As a University, we work hard to maintain our links with all our graduates and to ensure your continued connection with our community. This publication, SAM Heritage, is a companion to our Sydney Alumni Magazine, which you received earlier this year. This special annual edition is for our alumni who can remember when telephones weren’t mobile, cameras had film and speaking into a watch only happened in a James Bond film. It recognises our heritage and pays tribute to the incredible work being done by our alumni, staff and students to support the future of education and innovation.

In this edition you will meet three generations of the talented Coles family, who are all Sydney alumni and have fascinating views on how study with us has both evolved and stayed the same over the decades. You can read about our latest research into the links between exercise and dementia, and how our museums and art galleries provide unique insights into all kinds of ancient and modern worlds. Finally, we share the news of several remarkable gifts that have the power to change thousands – perhaps millions – of lives.

I am delighted to welcome you to SAM Heritage – celebrating our history and embracing our future.

Dr Michael Spence,
Vice-Chancellor and Principal
BA LLB Sydney DPhil PGDipTheol Oxf
The Coles family’s stories show that some undeniable constants never change—and make University life unforgettable.

“I hope you all go out from here full of gratitude for what you have been given, full of courage and, when it comes, ready to take that chance.” More than 65 years after his own graduation, this was Dr Ken Coles’ (BE [EngTech] ’48 DUniv ’99) advice to our most recent commerce students at their graduation ceremony in May.

The day was as much a celebration for Ken as it was for the graduates sitting in the Great Hall because among them was Harriet Coles (BCom ’15), his granddaughter and the third generation of University of Sydney graduates in the family.

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“After the ceremony I had so many people come up to me and say how good the speech was, and they didn’t know he was my grandfather,” Harriet explains. “It was really nice. His speech was universal to everyone graduating.”

A few months later, sitting down with his son and granddaughter by his side, Ken gives a glimpse into what University life was like during his time as an engineering student. “I graduated after five years of high school when I was 16 and graduated from university in 1948 when I was 20—I was far too young, but the war was on and you were meant to be serious, get stuck into it and not muck around,” Ken remembers. “I used to get a tram that came down King Street [in the city] then change over to get a tram up to the University.”

The three of us

Written by Ashleigh Goodfellow
Photography by Sarah Rhodes (BA ’96 MPub ’09)
EIGHT-HOUR EXAMS

Ken vividly recalls an eight-hour open-book exam using a slide rule to do complex calculations and an assignment requiring him to design a small steam engine made of cast iron.

It was a very different experience for his son, Richard Coles (BA ’80), who followed in his father’s footsteps and started an engineering degree at the University.

Richard recalls one lecturer in particular who both impressed and petrified him with his ability to command a room.

“In first-year maths we had a teacher called Mr Williams who ruled us with an iron fist,” Richard says. “All he did for the hour lecture was write equations on the board.

“If you dared to whisper to the person next to you he would whip around, point and yell. He had all 500 of us terrified to speak.”

Two years into his degree Richard had a change of heart and undertook a computing course at TAFE before coming back to the University and graduating with a Bachelor of Arts in 1980. During this time his intellect was opened to the world of philosophy.

“If you had a big essay to do in philosophy you spent days in the stack [Fisher library], and I loved it,” Richard says. “I would always find these amazing books.”

It’s a stark contrast to his daughter Harriet’s quest for knowledge in commerce, discovered mostly through the library’s online database.

INDELIBLE MEMORIES

Though the trio’s learning experiences have changed across the generations, they all share many fond memories created beyond the walls of the lecture theatres.

“I really immersed myself in the social life,”
Richard recalls. “I spent too many breaks between lectures going between Wentworth and the student union building. I played a lot of pinball and went to many rock concerts at Manning Bar on Friday nights.

“I have a vision of my future wife and I being hoisted up onto the arch beams at the old union building to watch Jimmy Barnes and Cold Chisel play. We watched Jimmy crowd surf. That was fantastic.”

Ken’s life at the University was punctuated by some memorable pranks, and he beams broadly when recalling one involving a car.

“It was a little Austin sedan and we carted it inside, up some stairs and put it on top of a billiard table. I never heard how they got it down.”

When asked what this friend did to deserve the elaborate prank, Ken paused for a few moments before reasoning: “Well, he was a good friend.”

It was perhaps Ken’s humour paired with his worldly knowledge that struck a chord with many of the new graduates during his occasional address. It seems that he has been giving good advice for a lifetime.

“I remember Dad saying to me clearly in the car one day ‘You seem to be taking your retirement before you’ve started work. I think it would be good if you finished university and got a job’,” recalls Richard, with his father laughing in the background.

Richard’s advice to Harriet before she started university was much more straightforward: “Go to your tutorials.”

With the tutorials and lectures now finished, Harriet, who has recently started a graduate role at KPMG, plans on becoming a chartered accountant and hopes to work overseas in the future.

As for the next generation of University of Sydney students, her words of wisdom are simple: “You really have to put yourself out there to get the full university experience.”

These three graduates have truly lived this advice.
The honour roll of sporting heroes includes former Wallabies captain Nick Farr-Jones AM (LLB ’86) and current Wallabies Israel Folau and Bernard Foley (BEc ’14). Soon new generations of rugby and soccer stars will enjoy a new home at No. 2 Oval. The revamped precinct will also be a welcome addition to the local community.

“The new grandstand will take the spectator experience to another level, placing our supporters substantially closer to the games,” the President of the Sydney University Football Club, David Mortimer AO (BEc ’70), says. “We are proud to be part of this development for our players and the rugby community.”

The redevelopment also represents the first time in almost 70 years that the University’s Soccer Football Club will have a “genuine home” for its 35 teams, according to President Ross Xenos (BCom ’08).

Facilities include a new 1100-seat grandstand, elite-athlete gym, outdoor entertainment areas, supporters’ bar, lighting for night games and training, and a new indoor cricket training centre. The University is providing about $5 million towards the $12.5 million upgrade, with Sydney Uni Sport & Fitness matching this amount. The remaining $2.5 million will be funded through philanthropy. One generous donor, who wishes to remain anonymous, has already given $1 million.

“Our principal contributors are our sporting alumni and supporters — a lot of people are passionate about sport at the University, particularly the rugby and soccer football clubs, which will benefit most from the upgrade,” says Rodney Tubbs (BEc ’71), who is helping to steer the project’s fundraising.

The oval upgrade is part of a grand plan of sporting infrastructure developments. One major milestone is already complete. “In 2013 we upgraded the aquatic centre to incorporate a new wing with two basketball courts,” Mr Tubbs adds. “There’s also a martial arts studio, group fitness room and boxing gymnasium. That was a fantastic development for 28 indoor sports.”

The next key milestone — the No. 2 Oval building works — is due for completion by December 2015 and the revamped oval should be ready for the first games of the 2016 soccer and rugby seasons.

Image: Artist’s impression of the new grandstand at No. 2 Oval. Image courtesy of Sydney Uni Sport & Fitness
New research led by the University of Sydney has brought us closer to answering critical questions about dementia. It suggests that to keep your mind healthy as you age, you need to do some heavy lifting.

The landmark study reveals that weight training can improve the mental abilities of older people with mild cognitive impairment—a common precursor to dementia.

Lead researcher Professor Maria Fiatarone Singh (pictured above with a patient) is a long-term proponent of ‘exercise as medicine’ and says the study shows promising results. “While we still have a long way to go, it’s exciting to think that something as simple and cost effective as exercise could be prescribed as a preventative measure in the fight against dementia,” says Professor Fiatarone Singh, who is also the John Sutton Chair of Exercise and Sport Science at the University.

Published in the *Journal of the American Medical Directors Association*, the study compared the effects of weight training, computer-based brain training and a combination of these two for 100 people older than 60 experiencing mild cognitive impairment.

Those who did six months of resistance training showed substantial improvements in overall brain function. Encouragingly, these improvements remained 12 months after supervised training finished.

The researchers will now follow participants for up to five years to see why some responded better than others, how long benefits last and if they are truly able to delay or even prevent the onset of dementia.

To learn more about research at the University, visit sydney.edu.au

The volume and diversity of cultural treasures in the University’s museums and art gallery is staggering: 500,000 entomology items, 50,000 historic photographs, 9000 bird specimens and 30,000 antiquities. Here’s a glimpse of several fascinating objects and the remarkable people behind their journey to our museums.

PAST INSPIRES PRESENT

Written by Martin Foster
Photography by Victoria Baldwin (BA ’14)

Bronze belt
Purchased by the Nicholson Museum in 1982, this beautiful belt is as rare as it is fragile. Forged from thin bronze, it belonged to a South Italian warrior, possibly from the Apulian region, in the 4th century BC. In the 1990s this well-preserved item was analysed for research by the University’s Electron Microscope Unit. The findings have enhanced our knowledge about ancient metalwork. Museum number: NM82.30

Tiger shark jaw (*Galeocerdo cuvier*)
This jaw shows how shark teeth develop in rows. New teeth replace worn or damaged teeth when they are shed, and the shape and number of teeth in each row are distinctive for each species. In this specimen, the teeth are cockscomb-shaped and heavily serrated. As the first commissioner for NSW fisheries, William John Macleay was keen to document the diversity of species in Australian waters. The Macleay Museum’s collections are still a beacon for taxonomists and ecologists keen to understand evolutionary and environmental changes since the 19th century. Museum number: NHF.1578
**Kakapo bird**

*Strigops habroptila*

This vibrant, flightless parrot is native to New Zealand. Its population was decimated by introduced predators (including cats) in the 19th and 20th centuries. Today breeding populations live freely on three small predator-free islands. Miklouho-Macleay Fellow Dr Lindsey Gray is conducting molecular work on the museum’s 22 specimens – collected in the 1870s – to learn more about the kakapo’s diet and the best possible foods for these birds’ survival. Museum number: NHB.1749

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**Egyptian necklace of small amulets**

This stunning Egyptian necklace comprises small amulets including tortoises, flies, hawks and wedjat eyes made from gold, faience and semi-precious stones. It dates back to the 18th Dynasty (1550-1295BC). It was purchased by Frederick Septimus Kelly in Egypt in 1910. Mr Kelly was a pianist, composer and Olympic gold medallist (for rowing). He was also an officer in the First World War, and died in action in France in 1916 when he was just 35. His small collection of Egyptian artefacts was passed to his niece, Beatrice McPhillamy, who donated it to the Nicholson Museum in 1968. Museum number: NM68.25

To read part two of our special museums feature, please turn to page 10.
The University of Sydney’s museums play an important role in celebrating the past to inform the present. They facilitate insights that will help us cross new frontiers of knowledge.

Reliving past glories

Written by Martin Foster

“We’re building visual and collection literacy,” says the University’s Director of Museums and Cultural Engagement, David Ellis. “We emphasise stories, we emphasise provenance; the link to the individual. That’s what brings them alive.”

Last year the University’s museums welcomed 120,000 visitors – a record number. Alumnus and cultural supporter Kenneth Reed AM (BA ’57 LLB ’60) is among the many inspired by the collections over the past 150 years.

“I have enjoyed numerous hours in the Nicholson and Macleay Museums and also the University Art Gallery,” says Mr Reed. “My time here as a student changed my life; it gave me a strong sense of community and a great appreciation of the arts.”

Mr Reed, who was recently awarded the title of Honorary Fellow for his service to the University, has generously bequeathed his collection of 17th century Dutch paintings to the University Art Gallery.

It has immense educational value and can be used by “students and the wider community for generations to come”, Mr Ellis says. Mr Reed’s collection will add another dimension to the many exciting exhibitions visitors currently enjoy. The Nicholson has given its Egyptian collection a new lease on life in Death Magic (pictured). It features high-calibre equipment – upright mummies in 360-degree glass casing – and planet-friendly LED lighting.

The Macleay Museum is showcasing the diversity of stone-tool production across Australia in its latest exhibition, Written in stone. Sourced from the University’s collections, it reflects on the beauty of the stone that Aboriginal people used for tools and painting.

At the University Art Gallery, Reparative Aesthetics features the work of Fiona Pardington from New Zealand and Rosangela Renno from Brazil, who adopt a reparative approach to representing the disempowered.

To find out more, visit sydney.edu.au/museums

Smartphones have become an indispensable tool for staying in touch with friends and passing time on the morning commute. But according to Dr Lis Neubeck, a researcher at the University of Sydney Nursing School, the ubiquitous devices can also be put to a more important use: preventing strokes.

Dr Neubeck spoke about her research into the medical applications of smartphone technology to Challis Bequest Society members at a recent event in the Charles Perkins Centre. Her focus is on diagnosing an irregular heart rhythm called atrial fibrillation, which causes blood clots that can travel to the brain and cause a stroke.

“Around half of people with atrial fibrillation don’t have any symptoms,” she explains. “So we need a way to find people who have it before they get a stroke, since there are very effective treatments for it, such as warfarin.”

The simplest way of testing for atrial fibrillation is a pulse check, but it is not a very sensitive method. As an alternative, Dr Neubeck and her colleagues have been investigating an electrocardiogram (ECG) device called AliveCor, which attaches to an iPhone. In 30 seconds, the heart rate monitor can check a pulse and tell if the rhythm is likely to be atrial fibrillation. A number of portable ECG monitors can be used to detect heart irregularities, Dr Neubeck says. After examining several, her team found AliveCor – in which it has no financial interest – to be fast and accurate.

Dr Neubeck and her colleagues have previously shown how the device can be used by community pharmacists and GPs to screen for atrial fibrillation. This year they are examining how it can be used by practice nurses as part of a screening program.

**NATIONAL POTENTIAL**

Because it is quick and cost effective, the method is suitable for use as part of a national screening program for atrial fibrillation – Dr Neubeck argues this is necessary to prevent stroke deaths. “International guidelines suggest everyone over 65 should have a check-up to see if they have atrial fibrillation, since that’s when your risk goes up,” she says.

More than 43,000 health-related apps are on the market, says Dr Neubeck, and new ones launch each week. “It’s a very exciting time, but not all of the health apps are based on evidence. So it’s important for health professionals to know which ones are of real value.”
More than 60,000 people in Australia are estimated to have reduced or discontinued their use of prescribed cholesterol-lowering statin medications following the airing of a two-part series critical of statins by ABC TV’s science program, Catalyst, University of Sydney research reveals.

Analysis of the Pharmaceutical Benefits Scheme medication records of 191,000 people revealed that there was an immediate impact after Catalyst was aired in October 2013, with 14,000 fewer people dispensed statins per week than expected.

“In the eight months following the Catalyst broadcast, an estimated 60,897 fewer people filled their statins prescriptions,” the study, which was published recently in the Medical Journal of Australia, found. “If patients continue to avoid statins over the next five years, this could result in between 1522 and 2900 preventable, and potentially fatal, heart attacks and strokes.”

Statins are widely used drugs recommended around the world to prevent and manage the risk of heart attacks and strokes in people at risk of cardiovascular disease. Following the broadcast, health experts, including ABC presenter Dr Norman Swan, were highly critical of the program for misrepresenting scientific evidence and scaring people away from prescribed medications.

The ABC subsequently removed the episodes from the Catalyst website after an internal review found that the episodes on statins had breached its impartiality standards.

“The impact of the program was not only immediate but long lasting,” the study’s lead author, Andrea Schaffer (MBiostat ’12), from the University of Sydney’s Faculty of Pharmacy, says.
“Statin dispensings were significantly lower than expected for the entire eight-month post-broadcast period we examined. It is unclear how long this change will last.”

Associate Professor Sallie Pearson, senior author on the study and Scientific Director of the Centre of Research Excellence in Medicines and Ageing, says: “What is particularly concerning is that this drop in statin use was seen in people who were at high risk of cardiovascular disease; for example, those who were also taking medications for diabetes.

“Heart attacks and strokes are the main killers of people with diabetes.

“Statins are recommended for people at high risk of cardiovascular disease because they have been shown to be effective. However, like all medications, they have risks and benefits and should only be used as recommended.”

The paper’s authors say that even though the observed effect was relatively small, the prevalence of statin use in Australia and the medication’s established efficacy means that a large number of people are affected, and may suffer unnecessary consequences.

EARLY WARNING
Before the airing of the *Catalyst* episode on statins, Australian National University Professor Emily Banks, a co-author of the new study, raised concerns that the program could have adverse health impacts.

“The media has a critical role to play in questioning the status quo and in helping people to make sense of health information,” Professor Banks says.
GIFTS THAT KEEP ON GIVING

The University of Sydney has a vast community of donors whose motivations are as varied as the many causes they support. Here is a snapshot of this year’s major gifts, so far, that will foster incredible research and improve lives in Australia and around the world.

To find out more about these and other gifts, visit sydney.edu.au/inspired

THE LAMBERT INITIATIVE

This extraordinary gift of $33.7 million places Australia at the forefront of medicinal cannabinoid research. It establishes a research program to build on the University’s extensive clinical and scientific expertise and ultimately produce cannabinoid-based medicines that are safe, reliable and affordable.

The aim of the Lambert Initiative is to understand how cannabidiol works to treat paediatric epilepsy, along with research into a broad range of applications, such as cancer, obesity, chronic pain, dementia and mental health disorders.

Donors: Barry and Joy Lambert
Total amount: $33.7 million
Area: Science and Sydney Medical School

SUSAN WAKIL SCHOLARSHIPS

This gift – the largest donation ever to a nursing school in Australia – establishes 12 annual scholarships to assist nursing students with study, tuition and accommodation. Beginning in 2016, the Susan Wakil Scholarships will support both undergraduate and postgraduate student nurses, including rural, regional and Aboriginal and Torres Strait Islander students. The donation ensures that the University of Sydney Nursing School will be able to offer Susan Wakil Scholarships to nursing students in perpetuity.

Donor: Susan and Isaac Wakil Foundation
Total amount: $10.8 million
Area: Sydney Nursing School
**COLIN SULLIVAN POST-DOCTORAL RESEARCH FELLOWSHIP**

Chronic illnesses, such as lung disease, heart disease, stroke and diabetes, are the leading causes of mortality in the world. There is growing evidence that sleep-disordered breathing and other disruptors of sleep exacerbate many of these chronic disorders, and that intervention improves outcomes. The Colin Sullivan Post-Doctoral Research Fellow will take a multi-disciplinary research approach, looking at chronic diseases and their relationship to sleep in new and innovative ways.

Donor: Professor Colin Sullivan  
BSc (Med) ’67 MBBS ’70 PhD (Medicine) ’77  
Total amount: $2 million  
Area: Charles Perkins Centre and the Sydney Medical School

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**HENRY HALLORAN TRUST**

The Henry Halloran Trust was established in 2012 thanks to the generosity of Warren Halloran. In June this year Mr Halloran made another generous gift of $5 million to further support the trust’s work. The trust’s primary aim is to bring together scholars, students and practitioners from around the world for cross-disciplinary collaborative projects that address the most important challenges land management and urban development face in Australia and overseas.

The Henry Halloran Trust was established in honour of Warren Halloran’s father, who was an advocate for town planning in the first half of the 20th century.

Donor: Warren Halloran  
Total amount: $5 million  
Area: Henry Halloran Trust

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**MAURICE BLACKMORE CHAIR IN INTEGRATIVE MEDICINE**

The Maurice Blackmore Chair in Integrative Medicine will undertake research into the impact of complementary medicines on health outcomes. The chair will carry out research into complementary and integrative medicines, and develop programs that will educate medical students about what complementary medicines can and can’t achieve, and how they interact with other treatments.

Donor: The Blackmores Institute  
Total amount: $1.3 million  
Area: Sydney Medical School
LIGHT FANTASTIC

The grounds of the University were recently transformed into a glittering canvas of light, music and inspiring ideas for Vivid Path to the Future. Featuring a spectacular light show, interactive installations, exhibitions and other events, Vivid showcased the creative minds of our staff and students. Here are a few displays and shows that wowed the crowds.

Top left: A birds-eye view of the festivities at the Quadrangle. Top right: The Sea of Hands, one of Australia’s largest public artworks, gave everyone a chance to participate. Bottom left: Lined with mirrors and periodically flooded with smoke, the dome of Mirador was designed by recent graduates of the Master of Architecture program, Ivana Kuzmonovska and Rachel Couper. Bottom right: Windows to the Soul, by local artist Marty Chaseling Renwick, was one of the projection shows that transformed the Quadrangle.
Think again

Sydney Ideas inspires you to think differently about today’s biggest issues.

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