news

May 2015

> from the University of South Australia



Firing up future industries with UCL partnership

UniSA and University College London (UCL) have signed a partnership agreement that will see the two institutions collaborating on a wide range of research and teaching designed to meet the needs of future industries. more



Australia's youngest university in top 50 under 50 worldwide more



From the Chancellery more



Unmaking waste through social enterprise and behavioural change more



The latest achievements and announcements more



The great milk-off! Is dairy all bad? more



The sky's the limit for Imogen more



Nutrition could be the key to preventing dementia more



3D anthropometry experts help steer the Navy of the future more



Citizen Science project reveals the secret lives of cats more



On campus this month $\underline{\mathsf{more}}$



Inaugural Reconciliation
Lecture: Understanding and
Resolution more

The latest books from UniSA

researchers more

Your UniSA News community 107,619

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: Wednesday, 13 May 2015

NEW BOOKS

May 2015

> from the University of South Australia

Australia's youngest university in top 50 under 50 worldwide

Back to story index

by Kelly Stone



UniSA has climbed to 35th place in the 2015 Times Higher Education (THE) international rankings of universities aged under 50, moving up 14 spots from 49 in 2014.

The position makes UniSA the youngest Australian university to feature in the THE 'top 100 under 50'.

The THE 'top 100 under 50' rankings were released at the end of April, highlighting the 'new breed' of universities making their mark on the international stage.

UniSA Vice Chancellor Professor David Lloyd said UniSA was proud of its position in this new generation of world-class universities.

"As Australia's University of Enterprise, we're really pleased with our standing among the world's best young universities," Prof Lloyd said.

"As an institution which is just 24 years old, to be placed in such an advanced position is a great achievement.

"UniSA has been steadily increasing its global reach, connecting with industry and providing our graduates with an education that ensures they can hit the ground fully qualified and work ready.



Professor David Lloyd delivering the keynote address at the THE Young Universities Summit

"Our research activities have matured in both excellence and impact.

"Top all that off with a vibrant, can-do, enterprising attitude and I'm confident that we will continue to shine on the world stage."

Prof Lloyd delivered the keynote address at the THE Young Universities Summit held at Dublin City University in

Ireland last month, where the THE 'top 100 under 50' rankings were officially announced.

RELATED STORIES



Firing up future industries with UCL partnership more



From the Chancellery more

top^

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

.atest content revision:Thursday, 23 March 2017



The great milk-off! Is dairy all bad?

Back to story index

by Kelly Stone



From skinny and soy, to almond, rice, cashew, coconut and even hemp milk, there's something of a milk-off happening on our supermarket shelves and in our coffee shops.

Full cream cow's milk anyone? Not anymore it seems; but are people turning to new alternatives unnecessarily and is dairy all that bad?

Dr Georgina Crichton from the UniSA Sansom Institute for Health Research is exploring how the milk of our childhood measures up against the more in-vogue varieties.

"There are many health benefits to be gained from consuming dairy milk on a regular basis," she says.

"Dairy milk is an excellent source of calcium, protein and vitamins D and K. It is also a source of potassium, magnesium and phosphorus.

"I think conventional milk does get a bad rap. Unless you are lactose intolerant, there is really no need to avoid plain-old normal milk."

Dr Crichton has conducted large cross-sectional studies on dairy consumption and associated cardiovascular health of adults in Australia, the United States and Luxembourg.

In the Luxembourg study, participants who consumed at least five serves of whole fat milk per week had higher cardiovascular health scores (indicating better health) than those who consumed less than five serves.

"Our Luxembourg study also showed that consumption of whole fat dairy food – including milk, cheese and yoghurt – was associated with lower waist circumference and a lower likelihood of being obese," Dr Crichton says.

"Similarly, the US study showed positive associations between intakes of milk and yoghurt and cardiovascular

health. In particular, yoghurt consumption was positively associated with lower blood pressure, higher levels of physical activity, and 'healthier' diet scores.

"The US study also showed associations between higher intakes of dairy food consumption and lower pulse wave velocity, which is a measure of arterial stiffness – and of course stiff arteries increase the risk of cardiovascular events."

At UniSA, Dr Crichton conducted an intervention trial which showed that recommended intakes of reduced fat dairy products can be incorporated into the diet of overweight adults without adversely affecting their cardiometabolic health.

"Our research, and the work of others is demonstrating that for an average healthy adult there are multiple benefits of consuming dairy foods on a regular basis and not limiting these to low fat varieties," she says.

"We've shown dairy foods are beneficial for cardiovascular, and overall health. Other research we've done also shows it's good for brain health and cognitive performance.

"Unless you're lactose intolerant, or you really don't like the taste, it's unnecessary to avoid conventional milk."

RELATED STORIES



Nutrition could be the key to preventing dementia more



3D anthropometry experts help steer the Navy of the future more

top^



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

From the Chancellery

Back to story index



I've done a lot of travelling lately and long-haul flights are great opportunities for reflection. They're great for work too, but the chance to lie back and stare out at the clouds helps focus the mind. And this is where my mind went:

We leapt up the Times Higher Education rankings for young universities. In their list of the world's top 100 universities under the age of 50, we rank 35. We're the youngest university in Australia in the Top 50 under 50 and we've got 25 years more to knock the first few off their perches. The rankings were based on our research volume and income, its influence, and on the quality of our teaching and learning. This is a great leap forward and a big pat on the back for everybody at this University.

But while our international rankings took centre stage for a day or two, there was some real lasting and valuable work going on at the University and I just wanted to remind you of what real good we do as an institution. Work that we can all take pride in.

The UniSA Law School is about to extend its pro bono legal work by launching the University of South Australia and Northern Community Legal Service Legal and Financial Counselling Clinic at the Elizabeth Magistrate's Court. The legal advice clinics at City West and Port Adelaide have, in the past four years, provided more than \$1 million in free legal work, giving access to justice to the very people who often struggle to get the support they need. With the Clinic being extended to Elizabeth, this not only spreads the Law School's community contribution but gives invaluable work experience to young law students.

Meanwhile, this week UniSA's **School of Education** will launch the National Exceptional Teachers for Disadvantaged Schools (NETDS) project in South Australia which is expected to help boost the performance of students in schools in low socioeconomic status areas.

Forty-five high performing pre-service teachers at UniSA have been selected to teach in 13 project schools in Adelaide's northern suburbs. It is a partnership between the School of Education, the Department of Education and Child Development and the schools and is a wonderful example of our community commitment at work in a

very real sense.

The bright minds at the **School of Pharmacy and Medical Sciences** are making huge advances in the development of effective biomarkers for the diagnosis and prognosis of prostate cancer. Professor Doug Brooks received more than one million dollars in National Health and Medical Research Council (NHMRC) funding to continue the work.

It's work that will impact upon the approximately 20,000 Australian men who are diagnosed annually with prostate cancer. The current prostate-specific antigen (PSA) based blood test for prostate cancer's diagnosis can't be specific and often results in missed diagnoses, over-diagnoses and unnecessary biopsies or other treatments. It is a huge cost, not just to the patient, but to the health care system.

Not to be outdone, our colleagues at Mawson Lakes are focused on creating industries of the future that will add significant value to the state and national economies. An agreement between UniSA and University College London (UCL) will see collaboration between our Future Industries Institute (FII) and the UCL Faculty of Engineering.

The institutions will work together to develop teaching and research in South Australia in fields that include minerals processing, advanced manufacturing, sustainable future energy production and protection, and care of the environment.

The collaboration is expected to include an industry-focused PhD program, joint curriculum development – especially in areas aligned to growth industries in the region, student and staff exchange programs, public engagement and joint academic appointments.

In 2014 the *Good Universities Guide* ranked us as number one in South Australia for the employment rate of our graduates and number one for overall satisfaction of our students. While international rankings give us a buzz, it's how we prepare our students for their future lives that really counts. Looking at what we're doing across the board tells me that their future is safe with us and for that we should all be very proud.

Professor David Lloyd Vice Chancellor and President

RELATED STORIES



Firing up future industries with UCL partnership more



Australia's youngest university in top 50 under 50 worldwide more

top^



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

Achievements and Announcements

Back to story index

MOU signals new international collaborations in urban planning

New partnership to drive global research in education and social sciences

New Director of UniSA International

Students unite to fundraise for Nepal

UniSA brings prestigious arts and culture conference to Asia Pacific region for the first time

New student service hub open for business

Budding entrepreneur becomes UniSA's 2015 marketing scholar

Taking home more than an award

The Planet Talks series is now online

MOU signals new international collaborations in urban planning

Urban planning students will have the chance to learn in one of South East Asia's most rapidly developing countries, following the signing of a Memorandum of Understanding (MOU) between UniSA and Hue University of Sciences in Vietnam (pictured right).

The MOU signing underpinned a study tour for urban planning students last month and will be the starting point to build the partnership with Hue University of Sciences into a fully-fledged research and education collaboration.



UniSA Senior Lecturer, researcher in urban geography and leader of the study tour, Dr Matthew Rofe says the MOU will increase academic and student understanding of building and sustainability issues in an international context.

"Being confined to thinking about urban planning issues as they relate only to a local Australian context is not enough for today's planning graduates," Dr Rofe says.

"As a rapidly developing Asian country Vietnam's planning issues are quite different from anything our students would have tackled in a real world context here.

"The political system is different, the population challenges are unique and the planning and development problems are different.

"The MOU we have signed with Hue University of Sciences is a foundation for broader engagement between our two institutions and is an example of UniSA's commitment to providing students with both real world learning opportunities and education in an international context."

Employment, Higher Education and Skills Minister Gail Gago witnessed the MOU signing during a higher education mission to Vietnam.



She says the MOU will would facilitate invaluable learning opportunities for UniSA students and will provide a future path for Vietnamese students and academics to come work and study in Adelaide.

"These shared experiences and the relationships forged will benefit both cities," she says.

For more information, go to the related media release.

New partnership to drive global research in education and social sciences

A new partnership with Kobe University in Japan is set to expand UniSA's research capacity in the fields of education and social sciences.

UniSA Vice Chancellor, Professor David Lloyd and Kobe University President, Professor Takeda Hiroshi signed a Memorandum of Understanding (MOU) in April to encourage academic exchange between the two universities.

Prof Lloyd said he welcomed the new MOU, which is aimed at improving research collaboration.

"We're delighted to be able to form this new partnership with Kobe University, which is one of the highest-ranked universities in Japan and noted for its excellence in graduate research education," Prof Lloyd said.



UniSA Vice Chancellor, Professor David Lloyd and Kobe University President, Professor Takeda Hiroshi.

"To become a world leader in research in the areas of social science and education means establishing strong global links with institutions that share the same vision and that is why our new partnership with Kobe University is so valuable."

Prof Hiroshi said the new MOU will enable more expansive research teamwork.

"A research exchange in the field of sociology initiated by researchers from both institutions has been the basis for this newly signed MOU, but our collaboration is expected to extend to new areas including law, plus the establishment of collaborative educational programs," Prof Hiroshi said.

For more information, see the related media release.

New Director of UniSA International

The University will welcome Gabrielle Rolan (pictured right) to the position of UniSA Director: International in July, where she will oversee the University's international student recruitment and engagement strategies.

Currently Acting Pro Vice Chancellor: External Relations at the University of New England (UNE), Rolan was previously Director of UNE International for more than three years.

Her broad experience in the sector includes roles as Director of Global Recruitment and Admissions and Executive Director of International at the University of Southern Queensland; Director of Marketing and Director of International Marketing at the University of Central Queensland; and Manager, Offshore Marketing, Swinburne University.



As well as her university experience she has also worked in the private sector as head of her own consultancy, WorldStar International.

Rolan said she was delighted to be joining a metropolitan university with an ambitious international expansion plan.

"As has been evidenced in recent weeks with UniSA's rapid rise in the Times Higher Education Rankings for the Top 100 universities under 50 years old and its exciting new research and education partnership with University College London, UniSA has an enterprising outlook," Rolan said.

"The future strength of universities in an increasingly globalised environment will lie in developing high-value partnerships with other universities, institutions and industries.

"For students, both international and domestic, the great attraction will be knowing that their university is not only offering a quality education within, but one that is enhanced by global connections with the best educators and researchers in the world."

For more information, go to the related media release.

Students unite to fundraise for Nepal

In the wake of the devastating earthquake in Nepal, a group of Nepalese students at UniSA have banded together, raising more than \$1500 to support those affected in the earthquake zone.

The group of students mobilised a fundraising drive at the University, which

included turning UniSA's regular Brekky Bar, held each week at UniSA's metropolitan campuses, into fundraising events for one week in May in support of their chosen charity, Medecins Sans Frontieres (Doctors Without Borders).

Donations made at the event went directly to Medecins Sans Frontieres' relief efforts, which are helping to provide more lifesaving medical services to the region, as well as non-food items and medical kits.



UniSA students raised money to support those affected by the Nepal earthquake at UniSA Brekky Bars last month.

Donations can still be made directly to Medecins Sans Frontieres at www.msf.org.au.

UniSA brings prestigious arts and culture conference to Asia Pacific region for the first time

Arts management and cultural policy researchers and practitioners from around the world will meet in Adelaide this year for the International Conference of Social Theory, Politics and the Arts (STP+A) – the first time the event has been held in the Asia Pacific region.

Set to take place in December, the conference will be hosted by UniSA in conjunction with the Asia Pacific Centre for Arts and Cultural Leadership – a joint venture between the Adelaide Festival Centre and UniSA – and the Bob Hawke Prime Ministerial Centre.



Dean of Academic in the UniSA Business School and Conference Chair, Associate Professor Stephen Boyle, says the STP+A is the oldest and one of the most influential conferences of its kind globally and will bring together interdisciplinary researchers and practitioners to explore contemporary issues in arts and culture.

"We're excited to be bringing this prestigious conference to Adelaide, and to the Asia Pacific region, for the first time," he says.

"The focus of the SPT+A this year is to explore how individuals, organisations and institutions can expand and strengthen the capability of the arts and cultural sectors to create value for other groups in society.

"A dynamic city with a vibrant and growing arts and culture scene, Adelaide is the perfect location to host this conference and we're looking forward to welcoming international delegates from a diverse range of disciplines, spanning from economics and law, right through to art history and museum studies."

Asia Pacific Centre for Arts and Cultural Leadership Director and UniSA alumnus, Douglas Gautier and Distinguished Professor of Economics at Macquarie University, David Throsby will deliver the keynote addresses at the STP+A.

For more information on the conference, go to the STP+A website.

New student service hub open for business

The UniSA Business School has officially launched its new Undergraduate Program Hub for students, providing a one-stop shop for undergraduate business and commerce students to get program advice and information.

Business School Pro Vice Chancellor, Professor Marie Wilson, who opened The Hub at a special event in April, said it would provide expert program advice to Bachelor of Business and Bachelor of Commerce students.

"This is a central location, where we have expert staff in these discipline areas of the Business School," Prof Wilson said.



"If students have questions about their study plan, or how much credit they might be eligible for, or are looking to transfer between programs, then The Hub staff can provide them with the right advice."

Program Director of the Bachelor of Commerce, Dr Gerard Stone said The Hub was different from Campus Central as it was a place to talk to program experts.

"Students come to The Hub to get advice about their particular program whereas they go to Campus Central for

an administrative query," Dr Stone said.

"Students are regularly looking for advice about how they can 'value add' to their program of study, which is great, and The Hub can provide that.

"Students are looking for the most up-to-date advice about electives, they're looking for the latest and best advice about student exchange, or they want to apply for membership of a relevant professional body once they've completed their undergraduate program."

All UniSA students can still access Campus Central for general student administration gueries about everything from student ID cards and accommodation services, to student finance and printing.

The new Undergraduate Program Hub is located in the Yungondi Building in the Atrium on level one at City West campus and is open Monday to Friday between 8.30am and 4.30pm.

Undergraduate students studying law can continue to visit the reception in the Law School building to get advice about their study program.

Students can consult one of The Hub's staff in person, via email or by making an appointment. For more information, go The Hub website.

For more information on Campus Central, go to the Campus Central website.

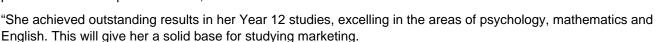
Budding entrepreneur becomes UniSA's 2015 marketing scholar

At only 17, Madeleine Caines (pictured right) had already launched her own YouTube channel, an event hair and makeup business, and managed a vegan food stall. And now the first-year marketing student has secured the 2015 Ehrenberg Scholarship at UniSA.

Madeleine was selected from a number of high-calibre candidates, who had all achieved an Australian Tertiary Admission Rank score of 95 and above in their Year 12 results.

Director of the Ehrenberg-Bass Institute for Marketing Science at UniSA, Professor Byron Sharp congratulated Madeleine on winning the scholarship.

"Madeleine is a standout candidate and having already started several small businesses even though she was still in high school, she impressed the selection panel with her entrepreneurial flair," he said.



"She is already considering a PhD in marketing and we look forward to seeing what she does next as she embarks on her tertiary education journey."

The Ehrenberg Scholarship – which is named after the late Professor Andrew Ehrenberg, one of the namesakes of the Ehrenberg-Bass Institute, is awarded to one new marketing student from those with an ATAR of 95 or above and covers the cost of the first year student HECS fees.

The Planet Talks series is now online

From sustainable diets and creating outdoor play spaces, to waste reduction and the financial value of our environment, the 2015 WOMADelaide Planet Talks series brought together experts from around the world to discuss the future of our planet.

The series, which is presented by UniSA as WOMADelaide's official education partner, saw six panel sessions and three hands-on workshops take place across the four-day festival in March.

oceanographer Sylvia Earle and TV personality Andrew Denton.

UniSA researchers Professor Chris Daniels, Dr Paul Sutton, Dr Robert Crocker, Dr Evangeline Mantzioris and lecturer Martin Freney all presented during the 2015 Planet Talks, joining an impressive line-up of speakers that also included former Greens party leader Bob Brown, renowned

If you missed any of the Planet Talks sessions, they are now available to view on the UniSA website.



Taking home more than an award

A Medical Science student's creative video submission about her studies has won a national award, bringing her one step closer to her goals in the health and education industries.

Francesca Chilcott was nominated for the 2014 Pearson Student Academic Achievement Award by UniSA's Bachelor of Medical Science Program Director, Associate Professor Sandra Orgeig, after topping her Physiology class which uses a Pearson textbook.

Established by Pearson Australia, a leading digital education resources company, the awards acknowledge Australian higher education students who have demonstrated outstanding effort, dedication and academic achievement in their chosen field of study.

Competing in the science category, third-year student Francesca's submission explored why she chose medical science, the life impact of her studies, and what makes her a successful university student.

Francesca said she was honoured to be nominated for the prestigious award, let alone win it.

"I was so surprised and honoured to have been nominated. Winning it was amazing and definitely a highlight of my studies," she said.

"I was stunned, overjoyed, exuberant and very grateful.

"The three main elements of my student success are being passionate about my studies, really organised and using a mix of learning styles that work for me."

Francesca has always been interested in building a career in health, and already has more than 20 years' experience in the fitness and aquatic industries.

"The very large all-encompassing picture of health fascinates me and my purpose of starting uni was to find a career path that was more time friendly for my children," she said.

"My immediate goal is to further my studies through a Master of Teaching so I can teach science to secondary school students."

Assoc Prof Orgeig said she was immensely proud of Francesca's achievement and what she had accomplished during her studies.

"Francesca produced an incredibly imaginative, thoughtful, energetic, passionate, personal and revealing submission," Assoc Prof Orgeig said.

"It epitomises her dedication, outstanding effort and rich imagination. This award will help Francesca differentiate herself from other graduates for future study and job applications."

Francesca's winning submission can be viewed below.



top^

<u>Disclaimer | Copyright | Privacy | Web accessibility | CRICOS Provider no 00121B | Contact UniSA Site help | Open Day | UniSA Events Calendar | Read this page</u>

Latest content revision:Thursday, 23 March 2017



The sky's the limit for Imogen

Back to story index

by Katherine Cox



UniSA student Imogen Domin (pictured above) is jetting off to America this month to undertake a cutting-edge internship at the world's largest aeronautical school – the Embry-Riddle Aeronautical University.

Imogen, a Bachelor of Aviation graduate who is now completing a Graduate Diploma in Human Factors and Safety Management Systems at UniSA, will be the first Australian student to participate in the NextGen Test Bed International Harmonization internship in Florida.

She is one of only eight students selected internationally to work at the NextGen Test Bed, a research and demonstration facility governed by the Federal Aviation Administration in the United States.

Imogen says she is honoured to be representing UniSA and she hopes to make a good impression by helping to build a new air traffic control system as part of her internship project.

"The technology and the research that happens at the NextGen Test Bed can provide the Federal Aviation Administration with new systems, new developments and new innovations, so it's a pretty ground-breaking place," Imogen says.

"That's what I'll be going over there to do, so it's very exciting."

Imogen says the internship is a great opportunity for networking with contacts who already have professional flying experience.

"I haven't even left Australia yet and I've already established a lot of wonderful friendships and professional relationships from the internship," she says.

"John Borghetti, the CEO of Virgin Australia, offered to fly me to the United States with Virgin Australia. I've always dreamed of being a pilot for Virgin Australia one day, so the fact that he knows my name is an 'up' in

itself.

"I'm excited to face some new challenges and to experience university life in America. Plus the facility I'm going to is a United States Federal facility so I am expecting that it's going to be a completely different environment to what I'm used to.

"It will be a real eye-opener and I'm going to come back much more prepared for anything else I might go through in my career. I'll be seeing the differences in the industry, learning new things, and I plan to bring home new ideas and innovations."

Imogen says she loves aviation because it allows her to push the boundaries.

"When I am flying, there are times when physically as well as mentally I'm way out of my comfort zone and I like that because I know that I'm constantly bettering myself and challenging myself," she says.

Once she returns to Australia, Imogen plans to finish her Graduate Diploma and is also considering pursuing a masters or a PhD. She will also finish her commercial training and her multi-engine command instrument rating course upon her return.

Imogen's success follows the signing of a Memorandum of Understanding (MOU) between UniSA and Embry-Riddle Aeronautical University Asia to increase aviation student degree opportunities. For more information on the MOU, go to the <u>media release</u>.

RELATED STORIES



Citizen Science project reveals the secret lives of cats more



Firing up future industries with UCL partnership 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, 23 March 2017

News Home Archives Contacts Media Centre

May 2015

> from the University of South Australia

Firing up future industries with UCL partnership

Back to story index

by Michèle Nardelli



The University College London in England.

UniSA and University College London (UCL) have signed a partnership agreement that will see the two institutions collaborating on a wide range of research and teaching designed to meet the needs of future industries.

UniSA Vice Chancellor Professor David Lloyd travelled to London to sign a Memorandum of Understanding (MOU) between the two universities and Dean of UCL's Faculty of Engineering, Professor Anthony Finkelstein (pictured right), visited Adelaide to further talks around the partnership.

The MOU is the foundation for a program of collaboration between the new Future Industries Institute (FII), UniSA's flagship engineering sciences research institute, and the UCL Faculty of Engineering.

The partnership opens opportunities for an industry-focused PhD program, joint curriculum development, especially in areas aligned to growth industries in the region, student and staff exchange programs, public engagement and joint academic appointments.



Professor Tanya Monro and Professor Anthony Finkelstein at MOU event at UniSA.

It also emphasises UCL's ongoing commitment to sustaining its engagement with South Australia in a new format beyond 2017, when it will no longer have a stand-alone presence in SA.

Prof Lloyd says the partnership is exciting for South Australia and the region.

"UCL is one of the world's most respected institutions, both for its research and its teaching," Prof Lloyd says.

"I am especially pleased to be working with a university that is so highly regarded internationally at a time when

UniSA is building knowledge and capacity in core future industries through the creation of its new FII.

"FII represents our largest single investment in research at UniSA and will be a flagship for industry-connected, interdisciplinary science and discovery."

Under the partnership plans are being developed to create a number of five-year Foundation Research Fellows who will work on collaborative research projects based at UniSA's FII. In addition, UniSA will be supporting a further 12 Foundation Fellows.

A number of the Foundation Fellowships will be directly targeted at supporting outstanding women researchers at early and mid-career levels encouraging more diversity in the science and engineering research community.

The new Director of the FII will also hold an honorary professorship at UCL and a senior UniSA researcher, Professor Magnus Nyden, will take on a seconded role as the Head of Department for UCL Australia.

Prof Finkelstein says the partnership confirms UCL's commitment to South Australia and to the advancement of engineering excellence globally.

"This engineering partnership with UniSA signals a vibrant new approach to our work in South Australia, designed to deliver tangible outcomes for industry through innovation in science and engineering," Prof Finkelstein says.

"In this context we are very pleased to welcome Professor Magnus Nyden, former Director of the Ian Wark Research Institute, to the role of Head of the Department of UCL Australia."

UniSA Deputy Vice Chancellor: Research and Innovation, Professor Tanya Monro says the new FII builds on UniSA's considerable reputation and capacity in engineering and the physical sciences through the Ian Wark and Mawson Institutes to further grow research capacity and international reach.

"The creation of the FII builds on our strengths to allow us to invest in bringing together outstanding researchers to create the critical mass required to deliver meaningful, valuable research to industry and to align our endeavours to State and National priorities," Prof Monro says.

"In the past that was all about mining and traditional manufacturing but the future holds new frontiers – more efficient and sophisticated minerals processing, developments in biomaterials and new sensing technologies, and exploring new approaches to support sustainable future energy production and the protection and care of the environment.

"Our new FII and this partnership with UCL offer a great opportunity for passionate and driven scientists to aspire to build their careers in science and build them here in South Australia."



RELATED STORIES



Australia's youngest university in top 50 under 50 worldwide more



From the Chancellery more

top^

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

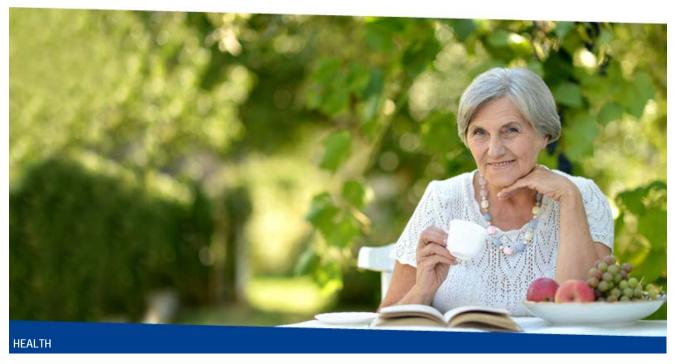
Latest content revision:Thursday, 23 March 2017



Nutrition could be the key to preventing dementia

Back to story index

by Rosanna Galvin



Obesity, vitamin D and coffee consumption – they've all been shown to affect how our brains work. But could their association with cognitive function help to prevent dementia?

That's what UniSA population health expert Professor Elina Hyppönen is hoping to find out in her latest research project titled 'Nutritional factors and cognitive function: examining evidence for a causal association', with help from a recently secured Mason Foundation grant.

Prof Hyppönen says obesity, low vitamin D status and coffee consumption are all common in contemporary populations so understanding the causal link between each of these nutritional factors and cognitive function could have a significant impact on public health.

And in countries with an ageing population like Australia, uncovering new ways to prevent dementia is even more critical as dementia – a collection of symptoms affecting people's ability to think and perform everyday tasks – is more common in people aged 65 and above.

"We selected these nutritional factors because all of them are associated with cognitive function, but the associations remain controversial and we don't know whether these represent true causal effects," Prof Hyppönen says.

"There is still a lot we don't know about the effects of these nutritional factors on cognitive function, which includes even whether they are beneficial or harmful.

"For example, obesity has been typically associated with poorer cognitive function and increased dementia risk, but a recent retrospective cohort study of nearly two million individuals reported reductions in dementia risk even for the severely obese individuals.

"The study noted that compared to those with a heathy weight, dementia risk was increased by 34 per cent for

the underweight individuals with a body mass index (BMI) of under 20kg/m2.

"Perhaps most interesting though was that the study showed that dementia risk continued to fall with increasing BMI, and compared to those with a healthy weight, severely obese people with a BMI above 40 kg/m2 had 29 per cent lower dementia risk.

"With vitamin D, we have found evidence for lower memory function for individuals with both very low and high concentrations.

"And anyone who has felt that burst of energy from their morning cup of coffee will know that coffee consumption stimulates cognitive function in the short-term but we do not know if it has any long-term effects.

"Could these nutritional factors play a role in preventing dementia? That's what we want to find out."

The Professor of Nutritional and Genetic Epidemiology says approaching the study from a population health perspective is cost-effective while still providing important insights into new ways to prevent dementia in the future.

"This project aims to inform non-invasive ways to prevent dementia," Prof Hyppönen says.

"From past experience we know that evidence from observational studies can be misleading, and even very promising nutritional factors may fail to deliver the promised benefits when tested in clinical trials. Clinical trials are also typically very expensive and time consuming.

"This makes the genetic approach we are using for this project very attractive, as it allows us to establish likely causal effects by modest life-long differences in exposure levels in a very cost-effective way without any risk of harm to patients."

The field of population health uses and interprets population data to inform health and social policy.

Prof Hyppönen's project will contribute to establishing a large-scale project with up to 150,000 participants form various European universities including the University of Exeter, University College London and University of Bristol among others.

RELATED STORIES



The great milk-off! Is dairy all bad? more



3D anthropometry experts help steer the Navy of the future more

top^



Disclaimer | Copyright | Privacy | Web accessibility | CRICOS Provider no 00121B | Contact UniSA | Site help | Open Day | UniSA Events Calendar | Read this page | Latest contact to inician Thursday 23 March 2017



3D anthropometry experts help steer the Navy of the future

Back to story index

by Kelly Stone



A UniSA research project worth \$1 million will use 3D body scanning technology to help the Royal Australian Navy optimise their work environments and improve the design of their uniforms and specialist clothing.

Run by the University's Division of Health Sciences in collaboration with the Defence Science Technology Organisation (DSTO) under the Defence Science Partnerships Program, the project will use cutting-edge digital anthropometry to measure body dimensions and proportions of 1500 Navy personnel.

The results from the project will inform the customisation of internal specifications for the submarines and ships of the future.

Given that the population is generally taller and wider than 30 years ago, lead researcher Dr Grant Tomkinson (pictured right) says the data will inform decisions around working environments such as the height and width of doorways and the length and width of bunks in submarines.

"Submarines are built to last across many generations, 20 to 30 years or more," Dr Tomkinson says.

"So while we have a piece of machinery that can last for many decades, the average sailor – just like the average person – is changing over time. People are now on average about an inch or so taller, and a bit wider, than they were 30 years ago.

"This research project is a way of surveying body size and shape for the Navy which will give them some good predictions on how they might change in the future, and then



how their equipment and machines should look.

"If you're not fitting in your environment well, you're not going to be as efficient and it will create more stress and strain. You're more likely to have physical niggles, and those niggles can lead to injuries. The main driver behind this research is ergonomics – to optimise the fit of the person to their environment, to help them work better and ultimately to build a stronger defence force."

Dr Tomkinson and UniSA Research Fellow Dr Nathan Daniell will work with a team of postgraduate and undergraduate students to measure 1500 Navy personnel based in New South Wales and Western Australia.

He says the team is contracted to take about 90 measurements of the body, including standard measurements like circumferences, heights, lengths and breadths of the arms, legs and torso.

"Our survey of body size and shape uses both traditional methods and a digital approach," Dr Tomkinson says.

"We use a 3D whole-body scanner, which is like stepping into a large changing room and 15 seconds later we get a 3D image of your body from which we can extract measurements at a later stage.

"It captures about half a million data points on the surface of the body and then we can measure dimensions such as waist circumference without needing to measure the person again.

"We're also doing some customised measurements such as eye spacing to help viewing through periscopes, head measurements for helmet fit, hand length to navigate controls, and the length from the knees to the buttocks to help with seating size."

Captain (Dr) Simon Reay Atkinson says the Royal Australian Navy and the Australian Defence Test and Evaluation Organisation (ADTEO) are collaborating with UniSA and DSTO in the research to solve real-world defence problems.

"We live in a world in which we can no longer isolate the information from the technological from the human. In this world we need to better fit our people to the work spaces and organisations they occupy, such as operations rooms, so they can solve pressing problems, healthily and over prolonged periods away from base ports," Captain Atkinson says.

RELATED STORIES



Nutrition could be the key to preventing dementia more



The latest books from UniSA researchers more

top^



Disclaimer | Copyright | Privacy | Web accessibility | CRICOS Provider no 00121B | Contact UniSA | Site help | Open Day | UniSA Events Calendar | Read this page | Latest souther to vision Thursday 23 March 2017

Citizen Science project reveals the secret lives of cats

Back to story index

by Will Venn



The secret lives of South Australia's cats are about to be exposed as UniSA's new Cat Tracker Project is rolled out across the State, with around 500 domestic cats having their movements tracked through GPS.

The project is being led by Dr Philip Roetman from the Discovery Circle, UniSA's Citizen Science initiative, and has prompted huge interest from hundreds of cat owners with further community involvement from local councils and schools.

Cat-owning participants are being sent easy-to-use GPS tracking devices which record where their cat travels over the course of a week. Initial results from the first cats tracked have been illustrated on maps which pinpoint the travel patterns of cats as they zigzag their way around their local neighbourhoods.

Participants are also being provided with questionnaires to respond to, which helps them understand more about the personality of their cats and the places they venture to.

Dr Roetman says as well as satisfying the curiosity of cat owners, the research is aimed at understanding the movement of domestic cats.



"Research in the past has focused on feral cats, with only small samples related to domestic cats. We wanted to get a big sample and Citizen Science is an ideal project for that," Dr Roetman says.

"People are interested in where their cats travel to but it's only really been in the past 10 years that technology

has become available to track pets this way, and the results we have had back so far have indicated some really interesting patterns and diverse journeys".

Cat tracker participant Victoria Fielding was surprised to see just how far her own pet, Snowy, travelled.

"When I agreed to track Snowy, I warned the researchers that she would be a very inactive cat as I was sure the extent of her roaming was confined to our garden," Fielding says.

"I was shocked to see the results of the tracking which showed Snowy was regularly leaving our house and visiting the school across the road and other houses around us. She doesn't go very far, no more than about half a

hectare, but it's still fascinating to find out that she's been leaving and coming back without us noticing.

"I am considering shutting her in the house at night as I don't like the idea of her crossing the road in the dark – she could be hit by a car."

Pam Whetnall (pictured right), a project officer at the Dog and Cat Management Board, says Cat Tracker is an ideal way to raise community awareness of responsible pet ownership.

"Citizen Science has really proven itself as a way to engage people and we want people to think about how to be a responsible cat owner," Whetnall says.

"There is risk in letting domestic cats roam free outdoors – firstly regarding the safety of the cat. Cats that venture out a lot run a greater risk of getting into fights, getting diseases or getting hit by a car.

"Another issue is that without being de-sexed, cats that roam outdoors will have more opportunity to breed. That can have impact on the cat population and presents a problem with large numbers of stray and unwanted cats being put into shelters."

For more information on the Cat Tracker Project, go to www.discoverycircle.org.au.





RELATED STORIES



The sky's the limit for Imogen more



The latest books from UniSA researchers more

top^



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



New Books

News Home Archives Contacts Media Centre

news

May 2015

> from the University of South Australia

New Books

Back to story index

The social side of the sporting field

by Katherine Cox

Sporting players who come from more socioeconomically advantaged communities have better connections within the sporting community compared to those from disadvantaged backgrounds, according to UniSA Research Fellow for Sport and Development Dr Edoardo Rosso (pictured right).

This is one of the key findings in his new book, which explores the influence social relationships have in developing elite athletes.

Titled *Taking the Next Step, Social Capital and Athlete Development*, the book is the result of work completed during Dr Rosso's PhD a few years ago, which explored women's soccer in South Australia as a case study of how social relationships can either help or undermine the ability of athletes to fulfil a sporting career.



"The book explores the concept of social capital, which means the ability of individuals and groups to gain resources by means of memberships in social networks," Dr Rosso says.

"I examined the influences of immediate personal relationships such as family and friends and also the wider relationships that players are involved with in their local communities."

The researcher hopes his new book will influence the bodies that govern sport to better understand what he describes as "soft components" of athlete development. He says athlete development is not just about the quality of training or support and it also important to connect athletes socially in sporting communities.

"While this book will contribute to developing better athletes, at the same time I hope it will help make better people in society," Dr Rosso says.

Dr Rosso puts the themes of his book into action in his role leading the Division of Health Sciences' Sport and Development programs at UniSA, which promote physical activity in the community and use sport as a way to encourage wider community improvement.

Dr Rosso found that these community programs help bring people together to learn not only about sport, but also to develop a sense of belonging, determination and accomplishment.

"Through these programs, communities get the opportunity to participate in a sport that otherwise they could find it difficult to participate in," he says.

"In my opinion, the most important goal is to give participants a feeling of belonging and connection, and that's where social capital comes back in the equation.

"By participating in the programs, very underprivileged community members get the opportunity to belong to something, to feel empowered and to create connections that may help them to take the next step in life."

Published by Common Ground, *Taking the Next Step, Social Capital and Social Development* is available for purchase online.

The green effect: costs and benefits of environmental regulation

It is a new book that all began with a lightbulb moment.

In 2009, the Australian Government began to phase out inefficient incandescent light bulbs in favour of more

cost-effective and energy efficient alternatives.

When that policy reached UniSA Associate Professor Vikash Ramiah (pictured below) in his own home as he went to change a lightbulb, the applied finance expert began to question what impact these type of policies have on the financial sector.

Together with RMIT's Professor Imad Moosa (pictured right), a highly-regarded economist who has previously worked at International Monetary Fund, United Nations and the United States Treasury, Assoc Prof Ramiah embarked on writing a book which investigates environmental regulation, its economic and financial effects and the associated costs and benefits.

"Finance is all about risk, return and investment and our book looks at the finance side of the environment and what effects environmental policy may have on the financial sector," Assoc Prof Ramiah says.

"We wanted to look at the costs and benefits of environmental regulation, and find out if there is money to be made in socially and environmentally responsible investments. Can investors cash in on new environment regulations?"

The book, titled *The Cost and Benefits of Environmental Regulation*, concludes that it is essential to allocate appropriate funds to combat the environmental damage humans are inflicting on the planet.

"In countries like Australia, environmental regulation is a lifestyle issue but in countries like China, it is quite literally a life-saving issue," Assoc Prof Ramiah says.

"As part of our research for the book, we found that in China four children are dying from air pollution every five minutes.

"While in many Western societies, there is a philosophy of 'grow now, clean later', in China they are putting in place environmental regulations in a bid to 'grow now, clean now.'

"Our role in protecting our planet is to use financial data to identify whether a particular environmental policy is effective.

"If we can illustrate the risks, costs and, most importantly, financial benefits of a policy, it is more likely to be successful and that's good for investors and for the environment."

Published by Edward Elgar Publishing, *The Cost and Benefits of Environmental Regulation* is available for purchase on the publisher's <u>website</u>.



Professor Imad Moosa and Associate Professor Vikash Ramiah at the launch of their new book.

Imad A. Moosa and vikash Ramiah THE COSTS AND BENEFITS OF ENVIRONMENTAL REGULATION

RELATED STORIES



On campus this month more



The latest achievements and announcements more

top^



Latest content revision:Thursday, 23 March 2017

In Pictures

News Home Archives Contacts Media Centre

May 2015

> from the University of South Australia

In Pictures

Back to story index



Writer, academic and journalist, Germaine Greer delivered a public lecture titled 'Earth can survive without people; People cannot survive without earth' at UniSA last month. The lecture was presented by the Hawke Research Institute. Greer is pictured above (centre) with Hawke Research Institute Director Professor Anthony Elliott (left) and UniSA Vice Chancellor Professor David Lloyd (right).







Highlights from the Samstag Museum of Arts's do it [adelaide] exhibition which wrapped up last month.

Top row: Tracey Emin, 2007, enacted by Ray Harris, 2015, *What Would Tracey Do?*, do it [adelaide], Samstag Museum of Art, photograph by Sam Noonan. Second and third row: *do it [adelaide]* at the Samstag Museum of Art in February 2015, photographs by Lara Merrington.

top^

University of South Australia

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, 23 March 2017

