South Australian Medical Health Research Institute, who was named SA Aboriginal Scholar of the Year, with UniSA Dean: Aboriginal Engagement & Strategic Projects Professor Peter Buckskin.

Architecture award for book telling Canberra's story through 100 homes

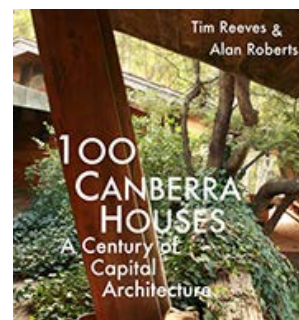
UniSA architecture PhD candidate and author Tim Reeves has been awarded the 2017 Clem Cummings Medal for his book 100 Canberra Houses, co-authored by Dr Alan Roberts.

The medal is awarded annually by the ACT Institute of Architects in recognition of a significant contribution to the advancement of architecture in the Australian Capital Territory.

Six years in the making, the book allowed Tim to combine his two loves: history and architecture. [100 Canberra Houses](#) tells the story of Canberra's development from 1913 to 2013 through the stories of 100 houses.

Tim says it was an honour to receive the award.

“With Canberra's centenary six years away I conceived the idea for a book that would also tell the stories of 100 houses – chosen for their historical or architectural significance – while revealing Canberra's century of development through its domestic architecture,” he says.



“What inspired me was interviewing the people behind each house – the people who commissioned

it, the architect and builder. They're the real heroes of the book.”

Tim continues to work on his PhD focusing on the history of Australian house design competitions, which will be the subject of his second book.

See the full list of winners on Architectureau.com.

UniSA success at the South Australian Architecture Awards

UniSA students, staff and alumni did well at the 2017 South Australian Architecture Awards.

The 29 jurors assessed a competitive field of more than 79 entries across a range of categories.

A team of UniSA architecture students, led by Dr Tim McGinley, received a commendation for their design *Agile x UniSA Pavilion* in the Small Project Architecture category.

The judges' citations described the project as “spatially eloquent, melding highly customised and ‘off the shelf’ components seamlessly together to produce a structurally robust and highly sophisticated spatial insertion”.

They also commended the team on demonstrating “a highly innovative and creative response to the design process and prototyping technology explorations and is a positive contribution to student engagement and collaboration”.

UniSA Visual Arts program director Dr Andrew Welch was commissioned to design and make the 2017 President's Medal that was awarded to leading SA architect John Held.

Read more about the Agile x pavilion on Architizer.

See the full list of winners on the Australian Institute of Architects website.



Agile x UniSA Pavilion by UniSA student project team. Image courtesy Sam Noonan.

UniSA consumer behaviour specialist a ‘standard’ above

Associate Professor Svetlana Bogomolova from UniSA's Ehrenberg-Bass Institute for Marketing Science has been named an emerging leader by the body which sets Australian standards.

Standards Australia presented Assoc Prof Bogomolova with its Emerging Leader Award. The award acknowledges a young professional who has demonstrated great involvement in standardisation, by effectively representing the views of their industry in national or international committees and has willingly undertaken active roles, projects or initiatives in their committees.

In announcing the winners, Standards Australia cited Assoc Prof Bogomolova's representation of the academic and research community on the international committee which deals with guidance on unit pricing.

“Her contributions were instrumental to ensuring the standard had a solid evidence base and the committee had access to the latest knowledge on unit price, retail shopping trends and how consumers use unit pricing information,” Standards Australia stated.

Assoc Prof Bogomolova specialises in consumer behaviour in supermarkets.



Associate Professor Svetlana Bogomolova receives her award from Standards Australia deputy chief executive officer Adrian O'Connell in the organisation's Sydney office.

Mark Kimber a finalist in national award for excellence in photographic portraiture

UniSA's Mark Kimber, Studio Head of Photography in the School of Art, Architecture and Design, has been selected as a finalist in the \$20,000 Olive Cotton Award for photographic portraiture exhibition for his work Dash on the Summer Solstice.

Kimber says his photograph was inspired by “the idea of "periphery and exploring the marginalised and the fringe dweller by use of theatrical tropes that deal with tribalism

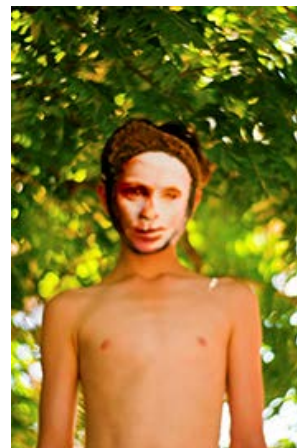
within the suburban realm”.

“My photograph is of my son Dash on the summer solstice,” he says. “He had made a mask based on those worn by people from ancient cultures that celebrated the change of seasons.”

The Olive Cotton Award celebrates excellence in photographic portraiture, with the winning piece acquired for the Tweed Regional Gallery. The nationally recognised award often features works from some of Australia’s most recognised photographers, as well as emerging photographers.

Kimber was selected from a field of more than 500 entries across Australia.

“Being selected as a finalist is something that is both a thrill for me and an honour,” Kimber says. “The Olive Cotton award has become one of the premier photographic art awards in the country.”



Dash on the Summer Solstice
taken at dusk with a combination
of long exposure (digital) and
flashlight.

ANNOUNCEMENTS

Vale Bill Cossey AM

With the news of Bill Cossey’s death this month, the University of South Australia recognises the life and contribution of a man dedicated to public service, to mentoring tomorrow’s leaders and a great influencer in the quest for good government and good governance.

Cossey was a Fellow of the University, an honour he received in recognition of his enormous service to UniSA over many years.

He served on the [University Council](#) for 10 years from 2002 and was engaged with the University in many ways – as Chair of the [Senior Academic Promotions Committee](#), the Honorary Awards Committee and on selection committees for senior appointments.

His reputation for generosity in sharing his time, experience and wisdom was legendary and he supported many UniSA activities including speaking engagements, training sessions and simply providing wise counsel.

A graduate in maths and mathematical statistics, as a young man Cossey travelled to Washington DC in the late 1970s, where he worked in private enterprise before returning to Australia.

When he retired from his position as chief executive of the [State’s Courts Administration Authority](#) in 2004, he concluded a 35-year career in the South Australian Public Services across key departments, including Industry and Trade, the Adelaide Festival Centre Trust, Government Management, Regional Development and State Services. That service and his many volunteer roles in the community across sporting, educational, aged care, financial and arts bodies, were acknowledged when he was awarded a Member of the Order of Australia in 2004.

UniSA Vice Chancellor Professor David Lloyd says Bill Cossey has been an asset to the State for many years and one of its most ardent contributors.

“When I first came to South Australia he was extremely kind to me, making me feel welcome and supporting me in my transition to the role of Vice Chancellor,” Prof Lloyd says.



“Bill was known everywhere for his positivity, his belief that good leaders valued people as their key resource and their key concern through organisational change and development.

“He loved South Australia and he will be missed by the many people whose lives he influenced.

“We send our heartfelt sympathy to his family.”

UniSA debuts at 36 in THE Asia-Pacific University Rankings

The Times Higher Education's first ranking of universities in the Asia-Pacific has placed UniSA at 36 in a field of 243 higher education institutions in the region.

UniSA Vice Chancellor Professor David Lloyd says the result is excellent and places UniSA in Australia's top 12 in the rankings, alongside some of the nation's oldest institutions.

"UniSA, at only 26 years old, is holding its own against long established universities across the region," Prof Lloyd says.

"We're demonstrating exceptional performance in research, teaching and innovation at the highest standards."/p>

"Our commitment as Australia's university of enterprise is to continue to look for opportunities to improve and innovate and to engage internationally through education and industry partnerships."

He says the rankings provide a valuable insight into the quality of universities for the many students across the region who choose to study at institutions in countries other than their own.

"We are delighted to be ranked among the very best in the Asia-Pacific region and look forward to rising further in the coming years."

WOMADelaide Planet Talks podcasts out now

UniSA sponsored WOMADelaide's 2017 Planet Talks Program, which this year included six panel discussions across three days.

If you missed the Planet Talks, you can now catch up on the in-depth [conversations](#) about cultivating a sustainable relationship with the planet and extending the life of everything society uses, via WOMADelaide's podcasts.

UniSA's director of the Centre for Islamic Thought and Education, Professor Mohamad Abdalla, joined a multi-faith panel to discuss how environmental stewardship and climate change is a central pillar for all major religions.



Professor Mohamad Abdalla with host Father Bob Maguire.

Prof Abdalla described his beliefs in their context with the planet.

"As human beings we have an intrinsic relationship with this planet," Prof Abdalla says. "This relationship is interconnected. It is impossible for us to live on this planet, in a holistic and a sustainable way without an appreciation of every other creation that is on this planet.

"And as a Muslim, we believe that this earth ... has been created and that we also have been created and placed on this planet, not necessarily as a privilege but rather in a position of responsibility.

"It is issues like this, looking after our common home that can beautifully unite us and bring us together despite perhaps the theological and perhaps the ideological differences."

Hear a panel discussion about redefining resources and the right to repair with our Nicholas Chileshe or find out more about human life on Mars and what you can do to make a difference to environmental sustainability.

The podcasts are available on the WOMADelaide [website](#).

Scholarships for SA students to study at UniSA space school

The State Government has announced a new space studies scholarship program in partnership with UniSA.

The new scholarships will see five South Australian students receive \$10,000 each to attend the highly regarded [Southern Hemisphere Space Studies Program](#), which is jointly organised by UniSA and the International Space University (ISU).

Funds for the live-in summer school will cover tuition, accommodation and meal costs for each of the five participants who will learn a multidisciplinary understanding of the key activities and areas of knowledge required

by today's space professionals.

For more information about the scholarships including how to apply, contact inquiries.shs-sp@isunet.edu.

UniSA collaborates with Dublin City University on water

UniSA Vice Chancellor Professor David Lloyd has signed a letter of agreement with Dublin City University (DCU) to pave the way for future collaborations in water research.

UniSA's Dean Research and Innovation for the Division of Information Technology, Engineering and the Environment, Professor Chris Saint, says the collaboration followed a visit from DCU staff, during which both institutions realised they had similar interests in water and water quality issues.

With both universities particularly interested in energy (optimising water and wastewater treatment plants), water and health and sustainable agriculture, a partnership was established.

Prof Saint says the development of sensors and analytical techniques for chemical and biological assessment of water is a common strength.

"I was put in touch with DCU Water Institute's Director, Professor Fiona Regan, and after some discussion, we decided we would try and explore a bit further how we could collaborate," Prof Saint says.

Prof Saint visited DCU and soon after became a member of DCU Water Institute's Advisory Board.

With the team committed to taking the collaboration further, Prof Saint says both sides should benefit.



Professor Chris Saint with Prof Fiona Regan and some of the staff and students of the Water Institute, Dublin City University.

APPOINTMENTS

Chancellor to chair new Defence Cooperative Research Centre

UniSA Chancellor Jim McDowell will chair a new Defence Cooperative Research Centre responsible for delivering game-changing unmanned platforms that ensure reliable and effective cooperation between people and machines during dynamic military operations.

The Federal Government has announced the creation of a \$50 million Defence Cooperative Research Centre focused on Trusted Autonomous Systems.

Defence Industry Minister Christopher Pyne says existing autonomous and robotic systems that operate in the manufacturing and mining sector are effective in controlled environments but not suitable for Defence operations.

"To be effective, Defence needs autonomous systems to be highly trusted, robust and resilient and this initiative will bring together the best researchers from industry and universities to develop the intelligent military platforms of the future," he says.

Cooperative research centres bring together academics, publicly funded research agencies, industry (particularly small to medium enterprises) to create research and innovation capability focused on a specific outcome.

The CRC will be chaired by McDowell, who has had an extensive career in the defence industry before joining UniSA.

"As Chair, Mr McDowell will be responsible for leading the development of the research program and business plan and work with industry on transitioning the research results into capability outcomes," Pyne says.

McDowell, a former Australian chief of global defence giant BAE Systems, says he's looking forward to putting his skills and experience in the field towards addressing an important, national challenge.

"Defence is a growing sector and has great potential – provided we seize it – to become a major employer for Australians, supported by an array of related industries, particularly through the development and manufacture of advanced technologies," he says.

"This consortium will be an incubator for technology that can help make Australia a world leader not just in



automation for defence, but with potential application well beyond the industry.”

Read the [full announcement](#) by Defence Industry Minister Christopher Pyne.

HPE business leader heads up UniSA executive education

Former director of service delivery for Hewlett Packard Enterprise Services in the South Pacific and state manager for South Australia, Peter Stevens, has been appointed as executive director for the University of South Australia’s MBA and Executive Education.

The new role will lead growth and strategy for executive education focussing on UniSA Business Schools’ MBA and International MBA programs along with related executive education programs.

UniSA Pro Vice Chancellor Business and Law, Professor Marie Wilson, says she is excited to begin working with Stevens, to spearhead an expansion of the already successful suite of executive education UniSA provides.

“Part of our goal is to reach more people with the message that UniSA Business School is recognised as one of the best globally,” Prof Wilson says.

“This is not something we simply claim, we have earned that acknowledgement from independent assessments such as EQUIS and the Graduate Management Association of Australia where our MBA has maintained a five-star ranking for more than 10 years.

“Experienced across a 20-year career in a wide range of business operations - from HR management and IT to strategy and operations development, sales and service delivery - Peter brings a huge depth of knowledge of modern business environments to this role.”

Stevens has served as a Member of the Australian Information Industry Association State Council, has served on the UniSA Business School Advisory Board, has a Master of Business Administration from UniSA, and is a member of the Institute of Company Directors.

He starts his new role this month (July).

[Tweet](#)

[Share](#)

[top^](#)



[Disclaimer](#) | [Copyright](#) | [Privacy](#) | [Web accessibility](#) | [CRICOS Provider no 00121B](#) | [Contact UniSA](#)
[Site help](#) | [Open Day](#) | [UniSA Events Calendar](#) | [Read this page](#)

Latest content revision: Tuesday, 18 July 2017



UniSANEWS

[Archives](#)
[Contacts](#)
[Media Centre](#)
[UniSA Home](#)

Archives

Some archive files are in the Adobe Acrobat format. In order to read this format, you will need Adobe Acrobat Reader.

Please note that there may be links to pages that no longer exist



Older issues

2017

[June](#)
[May](#)
[April](#)
[March](#)
[February](#)
[January](#)

2016

[December](#)
[November](#)
[October](#)
[September](#)
[August](#)
[July](#)
[June](#)
[May](#)
[April](#)
[March](#)
[February](#)
[January](#)

2015

[December](#)
[November](#)
[October](#)
[September](#)
[August](#)
[July](#)
[June](#)
[May](#)
[April](#)
[March](#)
[February](#)

2014

[December](#)
[November](#)
[October](#)
[September](#)
[August](#)
[July](#)
[June](#)
[May](#)
[March](#)
[February](#)
[January](#)

2013

[December](#)
[November](#)
[October](#)
[AugustSeptember](#)
[July](#)
[June](#)
[May](#)
[April](#)
[FebMarch](#)
[Summer Edition](#)

2012

[December](#)
[November](#)
[October](#)
[Jeffrey Smart](#)
[August/September](#)
[July](#)
[June](#)
[May](#)
[April](#)
[March](#)
[February](#)

2011

[December](#)
[November](#)
[October](#)
[September](#)
[August](#)
[July](#)
[June](#)
[May](#)
[April](#)
[March](#)
[February](#)

2010

[December](#)
[November](#)
[October](#)
[September](#)
[August](#)
[July](#)
[June](#)
[May](#)
[April](#)
[March](#)
[February](#)

2009

[Summer](#)
[October](#)
[September](#)
[August](#)
[June](#)
[May](#)
[April](#)
[February-March](#)

2008

[Summer](#)
[October](#)
[September](#)
[August](#)
[June](#)
[May](#)
[April](#)
[February-March](#)

2007

Summer Edition
November
September
August
June
May
April
February

2006

Nov/Dec
October
September
August
July
June
May
April
February

2005

November
October
September
August
July
June
May
April
February

2004

Nov/Dec
October
September
August
July
June
May
April
February

2003

Nov/Dec
October
September
August
July
May
April
March
February

2002

Nov/Dec
October
September
August
July
May
April
March
February

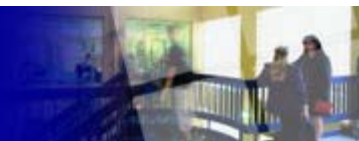
2001

Nov/Dec
October
September
August
July
June
May
April
March
February

2000

December

[top^](#)



UniSANEWS

[Archives](#)

[Contacts](#)

[Media Centre](#)

[UniSA Home](#)

Contacts

Editor

Rosanna Galvin , ph (08) 8302 0578

Web author

Edmund Boey

Graphic designer

Alison Albanese, ph (08) 8302 0028

If you have a story suggestion, please email unisa.news@unisa.edu.au by the first of each month for inclusion in that month's newsletter.

[top^](#)

[Disclaimer](#) | [Copyright](#) | [Privacy](#) | [Web accessibility](#) | [CRICOS Provider no 00121B](#) | [Contact UniSA](#)

[Site help](#) | [Open Day](#) | [UniSA Events Calendar](#) | [Read this page](#)

Latest content revision:Monday, 1 September 2014

Scientifically engineered nanoparticles to improve treatment for cancer

[Back to story index](#)

by Annabel Mansfield



HEALTH

Associate Professor Ivan Kempson uses a confocal microscope to image structures and features inside individual cells. Photo by David Solm.

> [Helping reduce chemotherapy-induced nausea Facility](#)

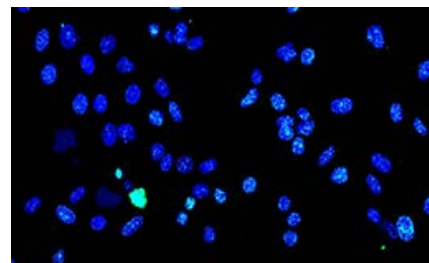
UniSA researchers have found a way to get scientifically engineered microscopic molecules to attach to cancer tumours to increase the effectiveness of radiotherapy – a major milestone it is hoped will lead to increased survival rates with fewer side effects from treatment.

Researchers believe they can use nanoparticles, which are 5000 times thinner than a human hair, to enable higher radiation doses to be delivered directly into cancer tumour tissue whilst sparing surrounding healthy tissues.

The world first involves scientifically engineered nanoparticles attaching to a tumour. The nanoparticles can enhance the physical and biological effects of radiotherapy by making the tumour more sensitive to x-rays. Just as light is absorbed at a greater rate in opaque materials, so too are larger numbers of x-rays absorbed in tumour tissues via nanoparticles.

The development is a result of the breakthrough ability to correlate, quantify and model the effects of nanoparticles in radiotherapy to predict and improve outcomes for patients with cancer.

Researchers from UniSA's [Future Industries Institute](#) are testing the nanoparticles in pre-clinical settings, which



Radiotherapy breaks the DNA strands inside cancer cell nuclei (the blue dots). The breaks in the DNA strand are shown in green / aqua. UniSA researchers are now able to count the number of DNA breaks compared to the number of nanoparticles inside each cell to formulate the most effective treatment.

should be ready for human trials in the next two years. The concept has already captured commercial interest. A preclinical study is being funded jointly by the South Australian Government and a medical device company. [UniSA Ventures](#), UniSA's commercialisation arm, is also involved in driving the technology forward.

The research has been carried out in close collaboration with the Royal Adelaide Hospital.

UniSA Professor in Medical Radiation Eva Bezak says the breakthrough discovery is expected to result in increased localised radiation damage in the tumour with far fewer side effects to surrounding healthy tissues.

"The experimental data is providing unique insight into mechanisms and variables that are important to radiobiological models predicting the effects of radiotherapy," Prof Bezak says.

"With this information we can begin to identify and design optimal radiation delivery plans to maximise therapeutic benefits."

Associate Professor Ivan Kempson, the biophysicist leading the experimental research, says the more efficient treatment could mean less time in treatment and away from home for patients, as well as lower costs, and, most importantly, more people surviving cancer, disease-free.

"Radiotherapy treatment is constrained by the radiation tolerance of healthy tissues and the side effects caused," Asc Prof Kempson says.

"As we get older or suffer from poorer health we are less tolerant of the side effects and therefore are unable to receive as aggressive treatments as younger, fitter people.

"With this new concept, higher radiation doses can be delivered into the tumour tissue and spare healthy tissues from the collateral damage.

"I believe this will amplify the therapeutic effect of radiotherapy, benefiting many patients but will be especially so for the frail and elderly."

In an exciting and unexpected development from the research, he believes some of the same concepts could translate to improvements in chemotherapy for treating metastatic cancer, which is cancer that has spread from the primary site of origin.

Helping reduce chemotherapy-induced nausea

UniSA researchers have received a grant from Cancer Council SA with the ambition of improving the treatment of nausea for patients receiving chemotherapy.

The Sansom Institute for Health Research director Professor Ian Olver and Senior Research Fellow Dr Hayley Whitford have been awarded a \$75,000 [Beat Cancer Project](#) grant.

Prof Olver says just over 50 per cent of patients diagnosed with cancer receive chemotherapy at some point, with up to seven in 10 experiencing nausea as a side effect.

"Nausea is one of the top 10 most disturbing side effects reported because it does not respond as well to medication which controls vomiting," Prof Olver says.

Prof Olver and Dr Whitford will develop an app through which patients can communicate nausea symptoms to oncology staff in real-time.

"We have already done research that nausea is a cluster of symptoms so we want to find out for each patient what those symptoms are so we can better target the treatment," he says.

"If successful, we will be able to better treat the nausea experienced by patients when they have drug therapy and stop it becoming a persistent symptom triggered by sights and smells associated with receiving chemotherapy."



The aim is to improve the quality of life of patients with cancer.

[Tweet](#)

[Share](#)

RELATED STORIES



HEALTH

What's UniSA's game changing tech to treat prostate cancer? [more](#)



INSIDE UNISA

The latest achievements and announcements [more](#)

[top^](#)

[Disclaimer](#) | [Copyright](#) | [Privacy](#) | [Web accessibility](#) | [CRICOS Provider no 00121B](#) | [Contact UniSA](#)
[Site help](#) | [Open Day](#) | [UniSA Events Calendar](#) | [Read this page](#)

Latest content revision: Monday, 17 July 2017



University of
South Australia

Suicide education program gives meaning to mateship

[Back to story index](#)

by Michèle Nardelli



MENTAL HEALTH

Construction workers are six times more likely to die from suicide than an accident at work. The MATES in Construction program was established to tackle the issue.

Raising awareness about the risk of suicide among construction workers and encouraging them to talk to each other about mental health is having a positive impact, according to new UniSA research.

The [MATES in Construction \(MIC\)](#) program was established to reduce the very high incidence of suicide in the construction industry. Every second day an Australian working in the construction industry takes their own life. The program is based on the idea that everyone in the industry must play their part – it cannot be left to mental health professionals alone.

New UniSA research has found the program, which provides general awareness training to construction workers and equips key staff with more specific support skills, is making it easier for people to discuss problems and share feelings.

The [research](#) involved a sample survey of construction industry workers in South Australia followed up with qualitative interviews with some of them.

Construction workers are six times more likely to die from suicide than an accident at work. The alarming statistic is thought to relate to a range of issues and stresses including the insecurity of work in construction, the prevalence of substance abuse among construction workers, the hyper-masculine environment that has traditionally seen help-seeking as weak, bullying, the stress of long work hours and relationship breakdowns.

UniSA researchers found programs introduced to provide worker education and training around the issues of suicide and suicide prevention – [General Awareness \(GAT\) and Connector Training](#) – were having a real impact with 50 per cent of the workers surveyed reporting they had used what they had learned at work and in life

outside of work.

Lead researcher on the project from UniSA's [Mental Health and Substance Use Research Group](#), Dr [Monika Ferguson](#), says the results are promising.

“We found that workers were not only using what they learned in the program to communicate with mates at work, but they were also applying their new knowledge and skills when communicating with their families and loved ones,” Dr Ferguson says.

“It was also useful for them in raising issues around work related stress. However, fewer participants reported using the training to talk directly about drug and alcohol related issues, financial pressures or suicidal thoughts.

“The big take home message is that well-structured and targeted education programs, even short ones such as the 45 minute GAT program, are helping to change the way workers see the role of communication and support in preventing suicide.

“The qualitative research showed in many instances that respondents had developed a heightened awareness for recognising the signs when someone is having a tough time, and had broken through previous reserve to offer support to mates and loved ones by asking clear questions such as ‘are you thinking about taking your life?’.”

Dr Ferguson says the MATES in Construction program is not only raising awareness about suicide and issues specific to the construction industry but is also giving workers the tools to support colleagues who might be struggling with the mental health issues and stresses that can lead to suicide.

“Our evidence shows that this program is achieving the desired effect,” Dr Ferguson says.

“It also supports the notion that expanding the program and diversifying the content so that it has meaning in various work and cultural contexts may be of benefit.”

South Australian CEO of the MIC program, Michelle Caston, says the long-term goal is to change the culture of the industry so that it is safe to talk about problems, smart to ask for help and checking in with mates to make sure they are okay “is just what you do”.

“If we can transform the culture, we know this program will improve work safety and productivity and ultimately save lives.”

[Tweet](#)

[Share](#)

RELATED STORIES



INSIDE UNISA

UniSA’s new leader of counselling to focus on student empowerment [more](#)



INSIDE UNISA

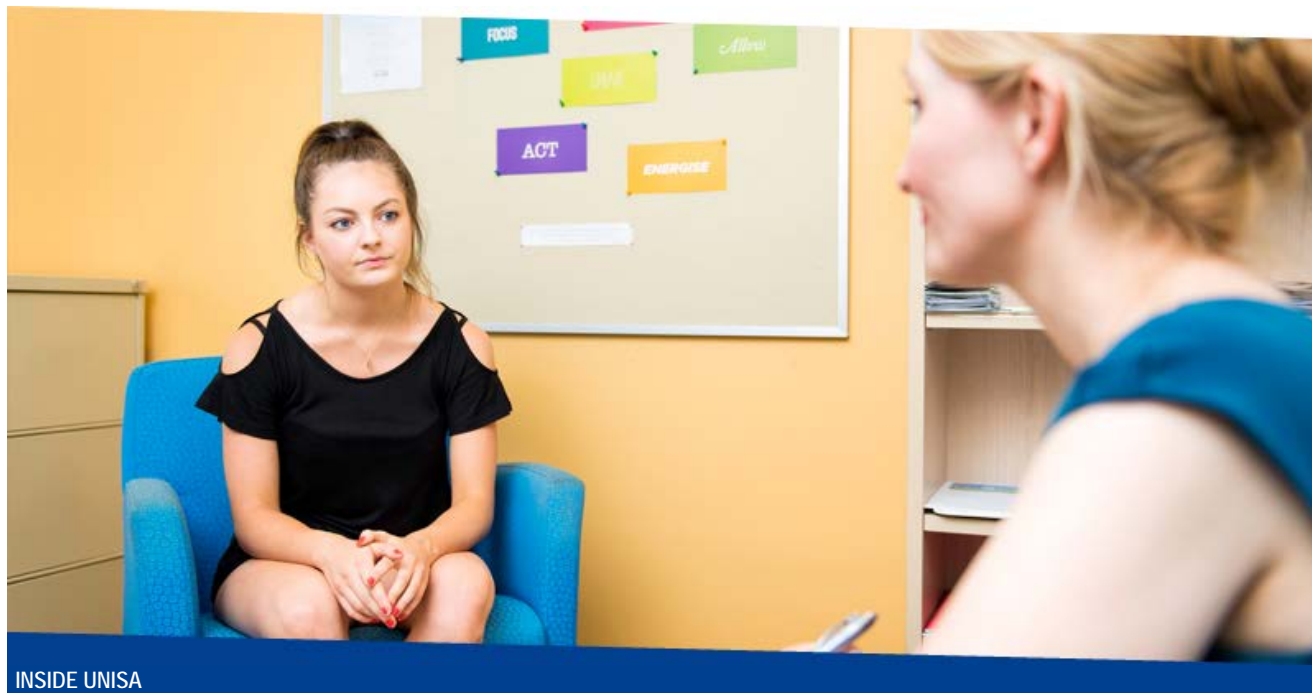
From the Vice Chancellor [more](#)

[top^](#)

UniSA's new leader of counselling puts the focus on student education and empowerment

[Back to story index](#)

by Michèle Nardelli



INSIDE UNISA

UniSA has appointed [Accredited Mental Health Social Worker](#) and former Associate Dean of Flinders Living, Narelle Lieschke as its new Manager: Counselling.

Arguably one of the most important roles in directing student wellbeing on campus, Lieschke says she is excited to take on the job at a time when UniSA is enhancing a range of new strategies to engage students in their own physical, mental and sexual health and safety.

"One of the reasons I applied for the role is that I will be working much more immediately in the policy space and be able to contribute meaningfully to the development of policy and practice to support student wellbeing," Lieschke says.

"Universities offer students the learning to start successful careers but it important to match that by empowering them to get the most out of their time at university in a safe environment that nurtures respect and psychosocial good health."

"My goal is to keep UniSA at the forefront – with a suite of best practice counselling services which are benchmarked to the highest national standards."

In her previous role, with oversight of student wellbeing at Flinders University's 560+ bed, residential facility, Lieschke was keenly aware of the important role education plays in supporting safe environments for students.



UniSA's new Manager:
Counselling Narelle Lieschke.

She led with the development and delivery of a two-hour workshop relating to sexual consent for 480 Flinders Living residents and was integral in the establishment of a sexual assault disclosure response protocol at Flinders. She also worked to support a sexual assault first response training strategy for student leaders.

Before working at Flinders University, Lieschke worked for five years at [Yarrow Place Rape and Sexual Assault Service](#) in South Australia where she managed a team of six clinicians who provided counselling services to victims of sexual assault and their families.

She supervised clinical staff who delivered crisis response, therapeutic counselling and therapeutic group work services to male and female victims of all ages and cultural backgrounds. As a Crisis Response Coordinator there, she managed a team of 20 allied health professionals including crisis response workers and forensic medical staff.

"We can support university students' mental and physical health and I know UniSA has recently introduced some great programs that empower students to take control of their wellbeing – programs that help set them up for life beyond campus days," Lieschke says.

"It is really important to develop a culture of safety and care on campus through education and open discussion but if or when an incident happens, it is crucial that the University is well prepared to manage it and support students with genuine sensitivity and comprehensive care.

"I look forward to working with the counselling team at UniSA to continue to drive innovation and excellence in our service."

Lieschke begins her new role at UniSA on 24 July.

RELATED STORIES



Suicide education program gives meaning to mateship

[more](#)



Family's refugee story helps student design award winning poster

[more](#)

[top^](#)

[Disclaimer](#) | [Copyright](#) | [Privacy](#) | [Web accessibility](#) | [CRICOS Provider no 00121B](#) | [Contact UniSA](#)

[Site help](#) | [Open Day](#) | [UniSA Events Calendar](#) | [Read this page](#)

Latest content revision: Monday, 17 July 2017



University of
South Australia

War and were seeking a better future.

“When I think of refugees who are leaving their country to escape a war for a better future, I feel this connection between my parents and those refugees as they share similar experiences.

“So I feel that winning this competition means that I've created something that could really help spread awareness and possibly help refugees who are in a similar position as my parents were.”

In total, more than 400 entries from 43 schools and institutions were submitted with 75 posters selected for exhibition. In the tertiary section, 14 posters were selected with seven designed by UniSA students.

The awards were presented at the Kerry Packer Civic Gallery in partnership with the Bob Hawke Prime Ministerial Centre and the School of Art, Architecture and Design.

Education and Child Development Minister Susan Close presented the awards.

The project is a key part of SA Refugee Week each year and is now touring regional galleries. The posters are currently on exhibition at the [City of Marion council chambers](#) until 31 July.

Tweet

Share

RELATED STORIES



INSIDE UNISA

UniSA's new leader of counselling to focus on student empowerment [more](#)



HEALTH

What's UniSA's game changing tech to treat prostate cancer? [more](#)

[top^](#)



Midwifery students experience birth care around the world

[Back to story index](#)

by Sophia Moshakis



COMMUNITY

Bachelor of Midwifery students next to the water purifier purchased for the Vinh Long Hospital through fundraising before their Vietnam study tour.

From helping deliver babies in Kenya to teaching new mothers to breastfeed in Vietnam – two groups of UniSA midwifery students have shared profound experiences relating to childbirth around the globe.

A group of students have recently returned from a Study Tour in Vinh Long Province, located in the Mekong Delta of Southern Vietnam.

Final-year student Carrie Mullen says it was a once in a lifetime opportunity to experience midwifery in a completely different culture. She was one of 10 [Bachelor of Midwifery](#) students who were selected through an application process to spend 2.5 weeks at Vinh Long Hospital and to observe and practice in one of the community clinics.



“After observing and learning the way medical practitioners do things in their hospital, we were encouraged to help manage the care of the women,” Carrie says.

“The postnatal ward made the biggest impact on me, as I learnt that as soon as a woman has a baby in Vietnam, they are ‘handed over’ to the family following birth and do not receive much postnatal care from the medical team due to a lack of resources.

“This has led to a higher instance of formula feeding as women have no breastfeeding knowledge. We were able to educate the women and show them proper techniques to assist them. By the end of the trip, families would seek us out and pull us into the room to help with breastfeeding which was very rewarding.”

Carrie says the experience reinforced the importance of good antenatal education about what happens during labour and, more importantly, what happens after the baby is born.

“We give so much information about breastfeeding and how to generally care for babies when they arrive and though it may seem obvious to us, it can be really helpful for others,” she says.

School of Nursing and Midwifery lecturer Vivian Wu, who facilitated the study tour, says the experience gave students a deep understanding of health care delivery in an international setting, which built on their previous experiential learning activities.

“The students provided free antenatal, intrapartum and postnatal midwifery care to the local community,” Wu says.

“They also conducted education sessions with the women and their families, as well as hospital staff.”

Carrie says she plans to do extra accreditation so she can learn some additional midwifery techniques which all midwives in Vietnam are taught, allowing them to be more independent from the doctors.

Students deliver eight babies in Africa

Earlier this year, two [Bachelor of Midwifery](#) students travelled to Kenya to volunteer at [FreMo Birth and Medical Centre](#) and an orphanage, [New Life Home Trust](#).

Brooke Crannaford and Jasmine Blanusa wanted to experience birthing in a third world country and were keen to use their knowledge to help improve their practice and vice versa.

“During our week at FreMo Birth and Medical Centre we delivered eight babies and attended home visits within the community to check on newborn infants, which included taking their weight and temperature, checking their skin integrity and looking into their feeding regime,” Brooke says. “We also assisted with the Immunisation Clinic and were able to immunise over 100 newborns to two year olds.”



(L)Midwifery student Jasmine Blanusa with a new mother at the at FreMo Birth and Medical Centre. (R) Midwifery student Brooke Crannaford with some of the children at New Life Home Trust.

Brooke says her midwifery studies helped better prepare them to work in such birthing environments, although it was challenging to perform tasks in a different way to how they'd be done in Australia.

“At New Life Home Trust, we worked in the Neonatal Intensive Care Area which consisted of 10 babies, with the majority being only a few days of age.

“All of these children were orphaned or abandoned and unfortunately in Kenya it is very difficult to adopt overseas or even locally so these children will most likely stay in care forever.”

[Tweet](#)

[Share](#)

RELATED STORIES



COMMUNITY

Sharing knowledge and experiences with our nearest neighbours [more](#)



ART AND DESIGN

Family's refugee story helps student design award winning poster [more](#)



UniSA low cost satellite tech named best new business

[Back to story index](#)

by Michèle Nardelli



SCIENCE AND TECHNOLOGY

The Myriota team - Dr Alex Grant (CEO), Dr David Haley (CTO), Tom Rayner (Business Development Executive)

Technology that started life at UniSA and which can provide access to small amounts of data from any location on the planet, at very low cost, has been named new business of the year.

Using low earth orbiting satellites, [Myriota](#)'s technology has a raft of applications from enabling outback graziers to remotely monitor livestock water tank levels, saving the farmer hundreds of kilometres of travel, to helping environmental agencies monitor ocean temperatures as part of climate change research.

Based on the concept of the [Internet of Things \(IoT\)](#), Myriota was born out of advanced technologies developed at UniSA's Institute for Telecommunications Research. It has won the New Business award at this year's [South Australian Telstra Business Awards](#).

Myriota's revolutionary technology combines low cost, long battery life, micro transmitters with small (20cm x 20cm) low earth orbit satellites to communicate over very narrow bandwidths. It is this complete direct-to-orbit communications platform that enables global IoT connectivity at a cost base not achievable by any other platform.

Earlier this month, Myriota "[stole the show](#)" at world's largest internet of things summit held in Silicon Valley, where it was named Best Industrial Start Up Company and crowned second best start up company overall.

The company was formed in 2015 with backing from UniSA Ventures and Canadian maritime tracking company [exactEarth Ltd](#), allowing full commercialisation of the technology.

SA Business
**Adelaide based
 telecommunications company
 Myriota awarded best industrial
 start up at major Silicon Valley
 awards**

Dr Alex Grant, Chief Executive Officer of yriota, innovator and former researcher at UniSA says the latest acknowledgement is fantastic.

“We are proud of our R&D origins at UniSA and the [Institute for Telecommunications Research](#). The groundbreaking technology developed there has led to our low cost global IoT connectivity platform,” Dr Grant said.

“This award from Telstra shows we are turning award winning technology into an award winning business – and that is a good thing for continued economic development in this State.

“We have successful deployments in the field now, and to see the business evolve from an idea at a university research institute, into a ground breaking communications solution, is very satisfying.”

Myriota’s technology is being deployed across a wide range of industries that need cost effective remote communications for IoT applications. Myriota is actively engaged with companies across agriculture, defence, the environment, maritime, transport and logistics, mining and utilities monitoring.

[Tweet](#)[Share](#)

RELATED STORIES



SCIENCE AND TECHNOLOGY

How to solve \$30bn ‘wear and tear’ problem for Aussie mining [more](#)



SCIENCE AND TECHNOLOGY

iPad app for French trains named crème de la crème [more](#)

[top^](#)

Sharing knowledge and experiences with our nearest neighbours [Back to story index](#)

by Michèle Nardelli



COMMUNITY

For the women selected for a graduate certificate in HR management through a special program delivery arrangement between UniSA Strategic Partnerships and the Australia Award, the opportunity to study in Australia is considered incredibly special.

Papua New Guinea is one of our closest neighbours. On a map, our northernmost tip points directly to Daru, capital of PNG's Western Province, and the Torres Strait Islands seem like small stepping-stones between us.

For 27 PNG public servants studying toward a [Graduate Certificate in Human Resource Management](#) (through a special program delivery arrangement between UniSA Strategic Partnerships and the Australia Awards), that geographical proximity is important – it makes sense for us to be good friends.

Now, half way through their 12-week study program, the group is brimming with enthusiasm for what they are learning, the important opportunity of coming to Australia to study, and how they will apply their knowledge back home in their large and administratively challenging country.

Moses Yandane, who works in development and training for Provincial Administration in Enga, one of PNG's provinces, says seeing the benefits of e-learning has been a huge revelation.

"It is fantastic to have learning delivered via the computer and to be able to submit your work the same way – we don't get much exposure to that at home but it would be so useful to boost access to education," he says.

"When I get back, one of the areas I want to focus on is a strategy for education in HR management in the workplace and I want to recommend e-



Moses Yandane says seeing the benefits of e-learning in Australia has been a huge revelation.

learning wherever possible.”

One of the great aspects of the UniSA Program is that it concentrates on core competencies such as Business English as well as a range of topics that focus on managing and leading people in order to make a difference – including units on power and influence and values – alongside workflow, workforce planning and performance management, workplace learning and development, recruiting, forecasting and planning and budgeting and other business practice.

For the nine women selected for the program, the opportunity to study here is seen as something incredibly special.

Study a ‘privilege’ to benefit children and country

With 28 children between them, these public servants have sacrificed a great deal (more than 12 weeks away from their kids) to come Down Under to study – but they see it as a privilege.

“We do this not only for ourselves – it is having a huge impact on our personal development – but also for our children and our country,” says Dorcas Gambu from West New Britain Province.

And the others are in furious agreement.

Heidi Kaivi says it has always been harder for women in management to have opportunities to develop, but PNG’s new Gender Equity and Inclusion Policy has meant women are now considered more often when development opportunities arise.

“It is important that we do our best here and that we return and help to improve opportunities for other women in PNG,” she says.

“We will return as powerful women with so much more knowledge than when we came.

“We will also go home with an experience of what a warm and welcoming neighbour we have in Australia.”

The [Australia Awards](#) are prestigious international Scholarships and Short Courses funded by the Australian Government providing participants an opportunity to undertake study, research and professional development in Australia.

Tweet

Share

RELATED STORIES



COMMUNITY

Midwifery students experience birth care around



ART AND DESIGN

Family’s refugee story helps student design award

the world [more](#)

winning poster [more](#)

[top](#)^

[Disclaimer](#) | [Copyright](#) | [Privacy](#) | [Web accessibility](#) | [CRICOS Provider no 00121B](#) | [Contact UniSA](#)
[Site help](#) | [Open Day](#) | [UniSA Events Calendar](#) | [Read this page](#)
Latest content revision: Monday, 17 July 2017



**University of
South Australia**

New Books

[Back to story index](#)

Energy, Governance and Security in Thailand and Myanmar (Burma): A Critical Approach to Environmental Politics in the South

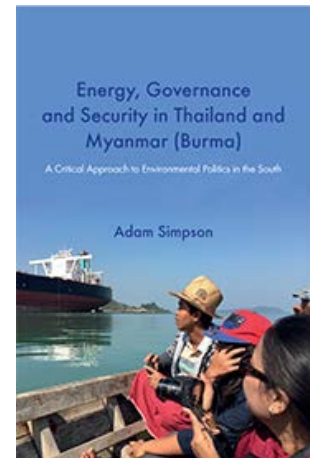
Across the world, states are seeking out new and secure supplies of energy as industrialisation is fomenting a frantic scramble for energy resources. The search is manifesting itself most visibly in Asia, where countries like Thailand and Myanmar are responding rapidly to the expansion of the oil and gas industries.

With both Thailand and Myanmar serving as major sites of controversial energy projects, the pursuit of national energy security through transnational energy projects has resulted in devastating impacts on the human and environmental security of local populations.

In his book, *Energy, Governance and Security in Thailand and Myanmar (Burma): A Critical Approach to Environmental Politics in the South*, Adam Simpson, Director of the Centre for Peace and Security, Hawke Research Institute at UniSA, provides a fascinating insight into activism in South Asia.

His ambitious book takes as its departure point the paradox that surfaces when the pursuit of energy security comes at the expense of the environmental security of local communities.

By comparing the nature of activism under two very different political regimes, Simpson extends the reader's knowledge of environmental policies and movement responses in Southeast Asia, and delivers crucial theoretical insights with both academic and policy implications for the sustainable and equitable development of Southeast Asia's natural resources.



“Environmental activism operates under a variety of illiberal political regimes across Southeast Asia, including Thailand and Myanmar,” Simpson says.

“And in the absence of effective and democratic governments, local and transnational activism have contributed to community scrutiny over so-called ‘high-impact’ energy schemes.

“The challenge is how developing countries can effectively balance their needs for sustainable energy with their needs for environmental security.”

Grounded by significant research, including multi-country field-work and scores of interviews, Simpson delivers a book that provides a valuable analysis of how different strategies and contexts provide opportunities for influencing authoritarian regimes.

Much of Simpson's fieldwork for the book was completed at Kyoto University's Centre for Southeast Asian Studies in Japan, where he spent six months under a Visiting Research Fellowship. The extent of the research is evident in the text, with Simpson drawing upon an array of primary source materials gained from interviews in the region.

Reviewer Pichamon May Yeophantong, *Pacific Affairs*, says: “It is in this respect that *Energy, Governance and Security* stands out. The novel perspectives distilled from these interviews are highly valuable, adding empirical substance to the discussion of contentious energy schemes on which reliable information does not readily exist.

“The volume's contribution to burgeoning literature on environmental governance in Southeast Asia lies primarily

with its interviews, which yield fascinating insights into the state of environmental activism in the region.”

The comprehensive book provides a thought-provoking contribution to existing scholarship. It is an excellent study in an emerging field that will be of increasing importance as large-scale energy projects continue to spread across the region, and a must-read for anyone interested in issues around energy, governance and activism.

The book is available via [Nias Press](#).

[Tweet](#)

[Share](#)

RELATED STORIES



INSIDE UNISA

From the Vice Chancellor [more](#)



INSIDE UNISA

The latest achievements and announcements [more](#)

[top^](#)

[Disclaimer](#) | [Copyright](#) | [Privacy](#) | [Web accessibility](#) | [CRICOS Provider no 00121B](#) | [Contact UniSA](#)
[Site help](#) | [Open Day](#) | [UniSA Events Calendar](#) | [Read this page](#)

Latest content revision: Monday, 17 July 2017



University of
South Australia

news

July 2017

> from the University of South Australia

Highlights from the Media Centre

[Back to story index](#)

UniSA's Media Centre continues to highlight some great stories from across the University, including research into the risks associated with lightweight running shoes; why farmers don't seek help for mental health problems; and a creative call out from the Museum of Discovery (MOD.). Here are some of the top news stories from our [Media Centre](#):

[Heavy runners risk injury in lightweight running shoes](#)

Minimalist or lightweight running shoes, popularised as a safe alternative to conventional trainers, have been found to cause more harm than good for runners carrying extra weight, reveals research from UniSA's Sansom Institute for Health Research.

Assessing the running experience of 61 trained runners, the 26-week study found that runners with a body weight of more than 85 kilograms and training in lightweight running shoes were over three times more likely to sustain an injury than when wearing conventional running shoes.

Dr Fuller, lead researcher of the study, says: "About two million Australians participate in regular running or jogging as a means to improve their fitness or health, yet over half of us that run will incur an injury over the next 12 months."



[Communication the key to helping farmers with mental health problems](#)

Knowing just how to speak to farmers to gain their trust and engagement could be a key factor in protecting the mental health of one of Australia's highest risk groups for suicide.

New research from UniSA PhD candidate Melissa Hull and a team of researchers including Associate Research Professor and Project Director, [Department of Rural Health](#), Dr Martin Jones, has assessed the differences between farming and non-farming rural adults to discover what stops them from using mental health services.

The report, *A comparison of barriers to mental health support-seeking among farming and non-farming adults in rural South Australia*, was published in the [Australian Journal of Rural Health](#) recently and Hull wants policy-makers at all levels to "explore how best to develop proactive health decision-making in this vulnerable population".

The study captured responses from 203 people from three rural regions in South Australia, offering insights into the values and attitudes that make farmers and non-farmers reluctant to access mental health services.

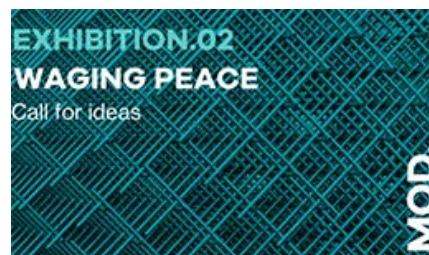


[Waging Peace – MOD. launches creative call out for second exhibition](#)

What would you assemble if you wanted to wage peace instead of war?

Imagining the parameters of waging peace – the industries it might foster, the dialogue it would create, the science and technology it might encourage, the pictures and words that would support peace, is the focus of a new exhibition being planned by UniSA's Museum of Discovery, MOD.

In July MOD. issued an open call for ideas for the exhibition, which will be launched in November 2018.



MOD. is inviting researchers, artists, students, organisations and technologists to submit proposals for contributions to the exhibition.

Waging Peace, is planned as the second exhibition in MOD's calendar when the Museum opens next year, but the first to be supported with an open call for ideas.

MOD. opens in May 2018 and will be Australia's leading future-focused museum, provoking new ideas at the intersection of science, art and innovation.

[Tweet](#)

[Share](#)

RELATED STORIES



Scientifically engineered nanoparticles to improve treatment for cancer [more](#)



How to solve \$30bn 'wear and tear' problem for Aussie mining [more](#)

[top^](#)

[Disclaimer](#) | [Copyright](#) | [Privacy](#) | [Web accessibility](#) | [CRICOS Provider no 00121B](#) | [Contact UniSA](#)
[Site help](#) | [Open Day](#) | [UniSA Events Calendar](#) | [Read this page](#)

Latest content revision: Thursday, 13 July 2017



University of
South Australia

IN PICTURES

[Back to story index](#)

Finalists tell stories about UniSA research through photography

Sixteen photographs which showcase the breadth and diversity of research at UniSA have been selected as finalists in the [Images of Research Photography Competition](#).

Now in its third year, there were almost 100 entries by UniSA staff and students in the competition, which aims to tell a story about the research the University does and the people who make it happen. First and second prize winners were announced at an awards ceremony earlier this month.

UniSA's Deputy Vice Chancellor of Research and Innovation, Professor Tanya Monro, says UniSA uses the images to raise awareness about its research.

"I think these images are arresting – they make you stop, pause and ask questions," Prof Monro says.

Voting is now open for the People's Choice Award, which will be announced on 31 August.

One vote per person can be made via the [Images of Research web page](#).

The finalists' images will be on display as part of the [South Australian Living Artists Festival \(SALA\)](#) in the Kurna Building Foyer from 31 July to 15 August, then Catherine Helen Spence Building Student Lounge Foyer from 16 August to 31 August.

First prize (\$5,000 prize) - *Resilience and Vulnerability*



Researcher: Ms Jelina Haines, PhD Candidate, School of Information Technology and Mathematical Sciences.

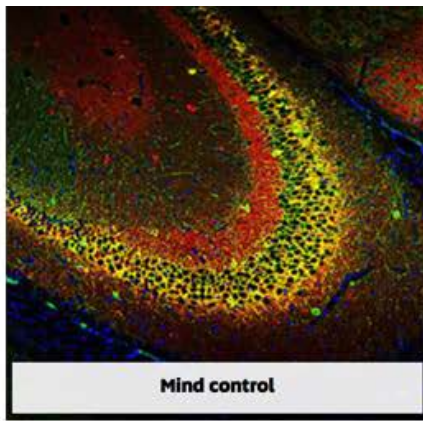
Second prize (\$2,000 prize) - *A green transport future*



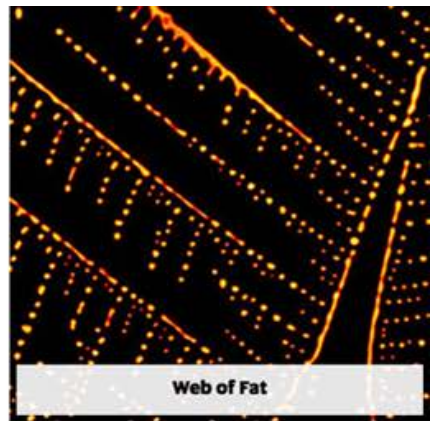
Researcher: Mr Callum Sleep, Course Developer, School of Natural and Built Environment



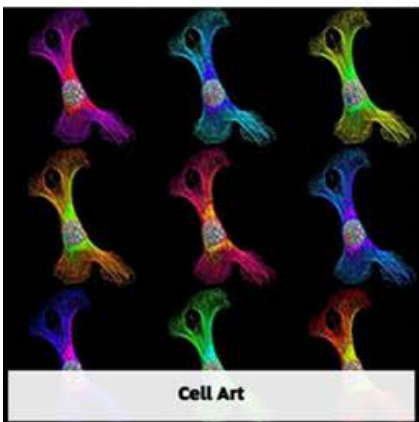
Why settle for a piece of sky, when you can fly and soar?



Mind control



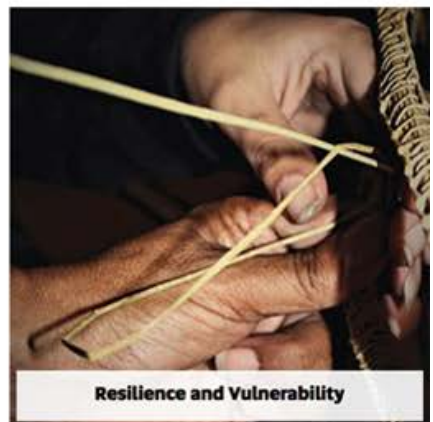
Web of Fat



Cell Art



Keep calm and carry on, amidst the hurricane of crystals



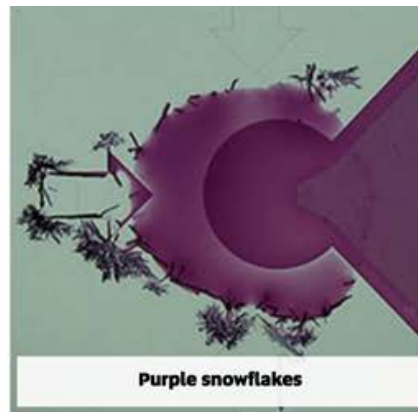
Resilience and Vulnerability



Burp baby, burp



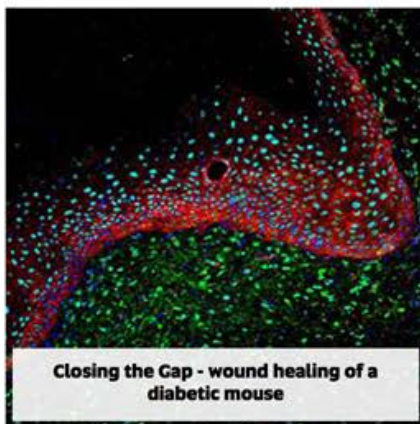
Ascending from chaos



Purple snowflakes



The light of a fire



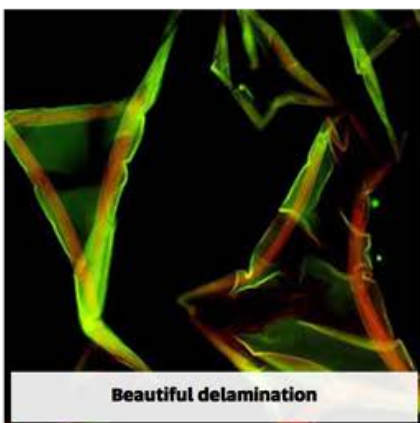
Closing the Gap - wound healing of a diabetic mouse



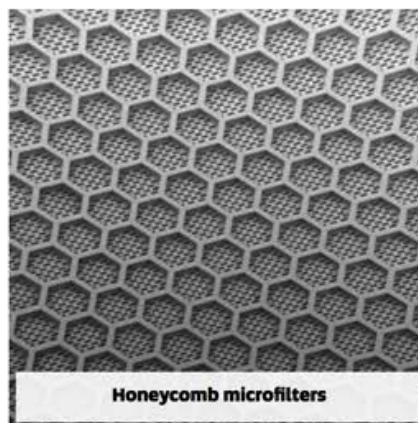
Universal surveillance



Cleaning Up Colours of Chemistry



Beautiful delamination



Honeycomb microfilters

[Tweet](#) [Share](#)

[top](#)