Investing in Indigenous health leadership

Nobel Laureate Professor Peter Doherty with immunologist Dr Misty Jenkins. Photo: Simon O’Dwyer/Fairfax Syndication.

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The University of Melbourne is a public research university located in Melbourne, Australia. It is one of Australia's oldest and most prestigious universities. The university was founded in 1853, and it has played a significant role in the development of modern Australia. It is a major research institution and is ranked among the top universities in the world. The university offers a wide range of undergraduate and postgraduate programs in various fields, including arts, sciences, engineering, law, medicine, and business. It is a provider of education and research for students and researchers from around the world.
investing in Indigenous health leadership

Future Aboriginal and Torres Strait Islander health professionals will have the opportunity for leadership development in health policy and practice thanks to a $10 million gift from leading Australian philanthropist, Greg Poche. By Elizabeth Brumby.

Despite advances in health care in recent years, Indigenous Australians face higher health costs and higher mortality rates and higher rates of preventable illness such as heart disease, kidney disease and diabetes than other Australians.

For Indigenous Australians born between 2005 and 2007, life expectancy is estimated to be 67.2 years for males and 72.9 years for females: around 10 – 11 years less than non-Indigenous people.

A $10 million gift to the University of Melbourne from leading Australian philanthropist Greg Poche will establish the University of Melbourne Poche Centre for Indigenous Health: a Centre that will provide training and development programs for emerging and established Indigenous leaders, and create academic pathways for Indigenous PhD candidates and postdoctoral fellows in health. The gift is part of Believe – the Campaign for the University of Melbourne.

Mr Poche, who has donated more than $115 million to causes around Australia, including over $40 million towards improving health outcomes for Aboriginal and Torres Strait Islander people, is the founder and former owner of Star Track Express.

Mr Poche and his wife Kay are committed to doing their best for Indigenous Australians.

"Improving the health and wellbeing of Indigenous Australians is one of our nation’s biggest challenges and it is vital that we do everything we can," Mr Poche says.

The University of Melbourne Poche Centre for Indigenous Health joins ‘aister’ Poche centres at the University of Western Australia, Flinders University and the University of Sydney. The goal of Poche centres around Australia is to contribute significantly to improved Aboriginal and Torres Strait Islander health and to reduce disparities in health outcomes between Aboriginal and non-Aboriginal people.

Associate Professor Shaun Ewen is the Associate Dean (Indigenous Development) at the faculty of Medicine, Dentistry and Health Sciences at the University of Melbourne. Professor Ewen says the gift is an investment in the future health of our nation, and will play a critical role in reducing health inequalities between Indigenous and non-Indigenous Australians.

"We know that well-managed Indigenous community-based organisations have delivered positive health outcomes for Indigenous people," Professor Ewen says.

We also know that some community-based organisations have not always been robustly managed, with a lack of leadership and governance at the core of this. We know, too, that in the past several years, around a dozen senior university leadership positions in Indigenous health across the country have been left unfilled – or filled by non-Indigenous academics.

To make real, long-term gains in indigenous health, we need leadership from highly skilled, well-qualified Indigenous people who are able to mobilise action and build an agenda for change in their areas of health practice.

The Centre’s training programs will have separate tracks for emerging and senior leadership. Themes of the emerging leadership program will include exposure to a breadth of career options, including clinical, public health and policy and research, and will provide emerging Indigenous health professionals with a platform to accelerate their influence and development.

The senior leadership program will draw participants from existing national leaders in Indigenous health, and will give leaders the opportunity to enhance their skills, develop their networks, and become key influencers across government, non-profit and research organisations.

"The mission of the University of Melbourne Poche Centre for Indigenous Health is to develop the next generation of Indigenous leaders. These leaders will influence the strategic directions of institutions, be mentors for emerging Indigenous leaders, build enduring partnerships and influence the health outcomes of Australia so that the gap in health status between Indigenous and other Australians is closed," Professor Ewen says.

Dr Misty Jenkins was the first Indigenous Australian to attend an Oxbridge university, and is a postdoctoral fellow in the Cancer Cell Death laboratory at the Peter MacCallum Cancer Centre. She has been mentored by Nobel-prize winning immunologist Professor Peter Doherty and ARC Future Fellow Professor Stephen Turner, and in 2013 was awarded a LeOraI Australia and New Zealand For Women in Science Fellowship.

After completing her PhD in Microbiology and Immunology at the University of Melbourne in 2007, and postdoctoral research in the UK, she worked with an Indigenous education body, the Aurora Project, to establish scholarships for other Indigenous postgraduates to attend these universities.

In order to help grow emerging Indigenous leaders in health, the University of Melbourne Poche Centre for Indigenous Health will provide opportunities for young Indigenous people to access and succeed in education. The Centre, together with the Faculty of Medicine, Dentistry and Health Sciences, will work towards achieving 20 new Indigenous PhD enrolments in health by 2020. To further build on this vision, a number of Poche Postdoctoral Fellows will be developed and supported – enabling early career Indigenous academics to become established, occupy positions of leadership and attract external grant funding.

Reflecting on her PhD at the University of Melbourne, Dr Jenkins describes the experience as, above all else, "empowering."

"My mother – a Gunditjmara woman from Western Victoria – always impressed on me the value of education in expanding one’s horizons," Dr Jenkins says.

"My PhD gave me the foundation for everything I’ve achieved since, and solidified in me that I wanted to be a scientist and researcher when I ‘grew up’. I learned not just to seize opportunities as they passed by, but also to create opportunities of my own."

"I was incredibly well supported throughout the experience and it was really that support – personal and academic – that has enabled me to grow so much professionally."

Dr Jenkins says she hopes the University of Melbourne Poche Centre for Indigenous Health will build on this culture of support for Indigenous PhD candidates, providing more opportunities for young people to accelerate their influence, growth and development as leaders in their field, whether it be clinical, policy or research-based. She says providing an opportunity for young Indigenous people to connect with national leaders and influencers in health is critical.

"What I learned during my PhD, and have learned over and over again since, is how important it is as a young person starting out to have access to mentors and leadership figures to look up to."

"I have a handful of very good mentors in my life, who work both within and outside the science field. Being able to access a network of leading figures in your field is really the pathway to becoming a better person and to becoming a leader yourself."

www.newsmelbourne.melbourne.edu/news/philanthropist-funds-indigenous-health-leadership
Setting the record straight

With its launch last month at the National Library of Australia in Canberra, a new online resource has shed light on how some of our female forebears assumed leadership, asserted influence and created change in a pre-Google era. By Gabrielle Murphy.

Shortly after the national launch of the new online Encyclopedia of Women and Leadership in Twentieth Century Australia, television audiences watched as the Melbourne Vixens took to the court to contest the 2014 grand final against the Queensland Firebirds in the trans-Tasman ANZ championship.

But it’s only relatively recently that this elite level of the most popular team sport played by women in Australia and New Zealand has been telecast live, or its star players widely known or recognised.

“Even at the most elite levels, stellar contributions by sportswomen have been little known and largely unrecognised,” says Patricia Grimshaw, professor of history and honorary fellow in the University of Melbourne’s School of Historical and Philosophical Studies.

“And that’s a situation replicated in most aspects and levels of society. Be it in the public areas of politics, business or sport, or in the private realm, women have been severely under-represented in the historical and contemporary record.”

Professor Grimshaw is chief investigator, with historian and colleague Joy Damousi, on an Australian Research Council Linkage grant of which the Encyclopedia of Women and Leadership is one of the significant publishing achievements. It includes over 600 individual and thematic entries focusing on women leaders of the 20th century, many of whom are not documented in existing online resources.

“The Encyclopedia seeks to fill the gap in our understanding of forgotten women from the public record and emphasises the range of areas in which women have made an impact,” Professor Damousi says.

“In this way, the Encyclopedia makes a distinctive contribution in identifying women whose achievements have not always been given a high profile elsewhere.”

According to the contributors, a key emphasis of this new online resource is the way in which women can exercise leadership that is different from that of men, but is no less effective, important or significant.

“Existing theories, drawn largely from the areas of business and management, take a narrow view of leadership,” says Shurlee Swain, leader of the Australian Catholic University’s Historical Research Concentration and co-editor (with Judith Smart) of the Encyclopedia of Women and Leadership.

“They position women within or in opposition to models developed by and for men. The Encyclopedia embraces a broader definition of leadership that eschews traditional hierarchical assumptions of what leadership entails, and highlights the significant contribution women have made at every aspect of society,” she says.

“Regrettably though, these different styles of leadership are often not recognised as such.”

Interestingly, retired Australian Rules footballer and self-proclaimed feminist, Luke Ablett recently joined former high profile coach David Parkin in publicly advocating for the appointment of qualified women into elite coaching roles. In so doing, Mr Ablett effectively endorsed the Encyclopedia’s wider definition of leadership and the qualities women bring to it.

“Apart from the basic principle of gender equality,” wrote Mr Ablett in The Age newspaper, “one of the great things about including women in any male-dominated workplace, including sport, is the diversity of skills, knowledge and experience they bring.”

Professor Damousi agrees that such public endorsements contribute to the wider understanding, acceptance and recognition of women’s skills and leadership qualities that a publication like the Encyclopedia aims to promote.

“If sportsmen come out in support of women’s sport, then all the better,” Professor Damousi says. “What a publication like the Encyclopedia of Women and Leadership does is provide research-based material which supports and enhances women’s key roles and ongoing participation.”

Professor Grimshaw’s linkage grant brings together researchers from the Australian Catholic University, the Australian National University, Griffith University and the University of Melbourne and Linkage partners from the Australian Nursing Federation, the Museum of Australian Democracy, the National Archives of Australia, the National Film and Sound Archive, the National Foundation for Australian Women and the National Library of Australia.

www.shaps.unimelb.edu.au
www.womenaustralia.info/leadership
The biggest sporting event in the world has come to an end, for now. The winners are basking in the glory of being world champions for the next four years, and the many, many losers are heading home, some with their heads held high, many with their tails between their legs.

The party is over and, once the buzz wears off, many Brazilians may soon be asking, was it worth it?

Earlier this year, Russia hosted the most expensive sporting event in history. The Sochi Winter Olympics cost an estimated US$55 billion, more than the US$40 billion China reportedly spent on the much larger 2008 Beijing Olympics. The Brazil World Cup looks like a bargain in comparison, but at an estimated cost of US$10 billion, it is probably the most expensive World Cup in history.

"It's ludicrous what Russia spent on Sochi," says Professor Richard Tomlinson, Chair of Urban Planning at the University of Melbourne.

"Normally [in the bidding process] you have two cities bidding and consequently these are the conditions under which we're going to bid."

"So Los Angeles was able to keep costs down and make some money," Professor Tomlinson says.

More recently, competition between potential host cities has been fierce, and bidders have been accused of using legally, ethically and economically dubious means to woo votes. Often the accused of using legally, ethically and economically dubious means to woo votes. Often the accused of using legally, ethically and economically dubious means to woo votes. Often the accused of using legally, ethically and economically dubious means to woo votes.

But even though these events almost never run at a profit, Professor Tomlinson says the hosts are still able to see economic gains from these events, citing the "Barcelona model" as an example of a mega-event having a positive impact, at least at the local scale.

"Barcelona went US$6 billion into debt when they hosted the 1992 Olympics, but most of that was paid back by the city and local provincial governments, rather than the city itself.

"It's interesting. There are ways to play the game."

Recent mega-events have largely been located in what Professor Tomlinson terms the BRICS, the developing economic powerhouses of Brazil, Russia, India, China and South Africa.

"In the BRICS, economics is a secondary consideration," he says. "When I speak with officials and politicians in Brazil and South Africa they all say the same thing. They feel they need to prove themselves to the USA; they need to show that they can 'do it.' It's like a cultural inferiority complex." Professor Tomlinson says, "Which is ironic because the Atlanta Olympics were just the worst – there is hardly a need for countries to prove themselves against that."

Professor Tomlinson says this inferiority complex is a common theme among the BRICs, although China is a different case. "The communist party has to have a parade of nationalist events. That's how it builds its legitimacy." Beyond the flexing of BRICS economies, however, sport remains big business. Statista.com estimates that the global sports market revenue in 2013 was US$130 billion.

In the game of leagues, the NFL (National Football League) in the USA rules from its gridiron throne, with US$9 billion in revenue last year. The pretender to the throne is the English Premier League, with revenue of about three billion pounds sterling (US$5 billion).

In the game of teams, Spanish football team Real Madrid rules an empire valued at US$3.3 billion, with revenue of US$650 million per year, according to Forbes.com. Their star player, world footballer of the year Cristiano Ronaldo earns an estimated US$80 million per year.

In Australia, the crown belongs to the AFL, who last year reported revenue of US$163 million. The NRL ran second with revenue of US$314 million.

"But where does all of this money come from?"

Professor Borland says historically financial support from fans and spectators was really important, but over time broadcast rights have become much more important as have sponsorship and merchandising.

According to Statista.com, of the US$130 billion total revenue in the global sports market in 2013, US$40 billion was sponsorship, US$40 billion came from gate revenues, US$30 billion from media rights and US$20 billion from merchandise.

Regardless of where the money comes from, ultimately, to attract revenue, a sporting competition has to appeal to the fans.

"We think of competitions that appeal to the fans probably having three main features," Professor Borland says. "If you're a fan, you want a better team than your team winning, you want to see the best quality competition you can and over time you want the degree of balance in the competition.

"You want your team to win but you don't want it to be too unbalanced. You want over time some churning in the teams that make the playoffs, and some churning in the teams that are champions.

"In the successful North American and Australian competitions, competitive balance is maintained through 'equalization' measures such as caps on player salaries, drafts that benefit the worst performing teams and 'profit taxes' that redistribute wealth.

In Europe, however, typified by the English Premier League, there are few restrictions on what teams can spend on players, and the richest clubs dominate year on year.

Since 1992, when the English Premier League launched, only five teams have won the title, and Manchester United has won an astonishing 13 times. Over the same period 14 different AFL teams have won the Superbowl and 11 AFL teams have been premiers.

Professor Borland says that even though the European leagues lack balance, they maintain interest throughout the season because of the promotion-relegation system, whereby teams at the bottom of the ladder are relegated to a lower league and teams at the top are promoted to a higher league.

"You can be the worst performing team in the division but your fans could still have a lot of interest in your matches towards the end of the season. You've got a lot to play for, the matches are meaningful, in terms of whether you can stay in that top division or not."

The public health challenges of advertising in sport

Alcohol, junk food and gambling industry sponsorship of sport could soon go the way of tobacco sponsorship if public health advocates get their way, reports Daryl Holland.

The Tobacco Advertising Prohibition Act 1992 bans tobacco companies from advertising their products in Australia.

Are we heading towards similar bans on other ‘vices’?

"Australian sportspersons have become ambassadors for junk food, alcohol and gambling, as they used to be for tobacco," says Rob Moodie, Professor of Public Health at the University of Melbourne.

He explains that even before the tobacco ban came into place, cigarette advertising had largely disappeared thanks to a hugely successful initiative of the Victorian government.

"In 1987 the Victorian Health Promotion Foundation (VicHealth) was established using funds collected from a tax on tobacco products. VicHealth used this money to buy out tobacco sponsorship of sports and the arts, and tobacco advertisements were replaced with public health messages. So the Winfield Socceroos became the Quit Socceroos," he says.

Professor Moodie, who is a former chief executive officer of VicHealth, calls the ‘no reason’ why a similar model couldn't be used to replace promotion of alcohol, junk food and gambling.

It’s already happening to some extent with alcohol. The National Preventative Health Agency's 'In the Influence – Tackle Binge Drinking' campaign has signed up 16 major beer companies. VicHealth has long-standing sponsorship arrangements with beer companies.

As we farewell World Cup 2014, Daryl Holland looks at the business of sport: individuals earning tens of millions for kicking a ball around, and mega-events costing billions but never turning a profit. Where does all the money come from and what defines a successful competition?
Matching up: tennis meets art for Basil Sellers prize

VCA alumnus Rob McHaffie is among the 16 artists competing for the 2014 Basil Sellers Art Prize. By Katherine Smith.

I wasn’t built for football so Mum took me each week to the local tennis club on Saturdays to smash the furry green balls around,” says Melbourne artist and VCA alumnus Rob McHaffie.

More interested in the clubroom lamingtons and pikelets, he says while they “sustained me for a few years it wasn’t long before before mum gave up on pushing tennis, and I pursued skateboard-ing thereafter.”

The VCA School of Art 2002 graduate is glued to the TV come January every year however, watching the Australian Open with poor Li Na, who kept falling on a weak ankle – these are fascinating watching Victoria Azerenka having a hissy fit to stall the match, and poor Li Na, who kept falling on a weak ankle – these are

“Tennis has been a fixture of my life since I was a child. I grew up in a tennis-playing family and was always surrounded by the sport. It’s become a central part of my identity. The game is something I’ve always loved and it’s something I’ve been passionate about. It has given me so much joy and I’ve always found it to be a source of comfort and inspiration.”

McHaffie’s impression of Serena Williams

VCA School of Art 2002 graduate is glued to the TV come January every year however, watching the Australian Open with poor Li Na, who kept falling on a weak ankle – these are fascinated watching Victoria Azerenka having a hissy fit to stall the match, and poor Li Na, who kept falling on a weak ankle – these are some great tennis moments that have stayed with me.

“My work sets about deconstructing and reconstructing these familiar blue of the court.”

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“The theme of sport allows for the exploration of endless issues and artistic possibilities and provides numerous opportunities to challenge existing preconceptions about both sport and art.

“We are expecting this 4th Basil Sellers Art Prize and exhibition will surprise, delight, perplex and entertain and that it will encourage us all to think differently about our national obsession and its connections to and relationship with the arts.”

The prize is supported by Basil Sellers AM, a businessman, philanthropist, well known collector of art and a sports enthusiast who spends his time between Australia and Europe. The Basil Sellers Art Prize aims to encourage artists to engage with sporting culture and to develop their practice through reflection on sport and culture in Australia.

The Basil Sellers Art Prize exhibition will open at the Ian Potter Museum of Art, University of Melbourne, on 22 July and run until 26 October 2014, with the winner announced on Friday 25 July, 2014.
literally hundreds of thousands of items have wended their way over time and distance to find a safe home in the University of Melbourne’s Collections. Here they are conserved, preserved and treasured for their own beauty or inherent value, but also as tools for learning, teaching and research. The forthcoming biennial Cultural Treasures Festival allows audiences to get up close to some of the treasures that make up the University’s 33 unique collections.

The power of Melba’s pitch
Melbourne has had a long association with cultural icon Helen Mitchell – better known as the flamboyant and notoriously difficult operatic soprano Dame Nellie Melba - who wowed audiences through the late Victorian era.

A stunning portrait of her by Baron Adolphe Proust is part of the University of Melbourne’s Grainger Collection and graces the foyer to the Melbourne Conservatorium of Music on the Parkville campus: the glamorous, almost regal, diva in full glory (below).

The less well-known connection is the collection of European pitch musical instruments she donated to the University, as well as a full set of tuning forks that now reside in Melbourne’s Physics Museum. Three of the instruments are currently on show in the Grainger Museum.

The University of Melbourne Library is excited to announce a two-week exhibition of the Gutenberg Bible as part of the 2014 Rare Book Week, Cultural Treasures Festival. The Bible, which is on loan from The University of Manchester’s John Rylands Library, was printed ca. 1455 and is the first substantial book to be printed in the western world using movable type.

Public Exhibition
Friday 18 to Sunday 27 July 2014, 11.00am to 5.00pm daily
Ground Floor, Baillieu Library, The University of Melbourne

The Ormond Professor of Music at the time Professor Peterson and Elie Love, lecturer in music, even held discussions with the University’s Victorian and National Education Minister Mr Sanchse about the standardisation of orchestral pitch. A need to sing too high, he says, “and toward variation of pitches, which caused Melba to standardising the pitch of music to create consistency.”

Dame Nellie donated £50 in 1907 for the purchase of a set of reference tuning forks (set to standard pitch) to be tested at the University in the hands of Natural Philosopher’s Professor TR Lyle.

“The Ormond Professor of Music at the time Professor Peterson and Elie Love, lecturer in music, even held discussions with the University’s Victorian and National Education Minister Mr Sanchse about the standardisation of orchestral pitch. A need to sing too high, he says, “and toward variation of pitches, which caused Melba to standardising the pitch of music to create consistency.”

Handmade to very high tolerances, the watch’s movement uses rubies as jeweled bearings, employs a bi-metallic balance (laminated metals that expand and contract at different rates) to compensate for fluctuations in temperature, and a Breguet overcoil hairspring to maintain even force from the mainspring as it winds down.

A little piece of Mt Buffalo in Parkville decades later, after Dame Nellie’s tuning forks were purchased, Australian botanist Percival St John was commissioned to make a collection of plants from the Mt Buffalo plateau in north-east Victoria.

This became the Grinnalde Plant Collection, now housed in the University’s Herbarium.

In 2006 a grant from the Mignayun Foundation to the School of Botany allowed this project to be revisited, beginning with relocation, curation and cataloguing of the original collection.

“Of the most interesting elements of that project was the collection of a new set of plants from Mt Buffalo, National Parks of Melbourne Botanical director Dr Gillian Brown.

“A total of 226 species of plants were collected for the Mignayun Mt Buffalo Collection during collecting trips made from April 2006 to January 2007.

“The revised list of vascular plants (which conduct water and minerals through plant tissues from the ground) in the Mt Buffalo National Park now includes 617 species, subspecies and varieties.”

There were 129 new additions to the list made during the course of the study, which is important new information about that area’s floral environment and which will inform conservation practices into the future,” she says.

Researchers on the Mignayun Mt Buffalo Collection project also gathered duplicate sets of specimens, which are housed at the University of Melbourne Herbarium. The other resides at the beautiful and iconic Mt Buffalo Chalet.

The Cultural Treasures Festival runs Saturday 26 and Sunday 27 July. All museums and exhibition spaces will be open to the public. www.unimelb.edu.au/culturalcollections/ treasuresfestival/
On the MAP: Start-ups boosted by unique funding program

Chris Weaver explores a leading program supporting innovative young businesses to get off the ground.

A program supporting budding entrepreneurs is growing from strength to strength. Launched in 2012 as a University of Melbourne-led initiative, the Melbourne Accelerator Program (MAP) is already helping more than 15 startup businesses gain the investment and mentorship needed to progress revolutionary projects through Entrepreneurial Fellowships.

Its rapid impact has been recognised internationally, with MAP last month named a global leader in the only worldwide survey of its kind.

The UBI Index – a Swedish research initiative comparing business incubators – ranks MAP 13th in the only worldwide survey of its kind.

The program comprises a startup accelerator, where the top startup business ideas on campus are offered $20,000 funding, office space, mentoring, and investor trips to Sydney and California's famed Silicon Valley.

More information is available at gifts made to MAP are representative of the Campaign’s commitment to supporting ingenuity, inven-
to transform the culture of entrepreneurship at the University, making it a globally-renowned hub for
helping young businesses get off the ground. The UBI Index – a Swedish research initiative comparing business incubators – ranks MAP 13th in the only worldwide survey of its kind.

MAP began as the brainchild of two Melbourne faculties – the Faculty of Business and Economics (FBE), and the Melbourne School of Engineering – wanting to encourage ingenuity and collaboration among ambitious entrepreneurs.

The program comprises a startup accelerator, where the top startup business ideas on campus are offered $20,000 funding, office space, mentoring, and investor trips to Sydney and California's famed Silicon Valley.

MAP realises that many staff and student ideas are embryonic and not ready for its accelerator program, so provides these ambitious entrepreneurs valuable up-skilling and connections through public forums, master classes and two dedicated feeder programs.

Rohan Workman, MAP Manager, intuitively understands the concept. His experience in starting his own HR management software business affords him rare insight into the challenges faced by young entrepreneurs. He says the University invests in startups because it believes Australia must have a knowledge-based economy.

"It is through innovation that we can create jobs and solve the problems facing both the Australian and international community,", he says.

"The University of Melbourne already has a track record in excellent research – now we are looking to take that one step further and demonstrate our ability to commercialise cutting-edge research.

"The program’s strength lies in its diversity. Resourced projects include a colour matching device (SwatchMate), an online publishing platform for legal professionals (Ebla) and Australia’s leading catalogue shopping iPad app (Bluesky).

MAP’s flourishing startups also include a range of medical projects with the potential to profoundly impact people’s lives. In 2013, 2Mar Robotics (who design, manufacture and sell wheelchair-mounted robot arms for people with quadriplegia) and Cortera Neurotechnologies (a company revolutionising the diagnosis and treatment of intractable neurological conditions) received MAP funding and support through Entrepreneurial Fellowships.

Cortera's subsequent success epitomises MAP’s dream. The company is collaborating with University of California, San Francisco researchers on a brain circuitry project backed by US President Barack Obama’s BRAIN Initiative.

One of 2014’s six Fellowships will be awarded to Quanticare Technologies, whose first product is a sensor system for walking frames.

Using camera technology, Quanticare’s walking frame sensors will track deterioration in walking quality. That data in turn helps medical professionals analyse and determine the action required to prevent often catastrophic falls for the elderly.

Quanticare’s CEO, Melbourne alumnus Phil Goebel, credits MAP with being involved in this project from inception. Keenly interested in personal tracking technology, Mr Goebel’s idea settled during MAP’s intensive three-day feeder program, Startup Velocity.

"The Velocity program allowed me to develop a basic idea into a product pitch very quickly," he says.

"That experience and the connections I made allowed me to get more technical people involved in what became the walking frame project."

Mr Goebel says MAP’s Entrepreneurial Fellowship will grant him time, money, mentors and the networks required to make Quanticare’s tracking technology successful. He works three days a week as an aged-care physiotherapist, which thanks to the MAP funding will be down to two days from July.

"There is a clear path ahead, but our work is draining," he says.

"Not being able to work on the walking frame sensor project full time slows down prototype development, so MAP is helping alleviate that problem.

MAP’s support also validates such projects in the eyes of potential investors. Mr Goebel credits MAP with increasing Quanticare’s networks and product testing capabilities.

"Our funding hasn’t begun yet, but already MAP’s support means we benefit in other ways," he says.

"The Fellowship announcement resulted in attention and legitimacy that now ensures we are treated seriously by the medical community.

Part of the University’s Carbon Connect Initiative, MAP’s ambition is impressive – the organisation aims to transform the culture of entrepreneurship at the University, making it a globally-renowned hub for creativity and innovation.

MAP currently receives funding from five of the 10 University faculties, but is looking to upscale its proven model and expand the program. It seeks further philanthropic and corporate support, such as the generous donations already received from several FBE and Engineering alumni.

Programs like MAP are indicative of the University’s desire to solve some of the world’s grand challenges outlined through Believe – the Campaign for the University of Melbourne. All philanthropic gifts made to MAP are representative of the Campaign’s commitment to supporting ingenuity, inven-
tion and collaboration.

More information is available at http://map.eng.unimelb.edu.au.

To support MAP:
http://go.unimelb.edu.au/5hmn
www.campaign.unimelb.edu.au

What can Brazil’s favelas teach us about future cities?

T hey’ve been featured in everything from movies like City of God to computer games as popular as the Call of Duty franchise. But could Brazilian favelas – the sprawling, urban slums found throughout the country – teach us how to improve our cities?

Associate Professor Justyna Karakiewicz thinks so. Based in the Faculty of Architecture, Building and Planning, Associate Professor Karakiewicz believes that city planners are too pre-determined in their approach.

"More than any other urban area, favelas are widely regarded as being the most flexible and adaptable in their operation and use. This is a desirable trait, as cities are constantly changing from the moment they become inhabited, even if they are designed as ‘perfect objects’ to begin with," she says.

"Nature is not perfect, it is inherently designed to change and adapt. In not easily allowing change, we are making cities less resilient for the future."

Associate Professor Karakiewicz and Dr Michael Kirley from the Melbourne School of Engineering will join with colleagues at São Paulo’s University of Campinas (UNICAMP) to closely model the complex adaptive systems inherent in Brazil’s favelas. They’re hopeful that in doing so, they can better articulate what makes them such a dynamic environment.

The favela seems to have this ability to reconfig-
figure itself based on needs,” Associate Professor Karakiewicz says. “They are not over-designed or pre-determined. The separation between public and private spaces is not as strict, allowing for strong adaptation between the two – a washing line strung across the road for example, or a public workshop operating out of a private house.

"In many ways they are the epitome of affordable living, being located in a place that allows residents to be entrepreneurial and have access to ways of making a living. Contrast that with what we have here in Australia; when we set up affordable housing, we’re often putting it in areas where it’s very difficult for people to access work and the cost of living is not affordable."

The favela project was one of four to receive grants under a scientific co-operation program.
NCDFREE, a global social movement against non-communicable diseases, is bringing together young change-makers through global health advocacy ‘bootcamps’ around the world — starting in Melbourne. By Elizabeth Brumby and Maddison Connaughton.

N on-communicable diseases, or NCDs, are conditions that cannot be caught by one person from another. Together, this group of diseases — which includes diabetes, cancer and heart disease — is the leading cause of death in Australia.

Founded by brothers Sandro and Giuseppe Demaio after a successful online fundraising campaign through the crowdfunding platform Indiegogo, NCDFREE launched at the University of Melbourne Festival of Ideas in 2013. NCDFREE aims to change the way society perceives non-communicable diseases and inspire a new generation of young, community-level change-makers.

“First, we’re hoping to connect the next generation of changemakers with community leaders from across different sectors, including law, health, policy, design, architecture and more. Next, we want to help these people build their skills in innovation thinking, leadership and advocacy. Finally, we aim to crowdsource new solutions and ideas from these bright young minds for our own NCDFREE campaign,” says Professor Strugnell.

The Melbourne NCDFREE bootcamp ran at the Melbourne Convention and Exhibition Centre for two days in May, bringing together 50 young people with leaders in health policy and other fields.

“Speakers included Dr Duncan Mathieka, Chair of the Kenyan Chapter of Young Professionals Chronic Disease Network (YP-CDN), social entrepreneur Simon Griffths of non-profit bar Shebeen and Who Gives a Crap, and Lucy Richards from The Smiling Mind, a program that uses mindfulness meditation to improve the lives of young Australians,” says Professor Strugnell.

On the second day, bootcamp participants were revitalised through a power yoga session before splitting into groups to tackle a global health challenge. Topics included climate change, mental health, urban planning, alcohol and public transport. Each group was charged with creating a campaign pitch that would engage the Millennial Generation in bringing about lasting social change — all in just two hours.

After the pitches were presented, the judging panel decided that the appropriately named “Smirnoffs” had won the day with their campaign ‘Breaking up with Alcohol.’ The pitch cleverly used pop culture references and humour to communicate their powerful message and start a conversation about our relationship with alcohol.

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Health communication professional Penny Moodie co-ordinated the bootcamp together with University of Melbourne students Lilli Morgan and Mats Junek. Ms Moodie said the initiatives led by NCDFREE have inspired her and other young people to use their passion and talents to fight major health issues.

Ms Moodie, who completed a Master of Global Media Communication at the University of Melbourne earlier this year, is committed to making a difference to societal inequities through effective communication. In addition to her active involvement with NCDFREE, Ms Moodie is completing an internship with the International Union for Cancer Control in Geneva, Switzerland.

Cancer is one of the world’s leading NCDs and over 70 per cent of all cancer cases worldwide occur in low and middle-income countries, posing an enormous public health and economic burden.

“A global problem requires a global solution and multi-sectoral partnership and collaboration. This is the only way we will be able to drive generations to change a world that is free of NCDs,” says Ms Moodie.


“Bootcamp for health advocacy change makers 

agreement between the University and the São Paulo Research Foundation (FAPESP). The agreement, first announced in 2013, provides funding for researchers in both countries to undertake collaborative exchanges.

It is expected there will be five rounds of funding provided, to support up to 25 new research collaborations.

Professor Dick Strugnell, Pro Vice-Chancellor (Graduate Research) says the range and quality of applicants for the inaugural round of grants was very pleasing.

“As the first joint program with an Australian institution, the scheme demonstrates that there’s strong interest in both research communities to study vaccines, to investigate the effects of tick bites on the local immune response. Professor Strugnell says all the grant recipients are working in areas where there is great social need.

“Brazil is a priority for the University under the Research at Melbourne strategy ‘Ensuring Excellence and Impact to 2025’. São Paulo is the leading location for research in Brazil and FAPESP has played a critical role in the development of this capacity,” he says.

“The relationship with FAPESP is therefore critical to our ambitions for stronger research and research training links with Latin America.”

The full list of successful proposals is available at http://www.fapesp.br/en/8676

JULY

THE UNIVERSITY OF MELBOURNE

Bootcamp for health advocacy change makers

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Interventions.

Andi Horvath finds out why koalas are better off left alone, protected from habitat loss and other harmful human interventions.

HAVE YOU EVER WONDERED?

Wildlife surveys have driven the decision to list Australia’s favourite icon, the koala, as vulnerable in several states and territories (Qld, NSW and ACT).

So could we embark on a civic duty program to adopt these cute, cuddly, sleepyheads into our backyards and local reserves?

Unfortunately for us, the science says no.

Dr Kath Handasyde from the Department of Zoology has been researching the ecology, management and diseases of Australian native mammals for over 35 years, and says, fundamentally, the reason koalas aren’t suitable as pets relates to issues of diet.

“Unlike our urban brushtail possums, which have a flexible diet, koalas are fussy, feeding on a very limited number of eucalypts, so they need to live in forests or woodlands containing their preferred trees,” she says.

“Urbanisation and habitat removal have precipitated koala population collapses in some areas because there simply isn’t enough habitat remaining for viable populations. In urban areas habitat also becomes fragmented, forcing koalas to move between patches, causing many animals to perish in road accidents or become the victims of dog attacks.

“In south-eastern Australia some local koala populations in isolated habitat patches can grow rapidly and literally eat themselves out of house and home, eventually killing their food source, although this most commonly occurs in populations where mortality is quite low,” Dr Handasyde says.

“Australia-wide, habitat loss and fragmentation are the greatest threats to wild koala populations.”

And even though we humans may find koalas fascinating and adorable, the feeling is not necessarily reciprocated.

Dr Jean-Loup Rault from the University’s Animal Welfare Science Centre says research conducted at Phillip Island Nature Parks’ Koala Conservation Centre showed too much interaction with the public could disturb koalas’ normal daily activities.

“Our study tested the effect of visitor numbers, visitor noise, and visitor proximity on koalas and showed that up-close and noisy encounters with human visitors resulted in increased vigilance. Such disturbance could cause stress, which would be energy-costly and potentially problematic because koalas survive on an extremely low energy diet, even minimising energy expenditure by sleeping 20 hours a day.

“Some wildlife parks offer close encounters or even hands-on experiences with koalas, but only now are we beginning to understand the impact of these visitor encounters on koalas’ behaviour and welfare.

“The koalas we see being handled by visiting members of the royal family, for instance, seem calm and cute but these animals have trained handlers.

“The general public should remember koalas are wild animals, with sharp teeth and claws, and can inflict serious injuries,” Dr Rault says.

Dr Natalie Briscoe from the University’s School of Botany and Department of Zoology is also researching koala behaviour, and in particular their response to extreme temperature conditions.

“Drought, bushfires and extreme temperatures can also put stress on koalas populations,” Dr Briscoe says.

“Our research looked at how koalas cope with extreme heat. While panting and licking their fur during hot weather helps koalas cool down, this can also lead to dehydration. Our thermal imaging data revealed koalas cope with extreme heat by hugging cool tree trunks. We found the trunks of some tree species can be over five degrees Celsius cooler than the air.

Resting against cool tree trunks can save about half the water a koala would need to keep cool on a hot day, which significantly reduces the amount of heat stress they experience. Cool tree trunks are likely to be an important micro-habitat for animals under current and future climate scenarios,” she says.

www.zoology.unimelb.edu.au/

Visions mini documentaries

The latest Visions episode explores the culmination of a two year creative process to develop the new Victorian College of the Arts musical theatre project A Little Touch of Chaos, which could become the next major stage hit.

A contemporary tale exploring themes of identity, familial ties and inherited ideologies and smashing the ties that bind, the show will be launched at the newly refurbished Giant Street Theatre at the VCA on July 18 by the Victorian Minister for the Arts Heidi Victoria.

The VCA New Work Music Theatre Project is made possible with the support of the Victorian Government Through Arts Victoria.

Available at visions.unimelb.edu.au or via iTunes Store.

Organ on a chip: How 3D models of living tissue are changing biomedical research

Bioengineer Professor Donald Ingber discusses how three-dimensional models of living human organs can advance our understanding of human physiology in ways that animal models can’t.

Presented by Dr Dyani Lewis.

Professor Donald Ingber is Founding Director of the Wyss Institute for Biologically Inspired Engineering at Harvard University, the Judah Folkman Professor of Vascular Biology at Harvard Medical School & Boston Children’s Hospital, and Professor of Bioengineering at the Harvard School of Engineering & Applied Sciences.

Risky business: Corporations and their behaviour in conflict zones

Political scientist Professor Virginia Haufler explains how business corporations can reduce the negative impacts of their presence, and even build resilience in the communities and countries in which they operate.

Presented by Lynne Haultain.

Professor Virginia Haufler is based at the Department of Government and Political Sciences, University of Maryland

Online now

When win-win lost: Business values and the myth of Corporate Social Responsibility

Business ethicist Professor Peter Fleming critically examines the concept of Corporate Social Responsibility (CSR) and concludes, that in practice, CSR is tragically compromised.

Presented by Elisabeth Lopez.

Professor Peter Fleming is Professor of Business and Society at Cass Business School at City University London

Online 18 July

Screening along the spectrum: The search for a genetic test for autism

Neuropsychiatrist Professor Chris Pantelis and neural engineer Professor Stan Skafidas discuss the potential for the use of genetics to improve the diagnosis of autism.

Presented by Dr Shane Huntington.

Professor Chris Pantelis is Professor of Neuropsychiatry and Scientific Director of the Melbourne Neuropsychiatry Centre at the University of Melbourne and Melbourne Health.

Professor Stan Skafidas is Professor of Neural Engineering at the Department of Electrical and Electronic Engineering, leads the Melbourne School of Engineering’s research in nanoelectronics and is the Director for Centre for Neural Engineering.

Online 25 July
Bach’s Mass in B minor: the most celebrated of all Bach’s vocal works

Masters student Andrew Frampton, who is working with musicology Professor Kerry Murphy to develop a forthcoming Bach symposium, explains the significance of Bach’s Mass in B minor ahead of its much anticipated MSO performance in Melbourne in August.

It has been called ‘The Greatest Musical Artwork of All Times and All Nations’, an ‘opus summum’, and a crowning musical achievement of the Baroque era. And yet, Johann Sebastian Bach’s Mass in B minor remains an enigmatic work, a towering monument of Western art music that in its length and scope far outstrips anything else that had been previously written in the genre.

A work of sublime beauty, intense emotion and perfect construction, and one that continues to fascinate scholars, performers and audiences alike, at its time of creation it had no explicit purpose or performance context.

For a long time, musicologists thought the B minor Mass had been written entirely during the 1730s, when Bach had already completed the majority of his church cantatas and was turning his attention to other types of vocal music.

In fact, the work in its final form dates from the last years of Bach’s life, around 1748-49, but it had a far longer gestation, for much of the piece is made up of independently conceived compositions that were then later revised and incorporated into the final work.

For example, the Sanctus (the third of the four major parts of the complete Mass) began life as a separate setting for use in the Leipzig churches on Christmas Day 1724. Another of these individual pieces was a Missa (the first of the parts) that Bach composed in 1733 for presentation in Dresden to the new Elector of Saxony. His dedication letter to the Elector referred to it as a “small work of that science which I have advanced in music”.

Exactly why Bach decided to expand the Missa into a complete mass setting remains uncertain. He had long been fascinated with Latin Church music, and had already written several short pieces in the genre, but there would have been no place for a complete Latin mass setting in a Lutheran church service, and in any case, the sheer length of the final composition (over two hours) would have made a complete performance in a liturgical context very unlikely.

Did Bach perhaps view the B minor mass as a kind of personal artistic legacy? Certainly, part of the appeal for him seems to have been that the text is not tied to an expressly Lutheran doctrine, but rather transcends theological boundaries. This made the Mass a truly ‘universal’ sacred work that could speak to the widest possible audience.

In its final 27-movement form, the Mass in B minor represents a complete synthesis of all the major kinds of vocal writing of Bach’s day. It encompasses music for every type of solo voice and complex choral textures for four to eight voices; it showcases the Baroque orchestra to its maximum effect and features representative solo instruments of all kinds; and it spans a vast range of musical styles and compositional techniques, from old-style strict part-writing to the most modern musical language. It draws on music written over a period of more than 25 years, and therefore represents in many ways the pinnacle and summation of Bach’s formidable vocal output.

On 7, 8 and 9 August, the Melbourne Symphony Orchestra will perform Bach’s Mass in B minor. In anticipation of this event, and in honour of the visit to Australia by one of the world’s most renowned Bach scholars, Professor Christoph Wolff, the Melbourne Conservatorium of Music (in association with the Australian Bach Society and St Johns Lutheran Church) will be hosting a symposium titled ‘Bach Studies in Australia’, as part of the Melbourne Bach Forum.

The symposium will showcase the very best of Bach scholarship from across the country, and feature concert performances of music by Bach, his family and his contemporaries. The highlight will be a public lecture on Friday 25 July given by Professor Wolff on ‘Johann Sebastian Bach in Leipzig’, where he will address general aspects regarding this period in Bach’s life, including a context for the Mass in B minor, this most universal and celebrated of all Bach’s vocal works.

WWW.MELBOURNEBACHFORUM.COM

Opera students put on a performance for all children

Melbourne opera students have helped introduce young audiences with special needs to the world of opera. By Stuart Winthrop.

Students from the Master of Music (Opera Performance) course have performed a ‘relaxed’ production of Hansel and Gretel, designed to make the opera accessible to children with sensory and communication disorders.

Relaxed performances welcome children with learning disabilities, Down syndrome, autism spectrum conditions and other disorders that may cause them to find regular opera performances difficult or intimidating.

There is a relaxed attitude to audience noise and movement, and some changes were made to the lighting and sound effects.

The cast began the opera by introducing themselves and their characters and an on-stage narrator led the children through the more frightening parts of the performance.

The opera students also adapted their performances. The house lights were on and they could see the audience.

The cast performed the opera entirely in German, and the narrator helped explain the story.

This is the first time Victorian Opera has run a ‘relaxed’ performance. Student and mezzo-soprano Emma Muir-Smith, who played Hansel, says the reaction from the audience made the performance incredibly rewarding.

“The kids were just wild and loved it; they were laughing their heads off,” she says. “It’s so nice to give a performance that you know is really appreciated and really makes a difference.”

Ms Muir-Smith’s fellow student, tenor Michael Petruccelli played the Sandman, the sleep fairy who puts Hansel and Gretel to sleep.

He says he loved the children’s unrestrained reactions to the music and acting.

“It was a beautiful and fresh thing, especially in opera,” he says.

“It’s amazing how the fresh and overtly positive reaction from the audience led our confidence in our performances to skyrocket, and we had the confidence to do so much more within our characters on-stage.”

Ms Muir-Smith says the relaxed performance meant in some ways the performers could interact with the audience more than normally.

“When we stop the performance to have a bit of narration, we come out of character and it’s Emma and Cristina (soprano Cristina Russo) on-stage instead of Hansel and Gretel,” she says.

“It can be jarring as a performer, but I think it really does engage the audience in a very different and intimate way that you don’t have the opportunity to do in a regular performance.”

Mr Petruccelli says the increased emphasis on engagement with young audiences gave the actor the opportunity to practise the non-vocal aspects of their performance.

“A lot of the time opera is based on the voice and acting is left by the wayside, but this has been a great avenue to push myself as an actor.”

Following the relaxed performance, the cast ran twice-daily shows for school groups at the Art Centre’s Fairfax Studio.

For these shows illustrative storyboards explained the story in place of the relaxed performances’ narrator, rather than traditional opera surtitles.

Victorian Opera Education and Community Engagement Manager Melissa Stark says Hansel and Gretel is an important part of the company’s education program.

“It provides many children with their first experience of the artform, while also being a learning experience for our performers,” she says.

The production was run by Victorian Opera, as a co-production with Arts Centre Melbourne.

WWW.VCA-MCM.UNIMELB.EDU.AU
Finding majesty in the earth’s dynamics

Mike Sandiford (centre) in the field.

Andi Horvath speaks to earth scientist Professor Mike Sandiford about his career researching, learning and teaching about the ground beneath our feet.

In some circles, Mike Sandiford is known as the scientist who started Australia talking about geothermal energy; others know him better as the earthquake expert.

Professor Sandiford is also one of the visionaries who will lead all the energy-related researchers at the University of Melbourne into the Melbourne Energy Institute, yet he sums himself up as the “accidental scientist”.

“I seem to change earth science disciplines every five years,” he says.

“I started research in ancient Antarctic rocks that originated deep in the earth and now I work up a bit of economics, engineering and policy strategy to allow the science to inform public decision-making.”

In such a new field, harnessing the energetics of our earth or, put simply, the geology of Australia’s hot rock province to understand what may be done about it to prevent this landslide disaster of last year where thousands of people perished in a high Himalayan valley.

“We wanted to understand why it happened and what may be done about it to prevent this sort of catastrophe in the future. Science can contribute to helping people live more safely in these high-risk areas. For example, in earthquake areas while we can’t predict precisely when and where quakes occur, we do know they occur with certain frequencies in certain areas. We can mitigate the risk for people by having things like appropriate building standards.”

“We are on this planet for such a short period of time and we tend to view the earth as a static feature,” he says. “Our local mountain vistas may not change much on human timetables, but it is actually a dynamic planet as we become aware of our dynamic planet, by its earthquakes, volcanoes and landslides. There are two sides to this dynamic activity. It actually makes our planet habitable by replenishing its soils. But it also makes for devastating natural hazards. An appreciation of the earth’s majesty and dynamics is somewhat humbling, and building our understanding of the earth’s resources and hazards is vital for future generations.”

Professor Sandiford’s current passion and motivation is in working to involve Australian geoscientists with the problems and opportunities in Asia, especially in places like Timor, Bhutan and Myanmar.

“Ours is the first geological and natural hazard maps in Timor Leste since independence and these will be important as it rebuilds its infrastructure. My students work with local professionals and students exchanging not only science expertise, but also invaluable life experience. My ambition is to set up a Graduate School in Asian geoscience. But I have an additional agenda; I take our students into Asia to also learn about different cultures, the issues of working in Asia in developing countries. In doing so, my students learn so much about how we come back better professionals and better people – better citizens of the world.”

Professor Sandiford was made director of Melbourne Energy Institute, which has attracted $32 million of funding for the University’s energy research programs. The focus of the Institute is to help Australia’s capacity for large-scale, low emission energy systems across the spectrum of science and technology, markets and policy.

Support for female genital cutting declining across Melbourne

Tolerance for female genital cutting (FGC) has decreased significantly among members of Melbourne East-African communities for whom the practice was culturally traditional, a new study from the University of Melbourne has found.

However the study also found women and girls in inner city Melbourne who had experienced FGC felt stigmatized and that they were not always listened to by health professionals.

Lead researcher Dr Cathy Vaughan said there were sizeable communities from countries where FGC was prevalent, including Eritrea, Ethiopia, Somalia and Sudan. The study — Listening to North Yarra communities about female genital cutting — was conducted in partnership with the Royal Women’s Hospital and co-hosted by the University of Melbourne’s Centre of Women’s and Sexual Health.

Female genital cutting involves the partial or total removal of the external genitalia of girls and women for non-medical reasons. There are no health benefits and there may be long-lasting physical and mental health issues for women and girls affected.

The study also found that though there was increasing knowledge about FGC among health professionals, women experienced inconsistency of care during childhood, with many women reporting they felt carers were not listening to them.

Report author Dr Cathy Vaughan, from the University of Melbourne School of Population and Global Health, said several issues were identified.

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The legacy of Aztec astronomy

Melbourne is University Partner in the current Melbourne Museum Aztecs exhibition. History and Philosophy of Science lecturer Dr Gerhard Wiesenfeld gave a public lecture about Aztec astronomy recently. Following is an edited extract.

**PUBLIC SPEAKING**

I f you look at the astronomy of the Aztecs, you will find something quite unusual. While for many other civilisations the night sky has been a source of stability and unchanging harmony, Aztecs were concerned about a lack of stability and the potential destruction of the world coming from the sky.

The Aztecs used a complex calendar system characteristic of Mesoamerican civilisations. It combined a count of 365 days based on the solar year with a separate calendar of 260 days based on various rituals. Every 52 years, both calendars would overlap and a new cycle would commence.

Unlike other civilisations, such as the Mayans, the Aztecs seriously considered the possibility that the world could be destroyed and recreated at the end of such a 52-year cycle.

Such cosmological understanding has far-reaching cultural and spiritual consequences. While the notion of the world's destruction (and recreation) is found in other cosmologies as well – whether it is in ancient India or in medieval Christianity – having such a recurring danger in periods comparable with human life spans is quite extraordinary.

Historians of Aztec astronomy nowadays speak of entire ritual landscapes in which not only cities were planned according to astronomical alignments, but in which the very location of major cities had been determined by their significance for rituals that were guided by astronomical observations.

By interpreting the complexity of their calendars, can have a quite a world view, in which different deities act in different ways, often opposing each other and leaving the fate of humanity depending on the outcome of their contests. The Aztecs regarded each day as being dominated by different, potentially conflicting meanings given by the various calendar counts.

At the centre of their cosmology, however, stood the sun, famously represented in the Aztec Calendar Stone.

For the Aztecs, it was the fifth sun, following the earlier four springs having come to an end with various destructions of the world.

This sun had itself come into existence as the result of a god sacrificing himself for humanity, a sacrifice that in itself was mandating further sacrifice to the sun, as well as a life that needed to be lived to prevent the gods destroying the world again.

For the Aztecs, like for many other civilisations, astronomy was a study closely associated with religious significance and a strong moral code of behaviour.

Aztec astronomy also played an important role in later history in relation to the emancipation of Mexico from Spanish colonial rule.

After the Aztec Calendar Stone was discovered during construction works in Mexico City in 1792, the Spanish American astronomer and polymath Antonio de León y Gama (1735-1802) became the first scholar to try to understand the astronomical system represented in the calendar stone.

In order to solve the puzzles he encountered in the process he had to study a large number of sources from different Mesoamerican civilisations.

What surprised him was how little understanding of those cultures the existing European literature on the topic demonstrated. For de León y Gama, this caused a shift in perspective, and he saw himself no longer at the margins of European civilisation, but in a unique position in universal history. He argued that only Mexicans could properly understand Aztec culture, as Mexico combined European and Aztec heritage.

Around 1800, his claim that the Aztecs had been on the same cultural level as the great civilisations of ancient Greece and Egypt provoked much controversy. However, supported by good arguments from the study of Aztec astronomy, this claim helped establish a Mexican identity independent of the Spanish mother country in the 19th century.

Until this day, the Aztec Calendar Stone remains one of the central icons of Mexican culture.

Aztecs: an epic story of life and death is on show at Melbourne Museum until 10 August.

**A shared learning experience**

UnimelbEmbraceEducation

www.embrace-education.org/volunteer/applications

www.cmy.net.au

www.ds.org.au

Unimelb Voice, July 2014 © The University of Melbourne

**UNIVERSITY OF MELBOURNE**

This month, Melbourne University student volunteers David Conroy, Lorraine Prestley and Henry Howard, and Gillian Green (Dundrum Street Services), building bigger and better things for the Carlton Homework Club, hosted each week at Carlton Primary School. Photo credit: Peter Casamento
A program led by students at the University of Melbourne is increasing the health literacy of high school students in Melbourne’s western suburbs with the goal of transforming the region’s future health outcomes. By Kate Dukes.

Fed your intellect with a University of Melbourne Public Lecture. With local experts as well as those from across the globe you’ll find there’s always something new to discover. You don’t need to be an enrolled student and most lectures are free!

For latest listings visit: www.events.unimelb.edu.au

Follow @umfreelectures on twitter

July Timetable

Keynote address for ‘Global Health and Human Rights’ by The Honourable Michael Kirby AC, CH (former Justice of the High Court of Australia). Nossal Institute for Global Health Lecture
Bookings: register.eventarc.com/23003/
Enquiries: lana.logam@unimelb.edu.au, 9035 5604

RARE CANCERS
WEDNESDAY 23 JULY 6PM
Illuminating... Rare Cancers, by Associate Professor Larry Clark Scott (CARITAS-CEL). Mr Richard Vines (Rare Cancers Australia), Ms Simone Leyden (The Unicorn Foundation). Walter and Eliza Hall Institute Lecture
Bookings: www.wei.edu.au/illumination
Enquiries: l@@illumination@wei.edu.au, 9345 2595
WALTER AND ELIZA HALL INSTITUTE, 15 ROYAL PARADE, PARKVILLE

HISTORY IN AMERICA
THURSDAY 24 JULY 6PM
How ‘Indian’ history became American history, by Professor Trevor Barnard (University of Melbourne). University of Melbourne Public Lecture Program
Bookings: aztec2.eventbrite.com.au
Enquiries: cghergr@unimelb.edu.au, 8344 6004
THEATRE A, ELISABETH MURDOCH BUILDING

THE HAPPINESS CHALLENGE
TUESDAY 29 JULY 5.30PM
The Happiness Challenge: Lessons from Australia’s happiest state (Times of India). Australia India Institute Lecture
Bookings: www.aii.unimelb.edu.au/upcoming_events
Enquiries: ali-rsvp@unimelb.edu.au, 9305 7538
SEMINAR ROOM, AUSTRALIA INDIA INSTITUTE

THURSDAY 31 JULY 6.00PM
Motuczka: the question of headdress and heritage, by Professor Jose Antonio Gonzalez Zarandona (University of Melbourne). University of Melbourne Public Lecture Program
Bookings: aztec2.eventbrite.com.au
Enquiries: cghergr@unimelb.edu.au, 8344 6004
THEATRE A, ELISABETH MURDOCH BUILDING

THURSDAY 8 AUGUST 6.30PM
The Political Origins of Global Justice, by Professor Samuel Moyn (Harvard Law School). Arts Lecture
Bookings: http://www.law.unimelb.edu.au/event/7198
Enquiries: qemba.sharpe@unimelb.edu.au, 9305 8371
THEATRE G, LOUVAIN BUILDING

TUESDAY 12 AUGUST 6.00PM
Indigenous Australian and universities: Navigating reform in a changing landscape, by Professor Ian Anderson (Munup Barak) Deans Lecture, Education
Enquiries: education-events@unimelb.edu.au, 8344 8371
THEATRE Q300 LEVEL 2, 234 QUEENSBERRY ST
Bullseye: student athletes hitting the mark across the world

While the Commonwealth Games in Glasgow are just around the corner, several members of the University’s Elite Athlete Program are competing in international university championship events across Europe, writes David Scott.

It’s a long way to Poland from Outtrim in South Gippsland, a farming community on the outskirts of coastal Inverloch. Yet that’s the path Mitchell James has taken to get to the World University Championship for archery.

Archery may seem like an odd choice for someone who hails from a region known more in athlete circles for its surf culture and country football leagues. But for James, the sport contains a lot of traits similar to those on the dairy farm he grew up on.

“It’s a very technical sport and very repetitive, not in a bad way of course, as you try and master it all. Some would say it’s tedious, but I find it appealing to me that with this sport I don’t have to rely on anyone else, it’s all down to me. I did shoot against a lot of guys who competed at the London Olympics in 2012 and had a good showing, but it takes a lot of hard work to stay at that level and be amongst the medals.”

“One day I want to achieve that, I wouldn’t mind taking part in the world cup circuit (usually four events a year), but in the immediate future, a spot in the Commonwealth Games on the Gold Coast in 2018 is the main goal.”

While James was heading to Europe to face off against the world’s best university archers, Commerce student Luke Gillies was returning from competition abroad; albeit for karate on the fight-mats of Montenegro.

“It’s absolutely up there in terms of a career highlight,” Mr Gillies reflects, having just missed out on a quarterfinal berth in this division. “With 38 countries represented by 350 competitors across 12 divisions both male and female, it was absolutely amazing to get there and compete.”

Mr Gillies, who was the only Victorian in a four-person Australian team, has been competing at a state level since he was 14, and nationally from 16, but says his experience in Europe has shown him what he needs to do to improve further.

“Before the event I got to train in Turkey with an ex-world champion of my division, Okay Arpa, which was just amazing as he’s someone I’d like to model my development off. We’re a similar size and I really rate how he moves around in competition.

“I’m very keen to head back to Europe after the Oceania Championships in September and compete every weekend. There are so many competitions of a good standard happening all the time, and I think it will help me improve rapidly.”

It will be badminton in which the University will be the best represented in international competition this month, with both Luke Chong and Wuing Lin Mak featuring in the Australian team going to the World University Championships.

Chong, this year’s Team Captain for the event in the Spanish city of Cordoba and who will be attending his third championships, says that if previous events are any guide, Olympic level talent will be on display.

“The standard is unbelievably high, it’s right up there with the top international tournaments. At the last World University Summer Games both China and Korea put in their full strength Olympic squad. It makes it a difficult proposition, but a fantastic experience.”

He says that while badminton is still a sporting minnow in Australia when compared with cricket or swimming, it continues to grow. “The standard is slowly improving, but it’s hard to compare with many of the top Asian countries for them it’s basically their national sport. Most of our national team contains part-timers like myself.

“I love it because it’s the fastest racquet sport in the world and there are so many aspects to master, alongside speed, strength and good reaction times you need to have skill and finesse as well.”

“It never gets stale or boring.”

For more information about MU Sport’s Elite Athlete Program, go to http://www.sport.unimelb.edu.au/EliteAthleteProgram

The University will be well represented in Glasgow this month when the 20th Commonwealth Games get under way from 23 July. Biomedicine student Alex Rowe will be looking for gold in the 800m, after finishing second in the event at the Australian Athletics Championships and fourth in the IAAF World Challenge Meet earlier this year. Alumnus Jeff Tho will help fly the flag for Australia in the badminton, fresh off winning the 2014 Oceania Championships. And another graduate Tony Thomas will make her Games debut in mountain biking.

While the Melbourne Graduate School of Education student, a top-20 finisher in the World University Championship for archery, will be one of two Australians at the event and will be looking to build on his recent scores in local state-based competitions.

The newly converted compound archer – James changed from the Olympic-level ‘recurve’ bow last year wanting a new challenge – says the competition at an international level is intense. “I’d expect the Korean and American teams would be the ones to beat again, they are generally amongst the best at these open, world-level competitions.”

He laughs at suggestions that his skillset wouldn’t be out of place in The Hunger Games, a la Katniss Everdeen, the book character made famous by Jennifer Lawrence’s movie portrayal.

“I guess I’d be fine, it is something I enjoy to rely on anyone else, it’s all down to me. We’re a similar size and I really rate how he moves around in competition. It’s an absolutely up there in terms of a career highlight.”

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Hoe presents a visual movement performance  
Master of Fine Arts (Dance) student Janette  
31 July - 2 August, 7pm  
Admission: Free, bookings essential  
Southbank  
Venue: Studio 45, 45 Sturt St, Southbank  

Linou presents an autobiographical dance  
Master of Fine Arts (Dance) student Christos  
Tuesday 29 July, 7pm  

**SHORT COURSES**

There are a wide range of upcoming short courses at the Victorian College of the Arts and Melbourne Conservatorium of Music. With programs for teens and adults, from novice to experienced, you can fuel the creative fire in your belly. Upcoming short courses include:
- Acting
- Classical Singing
- Music Theatre
- Audition workshops in Dance and Music Theatre

More information: vca-mcm.unimelb.edu.au/shortcourses or 9610 3276

**DANCE PERFORMANCES**

Bookings: vca.unimelb.edu.au/events
Please check website for full performance details. Unless specified, bookings are required for all performances.
- Naked Peel  
  Tuesday 29 July, 7pm  
  Master of Fine Arts (Dance) student Christos Linou presents an autobiographical dance performance examining the body’s capacity to reveal the trajectory of a life.  
  Venue: Studio 45, 45 Sturt St, Southbank  
  Admission: Free, bookings essential
- Moths Are Calling  
  31 July - 2 August, 7pm  
  Master of Fine Arts (Dance) student Janette Hoe presents a visual movement performance concerned with the embodiment of fragments of real and imagined stories in spaces within and without the body. Central themes include ephemerality, becoming, liminal spaces and the mysteries of light and darkness. Collaborators: Ria Soemardjo and Paula van Beek.  
  Venue: Studio 876, Performing Arts Building, 28 Dodds St, Southbank  
  Admission: Free

**CONCERTS**

- Lunch Hour Concerts at Melba Hall  
  A series of lunch hour concerts hosted in the newly refurbished Melba Hall, each Monday of semester from 1.10pm – 2pm.  
  Venue: Melba Hall, Royal Parade, Parkville
- Alumni Series: Quanta Saxophone Quartet  
  Wednesday 6 August, 7.30pm  
  The ensemble’s Australian tour is a culmination of their recent collaborations with emerging composers, creating an innovative concert program showcasing music from both Australian and American artists.  
  Venue: Melba Hall, Royal Parade, Parkville  
  Admission: Free

**EXHIBITIONS**

- Ian Potter Museum of Art – The University of Melbourne  
  Swanson Street, Parkville  
  Gallery hours: Tuesday to Friday 10am-5pm; Saturday and Sunday 12–5pm.  
  Closed Monday.  
  Free admission  
  Enquiries: 03 8344 0327  
  art-museum.unimelb.edu.au
- The Potter will be closed for installing from the 7 to 21 July, re-opening on Tuesday 22 July.
- The less there is to see the more important it is to look until 21 September
- North South East West: Visions of mid-19th century Victoria from the University of Melbourne Art Collection  
  From 22 July
- Secret lives, forgotten stories: highlights from Heritage Victoria’s Archaeological Collection  
  until 12 October
- Basil Sellers Art Prize 4  
  from Tuesday 22 July
- NiteArt Wednesday 23 July 6pm until midnight
  Join NiteArt at art sites across the city – commercial galleries, artist–run spaces, museums and unexpected architectural spaces. Melbourne opens up for a night artwalk event, where you ‘curate your own night’, connecting with art, artists and the city. Explore art precincts, including the University of Melbourne activated with mini-events, exhibitions, artist talks and installations and finish at the Potter with artist Jon Campbell’s band PAMELA and a DJ, open until midnight. For further details go to www.niteart.com.au

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**MUSEUMS AND GALLERIES**

- Margaret Lawrence Gallery  
  40 Dodds St, Southbank  
  Opening hours: Tuesday – Saturday, 12pm – 5pm  
  Free admission  
  Enquiries: 03 9035 9400  
  ml-gallery@unimelb.edu.au
- Lani Seligman: Long Wires  
  11 – 26 July  
  Opening: Thursday 10 July, 6 – 8pm
- Craig Easton: A Strange Arrangement  
  1 – 17 August  
  Opening: Thursday 31 July, 6 – 8pm
- Student Gallery  
  Gate 4, Dodds St, Southbank  
  Tuesday – Friday, 10am – 4.30pm  
  Free admission  
  Enquiries: ml-gallery@unimelb.edu.au

**WEEKLY STUDENT EXHIBITIONS**

New weekly installations of student works during the semester.

**HONOURS EXHIBITION**

- Bachelor of Fine Arts (Visual Art) Honours  
  Students exhibit their artwork.