DISRUPTIVE FASHION
New device is set to revolutionise how clothes are made and fit

BEYOND THE BIRTH
How hypertension in pregnancy affects mothers’ mental health

NEW TRAIN OF THOUGHT
Could this be the end of overcrowded and delayed trains?
ASK THE EXEC

PETER BOOTH

PROVOST AND SENIOR VICE-PRESIDENT

What’s the first thing you notice about people?
How they interact with other people and how they interact with the world. As a social scientist, I love observing people and seeing what is going on, what they are doing, speculating on their thoughts and aims. More importantly, my job, at its heart, is about working with people, so it is also important for me to try to understand someone as quickly as I can.

As you prepare to retire in May 2017, what will you miss most about UTS?
The people and what they have achieved, particularly the students. I have made a lot of good friends at UTS over the years, but more than that I know I can go around to any area and get a friendly and open reception from staff and students, even ones I have never met previously.

I know that you can engage in productive conversations and that people are highly motivated to achieve the best they can to make UTS great. That not only makes my job so much easier, but more rewarding too.

In particular, I get a real buzz and sense of reward when I see what our students have achieved, the prizes they’ve won, events they’ve organised, social outreach they’ve championed, sporting achievements they’ve made, the list goes on and on.

How do you compare the view from your new office in Bon Marché to your office in the Chancellery?
Boring! I had a great view of Alumni Green from my Chancellery office, where you could see glimpses of the vibrancy and life of students and staff at UTS. It was very relaxing, when you needed a break from work, to look out at people coming and going, students playing table tennis, et cetera.
Now I have an ‘endearing’ view of the fire stairs to The Loft and the windowless side of levels 5 and 6 of the Tower – no people, just bricks and concrete!

What do you consider to be UTS’s hidden gem?
The Tower podium levels are a hidden gem; they are often underappreciated. They provide a wide range of places – from quiet to noisy – and are used for a vast array of activities. I love walking through during teaching sessions or when events are on and seeing and hearing the hive of activity, particularly from students. It gives you a lift to feel the energy of UTS at those times.

Where is your favourite winter getaway?
The Blue Mountains or Southern Highlands are good places for a weekend away. They’re close, but not too busy, and there are lots of interesting places to eat, shops to explore and stunning scenery; a good way to shut off from work and Sydney for a couple of days.

ISSUE 5

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In simple terms, Euclidean geometry measures flat surfaces. Non-Euclidean geometry, measures curved spherical surfaces (positive curvature) and hyperbolic (negative). Non-Euclidean geometry was used by PhD designate Mark Liu to develop a new device for fashion designers to accurately measure the human body. Images supplied by: Mark Liu

**FEATURES**

**New train of thought**
The new multi-disciplinary and industry collaboration that could spell the end for overcrowded and delayed trains

**Beyond the birth**
PhD candidate Lynne Roberts reveals how her own traumatic birthing experience has led to cutting-edge research into the effects of gestational hypertension and pre-eclampsia on the mental health of women

**Disruptive fashion**
A revolutionary device that combines fashion with geometry is set to redefine how we measure the human body and the way fashion and mathematics are taught

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**NEXT ISSUE**
The next issue will be released on Friday 26 August 2016.

All U: articles are available to read online via newsroom.uts.edu.au or follow us @utsnewsroom

Send your story ideas, opinions and events to u@uts.edu.au
“We’re taking sport science to the sporting grounds.” That’s how Faculty Operations Manager in the Faculty of Health Karina Sherwood describes UTS’s new partnership with the Sydney Cricket & Sports Ground Trust (SCGT) and the Australian Rugby Union (ARU).

Work has already commenced on a new five-and-a-half-storey facility at the Sydney Cricket Ground and Allianz Stadium precinct in Moore Park. In an Australian-first, UTS will jointly occupy the building with the ARU.

It will be known as the Australian Rugby Development Centre (ARDC), and be located on Moore Park Road next to Allianz Stadium.

“Essentially, it’s a world-class sporting, education and community hub,” explains Sherwood. “It will be home to our sport and exercise science courses and our sport management courses, as well as all the related research they do. It’s also home to Australia’s top male and female rugby union players, so our students will have unprecedented access to the nation’s best players and training facilities.”

The new building is due to open for the first teaching session in 2018. However, students are already taking classes at Moore Park after a range of temporary facilities were completed by UTS’s Facilities Management Operations (FMO) at the end of 2015.

The new UTS Moore Park precinct, as it’s known, is an extension of the university’s City campus and offers an unprecedented opportunity for students.

A central connecting staircase will join the training hall to the rooftop terrace, which will include a running track, meeting rooms, a function room and views of the Sydney Tower and surrounding buildings.

Jenkins says, “While students and academics will benefit from the range of specialist facilities in the ARDC, they can also take advantage of everything our City campus has to offer.”

The prime location of the precinct will give students the opportunity to network and develop strong partnerships with the ARU and other elite sporting identities that call the SCG home, adds Sherwood.

“Being on-site at the precinct will enable the students to be as submerged in the sporting environment as they can, whilst seeing and working alongside elite athletes,” she says.

“The research conducted by our sport and exercise staff has been awarded ERA 5 − the highest ranking in Australia − which indicates their research is well-above world standard. Many of our academics have also received university or national teaching awards, so this precinct will be an extension of UTS’s excellence in sport sciences. It’s a platform and from it, the sky is the limit.”

Lexy Akillas
Bachelor of Arts in Communication (Journalism)
Photographer (groundbreaking); Charlie Drayton
(SCGT Media)
ARDC images: Populous
“Social justice is, to me, about equality,” asserts Ruby Wawn. “At the heart of it is the constant struggle to create a society that is blind to gender, age, race, ethnicity, class, religion or disability and recognise that humanity transcends these arbitrary differences.”

Wawn is far from shy when talking about social justice. And why would she be? The social inquiry/law student is also the Convenor of Amnesty UTS. This year, Wawn teamed up with the Equity and Diversity Unit, organising a film screening as part of Diversity Week (starting 29 August).

It’s one of the more controversial evening events at this year’s Diversity Week. *Chasing Asylum*, which will be shown on Tuesday 30 August at 5.30pm, is a documentary by Academy Award-winner Eva Orner. The film features never-before-seen footage from inside Australia’s offshore detention camps.

“*Chasing Asylum* is Australia’s first look at the atrocities being committed in our name on Manus and Nauru,” explains Wawn.

“With the media blackout on offshore detention, it has been easy for the Australian public to turn a blind eye. This film holds us accountable for continuing to elect leaders who believe in using indefinite mandatory detention as a punishment for fleeing persecution, war and torture.”

Wawn, whose mother is an environmental activist, was raised to be politically aware, but has always felt more strongly about human-centred issues. “When I started at university, became of voting age and felt more empowered to take action, I began pursuing the issues I am passionate about, namely refugee and Indigenous rights.

“I found Amnesty to be a very accessible entry point to becoming involved in human rights activism as you’re provided with opportunities for training and support while learning through running your own campaigns and events.”

This year, other Diversity Week events include unpacking biological sex, gender identity, gender expression and sexuality in Breaking the Binary training for staff (Monday 29 August); market stalls run by student clubs active in the social justice space (Wednesday 31 August); and a wheelchair quidditch exhibition match between the UTS Quidditch club and other staff and students keen to give the game a go (Friday 2 September).

However, the flagship event of the week is the biennial UTS Human Rights Awards (Thursday 1 September). The awards celebrate the contributions staff and students make to social justice, equality and diversity.

This year’s guest speaker is Professor Pat Dudgeon, a National Mental Health Commissioner and project leader of the National Empowerment Project – an Indigenous suicide prevention initiative working with 11 Aboriginal communities across the country.

All of these events aim to encourage a greater awareness of the diversity of UTS’s student and staff population, as well as celebrate our differences.

Wawn, in particular, is hoping *Chasing Asylum* will inform Australians about what is happening to refugees and spark change.

“After the release of this film, there is no way we’ll look back in 20 years and feign ignorance and say ‘I didn’t know.’”

**Diversity Week will run from 29 August to 2 September 2016. For the full line up of events, visit diversityweek.uts.edu.au**

Katia Sanfilippo
Equity and Diversity Unit
Photographer: Shane Lo
Through it was launched only four months ago, the UTS Transport Research Centre has already moved into the fast lane thanks to its current research initiatives like the Responsive Passenger Information Systems (RPIS).

RPIS aims to improve the efficiency of public transport rail services and the experience for users by monitoring the interactions between the two. One facet of RPIS is being developed in partnership with Downer Rail and the Rail Manufacturing Cooperative Research Centre (RMCRC).

Senior Lecturer at the Centre for Autonomous Systems Alen Alempijevic is working on RPIS and other related projects. He says, “If you can effectively improve the interaction between the service and the passengers, then you’re onto a real winner.”

The cross-disciplinary team’s current RPIS project is Complex Dwell Time Diagnostics (CDD). It’s looking into technology that enables passive cameras to monitor passengers on platforms in real time.

Alempijevic hopes the cameras will solve major issues like overcrowding and inform transport officers of the reasons for delays in departure, whether that be due to passengers arriving late or if train doors are closing too soon.

The project will eventually see transport officers receive this information in real-time and thus appropriately direct passengers and respond to complications as they arise.

Alempijevic says, “Our work is really unique, as tracking people is not like tracking a vehicle. You have kinematics of a car that prevent it from doing certain things, but a person can move in any orientation and for any reason, which is what we’re exploring in the transport spaces.”

Transport planner and Research Director at UTS’s Institute for Sustainable Futures Michelle Zeibots is the founder of RPIS. She came up with the idea after realising there was a lack of accurate real-time data about the number of people in a physical space such as a railway station. This prompted her to assemble the “perfect cross-disciplinary team”, which included Alempijevic.

“Michelle is not just good, she is exceptional, at translating the needs of the transport providers and conveying the gap between what people currently use and what is possible in the future,” says Alempijevic.

“Together, with myself and the others involved, we are kind of like Steve Jobs and Steve Wozniak. We work together, and without having the person in transport with the insights and then the engineers who can translate that into the engineering behind it, it wouldn’t happen.”

The Transport Research Centre is also working on two other major programs – Network Planning and Optimisation, and Condition Monitoring.

The former looks at the structure of transport systems and how they are evolving as a result of new and innovative technologies, like OPAL in Sydney. The latter is more focused on data analysis, control of intelligent machines, and programming. It is also a partnership venture with the RMCRC.

General Manager of Innovation at Downer EDI Rail Mike Ayling is excited about where the UTS partnership is headed.

He refers to it as an “interesting marriage” as despite the two parties being driven by completely different forces – academic and commercial – they have been able to forge a working relationship with many benefits. “We have a really strong relationship with the university, and this partnership will only go from strength to strength, so there are very exciting times ahead,” he says.

Ayling says the RPIS cameras were tested and well-received by Queensland Rail in February 2015 and May of 2016. The next stage is perfecting some minor bugs in the system, using UTS’s Data Arena, before going through another trial period.

Following that, the team hope to turn the research into a commercially viable product so it can be distributed state-wide, Australia-wide or even internationally.
“This technology is so new and there’s really nothing like it at the moment, so there is a lot of interest from industry about where we go next,” says Ayling.

And there’s great interest from PhD students too.

Alempijevic says, “The students who are part of this team get to be on the forefront of technical challenges that are always state-of-the-art. You won’t necessarily walk into these roles out in industry without having PhD qualifications first.

“UTS does extremely well in cross-disciplinary research and the Transport Research Centre, as well as RPIS, is an example of this. With the knowledge and insight from this cross-disciplinary team, UTS can make a leap and bound that is beyond one individual faculty.”

Lexy Akillas
Bachelor of Arts in Communication (Journalism)
Photographer (A Alempijevic and M Ayling): Hannah Jenkins
Photographer (train stations): Jamie Williams
Photographer (UTS Data Arena): Aaron Luo

This research is funded by: Rail Manufacturing Cooperative Research Centre and Downer EDI Rail Pty Ltd
The pain of childbirth isn’t always confined to labour. For some women, medical complications can cause anxiety, depression and post-traumatic stress disorder well before, and after, their child’s birth. Lynne Roberts reveals how her own traumatic birthing experience led her to undertake cutting-edge research into the effects of gestational hypertension and pre-eclampsia on the mental health of women.

Our society generally assumes pregnancy and the birth of a child are happy and positive experiences. While this is true for the majority of cases, for some, like me, the experience can be traumatic.

Hypertension in pregnancy (HIP) is the most common medical complication in pregnancy – it can be either a pre-existing condition or a disorder that develops during the pregnancy. There are two hypertensive disorders specific to pregnancy – gestational hypertension (GH) and pre-eclampsia (PE) – which together affect approximately five to eight per cent of all pregnancies.

GH, raised blood pressure in the second half of pregnancy, is usually a benign condition with good maternal and fetal outcomes. PE, however, is hypertension that develops in the second half of pregnancy and involves other organs such as the kidneys, liver and central nervous system.

PE is a more significant disorder associated with increased maternal and fetal morbidity and mortality. Women who have had PE are two to three times more likely to develop hypertension, cardiovascular disease or kidney disease later in life.
working as a clinical midwife in a multi-disciplinary team caring for women with complicated pregnancies.

However, it is now, through my PhD project, being done through the Faculty of Health’s Centre for Midwifery, Child and Family Health, that I have an amazing opportunity to really make a difference in the health of women who experience GH or PE.

For these women, complications like fetal distress, emergency caesarean section, pre-term birth and admission (of either the mother, the baby or both) to intensive care units is common. While this stress may contribute to increased levels of depression, anxiety, or post-traumatic stress disorder (PTSD), research is scarce.

About one in six pregnant women experience psychological problems, commonly depression and/or anxiety, in the year following the birth. However, it has been reported that women who experience a complicated pregnancy, like those with PE, are at a higher risk for depression and anxiety and face a higher prevalence of PTSD.

It’s currently very difficult to know whether any increase in the mental health issues in women with GH or PE pre-dated their pregnancy, are a consequence of the pregnancy, are due to the processes involved in managing the complication or the often-associated pre-term birth. I’m hoping to find answers to these questions.

Currently, I’m coordinating a large longitudinal study, known as the P4 Study, at St George Hospital. This research will investigate the physical and mental health of women who had GH or PE and the health and development of their babies. The physical health data will inform guidelines for follow-up of women who had GH or PE, while the mental health component of the study is my PhD project.

For this, I am comparing, at six months postpartum, the level of depression, anxiety and PTSD symptoms amongst women who had normal blood pressure in pregnancy to those who had either GH or PE. I’m also seeking to gain insight into the different experiences of HIP by interviewing women and listening to their stories.

I want to discover what has helped women during their experiences and what could be improved upon. The care of women with HIP often focuses on the immediate physical health issues, but I propose that their care should also include emotional and social support.

Quite simply, I’m hoping to fill the current gap in knowledge and improve the care that women who have HIP receive in an effort to improve their experience and reduce their mental health morbidity. After all, gaining a better understanding of the psychological consequences of complicated pregnancies is a public health concern.

Prolonged mental health disorder can affect both a woman and her infant. Depression, anxiety, and PTSD may be debilitating and impair a woman’s capacity to function in her normal life, including caring for her child. Persistent maternal depression and anxiety may also affect the infant’s development in the cognitive, emotional and social domains, and the development of the mother-infant relationship. Mothers and their children deserve better than this.

Lynne Roberts
PhD candidate
Faculty of Health
Photographer: Hannah Jenkins

This research is funded by: St George Hospital
Department of Women’s and Children’s Health and
St George & Sutherland Medical Research Foundation

In the Australian Institute of Health and Welfare’s *Maternal Deaths in Australia 2008-2012* report, HIP was reported as the third leading cause of maternal death directly related to pregnancy. And, as the only known treatment for PE is for the baby to be born, it’s also a leading cause of pre-term birth.

Pre-term birth was my experience. In August 1993, severe PE led to my son being born by emergency caesarean section at 30 weeks gestation (10 weeks early). I spent the next three days in the intensive care unit at one hospital while my son was transferred to the neonatal intensive care unit at another.

I came home after a week, but my son spent the first eight weeks of his life in hospital. It was an incredibly worrying and scary time, aggravated by the separation of myself and my child.

Ever since, I have made great efforts to understand HIP and to improve the care women receive. For 13 years I have worked as a Research Midwife at St George Hospital, prior to this I spent seven years working as a clinical midwife in a multi-disciplinary team caring for women with complicated pregnancies.

For this, I am comparing, at six months postpartum, the level of depression, anxiety and PTSD symptoms amongst women who had normal blood pressure in pregnancy to those who had either GH or PE. I’m also seeking to gain insight into the different experiences of HIP by interviewing women and listening to their stories.

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Lynne Roberts
PhD candidate
Faculty of Health
Photographer: Hannah Jenkins

This research is funded by: St George Hospital
Department of Women’s and Children’s Health and
St George & Sutherland Medical Research Foundation
Liu admits, “Once you have an idea like that, it drives you to obsession.”
And it was this that led Liu away from the parties and fashion shows of Europe and back to UTS to embark on a PhD under the supervision of DAB’s Head of School, Design Lawrence Wallen and Professor in the School of Design Thea Brejzek.

Liu’s research has resulted in a new invention that is set to change the way designers measure people for clothes and, at the same time, address the problems of fitting people of different shapes and sizes that are inherent throughout the fashion industry.

And it all started by Liu looking at the curves of the human body the way a mathematician would look at equations. “The geometry of curved things is far more complicated than fashion designers think,” says Liu. “If you look at the human body, it is actually a really complicated 3D shape, with all different kinds of curvatures.

“It’s almost more complex to look at the cleavage or moving arm of a person than it is at equations. I don’t think fashion designers understood how complex measuring and dressing this shape is. But, now we can start addressing and explaining it.”

Liu explains that in traditional patternmaking, designers take linear measurements of the body then shape those into a flat pattern. But, these flat, linear measurements don’t take into account the curvature of the human body.

“The geometry of the human body is actually very complicated. We don’t have a system sophisticated enough to understand and accurately map everything. We try to make these idealised forms through our patternmaking, but people aren’t like that.”

So Liu came up with the Drape Measure – a device that could measure the human body in 3D. It’s part of a whole new system of fashion patternmaking that Liu has built from the ground up; a system based on modern geometry called Non Euclidean Patternmaking, and one that bypasses many problems encountered in traditional patternmaking.

“The Drape Measure is designed so it’s flat, it’s like a protractor and it’s 360 degrees, but say I need to measure something that is spherical, I can change it to fit.

“The device works like a normal tape measure, but it also can capture a conical or 3D shape in a 360 degree angle to then translate onto the pattern and fabric,” he says. “So, with the Drape Measure, we get the exact shape we want; the exact measurement.

“It really simplifies the way that we do things: instead of this very traditional, convoluted system, with adding bits on here and there; the Drape Measure uses a simplified system, with a greater understanding of how the geometry of fashion patternmaking works.”

With completion of his PhD and patenting of the Drape Measure in the works, Liu is turning his hand to ensuring aspiring fashion students don’t give up maths and science, through outreach work with UTS’s Senior Lecturer in mathematics Mary Coupland. He has even recently contributed his article ‘So you want to be a fashion designer …’ to the maths’ journal Reflections.

“I’m really interested in pursuing fashion as a way of inspiring young people to engage with maths and science,” says Liu. “Most people seem to think of fashion as frivolous and anti-intellectual, but the future of cutting-edge fashion design will be based on pioneering scientific research.

“Fashion design is actually very technical and more related to maths and science than most people would think. You can’t have one without the other.”

Jen Mansell
Marketing and Communication Unit
Photographer: Shane Lo
Sustainable living comes easily to Project Manager Daisy Amanaki. “I’m the daughter of a green hero,” she says. “My father believed in reusing stuff, never wasting anything and doing a whole lot of different, innovative things. “Most of his life he did that, and that’s where my green network came from.”

As one of nine children growing up in the Cook Islands, Amanaki was at her father’s side when he was capturing methane from the family’s septic system to make electricity. She was also there when he began generating power with his home-built solar panel. And when he built a hurricane-proof house whose roof was specially anchored to the ground.

“It’s only now that I realise what I got from my father,” she says, reflecting on her recent accolade – UTS Green Hero Award winner for 2016.

Amanaki, who works in UTS’s Information Technology Division, won the award for initiating the donation of several hundred desks and chairs, no longer needed for Building 2, to schools in the Cook Islands. She galvanised the local Cook Islands community to help, and she launched a fundraising campaign on crowd-sourcing website chuffed.org to help cover shipping costs.

The UTS Green Hero judges recognised Amanaki’s initiative because it “not only keeps material out of landfill, but has great social sustainability benefits by giving the items a new life with kids in the Pacific”. This is Amanaki’s 20th year at UTS – she remembers the campus she joined in 1996 as “small, dated, slightly depressing” and yet to be reshaped by the digital revolution.

“There was a job as a project manager for capital works in the Faculty of Law and I was employed just for that. But within three months, I had 40 projects on my plate,” she says.

“Now the campus is so vibrant and connected – there are so many different places that can be used in many ways. My favourite is Alumni Green. I love being able to plug in my laptop or my mobile phone out there and carry on working.”

In the late 1970s, Amanaki was the beneficiary of a push to encourage girls into engineering – she received a scholarship to study in Fiji, then one from Cable & Wireless to study in the UK for her advanced diploma in telecommunications engineering.

She also met her Tongan husband in the UK, with whom she had four children. The couple returned to the South Pacific to marry, working in the Cook Islands and Tonga, before arriving in Sydney in 1991.

Today, Amanaki is a member of the Green Staff Network and the Staff Social Club. She is president of the UTS Wine Society and fond of a good Hunter Valley Shiraz. She is also a powerful advocate for women’s fitness. On Walk to Work day last November, she did just that – 7.6km from the Inner West apartment she moved to after her husband died two years ago.

“I loved it, I absolutely loved it. The weather was perfect and I said, ‘that’s it – I’m going to walk every morning from now on’.”

She’s out the door by 5am and in the UTS gym by 6.10am, ready to do a weights routine before she begins her working day. However, Amanaki maintains strong connections with her Cook Islands village, Arorangi, where her mother is queen.

“My years at Arorangi School and Tereora College provided the foundation for me to pursue my tertiary studies,” says Amanaki.

“Being able to organise this donation of desks from UTS to the Cook Islands Ministry of Education is a way of giving back.”

Fiona McGill
Marketing and Communication Unit
Photographer (D Amanaki): Hannah Jenkins
Photographer (furniture packing): Seb Crawford

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Director Madeline Kelly doesn’t mince words when talking about her award-winning short film, Nineteen. “It’s about a young man being stifled and dealing with homosexuality,” the Bachelor of Communication (Media Arts and Production) graduate says.

“It’s something that can make a lot of people feel trapped and I wanted to communicate that through the film.”

Nineteen tells the story of a 19-year-old experiencing intimacy for the first time. The camera stays unflinchingly close to him as he nervously fidgets, allowing the audience to put themselves in the place of the troubled character.

While the 10-minute film is sparse and almost music-free, it artfully explores the complexity of sex and love through a fleeting relationship between the young man and a male sex worker.

Its powerful and heartbreaking message about the challenges of being gay saw Kelly win the UTS Human Rights and Social Justice Award for 2014 and the UTS Golden Eye awards for Best Drama and Best Script in 2015.

The film has also been shown at the 2015 Sydney Mardi Gras Film Festival, and the 2016 Melbourne Queer Film Festival, where it won Best Australian Short Film. Internationally, Nineteen has taken on a life of its own, making it to the Palm Springs International Shorts Fest and the prestigious Out Fest in Los Angeles, to name just a few.

Thanks to previous wins, Nineteen is now up for the Iris Prize (Cardiff’s international gay and lesbian short film prize) which could see Kelly win £30,000 – the largest prize for a gay and lesbian short film in the world.

And, says Kelly, “It’s also being used as an educational DVD through Belgium and France and Germany”.

But these impressive accolades are only one aspect of the film’s success.

“It’s been amazing getting messages from queer people who have connected to my film, or someone coming up to me after the film and crying and telling me they are so touched and moved,” she says. “To me that has been the most rewarding – knowing that my film has impacted people and the way they perceive gay issues.”

Kelly’s script for Nineteen was based, in part, on the memory of her brother who died of brain cancer shortly after coming out as gay.

She describes her process of making the film for the final project of her UTS degree as an “investment”.

“I thought, ‘If I’m going to do this, I’m going to do it properly, and I’m going to make something that I’ll be proud of’.”

Kelly says her time studying at UTS was invaluable for learning about diverse film making practices and cultures.

“They gave us a really good understanding of the history of filmmaking,” she says. “It was so amazing to be able to see and study films from Africa, Iran, Afghanistan and European countries as well.”

Now a producer and director at an independent production company, Kelly spends her time crafting commercial content and working on her next short film.

“I like getting inspiration from so many different sources like meeting new people or being involved in the arts culture that’s going on in Sydney and around Australia,” she says. “I’m continuing to build my portfolio as a young director and encouraging everyone to address gay rights as a human issue and not a political one.”

Hannah Jenkins
Marketing and Communication Unit
Photograph and film still supplied by: Madeline Kelly
Five years ago, Alex Duncan and Andrew Rawson graduated from UTS’s Bachelor of Accounting degree. Today, they’re professional management consultants with leading advisory firms – EY and Deloitte. They’re also mentors for current UTS Master of Business Administration (MBA) and Master of Management students, working with UTS Shopfront to guide the students as they solve real-world business problems for not-for-profit community organisations.
Alex Duncan

Our Bachelor of Accounting cohort was split up according to names, so anyone whose name began with ‘A’ was put together. So, Alex and Andy, that’s how we first met. Andy was late on our first day, I remember that!

After uni, I took a job at EY starting out as an accountant in our assurance practice, but mid-way through my first year I worked out that although I really enjoyed accounting I was more interested in the management consulting side. So I flipped over and have spent the last four years as a management consultant. About two-and-a-half years ago I spoke to Andy and asked him if he wanted to join us at EY.

When you recommend someone for a job at your firm there is always a bit of pressure to make sure they aren’t a lemon. After countless nights out, weekend getaways, ski trips and 21st’s, the question, ‘Could Andy actually do any work?’ was still unanswered! Thankfully, not only did he step-up to the plate, but he smashed it out of the park. Just recently, though, he’s taken on a management consulting role with Deloitte Australia and I know he’s going to go well there too.

We got involved with the MBA’s Management Consulting subject through another Bachelor of Accounting graduate, Laurence Wainwright. I had previously worked with Laz at a community crisis shelter in Kings Cross. Every Sunday and Thursday, a group of us would open up a hall in St Canice Church, set up beds and accordingly, provide shelter for those in need. With this history together, Laz knew I would be keen to use my skills and profession to help not-for-profits, so he connected us with the Management Consulting Subject Coordinator Natalia Nikolova.

I find students either hate this subject or they love it. Students are given a problem which the client doesn’t fully understand – the client’s mind will change, so the problem’s always moving and there’s no textbook answer. You have to bank on your own knowledge, your own skills and experience.

Andy and I have worked on three projects now – Cure Cancer Australia, Alfalfa House and Mums 4 Refugees. We love getting involved and getting to meet all the new students and dealing with different problems, but we also want to give that opportunity to our EY colleagues. We wrote up an article in our own internal newspaper talking about the benefits of helping out UTS and these not-for-profit organisations. I think we’ve had seven EY consultants join us on Shopfront projects. For longevity purposes as well, it’s good to create that connection between UTS and EY so there’s always people available to help out.

There’s the intangible benefit of getting something by giving something – we’re exposed to university students who are quite digitally savvy and their minds haven’t been constrained by corporate thinking. One of our first groups did a video for their project using a particular type of software. I really liked that software and shared it with one of my EY clients who used it to make their own video for a similar purpose. Being exposed to those kinds of students actually helps us in our jobs and how we think about things. As management consultants we need to be adaptive and forward-thinking and being able to partner with a university that shares those same values means we can get the right benefits from the program too.

Andrew Rawson

I always had an interest in business, but, you know, you come out of high school and you’re not quite sure what business really means or that it is comprised of so many different things. I realised that accounting is a fundamental skill to have in any sort of business. That’s why I chose that degree. The Bachelor of Accounting really helps you get your foot in the door and understand the practical context of what’s happening in the business world.

Our Bachelor of Accounting cohort was quite small and we actually made lots of really good friends in the group. We still hang out with them to this day. We have a daily email chain where we drop questions and hopefully someone knows the answer. Things like ‘Why isn’t this vlookup working?’, or ‘How do you account for this GST?’ To be honest though, much of our email banter is centred on Game of Thrones or the life of our single mates!

Alex and I have since moved out of accounting, but I think we both found a really good grounding for what we wanted to do with our futures. After doing accounting for three years I decided I wanted to do something different. Alex had already established himself as a management consultant at EY and he basically brought me across. He was pestering me for a while to come over and eventually I was like, “Alright, I’m in. Let’s do it!”

After our really great experience at UTS we thought it would be a good idea to give back. It’s great because you’re working with the university and with the students, helping them develop their skills and at the same time you’re helping these great organisations. We’ve always had an interest in working in the not-for-profit sector and there’s a lot of ways you can get involved, but we wanted to do it in a way where we could apply our current skills.

With university assignments, you’ve got the theoretical component and the practical component, with students usually well-exposed to the theoretical side of the business, but not so much the practical side. So they often struggle with the Management Consulting subject.

With university assignments, you’ve got the theoretical component and the practical component, with students usually well-exposed to the theoretical side of the business, but not so much the practical side. So they often struggle with the Management Consulting subject. We have to, sort of, extract their knowledge and put it into a business context to really provide value for the client. But, the students can usually see the benefits of the subject – they get exposure to the way we work and can see if that’s a future career that interests them. So far, EY has hired one student from the subject. The benefit of being able to go into a job interview and talk about how you solved a real-life client’s problem is a huge competitive advantage from the rest of the graduates competing for your position.

At the beginning of each session, we usually get a choice to work with a charity that aligns with our interests and beliefs. This session we’re working with Mums 4 Refugees – a not-for-profit that is really passionate about the treatment of refugees. It’s an area that I’ve always had a lot of interest in, but I’ve never been able to apply what I know from the business context to that. Projects like these are an amazing way to do that and to be able to really give to these organisations in a meaningful way.

To find out more about UTS Shopfront and to get involved, visit shopfront.uts.edu.au

Rachel Zarb
UTS Business School
Photographer: Nathan Rodger
“Children are the future, and my future is for the children. That’s my motto,” says 21-year-old education student Reece Griffiths.

And if anyone should know about the transformative power of education, it’s Griffiths. His formative years, spent growing up in the regional NSW town of Gunnedah, were marred by self-destructive habits and the presence of drugs.

Without finishing high school and at risk of living on the streets, university wasn’t something the young man ever considered.

“I was a bit lost because of the poor choices I made,” admits Griffiths. “I went off the tracks.”

But that all changed when a local businessman gave Griffiths a second chance.

“John Hickey gave me a handful of shifts a week at his store. He was the only guy who gave me a crack.”

Hickey also gave Griffiths a 12-month gym membership. And, says Griffiths, “Sports and fitness changed my life. Staying physically healthy is the best thing a person can do, I still work out daily. That’s all thanks to John.”

The Kamilaroi man, inspired by his love of fitness, sought out UTS’s UNISTART program – a unique staff-funded venture that provides Indigenous youth with pathways into university.

Griffith’s original goal was to enter a Bachelor of Sports and Exercise Management. And in 2015, Griffiths started the 12-month program that equipped him with the academic skills he needed to bridge his way into his second-year of study.

But, during the program, a different calling found Griffiths. “University opened my mind to a world that previously didn’t exist,” he says.

“Coming into uni, all I knew was sports and fitness. UNISTART gave me the chance to reflect and think about my future. Education just stood out like a yellow suit at a black and white party, I realised that my future is with the youth of Australia.”

“During my time at uni I have learned a lot about respect and caring for others. When I finish my studies I want to start a business that helps all children to find and achieve their dreams. Whether it be fashion, art, music, sports or education, I want to inspire ambition in all students, especially the Indigenous youth of Australia.”

Today Griffiths is halfway through his second year of a Bachelor of Education. And when he’s not studying, he spends time working out and enjoying Sydney’s cafe scene.

“Spending time in cafes is my meditation. For some reason I feel relaxed every time I walk into a cafe – nothing beats a cuppa and a read of the paper.”

Though Griffiths has travelled far from his troubled adolescence, he still finds time to visit his hometown. “I visit Gunnedah about four or fives times a year. Every time I go home it makes me want to work harder.”

“I lost my uncle, when we were both aged 16, and we always talked about becoming successful. My family has gone through hard times, but that motivates me greatly. Everything I have become is thanks to my beautiful family.”

Today, Griffiths says, “I’ve developed into a responsible, hard-working man with big dreams. I haven’t looked back.”

And if Griffiths gets his way, you can be sure that even more Indigenous children will, one day, be able to say the same.

Alex McAlpin
Bachelor of Global Studies
Photographer: Hannah Jenkins
Moving beyond simplistic notions of precariousness and contingency, *The Post-Fordist Sexual Contract* analyses how work, employment and gender are being remade. Susan Luckman’s analysis of craft ‘making’ and selling via platforms such as Etsy considers an entrepreneurial model sold to middle-class women as empowering and ‘flexible’. While these women’s blogs display curated images of perfect families and creative spaces, the reality is long hours, necessary assistance in parenting, debt, risk and insecure income. Luckman notes a problematic consequence is the collapse of demands for deeper change that might allow women (and men) to do work and gender differently. Dan Irving’s chapter on gender transition demonstrates the enmeshed context of economic and gender embodiment. Rigid post-Fordist gender identities means transition is both a private and economic event. His analysis also highlights the more general division amongst women, “between those who can be read as employable and those whose bodies and behaviours are deemed disposable”. Mona Manneuvo’s chapter on affective attachments in academia maps the intersection of labour, motherhood and affect in the contemporary university setting.

Other chapters consider employability of workers and would-be workers, sub-contracting and outsourcing, and the financialisation of social reproduction. The latter chapter, by the editors, is a standout seeking to theorise social reproduction in a new period of capitalism. This is a compelling collection, deftly woven together in Adkins’ introduction.

Elizabeth Humphrys
Faculty of Arts and Social Sciences

Maryanne Dever is the Associate Dean (Teaching & Learning) in the Faculty of Arts and Social Sciences and joint Editor-in-Chief of Australian Feminist Studies.

*The Dirty Little Dog* is Jeremy Fisher’s latest addition to gay literature. The story, set in a fictional, corrupted political scene in New South Wales, features Detective Terry Bradley and his partner, journalist Jack Rutherford. When Julian, the son of powerful media mogul Wardell Costello, disappears in mysterious circumstances, the couple, and their skills, are pitted against each other. On one side is Detective Bradley, who was assigned the case after Julian’s neighbour, Pup, raised the alarm. On the other is Jack, who was called by Costello, a long-time enemy, to find his son. Though Jack isn’t keen to take on the task, he needs the money. However, when the body of a famous rugby league player is found washed-up along Sydney Harbour and another is found dead inside Julian’s fancy inner-city apartment, the pair begin to lose hope. Someone is killing young men who have a certain connection to Julian and time is running out. *The Dirty Little Dog* is a fascinating read, best suited to those who enjoy a dark thriller with a complex intrigue of power, hidden-truths and money.

Sophie Erpicum
Student Services Unit

*The Dirty Little Dog* is Jeremy Fisher’s third book and is his first foray into crime fiction. Fisher graduated from UTS in 2003 with a Doctor of Creative Arts.

Starting with the 1836 shipwreck of Eliza Fraser on the remote Queensland island that now bears her name, *Finding Eliza* takes the reader deep into the history and racial divide that separates Australia, still, to the modern day. But rather than step through facts and figures alone, author Larissa Behrendt explores the words, thoughts and actions of fictional characters. In doing so, the very real motivations and preconceptions of the authors and their contemporaries are exposed. And here lies the strength of *Finding Eliza* – Behrendt is able to communicate the plight of Aboriginal women in surviving the colonisation of Australia, in a real and powerful way, by exposing the prejudice of generations of white Australia in accepting a flawed and censored view of history. It’s a message that Behrendt finely crafts in *Finding Eliza* – while white Australia refuses to accept the facts, and rather lives with a fictitious version of the past, colonisation continues. For the racial divide to be closed in our nation, recognition of both the good and bad in our history needs to be found. Otherwise we’re bound to follow the lies of the past.

James Cardiff
Marketing and Communication Unit

Finding Eliza is Larissa Behrendt’s third book. The Aboriginal lawyer, writer and filmmaker is also a Professor of Law and Director of Research at UTS’s Jumbunna Indigenous House of Learning.

During August, the Co-op Bookshop on Broadway is offering Co-op members a 20 per cent discount on *Finding Eliza* reviewed in this issue. Mention U: magazine when you purchase this book in store.
Do you love a good crime show? Were you guilty of binge watching the Netflix documentary *Making a Murderer*? Like many crime show fans, you’ve probably pictured yourself as a forensics investigator. But how exactly do forensic scientists determine things like time since death? And how are police dogs able to quickly locate bodies?

Head along to *UTS Science in Focus: Inside the forensics world*, to find out all these answers, and more. The public lecture, co-presented by the Sydney Science Festival, will be held during National Science Week, on August 16.

Headlining the event are UTS’s own Shari Forbes and Xanthe Spindler. Forbes, an expert in decomposition, has been at the forefront of research investigating the chemical processes that occur in soft tissue decomposition. Her research aims to identify the chemical profile of decomposition odour to enhance the capabilities of cadaver-detection dogs.

She’s doing this by studying the decomposition of human corpses at the recently opened Australian Facility for Taphonomic Experimental Research (AFTER) – the first of its kind in the southern hemisphere.

“Even though forensic taphonomy has been studied for more than 30 years now, there is still much that we have to learn about the process of decomposition,” says Forbes.

“Forensic investigation is multi-disciplinary – it involves work by biologists, chemists, physicists and mathematicians. Each expertise comprises only one part of the puzzle and demonstrates the importance of working collaboratively.”

While it might sound confronting to some, AFTER is vital for the success of human death investigations here and overseas, including in neighbouring countries where Australia sends emergency response teams in times of disaster.

Forbes hopes those attending the UTS Science in Focus event “gain a greater awareness of the value of AFTER and the invaluable contribution that our donors make to our research.”

Spindler, meanwhile, will focus her part of the lecture on fingerprint science. Though the aim of fingerprint science is simple – to find and enhance the fingerprint without destroying the pattern – the process isn’t quite so straightforward.

“When you follow a fingerprint from deposition at the scene to detection and identification, you discover that the discipline touches just about every aspect of science,” says Spindler.

“The secretions on our skin and the fingerprint patterns are a product of biology. The physics and chemistry of the touched surface affect how they are transferred and preserved. We detect them using chemistry, and the identification process would be a lot more cumbersome if it wasn’t for mathematics and computer science.”

“If we understand the fundamental processes involved in fingerprint transfer, ageing and detection, we can design better detection techniques and avoid destroying other traces like DNA or chemical residues.”

And by sharing her knowledge with the public, Spindler hopes, “guests at the event will gain a new perspective on those invisible traces – those amazing sweaty or greasy marks we leave behind on everything we touch.”

**For more information and to register your attendance, visit uts.ac/28RIVGB**
ART & U

Profiles a piece of work from the UTS Art Collection every issue.

EXHIBITION

Over Many Horizons is an interactive, experiential exhibition that investigates the environmental, social and cultural ecologies that form our worlds and asks how we might re-imagine our place and actions.

UTS Gallery, building 6, level 4
Until 23 September
Mon-Fri 12pm-6pm
art.uts.edu.au

Jude Rae, SL 342, 2014, oil on linen, UTS Art Collection

Quietly abstract yet believably solid, the vessels depicted in Jude Rae’s paintings are, more often than not, things the artist has found at the tip or kerbside. They are far from the fruit or flowers you see in more traditional still lifes.

As a genre of painting, still life was originally a depiction of material wealth (think, for example, of the luxurious table settings in the Dutch tradition). But in these simpler forms, Rae finds her own sense of richness.

Since the late 1990s, Rae’s skilful arrangements of containers, jars and gas bottles represent a deep investigation into both the still life genre and the nature of abstraction in painting. Minimally titled SL 342, this painting is a recent acquisition for the UTS Art Collection and a beautiful example of the artist’s work.

In it, the flatness of the picture plane is reinforced through flecks of bright orange ground showing through the painted surface, yet subtly pulled back with minimal indications of reflective light and shadow. The optical ‘trick’ of the water filled jar distorting the shape behind creates an understated dynamism between the flatness of the paint and the solid form it describes.

Rae, who is also known for her work in portraiture, was awarded the Portia Geach portraiture prize in 2005 and 2008 and was a finalist in the 2014 Archibald prize. Earlier this year, the Art Gallery of NSW acquired another of her still life paintings when she won of the prestigious Bulgari Art Award and a residency in Italy.

For more information, visit art.uts.edu.au

Janet Ollevou
UTS Art

PUBLIC LECTURE

Join Xanthe Spindler and Shari Forbes at UTS Science in Focus: Inside the forensics world as they explain how their forensic science research helps to solve crime and identify bodies in major disasters (registration essential).

The Great Hall, building 1, level 5
6.30pm-8pm
uts.ac/28RiVG

PUBLIC LECTURE

Head along to UTS Science in Focus: Biohacking – why should we care? to find out what biohacking is, how it’s changing the world and why it’s worth celebrating. This public lecture and panel discussion features Genspace co-founder Ellen Jorgensen and a panel of UTS experts (registration essential).

The Great Hall, building 1, level 5
6pm-7pm
uts.ac/295Wgs

DIVERSITY WEEK

Celebrate the diversity of UTS with a week of free events. Check out the film screening of Chasing Asylum and a gender identity talk on Tuesday 30 August, Social Justice Markets on Wednesday 31 August and the UTS Human Rights Awards on Thursday 1 September. View the full line-up online.

Until 2 September
diversityweek.uts.edu.au

UTS HUMAN RIGHTS AWARDS 2016

Janet Ollevou
UTS Art

For more information, visit art.uts.edu.au

Art & U profiles a piece of work from the UTS Art Collection every issue.

WHAT’S ON

AUGUST

Email your October events to u@uts.edu.au by Friday 26 August.
“Two years ago I attended a conference, called Starmus, on a volcano in the Canary Islands. It is an incredible and obscure conference that celebrates astronomy and music and is set in the world’s second-most important observatory. I met Stephen Hawking, Brian May and Richard Dawkins, among others, and it filled me with awe and inspiration. Those few days fuelled everything I’ve created during my masters at UTS and it inspired me to be bigger, greater and follow my dreams.”

Laura Jade Hindes’ hand-engraved Perspex sculpture Cerebral Nebulae will be on display in the Waterhouse Natural Science Prize exhibition at the National Archives of Australia, Canberra from 16 September to 13 November.

Photographer: Leslie Marsh