

- Jobs and the age of robots
- Plus
- Commercial music degree creates different kind of buzz
- Comfort out of adversity learning from the Canterbury earthquakes







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may be, as many have predicted. that we are about to see the end of traditional higher education. By

traditional I mean, attend university full-time, sit in lecture halls, listen to lectures, go to the library, write essays and sit exams.

Change in university education has been in the wind for more than 30 years without coming to much. Curricula have been updated, new technologies adopted, classrooms reshaped, and semesters introduced, and internal assessment has lessened the importance of exams - but none of this has fundamentally changed the way university education is offered.

The internet is changing all that. Already other sectors have been disrupted and transformed. Look at media, travel agencies, personal communication and retailing - all have been turned on their heads by the internet.

This is going to happen to higher education. Learning will become separate from the classroom. Courses will be created as they are needed and shaped around on-demand, any-time, any-place delivery models. Academics will become independent and offer their expertise to many institutions. Textbooks, the ink-on-paper versions we use today, will disappear.

Even the granting of qualifications will begin to fade away as students are confronted with a wide array of faster, cheaper options that can quality assure what they have been learning.

Campuses, built over many decades and centuries, will begin a difficult transformation as they move from the "industrial" model of yesterday to meet the more flexible, outward-facing model of the future. Buildings will be remodelled, organisational charts will be rewritten and the very essence of what it means to be a university will be up for discussion.

Higher education, notoriously slow to change, is entering the age of experimentation. Where this will take is us is not yet able to be defined but it is clear that by the end of this century the traditional model will have all but disappeared.

Massey University aims to be one of the universities that defines the future. Founded in 1926 as an agricultural college and granted full university status in 1964, Massey has long been seen as an innovator. In 1963 it began providing education "extramurally" for teachers who were seeking to lift their qualifications while remaining in their schools. The University became a "dual mode" institution offering campus-based and distance education.

In the past five decades Massey University has led the way in teaching innovations by adopting new technologies as they have been developed and constantly updating what is taught, how it is taught and how it is assessed.

These changes have allowed Massey to provide education to New Zealanders wherever they might be in the world. Today, some 200,000 students have gained part or all of their university education through Massey's distance programmes.

But the possibilities offered by new technology alongside the changing expectations of students, the rising cost of education, the demand for lifelong learning and Government policy have encouraged the University to move in new and exciting directions.



A new Student Management System being developed will allow students to enrol from anywhere online. Massey was the first New Zealand university to offer MOOCs (Massive Open Online Courses). Lectures are now recorded so that students can watch them in their own time. More courses are being taught online whether the students are on campus or somewhere else in the world. Highly innovative staff are offering additional background material, as is commonly found in the entertainment industry.

It is this spirit of innovation that has led to Massey offering its food technology programme in Singapore, its Master of Business Administration to pilots and engineers in Qatar, its postgraduate Diploma in Arts (Defence and Strategic Studies) in Brunei and its One Health programme, funded by the European Union through the World Bank, throughout East Asia.

This May, Massey's Oiled Wildlife Response Team will be collaborating with the University of California Davis to provide online learning for corporations such as BP and Shell. Throughout the year, as sportspeople prepare for the Olympics, they will be thanking Massey for enabling them to train and study.

But this really is just the beginning of the massive changes about to take place. A new world of learning is taking shape and as this edition of DefiningNZ shows, Massey University is leading the way. We hope you will come with us.



choice. The tennis pro, who started playing when she was just six, originally wanted a career in medicine, but her commitment to

the court meant a sacrifice.

"I just couldn't make it fit into my lifestyle. Ideally I would have moved into sports medicine but business has been very interesting. It covers a very broad area, one that many people can relate to in anything they do."

As for life after tennis, Erakovich is undecided, but says studying and finishing her degree is a definite.

She says the greatest benefit of learning via distance is being able to go at her own pace.

"I can organise my own schedule and make it fit into my training and competition needs. It does go very slowly, but little by little I am getting there. The contact side of things is great as well. I can be in touch with the paper coordinator from anywhere in the world."

2016 is a big year for Erakovich. Not only will she stage a comeback after suffering an injury to her right knee last year, it's also an Olympic year.

"My studies will continue as normal, but Rio is definitely a goal this year and I will be working hard on making the cut."



lympic and world champion sprint kayaker Lisa Carrington has already started on her latest challenge - a Graduate Diploma in Arts via distance learning at Massey University, having already completed a Bachelor of Arts.

After winning the K1 200m and 500m titles at last year's world championships, the 26-year-old has her sights set on defending her Olympic K 100m title at Rio de Janeiro.

Then it's back to the books as she thinks about life after the sporting



Gemma Flynn is in a similar frame of mind. Engaged to former All Blacks captain Richie McCaw, the Black Sticks hockey player is firmly focused on her goals for the Games but also further plans for study.

As a distance student at the Massey University Academy of Sport she has completed a Bachelor of Sport and Exercise Science, and has started a Graduate Certificate in Science and Technology.

"We are privileged to represent our country and are grateful for all the opportunities we get."

"We do need to prepare for life after sport, having a good balance is important and giving everything you have while you play is our focus."

- Gemma Flynn

Distance learning opens world of possibilities

/ hether learning about construction or commercial music, studying by distance at Massey University opens up a world of possibilities, allowing students to gain internationally recognised university qualifications and improve career options - while still balancing work and family commitments.

With more than 150 programmes to choose from, the curriculum offers the flexibility to make the most of your choice to pursue any-time, anywhere education.

And that means you do not have to attend classes at times that may not fit in with your lifestyle.

If you are already working, its convenience also enhances your career prospects and helps you to achieve your personal and professional goals without having to leave your job. In some cases your employer may even cover course fees.

You can study wherever you live - rural, urban or overseas locations - with course materials being available online or delivered to your home. While studying at home you may also be able to take advantage of the facilities we offer at one of our campuses near you and thus make use of all the support and services available to Massey students.

So join more than 15,000 other Massey students each year who study by distance at undergraduate and postgraduate levels.

For further information go to www.massey.ac.nz/massey/ learning/distance-learning/.



Georgia Gray says Massey University has been understanding and helpful in accommodating her sports commitments and training.

eorgia Gray is a talented 22-year-old, who graduated from the University of Oxford in 2014 with a degree in human sciences and made the move to Auckland after being head hunted by New Zealand's para-swimming head performance coach Jon Shaw.

Gray's shift from study to swimming has been a big transition.

"I moved here for swimming but I also really wanted to pursue a Master of Public Health. Massey University was the most understanding and 'athlete friendly' uni in New Zealand. And they offer a great course in public health."

Born in London to Kiwi parents, Gray grew up without the hand on her right arm. But the absence of her appendage hasn't deterred her from dreaming of qualifying for the Rio 2016 Paralympic Games.

"This year promises to be pretty busy if I qualify, with lots of international camps, but Rio is my aim right now. Swimming was very secondary to me during my first degree, and now it has sort of become the basis of my day, so it's been a bit of a shock to the system, but everyone has been so supportive."

Living in Auckland's Browns Bay on the North Shore, where Massey University has a modern campus, Gray has chosen to study via distance so that she can travel for training when needed. "Massey has been really understanding when I haven't been able to physically attend, sending me lecture notes or posting lectures online. It's been a great experience."

Gray and her British partner, who also made the move from the UK, have set up a joint tutoring business called Oxbridge Tutors NZ - www.oxbridgetutorsnz.com.

"He's an engineer, so he teaches maths and physics. I do more humanities, English and history, but also biology and health sciences."

Gray plans on ramping up her study time after Rio, but it won't be her last time as a student.

"I would really like to do a doctorate. Something on reproductive health in a third world, developing world setting. That's my end goal, my dream job really."

Rio-bound Fisher part of talent pool

aralympian swimmer Mary Fisher is intent on making a splash with her studies as well as her sport this year.

Denied the opportunity, due to an administrative blunder, to defend her title of 2014 Disabled Sportsperson of the Year at this year's Halberg Awards, she is determined to defend her medal haul in the pool.

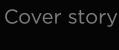
At the London 2012 Paralympic Games Fisher won a gold medal, two silvers and a bronze. She backed that up with consistent performances that earned her three world titles at the swimming world championships at Glasgow last August.

The early part of 2016 has been spent training as well as catching up on studies by completing summer school via distance

towards a psychology degree at Massey University.



Her focus will soon switch full-on to the Rio 2016 Paralympics in September. ■





them to stand firmly on their feet once their dance careers are over,

Royal New Zealand Ballet dancer Alayna Ng says that distance learning while on the road is motivating.

layna Ng has been dancing for more than 20 years, ever since she was four years old in a tiny tutu doing pirouettes.

She was taken to ballet classes once a week and as time went on to five or six days a week.

"After high school I went to the New Zealand School of Dance and we danced pretty much all day, five days a week and half a day on Saturdays."

She danced on into the Royal New Zealand Ballet. And now she's 28. She knows the career won't last forever and that injury can cut her dance career in an instant.

Her insurance against the inevitable end of dance is distance study at Massey University.

Fellow dancers Paul Mathews, 29, and Harry Skinner, 28, also know that age is their adversary and cart laptops on company tours around the world to link in to Massey from wherever they are.

Mathews is doing a business degree majoring in finance and Skinner is aiming for an arts degree majoring in communications.

Ng started a Bachelor of Science in human nutrition in 2012, with the idea of becoming a dietitian. She's completed three papers.

"The time I spend studying does vary. Dancing, my full-time job, does take precedence. It's a challenge, having a demanding job and studying on the run away from home, but it's definitely motivating."

When dancing does end for her, she'll go to Massey full-time. "Working away at papers part-time you have a feel for university life so it won't be a big shock when I go full-time.

"Nutrition is very important. Our bodies are the product of what we put into them. It's very important for everyone and something we all need to think about."

Ng has already trained as a pilates instructor.



Paul Mathews is doing a business degree, Alayna Ng has been studying human nutrition and Harry Skinner is doing an arts degree.

Her post-dance future will probably relate to her career in dance and that's not unusual, says Kat Sprowell, the Royal New Zealand Ballet's Artistic, HR and Corporate Services Manager.

"If you are a dancer it stays with you always, no matter what."

While some continue to work in studios others pursue careers in business or administration and marketing. It's really diverse, she says.

She says the dancers doing distance studying at Massey "have proactively sought out these opportunities with support from the company. We give them study leave when they need it and generally do what we can to make it as achievable as possible."

No matter how supportive the company, dancers need their own individual drive to keep up with with distance study.

"The company tours a lot, up to six months of the year generally, so a lot of time is spent travelling. It makes study very hard. People like Alayna, Harry and Paul have to be hugely motivated. They dance, and the job is demanding, and they study alongside that.

"The wonderful thing about a programme like Massey's distance learning programme is that it offers young dancers the opportunity to develop new careers when it would otherwise be incredibly difficult. It gives them an avenue to achieve that."

Skinner is one dancer in the career-development stage, but while he is committed to his distance study he also feels he is in "a good place" in dance.

"Dancing into your mid to late 30s is rare so I've got to keep my options open," he says, "and I don't want to limit myself."

At 15 he studied at The Australian Ballet School and he later joined the Royal New Zealand Ballet. Communications evolved as his favoured subject. Post-ballet he might pursue public relations and that could, he says, keep him in the ballet community.

Distance study has been demanding but satisfying.

"I find the lecturers good at understanding that students have other jobs, full-time jobs. They're very understanding. I've called some a few times."

Mathews also keeps the fear of a catastrophic ending to his dance career at bay but sensibly began studying at 20,

although not at Massey. It was only in 2014 that he took advantage of Massey's distance learning programme - in business.

"Massey has a better extramural set-up and I'm happy with the switch. Both papers have had a lot better support than I previously had [at other universities]. They're well organised and there are a lot of resources like live lectures. They film the lectures and you can watch along with people sitting in the room. You don't miss out on much."

Now he's older he knows how quickly his dance career can end.

"I'm hoping it doesn't happen 'til I've done a few more papers."

The Royal New Zealand Ballet is very supportive of dancers giving thought to what comes next and preparing for their eventual career transitions, whatever they may be.

"Being a professional dancer is a tough and often short profession, but I'm living my dream right now and loving it," says Ng. ■

You can see Mathews, Ng and Skinner dancing with the Royal New Zealand Ballet in the company's first season of 2016. **Speed of Light** starts on February 26 and runs to March 16 in Wellington, Auckland, Christchurch and Dunedin. See www.rnzb.org.nz.

From the House to health and safety - then back again

Judith Collins, now back in Cabinet, says there is always something new to learn - and distance study has worked for her. She talks to Jenna Ward.

inister of Corrections and Police Judith Collins isn't just a parliamentarian. She's also an A+ student.

The 56-year-old found herself with a little extra time on her hands last year, after resigning from Cabinet following a series of political headaches. She returned in December.

Collins, who spent more than 20 years as a lawyer, is now studying for a Graduate Diploma in Occupational Safety and Health.

"I enjoy being intellectually challenged as well as being busy. I'm used to also being a minister with very high-profile, challenging portfolios, so I really felt the need to be learning new things."

She already holds three university degrees - a Bachelor of Laws, a Master of Laws with Honours, and a Master of Taxation Studies. Now the Waikato-born farm girl is up-skilling again.

"The health and safety legislation was going to have major ramifications for New Zealand business and working cultures, and I thought it was a really good opportunity for me to learn something new.

"I am always telling others they should keep up to date with law changes and trends, and learn things that are different from what they are used to. It was a chance to be part of that continual improvement

I'm always suggesting that others do, so I thought I would take my own advice."

Despite having studied a lot in her earlier years, the mother of one says learning via distance takes more effort.

"I've never done distance learning before. It requires a lot more discipline than attending lectures because there's just not the same discipline imposed on you. It takes a lot more self-motivation.

"The more you know, the more you can contribute."

- Judith Collins

But because of the strange hours I work at Parliament, I can make it work for me. I personally find it really enjoyable."

This new knowledge fits in perfectly with her day job.

"Studying makes me better able to explain to people what changes in the health and safety legislation mean. It has made me better informed. It's just good for my brain, having to learn maths and chemistry again, and even physics. Having

to come to grips with logarithms for the first time since I was 17 has been challenging for the brain, but good for it.

"MPs tend to know more about the law. because we make laws all the time. My study provides me with a far greater understanding of the social, psychological and scientific reasons around changes. It makes for better law-making in my opinion. The more you know, the more you can contribute, and it has provided me with more information to debate issues in Parliament."

And despite juggling Parliament with studying and family life, Collins is getting A+ marks.

"In April I had to get my first assignment in, and I thought, 'Oh no, what have I done?' It would be too embarrassing to pull out, so I told myself I had better just keep going."

So what does she enjoy about distance learning?

"The best thing is if I get an A+. I am a little bit competitive, so I get a bit excited about that. The worst thing is having to study for exams. That's not so much fun."

Collins says you are never too old or too busy to study.

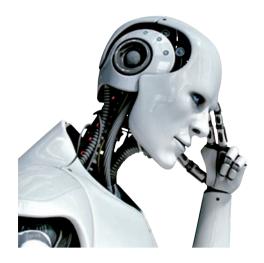
"Even if you just do a paper a year, it is really good for you. I have felt really quite rejuvenated by it all. You never know everything and you can always learn something new."



"I'm used to also being a minister with very high-profile, challenging portfolios, so I really felt the need to be learning new things."

- Judith Collins

Cabinet minister Judith Collins is studying occupation health and safety through Massey University's distance learning programme.



Which jobs are safe in the new age of automation?

It has been predicted that by the mid-2020s artificial intelligence will have overtaken human intelligence. In this brave new world, which jobs will be safe? By Ted Zorn.

he latest news you read in this magazine could have been written by a computer without your even noticing – one of the signs that we are in the midst of a revolution potentially more transformative than the industrial revolution.

That revolution moved humankind from manual to machine labour, and brought dramatic social changes and higher standards of living. The current revolution, driven by rapid advances in information and communication technologies and biotechnologies, will similarly bring massive changes in how we live and work. While the benefits are potentially huge, so are the dangers. Machines churning out news stories, along with driverless cars, 3D-printed human hearts and memory-recording MRI scans, are just the beginning.

The speed of innovation, particularly in chip processing and memory capacity, means a near exponential rate of development is ahead of us. Artificial intelligence expert Neil Jacobstein predicts that artificial intelligence will overtake human intelligence in the mid-2020s.

Experts nervously debate what this technological revolution will mean for the future. There is no question that there will be a heavy disruption to employment patterns as ever-increasing numbers of jobs face automation. Jobs that are routine and repetitive are, of course, already being replaced. Retail checkout clerks, tax preparers, bank tellers and telephone operators are quickly disappearing. Many other service and retail jobs could soon go the same way as manufacturing jobs.

What's more, jobs that require complex pattern recognition and non-routine cognitive tasks are not immune from automation. Ten years ago, driverless cars were an impossible dream because of computers' inability to recognise and respond to rapid changes in traffic and road conditions. Today, Google's independent cars are already proving more reliable than human drivers.

The impacts on the logistics and transport industry of this technology could be huge, affecting taxi drivers, couriers and pilots, among others. Similarly, "big data" already enables computers to carry out some activities faster and better than humans can. They can already identify fraud faster than an accountant and diagnose illness better than a doctor. One study predicts that 47 percent of jobs could become automated in the next 20 years.

New Zealand will not be exempt from automation. Two of our most important industries - agriculture and tourism - will undergo significant change in the coming decades. Agriculture and horticulture will increasingly see agricultural robots (or agbots) automating processes such as harvesting, fruit picking, ploughing, weeding, planting and irrigation, particularly on commercial farms. Hundreds of agbots equipped with microscopic sensors could potentially coordinate and work the land with minimal human intervention within the next 10 years.

The dairying industry will also see changes in the pipeline, with robotic systems that automate the entire milking process. Meanwhile, drones are already monitoring farm conditions as they are able to reach hard-to-access areas faster than a farmer ever could.

While the possibility of automation might ring warning bells for many industries, agriculture may be an exception. A shortage of agricultural workers is foreseen, and agbots could provide much-needed labour. A recent report launched by Minister for Primary Industries Nathan Guy, highlights the need for 50,000 more workers in agriculture by 2025. Agbots could fill this gap, working longer and more quickly and without human injuries.

The development of automation in agriculture also creates opportunities for New Zealand. A recent report commissioned by New Zealand Trade and Enterprise estimated that New Zealand's agri-technology exports are currently worth \$1.2 billion per annum and there is great potential for this to increase. The report also showed that New Zealand is emerging as a leader in providing agricultural technology solutions – a strength we should build upon.

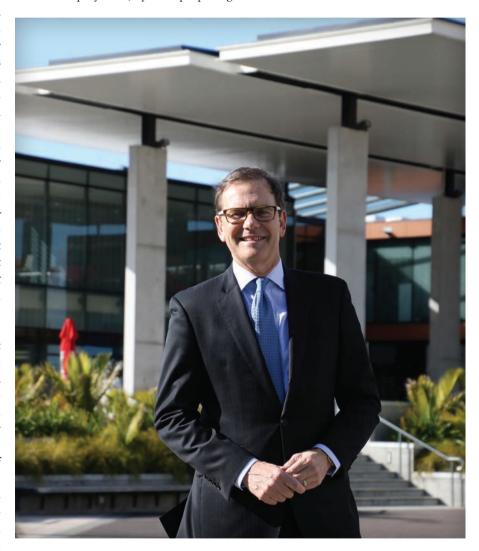
Tourism, New Zealand's second largest export earner, is also facing technological innovation – the airline industry being a frontrunner. The process of air travel - from reservations, to check-in, security, and baggage handling - is increasingly automated.

The trickle towards the automation of jobs may be relatively slow for the moment, but the flood may not be far off. With this in mind, which occupations will be the most resistant to automation? High-skill jobs requiring creativity, social intelligence and decision-making are least at risk, at least in the short to medium term. So managers and social workers, for example, repeatedly show up in the "safe" category. And some low-skill jobs – home-care and cleaning, for example – will also be largely unaffected in the near future.

As a business school dean, I think a lot about how we prepare our students for

the future. We must ensure that students are tech-savvy and can work effectively with new digital tools. A willingness to use technology to complement and enhance our effectiveness is critical. We must ensure that graduates are also equipped to continually learn, innovate and adapt.

Policymakers must also prepare for a future that could see at least temporary mass unemployment, by both preparing



to retrain large numbers and preparing for the possibility that technology will finally lead to what futurists have been forecasting for decades – an economy that simply requires far fewer workers. Managed well, this could mean enriched lives of more leisure and fulfilment. Managed poorly, it could mean massive disruption and social conflict.

Professor Ted Zorn is the Pro Vice-Chancellor and Dean of the Massey Business School.



Auckland leaders gathered at Massey's Albany campus for the Grow North summit. Pictured from left to right in a Sealegs amphibious marine craft: Guy Haddleton, Takapuna-based software entrepreneur: Brett O'Riley, Auckland Tourism, Events and Economic Development Chief Executive: Professor Howard Armitage, University of Waterloo; Dr Rebecca Gill, Massey University; and Professor Ted Zorn, Pro Vice-Chancellor and Dean of the Massev Business School.

Can Auckland North become the next Silicon Valley?

Massey University's entrepreneurship researcher Dr Rebecca Gill has a vision for an innovation district in Auckland's north. And she is not alone. By Sidah Russell.

arcelona, Spain. Boston, Massachusetts. Waterloo, Canada. The creation of innovation districts is an urban planning trend that has emerged in cities around the globe - and Dr Rebecca Gill believes there is no reason why Auckland's north ("Auckland North") can't be next.

The entrepreneurship researcher presented her ideas to more than 200 of Auckland's business, academic and local government leaders at the end of last year. While the vision is still evolving, there is already a consensus emerging amongst kev stakeholders.

"The district needs a heart and good transport connections are a must, both between the key locations in Auckland North and with the central city and Northland. A free light-rail link would be ideal so the multiple locations are strongly networked together," Gill said.

"These areas need to have mixed development so they become hip, vibrant and diverse places. They also need robust infrastructure, from high-speed broadband to public and commercial spaces for coworking and shared services."

As the lead researcher for the "Grow North" research project, Gill outlined the opportunities for and challenges to becoming an innovation district. She said that New Zealand's prevailing "do-it-yourself" mindset was one of the key things holding it back and true open collaboration was key to a successful innovation district.

"There are pockets of innovation all over Auckland North, but we really need to mobilise open collaboration and connections between these existing groups," she said.

"We currently lack an R&D [research and development] capability database that can easily be tapped into when firms want to purchase each other's innovation or collaborate on development."

Massey University Vice-Chancellor Steve Maharey called on everybody in the room to play their part and outlined Massey's contribution.

"We will soon start building our Sciences Innovation Complex, which will house teaching and research labs and collaborative working spaces to connect the University with the local community. We want this campus to be at the centre of this vision," he said.

"There is no doubt that the smart, innovative corridor from Auckland Harbour Bridge to Silverdale can make a contribution to Auckland and to the country.

"But this is not someone else's project. The whole community needs to come together. We need to make sure this is a place not only where businesses want to come, but where people want to live because they can find purpose here as part of a smart, innovative community."



Warehouse chief becomes Massey's CEO-in-Residence

By Sidah Russell.

hen Mark Powell hands over the reins at New Zealand's largest retailer this month he will take up part-time residence at the Massey Business School.

The outgoing Warehouse Group Chief Executive will become the University's first CEO-in-Residence, a position that will see him serve as a liaison point between the University and the business community, a guest lecturer, a mentor for students and a strategic consultant to the business school's executive team.

"I have always been interested in the connection between ideas and practice, and how one informs the other," Powell says. "As Massey's CEO-in-Residence I hope to help bridge the gap between

academia and business in a way that means important information flows both ways."

"I am a big believer in education - it gives you the confidence to ask questions and not be intimidated by experts."

- Mark Powell

Professor Ted Zorn, Pro-Vice Chancellor and Dean of the Massey Business School, says the University developed a strong relationship with Powell during his years at the helm of The Warehouse Group.

"We are extremely fortunate to have someone of his calibre joining our team, someone who understands Massey's goal of being an entrepreneurial university that is closely connected to the business community," he says.

Powell is no stranger to the academic world, with two bachelor's degrees and two master's degrees under his belt. He also plans to complete his third master's degree next year.

"I am a big believer in education – it gives you the confidence to ask questions and not be intimidated by experts," he says.

"At the same time it gives you humility because you know there is always more to learn." ■

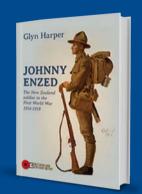


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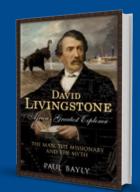
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Our military man in Paris

Shaun Fogarty is New Zealand's first military attaché in Paris. Behind him is a significant naval career and years of diligent distance study. He speaks to **Diana Dekker**.

here is an old naval saying:
"That's life in a blue suit".
Captain Shaun Fogarty is living that naval life of many changes.

"You tend to move every two or three years by nature of the military."

He is, for the moment, New Zealand's first defence attaché in Paris, focusing on World War I commemorations in France and Belgium.

His blue-suited life has been more peripatetic and eventful than he could ever have imagined when he left school in Dunedin at 18 with a dream of sailing the seas.

His Royal New Zealand Navy career has taken him all over the world, from East Timor to Buckingham Palace. And he has studied in tandem with it. Last year he completed his Master of Logistics and Supply Chain Management by distance learning at Massey University. He had earlier done Massey distance study for his diploma in the subject as well as a plethora of other work-relevant and farflung New Zealand Defence Force (NZDF) initiated study.

His master's thesis, far removed from the concerns and cultural highs of Paris, focused on the response to Canterbury's devastating earthquakes, exploring New Zealand's capability to manage logistical responses to major civil defence and emergency events strategically.

For it he needed to arrange and conduct many interviews with people involved with the Canterbury disaster. Self-discipline was essential and easy access to academic help crucial. His Massey supervisors, he says, were "fantastic". He is grateful to Dr Paul Childerhouse, School of Engineering and Advanced Technology Professor in Logistics and Supply Chain Management, logistics lecturer Walter Glass, and Lincoln University's Dr Mark Wilson.

"For distance study there were all manner of support systems should I need them. I cracked on. When I needed online facilities they were readily available and excellent. The NZDF library and the Massey library were first class."

It was dicey eyesight rather than design that set him on an academic path and a career that, after his role as a military observer in East Timor, saw him become a Member of the New Zealand Order of Merit in 2001.

"In hindsight I'm so glad. I've loved every minute of it. Being in logistics opened doors that being at sea probably wouldn't have done. The logistics area has been fantastic in terms of what I've been able to do."

He works out of the offices of New Zealand's ambassador to France, Dr James Kember. His role was established by the New Zealand Defence Force, and together with colleagues from the Ministry of Foreign Affairs and Trade and the Ministry of Culture and Heritage they deliver on the WWI centenary objectives.

"It's been a huge privilege to represent New Zealand at the many services that acknowledge the sacrifice our troops made nearly 100 years ago," he says.

"On the flip side the Paris attacks in November last year and earlier with the Charlie Hebdo [magazine cartoonist] killings have taken a huge toll on the French. However, in true stoic fashion they have continued to live their lives as normally as possible. It certainly hasn't stopped their passion for rugby, which lifted to new heights with the arrival of Dan Carter in Paris late last year. And we're all looking forward to later in the year when the All Blacks play in France for the Dave Gallaher Trophy, named after the famous All Blacks captain of 1905 who died at Passchendaele in 1917."



Elite rower turns adversity into success

Toby Cunliffe-Steel, who is studying sport and exercise through distance learning at Massey University, overcame a brain tumour to become one of the country's top rowers. By **Diana Dekker**.

oby Cunliffe-Steel is at the top of his game. The rower has represented his country and his university, Massey.

He is, at 23, in that golden, invincible stretch of years when hard physical work, early mornings and focus make for magic oars, immense satisfaction and national and international applause. "I'd like to row for the rest of my life, but lifelong high performance is not possible. You have to have other options."

In the 2015 World University Games. Cunliffe-Steel won the silver medal in the men's lightweight single scull, earning the title of the second fastest student lightweight sculler in the world. He was the first New

Zealand rower to ever win a medal at the games in its 50-year history.

So Cunliffe-Steel, based in Cambridge, is studying for a Bachelor of Sport and Exercise at Massey and making provision for the inevitable, fitting in the intellectual work with the physical as a distance learner. He trains at nearby Lake Karapiro.



"I'd like to row for the rest of my life, but lifelong high performance is not possible. You have to have other options."

- Toby Cunliffe-Steel

That's not easy, says Professor Emeritus Gary Hermansson, a sports psychologist and for 30 years both a counsellor and an educator at Massey. People like Cunliffe-Steel need to be disciplined to fit in study with their sport.

Professor Hermansson, who last year became an Officer of the New Zealand Order of Merit, has been at every Olympic and Commonwealth Games as the country's team psychologist since 1998.

He is used, in the last week of those games, to sitting with athletes and considering the "what now?". Some will score jobs because of their profiles but others can be helped to a planned post-competitive life in a world in which academic qualifications seem almost mandatory.

Not every elite athlete is quite as deter-

mined to succeed in sport and post-sport life as Cunliffe-Steel. His experience tells him that not only sport, but life, can end all too soon. A few years into his rowing career, in 2007, he was diagnosed with a brain tumour. He was treated in Auckland and Tauranga and by 2009 he was wearing the silver fern, representing New Zealand in the under-21 rowing team.

After six months study at the University of Otago he left for Cambridge, because it is the centre for rowing in New Zealand, and decided to enrol in Massey's distance programme.

"I decided it was the best option and I never looked back."

Having completed five years of part-time study, Cunliffe-Steel finished his degree in 2015.

He has made the brain tumour a positive in his life.

"I was honoured and grateful that I was put in the position of head prefect in my last year at school and was able to share a message with 1800 kids at school, a morbid one, that life can end in an instant. You could have done everything expected of you and that you wanted to do. It doesn't mean you are less likely to be unfortunate.

"The message is to be aware of it and make the most of every moment. There's no point in doing anything half-arsed when tomorrow you might not be there to do it. I have to commit 100 percent to rowing. It doesn't mean I let my study fall short."

At any moment the study might pay off. As with all elite sports people, there's the possibility an injury could propel him into post-rowing mode.



With global temperatures potentially rising by an average of 3.5 degrees Celsius in the next century if we carry on burning fossils at the rate we do now, New Zealand's biggest industry - agriculture - is set to be hit hard. Professor of Energy at Massey University Ralph Sims says farmers can not only adapt to this climate change but also help to prevent it. By Mirjam Guesgsen.

limate change is more than just rising temperatures. An assessment report from the Intergovernmental Panel on Climate Change, of which Sims is a part, points out that change for New Zealand will come in the form of significant shifts and rises rise in extreme rainfall, a tripling of the time spent in drought by 2040, global sea level rises, and a 400 percent increase in days with "very high" or "extreme" fire danger and shifts in wind speed and direction.

Even if temperature rises are kept below 2.0°C, or even closer to 1.5°C as per the recent Paris Agreement, more numerous and extreme weather events are likely.

The impacts of these changes on our dairy, sheep and beef industries will vary widely, Sims says.

"Some regions may actually benefit from increased pasture production, but for most, an increased drought risk and uncertain changes in pests, weeds and diseases, as well as the potential erosion of farmland, will wreak havoc."

Sims says farmers are beginning to adapt by planting drought-resistant varieties like chicory or plantain, and planting trees on erosion-prone hill country. However, he says, they also need to become more "energy smart".

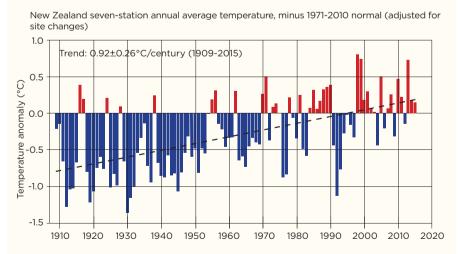
"The global supply chain needs to be unlinked from its dependency on fossil fuels. Think about all the tractors and farm equipment that run on petrol or diesel for example, and all the heat used in food-processing plants."

He envisions energy being used more efficiently through for example, the use of electro-technologies or woody biomass from forest wastes and the capture of local renewable energy sources, such

as orchards using solar energy to power water pumps for their trickle irrigation.

Part of the solution is also to minimise the third of all food that is produced but not consumed due to losses and

A newly published Food and Agriculture Organisation of the United Nations study, led by Sims, provides details on how this can be achieved (www.fao. org/3/a-i5125e.pdf).



Mean annual temperature for New Zealand, calculated from the National Institute of Water and Atmospheric Research's (NIWA's) "seven station" series.

This series uses climate data from seven geographically representative locations. The data is adjusted to take account of factors such as different measurement sites. The black dotted line is the linear trend from 1909 to 2015 [NIWA].



Animals have a range of experiences that come from both external factors and factors reflective of their perceptions.

The changing science of animal welfare

Mirjam Guesgen met two Massey scientists, Professor David Mellor and Dr Ngaio Beausoleil, to learn about an influential theory that has shaped how schools, universities, the livestock industry and zoos worldwide understand animals' experiences.

model developed at Massey
University of an animal's
perception of its environment has been feted around
the world.

The Five Domains Model, developed by Mellor in 1994, could be described as radical for its time but it is just as important as meeting an animal's basic survival needs.

"The health of an animal is not all that constitutes welfare," Beausoleil says.

When the model was first conceived, it included experiences of thirst, hunger, pain, anxiety, fear and distress. It soon became apparent that the concept of animal welfare was changing rapidly through scientific investigation. For example, the catch-all term "distress" was unhelpful.

The model was therefore modified in 2009 by the inclusion of breathlessness, nausea, dizziness, weakness, malaise and sickness (experiences resulting from external factors) and frustration, anger, helplessness, loneliness and boredom (reflective of an animal's perception of its environment).

However, perhaps the biggest shake-up to animal welfare science was the scientific validation of positive emotions, which Mellor then included in the model.

"We all knew that animals could have positive experiences but we needed to evaluate this scientifically. The thing that convinced me as a physiologist was understanding the brain mechanisms behind the behaviour.

"For negative emotions it's easy. We had a good understanding of stress hormones and their release in situations of fear or pain, but these did not help us with positive emotions. What we have instead are particular brain areas activated when an animal engages in something it finds rewarding."



Massey University's Professor David Mellor and Dr Ngaio Beausoleil.

The model and the field continue to develop with the expertise of Beausoleil. She has written a document for the Department of Conservation about the welfare implications and practicalities of marking and tagging wildlife.

Since then, she has made significant contributions to the field, now sitting on the Wellington Zoo Trust Animal Welfare Committee and holding the position of Deputy Director of the Massey University Animal Welfare Science and Bioethics Centre, which Mellor established in 1998.



Acting head of Whiti o Rehua School of Art Emma Febvre-Richards; senior lecturer of Māori Visual Arts Rachael Rakena; Director of Māori Art, Associate Professor Ngataiharuru Taepa; senior lecturer Professor Bob Jahnke and College of Creative Arts Pro Vice-Chancellor, Professor Claire Robinson.

Milestone for Māori visual art

ew Zealand's only degree in Māori Visual Arts fosters and recognises the work of Māori artists, which have been ignored in the past by art schools.

When Professor Bob Jahnke (Ngāi Taharora, Te Whānau a Iritekura, Te Whānau a Rakairo o Ngāti Porou) was at art school in the 1970s he got to study every other culture but his own and he dreamed of a course with Māori art and language at its heart.

Today he's not only one of the country's leading contemporary Māori artists, but also founder of its only degree in Māori visual arts which late last year celebrated its 20th anniversary. It's a milestone of which Jahnke is extremely proud, not for the programme's longevity but for the long list of artists, curators and teachers it's turned out and the Maori contemporary art movement it has nurtured.

The Bachelor of Māori Visual Arts (BMVA) grew out of the Te Pūtahi a Toi School of Māori Studies at Massey University in Palmerston North and has its roots firmly planted in Māori culture. Unlike other arts programmes, students go beyond studio art

to learn te reo, tikanga Māori and the Treaty of Waitangi, alongside other Māori studies.

"I want students to walk out and be able to use the cultural knowledge they have gained from the programme and to work wherever that maybe" says Jahnke. A Master's degree, the MMVA, was also developed to cater for postgraduates and established artists.

You don't have to be Māori to study the BMVA any more than you have to be Dutch to study van Gogh, but Jahnke delights in watching young Māori discover roots they barely knew they had. "In order to create art that communicates, you certainly have to understand your culture, where you come from and how that culture has shaped you."

Jahnke's vision was not just to look back at Māori artistry of the past but to shape its future as well.

"This programme is really aimed at tracking down new visual ground, new visual vocabulary based within kaupapa Māori."

He says evidence of the programme's success lies in its alumni. Artists like Sandy Adsett, Huhana Smith, Shane Cotton and Ngatai Taepa are graduates.

They are part of an anniversary series of exhibitions - Toioho XX - which opened in Palmerston North in December and brings together works from 150 alumni in one of the country's biggest displays of contemporary Māori art.

Toioho XX celebrates the 20th anniversary of Massey University's Bachelor of Māori Visual Arts. There are more than 150 works from art galleries and private collections displayed in six galleries, with some of the country's best Māori art on view.

Jahnke says he feels enormous pride in the national contribution that the programme has made.

"Sir Mason Durie always said the journey is not about the programme, or the staff, it is the students."

From the first graduate Huhana Smith to the latest PhD awarded late last year to Terri Te Tau, the programme has produced an impressive array of artists.

Te Manawa gallery in Palmerston North will house the core exhibitions along with the Square Edge Community Centre and The White Room Co. The exhibition runs until April 17 this year.

BA myth-busting makeover

It's a Bachelor of Arts, but not as you know it, writes Jennifer Little.



Actor Antonia Prebble says a Massey BA in English literature and French has enhanced her career.

new degree at Massey University aims to produce a generation of creative and critical thinkers.

Core papers in the new Massey University Bachelor of Arts will explore issues ranging from citizenship and identity to the impact of technology, the quality of political debate and the influence of social media on everything.

This new "intellectual kete" will expand people's universes, says Professor Richard Shaw, who is spearheading a "refresh" of the BA by Massey University, the first university in New Zealand to do so.

The degree nurtures critical, creative thinkers vital to a healthy democracy and economy, says Professor Shaw.

"That's our job, that's what we're supposed to do – expose students to things they would not otherwise have known existed."

Employers will want to have people on their payrolls who are confident in their own sense of identity and are comfortable about other people's ways of doing things, he adds.

"Society needs people with BA degrees – people who've studied politics, philosophy, religion, history, sociology, anthropology, languages, literature or media studies to name a few – to help maintain a healthy level of debate and dissension," he says.

An online equivalent of the degree will be established for Massey's growing distance student body.

Massey's "myth-busting" campaign has had a chorus of support, from celebrities such as comedian and TV host Jeremy Corbett and Massey BA graduate and actor

"Critical thinkers are needed for a healthy democracy."

- Professor Richard Shaw

Antonia Prebble. She talks in a short video clip about how her Massey BA in English literature and French has enhanced her career and personal development.



Nick Kapica, with Ilka, who was the first community manager, in the Kia Ora workspace that welcomes people to Te Whare Pukaka.

ow fitting that an institution dedicated to creativity should devise a new and engaging work environment for its staff.

The name of the space is Te Whare Pūkākā, or the College of Creative Arts Workplace, but that belies the sheer inventiveness of a myriad of spaces that have the potential to redefine the way we work.

Located in an environment of industrial chic, the floor plan is divided into rooms and spaces of varying sizes to accommodate professional staff and academics from Massey's Schools of Design, Art and Music and Creative Media Production.

And one of them, senior lecturer Nick Kapica, is the brains behind the concept, which combines open plan with box-type office and meeting rooms, as well as workshop space.

Each area has been given a name to define it and explain its function within the wider footprint of a space previously used by engineering staff and students.

Using the concept of activity-based workplaces, college staff along with Athfield Architects representatives visited numerous workplaces to help refine their thoughts on how the space should look.

Staff were involved with discussions on

how to create this aspirational and aesthetic use of space by suggesting how it should look and work.

Walking in, visitors are greeted by the words Kia Ora on the floor and find themselves in The Forge part of the communal kitchen.

It takes its name both from the metaphor that relationships are forged over food and drink and by the presence of a large extract hood. The Forge has an exaggerated kitchen island, the Kia Ora joinery and café furniture.

A community manager runs this space, which was largely the inspiration of Kapica's wife Ilka.

It is complemented by the neighbouring area Flux. This is an open working space where anyone from the university can come and work at the long work benches.

If privacy is required the space is populated with a series of box-type offices of varying shapes. The Flower Box has casual furniture, the Stand Box as the name suggests has stand-up meeting tables and leaner stools and the Long Box has a more traditional seated meeting table.

"It's a workspace where visitors can see staff working in a place outside the lecture theatre environment," Kapica says.

The smallest of the rooms is called the Soft Box, and is described as having more discreet access, no windows and loungetype furniture.

Off to the side of the main workspace is the intriguingly titled "The Scrum" space. It is simply furnished with large whiteboards and stools and can morph into a project space, an extension of The Forge for eating and drinking, or an exhibition space.

The activity most provided for is working at a computer - both sitting and standing. Six large shared tables provide clear desktop space for up to 76 people.

If that all sounds a bit busy and potentially noisy, the Sanctuary provides a refuge from other spaces, where you can work in silence and isolation.

Kapica concedes that not all staff were enamoured with the workspace environment when it was first unveiled, but many of the academics who had held on to their existing offices have gradually integrated into Te Whare Pūkākā.

College of Creative Arts Pro Vice-Chancellor, Professor Claire Robinson, says the space is still evolving, with some staff still adapting to the changes that are "a work in progress".

One further consideration is the possible addition of smaller spaces to accommodate the needs of other small groups wanting to meet privately.



Doctors, poets and the language of medicine

Poets, like doctors, deal with the deepest concerns of existence - illness, suffering, ageing, mortality, and the related feelings and fears. Massey University doctoral graduate Dr Johanna Emeney has explored the power of poetry to illuminate and comprehend medical experiences. She talks to **Jennifer Little**.

n award-winning poet before she began her doctoral thesis in creative writing through the School of English and Media Studies, Dr Johanna Emeney explored the emerging field of medical humanities by looking at the work of several New Zealand poets writing on medical themes.

Emeney says the emergence of medical humanities and its growing contribution to health practices arose from a need to break down communication barriers between doctors and patients resulting from complicated medical jargon.

She says that the "language of medicine, if one has the time to acquire it, is, like all languages, a source of power. By contrast, not to know a word, or words, is to be outside knowledge and therefore, as a patient, or as a carer, impotent."

She's also produced her own collection, titled *Family History*, about her mother's cancer treatment, for the creative component of her thesis. The poems capture her intensely felt reactions to and thoughts about her mother's cancer, along with her observations of hospital routines and clinical language that can heighten patients' and families' anxieties in an unfamiliar environment.

In her research she examines, "the ways in which the poets draw attention to the dehumanising effects of clinical language, and to the need for lifeworld language and imagery to communicate personal medical experience". While the field of medical humanities is well established in many United States and British universities, it is still relatively new to New Zealand. Emeney has been a guest tutor alongside Angela Andrews at the University of Auckland's Faculty of Medical and Health Sciences for several years.

The paper on comparative literature for third-year medical students is part of a medical humanities programme at the faculty.

Emeney says the opportunity for trainee doctors to study texts is hugely beneficial. They get the chance not only to develop empathy with patients, but also to process their own feelings about and reactions to difficult or challenging medical situations.

"Imagine after your first cadaver study – it can be very cathartic and creative to be able to write about that."

At the outset of writing her PhD, Emeney came third in the British Hippocrates Prize for Poetry and Medicine and last year was shortlisted for the Montreal International Poetry Prize and commended in the Hippocrates Prize. She published her first collection of poems, *Apple & Tree* (Cape Catley), in 2011.

She hopes to publish *Family History* later this year. She is teaching a creative writing paper at Massey's Albany campus this semester, and continues to co-facilitate the Michael King Young Writers Programme with her friend and teacher Ros Ali.

"We hold free writing events for talented senior school students from all over Auckland throughout the year. We also do frequent work for Auckland Council, running writing workshops for teens, migrant youth and older adults."

Night Nurses

appear at curtains in cameo profile, nod to obs sheets, tick boxes. The night nurses pickpocket pulses from bedsheets, slide and turn whole bodies from pain to comfort. In the light, their names will be forgottenlike the sound of their kind shoes on linoleum, their answers to muddled midnight questions, the nightmare admissions taken in their stride.

Lines Overheard at the Teaching Hospital

Today, I learned that heartstrings are called chordae tendineae I touched them.
In fact, I got to cut them in half.



A new music degree at Massey University aims not only to foster musical talent, but to produce industry-savvy graduates. By Paul Mulrooney.

here is a brand new approach to learning about creating and commercialising music being driven by Massey's new School of Music and Creative Media Production.

The first intake of students in the Bachelor of Commercial Music programme has started the course, which comprises three majors - music practice, music technology and music industry.

Head of School, Associate Professor Andre Ktori, says the full-time course is designed to produce creative graduates who are fluent in the production, promotion and distribution of music media and live events.

"It will take music into the digital worlds and encourage the new emerging artist - one

who is creative as well as strategic in a global music industry."

To help that goal to be realised, new hightech industry-standard studio spaces and labs are being built for the school.

When they are completed the facilities will include state-of-the-art recording, rehearsal, video and performance-capture facilities together with music, digital video, games, animation and web and mobile digital video studios with green screen web and mobile media labs.

Ktori, who is a BAFTA award winner for interactive enhanced music, has been joined at the school by staff who are working musicians, such as: producer and performer for internationally successful act Shapeshifter, Devin Abrams; Nicky Harrop, who has 18 years' experience in the music industry working for the BMG and Sony Music labels; lecturer Oli Wilson, who just happens to be keyboardist with renowned alternative indie act The Chills; and renowned pianist Dr Norman Meehan, who has joined the team to run the musicology courses.

Other staff include emerging artist Bridget Johnson, who leads the music technology major, which covers studio production, music software and hardware development. The objective is that students will lead both technological and artistic development, Ktori says. It is this unique combination of technological innovation, performance creativity and industry-

Creating a different kind of buzz

"... creative as well as strategic in a global music industry."

- Associate Professor Andre Ktori



Massey tutor Warren Maxwell performs at the Bachelor of Commercial Music launch last October.

Devin Abrams, performing with his band Shapeshifter, is also a tutor on the new course.

savvyness that sets Massey's programme apart, he says.

The calibre of the school's staff was emphasised at the Vodafone New Zealand Music Awards in November, when another staff member, Warren Maxwell, was presented with the Best Roots Album award for his band Trinity Roots's record *Citizen*. He is also part of Little Bushman and is an ex member of Fat Freddy's Drop.

Massey University has announced a scholarship to help foster excellence in the New Zealand music scene. Worth \$22,500, the scholarship, in association with the New Zealand Music Awards, will help a promising student with tuition fees and other costs in three years of undergraduate study. ■



Head of School, Associate Professor Andre Ktori says the course is designed to produce creative graduates who are fluent in the production, promotion and distribution of music media and live events.



Accentuating the positive out of adversity

It seems unlikely that anything positive could come out of the Canterbury earthquakes but nurses working with the recovery have experienced a phenomenon called post-traumatic growth, writes **Paul Mulrooney**.

urses are at the forefront of care in the immediate aftermath of any natural disaster. A ground-breaking study by Massey University researchers explores how they have coped with the personal and professional effects of the Canterbury earthquakes.

While there is significant existing research on the negative effects of disaster on mental health, there are few on the positive results for disaster response and recovery.

The study by clinical psychologist, Associate Professor Sarb Johal, and researcher Zoe Mounsey, addresses the main aspects of what has become known as post-traumatic growth. These are positive experiences arising out of disaster, such as improved relationships with others, increased personal strength, the identification of new possibilities, positive spiritual change and an increased appreciation of life.

On the fifth anniversary of the fatal Christchurch earthquake, Johal and Mounsey, from Massey's Joint Centre for Disaster Research, present their findings at the 2016 People and Disasters Conference. It is being held in Christchurch to coincide with the week in which the city fell in February 2011.

"Nurses do a lot but are not as well recognised as those in some other sectors."

- Associate Professor Sarb Johal

Two years after that 6.3-magnitude earthquake that killed 185 people and caused massive damage to the city's buildings and infrastructure, the researchers interviewed 11 nurses from across the city, including those working in community-based services, secondary care and residential homes.

The interviews took place in October and November 2013, enabling the interviewers to cover both the initial aftermath of the earthquakes and the ongoing recovery process.

Both researchers found differences from an earlier, similar study undertaken with Christchurch GPs.

"While doctors appeared to have prepared for their interviews with us, for some of the nurses it was the first time they had sat down and talked about their personal experiences," Mounsey says.

"They were very emotive interviews at times. Up until then they hadn't had a chance to reflect on what the earthquake experience meant for them."

All of the nurses interviewed were personally affected by the earthquakes and some continued to experience difficulties during the recovery phase. Many of the nurses experienced significant impacts to their living arrangements due to damage or a loss of facilities to their homes.

Johal says one of the main questions asked of the nurses, who were aged between 49 and 64, was, "Do you feel your relationships with other people have changed?".

For many the magnitude of the disaster was thrown into relief by the realisation of what really mattered to them.

"In a way they've become more detached from events and things, but more attached to people," he says.

One comment made that seemed to sum up the attitudes of a lot of the nurses was:



Associate Professor Sarb Johal from the Joint Centre for Disaster Research and researcher Zoe Mounsey.

"You have this realisation of what's really important. And it's like an absolute clarification of your values. What really counts is the relationships that you have with your family, your friends and your colleagues".

Another spoke of a change of approach from how they had viewed life before the first earthquake in September 2010 and afterward.

"Our lives have changed and I always call it AO and BO after quake and before quake. And it is different and I think a lot of people are different in that they have different attitudes."

They also talked a lot about the stress of the recovery process in the immediate aftermath of the quakes.

One phenomenon arising from this was the insistence of some traumatised people on speaking only to health professionals who had experienced the earthquakes too.

Since the earthquakes six of the 11 interviewees, who included one male nurse, had changed jobs or their hours.

"Several nurses recognised that they had grown in confidence as a result of their experience, and that while traumatic it was also rewarding in other ways, while others felt that they were more able to express their emotions," Johal says. "The words that the nurses used to describe their experiences, such as 'incredible', 'proud' and 'privileged' demonstrate the value that they placed on the experience."

The uplifting nature of the research's conclusion emerged spontaneously from the conversations, he says.

"Nurses do a lot but are not as well recognised as those in some other sectors."

Johal suspects that the experiences of others working in the emergency services at the time of the earthquake may also now emerge.

"After the five-year anniversary a lot of people may suddenly come out of the woodwork as the anniversary triggers previously suppressed emotions, thoughts and responses."

Campus wide



New college head says students can change the world

"We might be in the business of graduating students, but we are in the vocation of changing the world," says Professor Chris Gallavin, Massey University's College of Humanities and Social Sciences' new Deputy Pro Vice-Chancellor.

Professor Gallavin believes that humanities and social sciences are central to achieving this.

Originally from Blenheim, Gallavin has spent the past 10 years at the University of Canterbury, where he was Dean of the School of Law.

He completed his PhD in international criminal law and is now recognised as New Zealand's expert on the law of consent and culpable homicide, having written the book Evidence, published in 2008.

Gallavin also has a passion for poetry and a gift for memorising them en masse.

Māori science academy takes off



Massey University with Te Puni Kōkiri's support launched the first science academy of its kind in New Zealand in January.

The Massey Science Academy – Pūhoro fosters 75 Māori secondary school pupils from year 11 through to university and, ultimately, the workforce.

The University is working alongside five Manawatūsecondary schools, and university academics will engage with teachers, students and their families to foster students along their journeys to science careers.

Support will be in the form of selecting appropriate qualification standards at school, providing extra tutoring on a fortnightly basis, providing laboratory space for schools where this is not available, offering field trips and showing students the varied opportunities available to them.

Aerospace engineer Mana Vautier, pictured, who has previously worked with the United States National Aeronautics and Space Administration (NASA), is the ambassador and Big Brother for the campaign.

The Pūhoro programme is funded by Massey University and Te Puni Kōkiri with support from Palmerston North City Council, Te Tumu Paeroa and the New Zealand Qualifications Authority.

Massey forum helps address Pacific health issues

A serious under-resourcing of the health workforce in the Pacific Islands has been identified as one of the greatest challenges facing the region.

Academics, Pacific health researchers and leaders, and members of the diplomatic community gathered in Wellington in November to discuss the best way to address health issues in the region. These issues include high rates of cancer and the health and environmental effects of uncontrolled use and misuse of fertilisers and pesticides.

Numerous speakers at the event, hosted at the Dutch embassy and organised by Massey's Centre for Public Health Research, said that more health professionals and equipment are needed for the

Dutch Ambassador Rob Zaagman told guests that

his embassy has a special interest in the issues as it is officially accredited to Fiji, Samoa, Kiribati, Tuvalu

Massey Vice-Chancellor Steve Maharey described the forum as a "unique gathering" of the diplomatic and Pacific communities. Solutions to the region's myriad health issues lay with both securing more specialist support from outside the region and a commitment from the Pasifika community to addressing areas of concern, guests were told.

Centre Director, Professor Jeroen Douwes, hopes the forum will lead to a wider call to action from the international community to get involved in addressing certain health issues in the region that have not had the priority of others. A World Health Organisation non-communicable diseases action plan for



Dutch Ambassador Rob Zaagman (left), Tongan Minister for Health Dr Saia Piukala and Massey University Vice-Chancellor Steve Maharey at the Pasifika Health Research Forum

2013-2020 proposes a series of targets, including a reduction by 25 percent of mortality from cardiovascular disease, diabetes, chronic respiratory illnesses and cancer.



A labour of love

A Massey honours graduate has written and published a children's book – inspired by his young daughter.

Blair Reeve, a 2012 honours graduate in Japanese and English literature, came up with the idea of *Hogart the Hedgehog Turns Nine* by reading Dr Seuss books to his daughter, who was born in 2013.

While reading to her, the rhythm and

rhyming of the stories inspired him to write a book of his own.

After Massey Reeve went on to complete a Master of Fine Arts in creative writing at the City University of Hong Kong in 2014, where he still lives.

Hogart is about an elderly hedgehog having his ninth birthday, but he can't count past eight because hedgehogs count on their back feet and their back feet only have eight toes.

The book has received excellent reviews and is available in 10 countries.

The illustrator, Chris Stapp, also a New Zealander, is a friend of Reeve from Dunedin, who now lives in Auckland. Stapp is best known for his persona and movies Randy Cambell Stuntman.



