# VICTORIOUS

VICTORIA
UNIVERSITY
WELLINGTON

TE WHAKE WÄNANGA
O TE ÜPOKO O TE IKA A MÄUI



DESIGNING OUR FUTURE | HOW DO PEOPLE SAVE THE PLANET?
THE ART OF SCIENCE | HE PĀ ANAMATA—BUILDING A SUSTAINABLE FUTURE
BOLD PLANS TO TACKLE THE UNIVERSITY'S CARBON FOOTPRINT | WET AND WILD

#### **Contents**

#### PAGE 2

#### Recipe for planets

Discovering clues about the origins of our solar system.

#### PAGE 3

#### Robinson's space odyssey

Robinson Research Institute builds on its internationally renowned work with small satellites.

#### PAGE 4

#### A sweet solution

How best to protect pharmaceutical products, including mānuka honey, with



#### PAGE 5

#### Living-room legends

Using traditional Māori building materials and design to share stories.

#### PAGE 6 Navigating life's Hall of Faces

A new test provides insights into human face recognition.

#### PAGE 7

#### **Uncovering the stories** behind Islam

Exploring the diverse Muslim community and their perspectives.

#### PAGE 8

#### From Wellington to the world

Introducing the University's new Computational Media Innovation Centre.

#### PAGE 8

#### Boosting education leadership

An exciting initiative between the University and its commercialisation office, Viclink.

#### PAGE 9

#### On your bike

The sociology behind cycling in New Zealand cities.

#### PAGE 10

#### **Customised care**

New research into how prepared our aged-care facilities are.

#### PAGE 11

#### Family matters

A new director for the University's Roy McKenzie Centre for the Study of Families and Children.

#### PAGE 12

#### A new base for business

Victoria Business School launches a new innovation space, the Atom.

#### PAGE 12

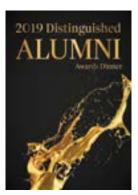
#### Thirty and going strong

Thirty years of New Zealand's Public Finance Act.

#### **PAGE 13**

#### The Distinguished Alumni Awards 2019

Introducing our 2019 Distinguished Alumni Award recipients.



#### PAGE 31 Book reviews

PAGE 32 Who's in my room?

#### SUSTAINABILITY

PAGE 18

Wet and wild

**PAGE 19** 

He pā anamata— Building a sustainable future

PAGE 19

Bold plans to tackle the University's carbon footprint

**PAGE 20** 

Many hands make light work

PAGE 21

**Energy lessons from South Korea** 

PAGE 22

Looking at the bigger picture

PAGE 23

Out of our depth

**PAGE 24** 

**Protecting our plants** 

**PAGE 25** 

Alumni profiles

**PAGE 26** 

Designing our future

**PAGE 27** 

How do people save the planet?

**PAGE 28** 

The art of science

**PAGE 29** 

Thinking outside the box

PAGE 30

The inbetweeners

#### PAGE 33

#### **Hidden voices**

What happens to our sense of past if we pay attention to hidden voices?

#### PAGE 34

#### Make believe with Weta Workshop

Exciting new online course offering from the University.

#### PAGE 35

#### Eyes on the prize

Master of Design key to working in Wellington's creative film industry.

#### PAGE 36

#### Out of order

The colourful langauge within the parliamentary debating chamber.

#### PAGE 37 A global perspective

#### PAGE 38

Our latest news

PAGE 40

Remembering

Roger Blackley

#### INSIDE BACK COVER Bridging time and space

Adam Art Gallery Te Pātaka Toi celebrates 20 years of groundbreaking exhibitions.





#### FROM THE VICE-CHANCELLOR

Sustainability is a word that gets used a lot these days, and sometimes it pays to unpack what we actually mean when we say it. From everyday personal decisions such as whether or not to use a supermarket plastic bag, to large-scale corporate initiatives to decarbonise, sustainability is ultimately about responsibility—for our communities, for our planet, and for future generations.

In this issue of Victorious, you will find out what the University has been doing to advance the global dialogue about sustainability, as well as what steps we are taking to reduce our own environmental footprint as an organisation.

One of the most pressing issues facing this generation is of course climate change, and the University is wholly committed to playing its part in the fight against it. Our Climate Change Research Institute and Science in Society Group are working to provide a better interface between science and policy. Our Antarctic Research Centre aims to improve understanding of Antarctic climate history and processes, and their influence on the global climate system. Our legal scholars contribute to advances in international environmental law, and our engineers and physical scientists work on sustainable energy systems.

This issue also touches on research our academics are doing into distinct but interlinked challenges such as biodiversity loss, pesticide regulation, freshwater decline, and housing density, which need to be addressed with no less urgency if we are to build a sustainable future.

Our researchers are looking into ways to build a deeper public discourse around environmental issues by partnering the natural sciences with other disciplines such as the arts and humanities. In this issue, you can read about the work being done by academics such as Professor James Renwick, Associate Professor Rebecca Priestley, and Dr Wokje Abrahamse to communicate complex ideas and change people's behaviours through these means.

As a large organisation, we are looking at what we can do to make our own practices and processes more sustainable. We have aligned our own actions with our research by adopting the United Nations Principles for Responsible Investment and by actively reducing our own carbon footprint. I'm particularly pleased that we are the first New Zealand university to be developing a comprehensive plan to reach net-zero carbon emissions by 2030—which you can read more about in this issue.

We are also launching our own Sustainability Week in September, in association with our media partner Newsroom, and involving cross-university seminars, debates, and events that aim to stimulate thought and action. Our efforts to demonstrate sustainability leadership have been recognised with numerous awards, including two Australasian Green Gown Awards we received in 2018, and a prestigious International Green Gown award in July 2019 for our Victoria Plus Programme. The University was a finalist in the sustainability section of the 2019 Wellington Gold Awards.

The research of course is crystal clear. The challenges posed to the world by climate instability and ocean acidification are already evident. The consequences to life as we know it are grave and will be irreversibly set in motion unless we rapidly decarbonise the world's energy supply and actively protect our planet's rich

I hope you enjoy reading about our contributions to sustainability research, but more importantly, I hope that the stories in this issue spur you to take action at any level you can—be it personal, community, national, or global.

#### **Professor Grant Guilford**

Vice-Chancellor ♡ @GrantGuilford

#### STAY CONNECTED

\$ 0800 VICTORIA (842 867)

- www.victoria.ac.nz
- ♡ @VicUniWgtn
- M VictoriaUniversityofWellington
- VictoriaUniversityofWellingtonAlumni
- ☑ VicUniWgtn

Keep your contact information up to date: ☑ alumni@vuw.ac.nz

#### **EVENTS**

Contact us to receive invitations for local and global events

- □ rsvp@vuw.ac.nz
- http://bit.ly/2bWR0J2

#### **GIFTING**

Contact the Development Office if you are interested in making a donation of funds or resources

 □ development-office@vuw.ac.nz § +64 4 463 5871

#### **VICTORIOUS**

 □ communications@lists.vuw.ac.nz Victorious is published by Victoria

University of Wellington, Te Whare Wānanga o te Ūpoko o te Ika a Māui

PO Box 600, Wellington, New Zealand

Editor: Samuel Burt

Design lead: Mary Adams

Editorial team: Crispin Anderlini, Elizabeth Beattie, Sarah Bovd. Alix Chapman, Lucy Dickie, Katherine Edmond, Jo Fisher, Samantha Smith, Kristina Keogh, Kirsten McDougall, Fiona Shaw, Andrew Smith, Guy Somerset, and Grace Taylor

Photographs (unless otherwise credited): Image Services, Victoria University of Wellington

Cover image: Professor James Renwick, pictured with Rudderstone, by Dennis O'Connor. Photograph by Mike Heydon, Jet Productions.

ISSN 1172-0387

© Victoria University of Wellington 2019

The views expressed in Victorious are not necessarily those of Victoria University of Wellington.

This publication is printed using soyabased inks. The paper is manufactured and sourced from paper mills that have accredited and audited environmental qualifications and use sustainably grown and harvested well-managed forests and elemental chlorine free pulp.

# Recipe for planets

IT'S NOT EVERY DAY THAT CLUES
ABOUT THE ORIGIN OF OUR SOLAR
SYSTEM FALL FROM THE SKY, BUT ONE
VICTORIA UNIVERSITY OF WELLINGTON
RESEARCHER HAS FOUND JUST THAT—IN
A METEORITE THAT COLLIDED WITH
EARTH 50 YEARS AGO.

since it hit Allende in northern Mexico on 8 February 1969, the meteorite has undergone extensive study, even informing the NASA Apollo missions that returned rock samples from the moon. Half a century later, samples of this meteorite have made their way to Wellington, where scientist Dr Bruce Charlier is studying them to reveal the secrets they hold about the birth of our solar system.

As part of an international collaboration with scientists from Caltech and the University of Chicago, Bruce is examining the composition of the isotopes of a particular element found in the meteorite. The composition of this element has its origins from before the solar system as we know it was formed, so studying it can give insights into our solar system.

"This meteorite preserves a record of the materials that gave birth to our sun," Bruce says. "In essence, we're looking at the raw ingredients for planets before everything got mixed up and cooked!"

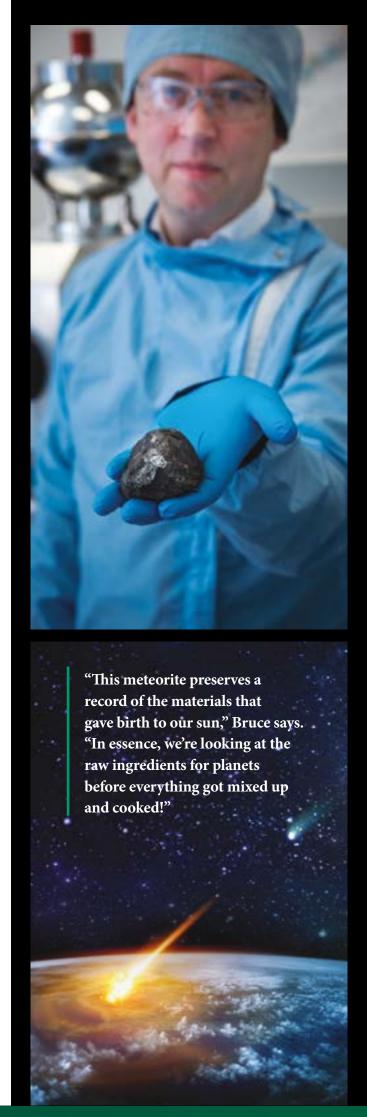
The elements Bruce is studying are found in a part of the meteorite called a calcium-aluminium-rich-inclusion (CAI). CAIs are the oldest dated solids in the solar system.

"These solids are pretty unique because they were formed from gas that cooled directly after the birth of the sun four and a half billion years ago," Bruce says. "They are the only surviving witnesses to that birth, so they can tell us a lot about the chemical composition of the earliest materials in the solar system and how they came together to form our sun and planets."

Using a state-of-the-art mass spectrometer at the University, Bruce and his team have so far studied the isotopes of the element strontium. However, there are many other elements present in the meteorite, each with a story to tell.

Bruce says they are now looking at ways to develop and enhance their analytical techniques. "This will allow us to study other elements and isotopes found in the Allende meteorite and learn more about the meteorite itself and the materials that came together to form the solar system we know today."

bruce.charlier@vuw.ac.nz





LIKE MANY OTHER PEOPLE HIS AGE,
VICTORIA UNIVERSITY OF WELLINGTON'S
DR NICK LONG CAN REMEMBER AS A
CHILD WATCHING BLACK AND WHITE
TELEVISION COVERAGE OF ASTRONAUTS
WALKING ON THE MOON. NOW, ON THE
FIFTIETH ANNIVERSARY OF THE FIRST
LUNAR LANDING, HE IS LEADING A
BRANCH OF NEW ZEALAND'S
NASCENT SPACE INDUSTRY.

ick is director of the Robinson Research Institute in the Faculty of Engineering, where he and his co-researchers are building on their internationally renowned strengths in high-temperature superconductor technology to develop propulsion and control systems for small satellites.

Space-sector analysts think small satellites are big business, says Nick. In 2016, they accounted for half of all launches and more than 8,500 small satellite missions are predicted over the next 10 years, with New Zealand playing an important role, thanks to Rocket Lab's breakthrough in enabling low-cost launches.

As loads become more sophisticated and missions more complicated, small satellites will need improved thrusting capability for in-space manoeuvres.

"Current propulsion technology is suited for large spacecraft but has low efficiency at small scale, so small satellites can't be repositioned once they are in orbit," says Nick.

"Our aim, in collaboration with researchers at the University of Auckland and University of Canterbury, is to create the next generation of propulsion systems for small satellites. These would provide manoeuvring on demand, which would not only enable repositioning but also compensate against atmospheric drag and ensure controlled deorbiting.

"Mission lifetimes would be longer and safer—with end-of-life decommissioning—and could include low-orbit high-resolution observations of Earth as well as enabling deep space missions."

'Stimulating a design-led, high-value manufacturing region' is one of Victoria University of Wellington's areas of academic distinctiveness, and the systems the Robinson Research Institute and its collaborators are developing would contribute to this.

"The economic benefits for New Zealand would accrue to high-tech manufacturers that make propulsion and control systems for local and export markets, and would extend to the many new high-value jobs created," says Nick.

"But the benefits would stretch even further when we take into account the value of the information gathered by a New Zealand-owned bespoke array of small satellites and provided to New Zealand users.

"Possible uses are many, from environmental and hazard monitoring to national security, telecommunications, and asset management. Users might include not only central and local government, but also commercial users such as farmers, forest owners, lines companies and telcos, as well as logistic, 'internet of things', and media companies."

The Government has established a New Zealand Space Agency and prioritised developing the country's space capability.

"We talk about 'blue sky' thinking, but with a space industry New Zealand can think beyond the sky," says Nick. "And the potential is as limitless as space itself."

□ nick.long@vuw.ac.nz



# sweet solution

HAILED FOR ITS MEDICINAL, ANTIBACTERIAL QUALITIES, MĀNUKA HONEY IS SO COVETED THAT JARS OF THE PRICEY PRODUCT ARE OFTEN KEPT UNDER LOCK AND KEY IN SHOPS TO PREVENT SHOPLIFTING.

t's also subject to regular fakery, with fraudsters marketing adulterated honey (or, in some cases, entirely artificial-flavoured sugar syrups) as mānuka honey to cash in on the product's reputation. Research from Victoria Business School (VBS) is looking into how pharmaceutical products, including mānuka honey, are best protected by law.

Dr Jessica Lai, a senior lecturer in Commercial Law at VBS's School of Accounting and Commercial Law, has a Master's degree in Chemistry and a PhD in Law. Her doctoral thesis was on the use of intellectual property to protect traditional knowledge.

"There are companies in Australia laying claim to the term 'mānuka honey', and fake products coming out of China and the United States. But 'mānuka' is a Māori word, and there are many traditional Māori uses for the mānuka plant that make use of its medicinal qualities. There's a risk that big companies could profit off this traditional knowledge without Māori getting anything," says Jessica.

Jessica, along with the Faculty of Law's Professor Susy Frankel, has received a Marsden grant to take a broader look at whether regulatory data exclusivity has become an increasingly important tool for some pharmaceutical companies.

"Regulatory data exclusivity protects data that is submitted to gain approval to market pharmaceuticals. Susy and I are looking at whether companies rely more on this protection when patents don't offer the protection they want."

Several patent applications for uses of the medicinal properties of the mānuka plant and honey have been filed in New Zealand. So

far, regulatory data exclusivity has not been an issue with mānukabased pharmaceuticals.

"Patents don't apply so well to manuka honey, for example, because it's a natural product that wasn't invented," says Jessica. "But you can isolate chemical compounds or genetic material contained within the plant or honey that can be used to identify it as containing mānuka. These markers are able to be—and have been—patented and are being used as part of the marketing battle over who can use the term 'mānuka honey' and what the product

Jessica says the trademark system could be a better way of protecting honey producers and consumers because trademarks are cheaper than patents and can, in theory, be maintained forever.

"But for this to work, there needs to be agreement on what actually constitutes mānuka honey. Such agreement would also make it easier to apply existing laws that protect consumers from misleading or deceptive conduct."

Jessica says a major concern is that Māori are often left out of the conversation, even when they have a relationship with the company seeking protection.

"This isn't okay. We shouldn't define 'mānuka' without Māori. Furthermore, we should be concerned when companies, who have their beehives on Māori land, experiment with the honey and seek patents for their findings, without consulting Māori. This is not to say that consultation is a panacea, but it's certainly a good starting point."

jessica.lai@vuw.ac.nz









Matariki, 3D printed recycled plastic and discarded offcuts of timber veneer.

# Living-room legends

HUMANS SHARE STORIES IN COUNTLESS WAYS: SINGING OR SPEAKING, THE WRITTEN WORD, PAINTINGS, AND MORE. BUT DAVE HAKARAIA FROM THE SCHOOL OF DESIGN IS USING A MORE UNIQUE METHOD, SHARING MĀORI MYTHS AND LEGENDS THROUGH CUSTOM-MADE FURNITURE.

ave's furniture designs—which include lamps, tables, and everything in between—use traditional Māori building materials and design techniques to tell traditional Māori stories. The table (pictured right), is made from celery pine (tanekaha), used by Māori for weaponry and boats, and traditional binding techniques, to tell the story of how Ranginui (the sky father) and Papatūānuku (the earth mother) were separated from a tight embrace by their sons to create the world we know today. Their struggle to stay together is shown in the design of the table, with the top and bottom pieces straining to stay connected in the centre but parting at the edges.

Dave, who is of Ngāpuhi and Ngāti Pāoa descent, says he chose furniture as his storytelling medium because it's something in use every day, allowing people to connect and engage with the narrative as part of our normal life and encouraging more widespread knowledge and understanding of Māori stories and culture.

Dave also mixes cutting-edge 3D fabrication techniques with more traditional design elements to create his distinct design approach.

"Every part of the design has meaning," Dave says. "I wanted to help create a contemporary Māori visual language, combining tradition with modern design technologies and techniques."

For Dave, sharing knowledge is the most important part of his work—both in design and teaching. He works closely with several contemporary Māori artists, including artist/designer Rangi Kipa, and he also mentors Māori and Pasifika students and students from low-decile schools.



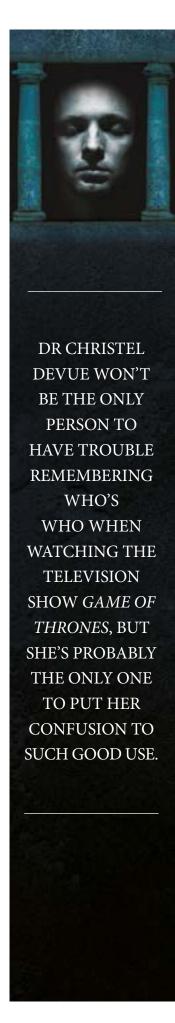
Ranginui and Papatūānuku, recycled tanekaha, hydrostone, and glass.



Te Po, recycled cuts of cedar with a flame-burnt top.

"Giving back is so important—I wouldn't be where I am without my mentors," he says.

☑ dave.hakaraia@vuw.ac.nz



## Navigating life's Hall of Faces

rompted by how she kept mixing up similar-looking characters among the cast of hundreds, Christel, a lecturer in the University's School of Psychology, joined with fellow researchers Annabelle Wride and Associate Professor Gina Grimshaw to develop a test based on the show to provide fresh insights into human face recognition.

"We had noticed significant limitations in existing tests," says Christel. "Some, for instance, use strictly controlled faces of strangers—stripped of hair, glasses, and other adornments—that people study and learn in the lab. To us, this seemed very unlike the way we learn faces in the real world, where we encounter people in many different situations and without any real intent to study their facial features."

According to laboratory-based tests, Christel is supposedly good with faces, but she wasn't when it came to Game of Thrones and its more challenging conditions.

So she and her colleagues tested participants who had watched the first six seasons of the show, just once and when they first screened, thus ensuring the same viewing experience. They showed them 90 headshots of actors with different levels of exposure (main heroes, lead characters, support characters, and bit players), mixed with

Participants judged whether each face was familiar and rated their confidence in their answer, before trying to identify and name the character or actor. Half were shown pictures where actors looked similar to their character and the rest pictures where appearance differed.

Among the cases of mistaken identity that ensued were Jack Gleeson, who plays despised Joffrey Baratheon, taken for Maisie Williams, who plays beloved Arya Stark; Sibel Kekilli, who plays Tyrion Lannister's mistress Shae, taken for Isaac Hempstead Wright, who is supernatural seer Brandon Stark; and a grizzled bearded stranger taken for Kristian Naim, the hulking Hodor. "These and other misidentifications were often based on ostensibly superficial features like hairstyle or colour and facial hair," says Christel.

Only the most prominent actors were correctly identified and named more often than just recognised, and identification errors occurred at all exposure levels. Bit players were never correctly identified and only rarely recognised, even if their brief appearance in the show had a dramatic impact.

"The participant who recognised the most actors did so for about 80 percent of actors, but also falsely recognised about 50 percent of strangers. This shows that being good with faces is also about knowing when you encounter a face for the first time. Some participants were extremely confident and others really hesitant, but confidence didn't predict performance.

"Our research—showing that even people with superior recognition abilities also forget faces and make identification errors—has important implications for eyewitness testimony in criminal court cases and law enforcement agencies' use of super-recognisers."

It can also make the rest of us feel better about our own difficulties with Game of Thrones characters.

christel.devue@vuw.ac.nz

# Uncovering the stories behind Islam

AFTER THE CHRISTCHURCH TERRORIST
ATTACKS OF 15 MARCH, THE ASIA NEW ZEALAND
FOUNDATION ASKED DR EVA NISA TO PROVIDE
A LIST OF 'DOS AND DON'TS' FOR JOURNALISTS
COVERING ISLAMIC ISSUES. HER RESPONSE WAS,
"THE MOST IMPORTANT THING IS THEY DON'T
ESSENTIALISE, BECAUSE, LIKE ANY RELIGION,
ISLAM IS VERY DIVERSE".

ournalists—and anyone else—should be cautious talking about "the position of Islam" or what "Islam says", warns Eva, a lecturer in the Religious Studies programme of Victoria University of Wellington's School of Social and Cultural Studies. "A religion doesn't think, doesn't act—its believers think and act," she says.

Eva's mother is an Islamic preacher to women congregants in Indonesia and envisaged her daughter following in her footsteps after she went to Al-Azhar University in Cairo, Egypt, to study for a Bachelor's degree, specialising in the Qur'an.

But in Cairo, and in her subsequent studies in the Netherlands, Australia, and Germany, Eva's focus widened from theology to incorporate other disciplines and a broader cultural perspective on Islam.

That is the perspective she now passes on to students, encouraging them to be critical thinkers and to understand Islam in different contexts, including the law, politics and international relations, and business and economics.

Underlying her research and teaching is the imperative to recognise "there are so many different Muslim voices". This is the case not only between countries but within countries, and even within the same communities within countries.

Fittingly, Eva's range of research projects is broad too, including looking at how the internet and social media interacts with Islam, the role of Muslim youth in spreading diverse perspectives of Islam in Southeast Asia, and middle-class Muslims, philanthropy, and the Islamic economy.

One of her principal focuses is women and Islam, including Muslim women judges and Islamic law reform, and international collaborations such as an Encyclopedia of Women and Islamic Cultures and a Muslim marriages project looking at contract marriage, arranged marriage, unregistered marriage, online secret marriage, and speed dating—the last in Malaysia.

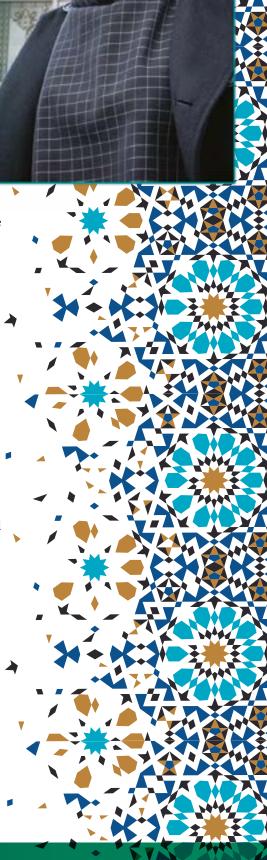
It is important to listen to Muslim women and their experiences, says Eva.

"One example is women with a veil. They are always represented as oppressed, as wearing a veil because of their male relatives or religious teachers. But although some are oppressed, for others the veil is a choice and you are oppressing them when you ask them to take it off. You are asking them to remove something that is their freedom and the way they exercise their agency."

As the crammed whiteboard planner on her office wall illustrates, Eva's research schedule is a busy one.

It is, however, the way she satisfies her curiosity. "That's something I love to do," she says. "Every time I see something, I go, 'Hmm, that's very interesting, what's the story behind that?"







### From Wellington to the world

Wellington city is a hub for New Zealand's tech and digital scenes, with companies such as Xero, TradeMe, Weta Digital, and 8i calling it home. The University's Computational Media Innovation Centre (CMIC) plans to join forces with these thriving industries to foster cutting-edge innovation and collaboration from its new premises in the heart of Wellington.

Founded in late 2017, and initially based at the University's Kelburn campus, CMIC has won numerous accolades, including a KiwiNet Research Innovation Award. It has also had a presence at leading industry events such as the international SIGGRAPH conference for computer graphics and facilitated the launch of start-up DreamFlux to bring innovative mixed-reality technology to the world.

The Centre's move to custom-designed premises on Wellington's Courtenay Place in April will help grow these connections and achievements, says dean of engineering Professor Dale Carnegie.

"We're thrilled with this location and what the new facilities

will allow us to achieve," says Dale. "Being in the heart of the city reflects our need to work more closely with industry and our desire to harness that spirit of entrepreneurship and innovation that is so uniquely Wellington."

The central city location will make it easier for staff and students to connect face-to-face with industry, while the spaces and latest technologies available inside the CMIC offices support groups of all shapes and sizes to innovate in the tech and digital spaces.

With extensive backgrounds in the entertainment and ICT sectors, CMIC co-directors Professor Ken Anjyo and Associate Professor Taehyun Rhee, and prototyping lead Meredith Meyer-Nichols bring local and international industry connections to CMIC. They hope these new premises will attract even more local and international talent to the University.

"CMIC will help strengthen industry-academia collaborations both in New Zealand and around the world," says Ken.

### Boosting education leadership

A joint initiative between Victoria University of Wellington and its commercialisation office Viclink is helping teachers from the Kingdom of Saudi Arabia drive change in their education system.

In order to diversify its economy away from oil and create more high-skill jobs, Saudi Arabia's Ministry of Education is sending hundreds of teachers around the world to engage in long-term, real-life experiences in other cultures. By exposing teachers to different ways of teaching and learning, the Ministry hopes to hone their teaching and English language skills and create global-thinking citizens who can share their new knowledge with Saudi students when they return home.

The international teaching programme—known as Khebrat, meaning 'experience'—is part of a major initiative to transform the country's education system. Eighteen Saudi Arabian teachers are participating in a one-year programme in Wellington aimed at building their leadership capabilities.

"The Kingdom recognises that in order to prepare their youth for a post-oil job market—one where they will need their own scientists, engineers, economists, and lawyers—they need to nurture critical, independent thinkers—and that starts with teachers," says Jeff Howe, Viclink's general manager, international development.

The University's English Language Institute, in the School of Linguistics and Applied Language Studies, is providing an English proficiency programme leading into a 10-week school immersion programme organised and supported by the Faculty of Education. The school immersion has the Saudi Arabians working alongside Wellington-based primary and secondary school teachers so they can study the New Zealand curriculum and observe classroom practice in action.

Dr Carolyn Tait, head of school in the Faculty of Education, is quick to point out that the programme is not simply about transferring New Zealand practice. "It's more about promoting deep, critical thinking about their own teaching practice," she says.

Despite some significant cultural differences to navigate, Carolyn says the learning is reciprocal.

"Not only are we improving our own intercultural skills, the experience is also giving us new eyes to look at our own curriculum, and ask questions about our own practices."

# On your bike

CYCLING IS AN INCREASINGLY POPULAR WAY TO GET AROUND NEW ZEALAND CITIES, BUT THE SOCIOLOGY BEHIND IT IS ONLY JUST BEGINNING TO BE UNDERSTOOD.

r Mike Lloyd from the School of Social and Cultural Studies says that while current research on the complexity of traffic focuses on the domains of psychology and engineering, there is growing interest from sociologists wanting to understand traffic as a complex space of interaction.

A keen cyclist since his school days in Christchurch, Mike has a personal as well as professional interest in the interactions between cyclists, drivers, and pedestrians. He says as cycling in New Zealand has grown in popularity, so has the focus on infrastructure to make

"Working from an understanding that road rules are not a hard and fast guide to what actually transpires on the road, my research investigated how cyclists, drivers, and pedestrians finely adapt their interactions with each other," says Mike.

Using Wellington's Island Bay cycleway as his research site, Mike fixed GoPro cameras to his helmet and bike to capture video footage.

He found that road design—things like placement of speed bumps and the colour and width of paint—combined with the fine movements of pedestrians, drivers, and cyclists, played a remarkably important role in how new cycling infrastructure is used. Mike includes gaze direction, stance, and the use of objects such as cell phones, car doors, and kerbsides, as important factors that coordinate movement on the road.

"It's not possible to predict exactly which features of infrastructure play a key role in interaction on the road, but a clear finding is that transition points need particular care in their design. The places where cycle lanes move onto shared space on footpaths, where cyclists and drivers share space in 'sharrow' lanes, and even the areas where near misses and collisions can occur," he says.

Growing recognition of the usefulness of video footage enabled Mike to use videos posted on sites such as YouTube for the second branch of his research, revealing some surprising results.

Focusing on what cyclists call 'cell-phone zombies'—pedestrians moving in or near cycle-lanes while distracted by their cell-phone use—Mike's research shows that there is remarkable variety in what pedestrians do when supposedly distracted by a cell phone. "Even though a cell phone might be at-the-ready, it is often the holder's gaze direction that successfully communicates to a cyclist that there is no worrying distraction occurring," he says.

"Very few collisions actually occur. Pedestrians are using peripheral awareness and at the same time cyclists are on the lookout for serious instances of cell-phone distraction, adapting their course when this occurs."

While there are instances where just holding a cell phone does appear to have an impact on oblivious movements by pedestrians, Mike's research suggests that the pejorative term 'cell-phone zombie' is not very useful.

"Given the ubiquity of cell-phone use and the potential dangers of the street, understanding these complex interactions between cyclists, drivers, and pedestrians is an important task for further research."

mike.lloyd@vuw.ac.nz





### Customised care

RESEARCH SHOWS THAT OBESITY RATES PEAK
AT THE AGE OF 65 AND, WITH AN AGEING
POPULATION IN NEW ZEALAND, IT'S TIMELY TO
ASK HOW PREPARED OUR AGED-CARE FACILITIES
ARE FOR VERY OVERWEIGHT PATIENTS.

**D**r Caz Hales (above left) and Dr Helen Rook (above right) from the Faculty of Health are leading a research project that builds on their earlier research into how hospitals care for larger patients.

"We know from working in hospitals that a lot of resources are required to care for this group of people, in terms of human resources and equipment. We also know the layout of the space, such as the doorways, often aren't large enough for specialised equipment to get through. We wanted to see whether there are similar concerns in aged-care facilities," says Caz.

Data will be collected from three aged-care facilities, including publicly funded, charity-funded, and religious-based care facilities, and will be analysed alongside a national database that records the activities of organisations that care for the elderly.

One of the focus areas of the study is current funding models. "At the moment, there is no funding allowance for increases in patient needs," says Helen. "That's problematic because people who are sicker, or have obesity, require different equipment and care. The same amount of funding for each patient doesn't allow for an equitable service."

The research being conducted by Caz and Helen is unique in New Zealand and will involve consultation with an advisory team of industry, consumer representatives, and care providers.

According to Helen, this could improve the impact of the research. "When we work collaboratively, we can have an impact directly on those who are engaged with the services so that there can be better planning to care for this group of people in the future."

# A resilient student community

It's no secret that New Zealand is currently facing a mental health crisis, and our rangatahi (young people) are often the most at risk.

In 2018, the Victoria University of Wellington Students' Association took to the streets of Wellington, along with many students, to demand that the Government increase its support of mental health providers at tertiary institutions—and both the University and the Government were listening.

The Ministry of Health, in partnership with Tu Ora Compass Health, recently included Victoria University of Wellington in the tertiary sector pilot of Piki, an initiative that provides free mental health support for 18- to 25-year-olds across the greater Wellington region and boosts the range of mental health services available to them on and off campus.

Students at the University now have access to four additional full-time counsellors or psychologists who complement the existing service offered by Mauri Ora (Student Health and Student Counselling), as well as access to external specialist support.

This includes peer support groups and new digital resources—both of which university staff and students have helped shape, and continue to develop and design content for, says Pam Thorburn, director of Student Academic Services.

"A strong youth voice is required to ensure the pilot of Piki is a success. We are committed to working in partnership with our students and external providers to build a resilient community in which students succeed academically and have a positive student experience."

victoria.ac.nz/piki



# Family matters

WE MAY NOT BE ABLE TO CHOOSE OUR FAMILIES, BUT DR KATE PRICKETT HAS CHOSEN TO STUDY EVERYTHING ABOUT THEM.

born and bred Wellingtonian, Kate has worked in Washington, D.C., Chicago, and Austin, Texas in various public-policy roles, largely focused on research into family life. She has recently returned to her hometown, where she's applying her extensive expertise to her new role as the director of the University's Roy McKenzie Centre for the Study of Families and Children.

Established in 2003, the Centre conducts research about families that informs policymakers and has received new funding from the Ministry of Social Development and Oranga Tamariki / the Ministry for Children.

"A big focus of my work is looking at inequalities in children's health and wellbeing and, in particular, how things like work, family structure, and poverty shape family processes," says Kate. "Family stress can contribute to these inequalities, but I'm also looking at aspects of resilience in families too—what is helping to make life easier."

Working conditions are a big strand of Kate's research. "Most families in New Zealand need two incomes just to get by, so we need to stop this conversation about whether it's 'good' for mothers to go back to work after having a baby," she says. "Research shows that employment per se doesn't really matter for a child's development—what matters is that parents have good jobs with flexibility to allow them to facilitate both work and family life.

"This opportunity doesn't come around every day," she says. "I've always wanted to make sure that my research isn't done in an academic vacuum, so the translational aspect of this role—that it can inform policy and make things better for families—is really exciting."

Kate says it was an easy choice to move her young family from the United States back to New Zealand's shaky isles.

"It's much easier to explain to my five-year-old daughter why she has to do earthquake drills at school here than it would have been to explain the active shooter lockdown drills she'd be doing in her kindergarten classroom if we were still in the States."

Kate says while she is glad to be away from the gun violence that she heard about on a daily basis in the US, she was dismayed to learn of the 15 March terrorist attacks in her home country. "When the terrible shootings happened in Christchurch, my reaction was quite different from that of my colleagues, who were in shock," she says. "I'd been conditioned to it by my time in the States so I was angry, but sadly, not surprised."

Earlier in the year Kate had published a study in the journal Pediatrics, which showed that firearm-related toddler mortality in the US had doubled over the last decade. "We were able to link it to the fact that Americans were now less likely to own long hunting-type guns, and more likely to have small handguns instead, which are generally loaded and stored somewhere handy like the car glove box, bedside table, or kitchen cabinet—basically, places that are also accessed easily by small children."

The story was picked up by New Zealand media, with Kate commenting at the time that New Zealand's gun laws were some of the most relaxed in the world.

Kate says New Zealand's swift changes to gun laws following the attacks on 15 March are laudable. "The world is watching, and I hope there are more changes to come that will make us even safer."

☑ kate.prickett@vuw.ac.nz



### A new base for business

Tictoria Business School (VBS) is strengthening its reputation as a hub for ideas and enterprise with the Atom, a new innovation space for students starting their entrepreneurial journeys.

Launched in March, the Atom provides a base for fledgling businesses to work from and access advice and support from entrepreneurs who have done it all before.

"The creation of the Atom was a team effort between students, staff, and stakeholders interested in creating a dedicated space for student entrepreneurship in the heart of Wellington," says Professor Stephen Cummings, director of entrepreneurship at VBS.

Seven businesses are currently based at The Atom, including HerbScience, a start-up specialising in the development of ethical evidence-based nutraceuticals and integrative medicine.

"Plants have been used to treat infections for centuries, but their potential as antimicrobials has been neglected by scientific research," says Cynthia Hunefield, the founder of HerbScience. "My background in ethnobotany and clinical herbal medicine, combined with a postgraduate degree in clinical research and my current study towards a Master of Innovation and Commercialisation, have provided me with a unique perspective of what might be possible. I look at our traditional medicines for inspiration to develop the medicines of tomorrow."

The Atom also provides a space for events centred on innovation and entrepreneurship. Earlier this year, a breakfast at the Atom saw alumnae Brooke Roberts and Sonya Williams, co-founders of wealth development platform Sharesies and VBS entrepreneurial ambassadors, speak about the development of Sharesies, which has around 36,000 Kiwi investors who have invested more than \$38 million.

"Wellington is the best environment I've ever seen for being a student and an entrepreneur," says Stephen. "We hope that the Atom aids that by becoming a central hub and incubator for New Zealand innovation and entrepreneurial talent."

www.theatom.co.nz

## Thirty and going strong

Then we think of 1989, some of us will recall protesters in Tiananmen Square, the fall of the Berlin Wall, and the Velvet Revolution in the former Czechoslovakia. But 1989 was also the year of a quieter far-reaching revolution: the establishment of New Zealand's Public Finance Act.

Professor Ian Ball knows better than most how the Act laid the groundwork for a pioneering public financial management system for which New Zealand is respected around the world.

Now professor of practice-public financial management in the School of Accounting and Commercial Law, Ian was a senior Treasury official between 1987 and 1994 and one of the architects of the Act.

"The New Zealand Government now has a system of financial management better than any other government in the world and it is known internationally for that?

Whether being interviewed about the Act by PhD candidates from the University of Oxford and Harvard University or hosting a recent three-day conference to mark its thirtieth anniversary, he is proud of the transformation the Act wrought.

"The New Zealand Government now has a system of financial management better than any other government in the world and it is known internationally for that," says Ian.

"What we do is, for many other countries, remarkable, if not impossible. For example, the New Zealand Government publishes monthly financial statements on a normal commercial basis. Most other governments have difficulty doing that annually. Many don't do it at all."

Ian—who was chief executive officer of the International Federation of Accountants in New York from 2002 to 2013, and earlier, as chairman of its Public Sector Committee, initiated and led development of International Public Sector Accounting Standards—is now contributing to the University's research, teaching, and engagement around the Act and other aspects of public financial management.

At the University, and as chair of the Treasury's Audit Committee for the Government's financial statements, he continues to provide thought leadership on the Act as it undergoes reform.

"In 1992, the Economist had a whole page on the Public Finance Act and its second-to-last sentence was 'Time will tell.' Well, time did tell, and the Act has stood the test of time. Now we need to ensure it is fit for purpose for another 30 years."

# Celebrating our distinguished ALUMINI

The achievements of six of Victoria University of Wellington's most distinguished alumni will be celebrated at a black-tie dinner in November.

The recipients of the Distinguished Alumni Awards 2019 are business leaders Rob Campbell and Whaimutu Dewes; Pasifika academic Tagaloatele Professor Peggy Fairbairn-Dunlop; sustainable building advocate Pamela Bell; astronaut Dr Alexander Gerst; and judge, youth justice advocate, and co-founder of Wellington's Circa Theatre Judge Carolyn Henwood.

Chancellor Neil Paviour-Smith said the award recipients had established themselves as leaders in their respective fields over the course of their careers, and were outstanding examples of what graduates from Victoria University of Wellington could achieve. "These alumni have achieved at the very highest level and made an immeasurable difference to those around them. In their different ways, each of these award winners has demonstrated the best of the University's values and the quality of an education from our institution. We are honoured to count them as alumni."





#### Pamela Bell (BArch 2003, MArch 2009)

Damela Bell is the founder and former chief executive of PrefabNZ, and is one of New Zealand's leading advocates for sustainable innovative building methods.

Ms Bell came to prominence as a sportswoman, competing in the 1998 Winter Olympics in Japan as New Zealand's first Olympic snowboarder. She went on to found the New Zealand Snowboard Academy along with her own snowboarding clothing company, Fruition Snow System.

After completing a Bachelor's degree in Architecture at Victoria University of Wellington, Ms Bell worked in the profession and undertook aid work in Africa before returning to New Zealand to raise her family and complete a Master's degree focused on prefabricated housing. Her research prompted her to organise a Kiwi Prefab Workshop at the University's School of Architecture and Design, which was attended by more than 140 people who called for an industry organisation to be established. Ms Bell took up this challenge and founded PrefabNZ.

Under her leadership, PrefabNZ has showcased innovative prefabricated buildings nationwide and organised a number of major events to educate industry, government, and the broader public about how offsite construction can address housing shortages and improve the sustainability of our future housing. The group numbers almost 400 member organisations and advocates for the numerous advantages that prefabrication offers to increase quality, save time, improve health and safety, and reduce material waste. As well as stimulating discussion in New Zealand, PrefabNZ has inspired similar movements in other countries, such as prefabAUS in Australia.

As well as functioning as an advocacy group, PrefabNZ actively encourages innovation in building methods by sowing seeds and showcasing best practice. One example is the 2015 UNIpod design competition for an open-source universally accessible bathroom and kitchen pod, designed specifically for multi-unit residential applications. The winning design was made into a prototype that was launched at the PrefabNZ CoLab conference in Auckland in 2016. The design is open source and available for all to use, a first for New Zealand.

More recently, the SNUG 'home in my backyard' design competition attracted 86 high-quality secondary or accessory housing options, with 12 winning designs launched at PrefabNZ's CoLab 2019.



#### Rob Campbell (BA 1972, BA(Hons) 1974)

 $R^{
m ob}$  Campbell is a professional business director and an advocate for more equitable and responsible practices in business management.

Mr Campbell trained as an economist at Victoria University of Wellington and went on to lecture there and at Massev University. After joining the union movement in the 1970s, he became a member of the Labour Party executive and was subsequently offered a directorship of New Zealand Post, which was the beginning of a new career as a professional director.

Mr Campbell has held many directorships over the course of a 30-year career in investment management and corporate governance. Currently, he chairs the boards of Skycity Entertainment Group, Summerset Group Holdings, Tourism Holdings, and WEL Networks. He is a director for a number of other companies, and is also the owner and director of Tutanekai Investments. In recent years, he has overseen

the successful listing of retirement village operator Summerset Group, transforming it into one of the leading organisations in that industry. In a similar vein, Tourism Holdings more than doubled its earnings in the first three years of his tenure as chair.

As well as significantly improving these companies' financial performance, Mr Campbell has become an outspoken critic of some of the systemic problems he sees in corporate governance, including a lack of diversity on boards and the need for directors to become more actively involved in the management of businesses. He has taken significant steps to address these issues in the businesses with which he is involved, and his public advocacy earned him the Beacon Award for business leader of the year in 2017 from the New Zealand Shareholders Association, which applauded his willingness to speak out on issues "without fear or favour".



#### Whaimutu Dewes, Ngāti Porou and

Ngāti Rangitihi (BA 1975, LLB 1977, MPA 1988)

haimutu Dewes is a prominent business leader, particularly in the seafood industry, and a strong advocate for Māori economic development.

After graduating from Victoria University of Wellington, Mr Dewes joined the public service, rising to become the chief legal adviser in what was then the Department of Māori Affairs. In 1988, he was a guest scholar at the Brookings Institution in Washington, D.C., looking at Māori economic development, and in the same year he graduated with a Master of Public Administration from the Kennedy School of Government at Harvard.

Subsequently, Mr Dewes worked in senior roles for Fletcher Challenge and held directorships at organisations including Housing New Zealand, Television New Zealand, Māori Television, and Ngāti Porou Holding Company. He currently serves on the board of Contact Energy and chairs Ngati Porou Seafoods and Ngati Porou Forestry.

He has established himself as a leader in Māori business organisations, with particular expertise in fisheries, and is the current chairman of Sealord Group and Moana New Zealand. He also served as a member of the Treaty of Waitangi Fisheries Commission in its first 10 years.

Mr Dewes is also a prominent advocate for the revitalisation of te reo Māori. His involvement in this movement dates from membership of Victoria University of Wellington's Te Reo Māori Society and his part in the campaign that resulted in the te reo Māori 1972 petition to Parliament. Those efforts led to the establishment, in 1975, of Māori Language Week and the Māori Language Act 1987. Mr Dewes regards the fact that he and his wife, Judy, have raised their children to be fluently bilingual as their most rewarding achievement.

In 2018, he was awarded the Māori Governance Leader Award as part of the Māori Business Leader Awards.



#### Tagaloatele Professor Peggy Fairbairn-Dunlop

Sa Petaia, Sa Te'o, and Sa Atoa (BA 1974, BA(Hons) 1977, MA 1982)

agaloatele Professor Peggy Fairbairn-Dunlop is a trailblazing Pasifika academic and an expert in a range of Pacific development issues, including national sustainable development, gender equality, and youth equity.

An emeritus professor of Pacific Studies at Auckland University of Technology, Professor Fairbairn-Dunlop has had a long career fostering the involvement and achievement of Pasifika students in tertiary institutions.

After completing doctoral studies in Australia, she returned to Victoria University of Wellington, where she had undertaken Bachelor's and Master's degrees, to become the inaugural director of the Pacific Studies department, Va'aomanu Pasifika.

As well as supervising graduate students, she established the Pacific Postgraduate Talanoa national seminar series. Now in its 12th year, it has been invaluable not only for the quality of research shared but also for its fostering of a support network for Pasifika students and academics in New Zealand, and for establishing connections with peers across the Pacific and in the United States.

Professor Fairbairn-Dunlop has made major contributions to government and non-governmental organisations' policy affecting the Pasifika community. Her work has been devoted to documenting Pasifika and indigenous knowledge and knowledge-building processes, and looking at how these values, beliefs, and practices might be integrated with decision-making at a local, national, and global level.

She has held posts with the United Nations Development Fund for Women and the United Nations Development Fund in the Pacific. In New Zealand, she has served as chair of the Health Research Council Pacific team and she sits on a number of Ministry of Education and Ministry of Health committees, as well as the social sciences committees of both the Royal Society Te Apārangi and UNESCO. She has served as the national president of PACIFICA Inc-New Zealand's oldest organisation for Pacific women in New Zealand—and in 2017 she was one of four commissioners appointed to oversee Samoa's first-ever national inquiry into family violence.



#### Dr Alexander Gerst (MSc 2003)

r Alexander Gerst is a highly regarded volcanologist and astronaut, who has undertaken two missions to the International Space Station (ISS).

During his graduate studies at Victoria University of Wellington, Dr Gerst developed new volcano-monitoring techniques that can improve volcanic-eruption forecasting. He continued this work during a doctorate undertaken at the University of Hamburg, for which he received the Bernd Rendel award for outstanding research from the German Research Foundation.

After completing his doctorate, Dr Gerst was elected as an astronaut by the European Space Agency in 2009. Since then, he has been a member of the European Astronaut Corps, based in the European Astronaut Centre in Germany.

Dr Gerst first travelled into space in 2014, spending six months on the ISS as flight engineer, and he returned to the ISS in 2018 as commander. He is the first German to have held this position, and only the second European. For his work during the 2014 ISS mission, Dr Gerst was awarded the Officer's Cross of the Federal Republic of Germany.

During his space flights, Dr Gerst carried out a range of experiments on how various chemicals and elements behave in zero gravity, as well as testing new technologies to support future human space exploration. He is an enthusiastic science communicator and, while conducting his work on the ISS, maintained a popular blog detailing the progress of his experiments and shared photos and insights from space on social media platforms to a large international following.



#### Judge Carolyn Henwood (LLB 1971)

Tudge Carolyn Henwood has had a distinguished career as a judge of the District Court and Youth Court, and as a prominent supporter of the arts.

Graduating with a Bachelor of Laws from Victoria University of Wellington, Judge Henwood went on to become the first female judge of the District Court in Wellington. She has had a particularly prominent role in youth justice, serving as a Youth Court judge for many years, and has served on a number of government panels and published extensively on youth justice issues. Her expertise has been recognised on an international stage as well, thanks to leadership and convenor roles for a number of international conferences held in New Zealand, and a presentation in Washington, D.C. and at the University of Oxford.

In 2006, Judge Henwood was appointed as special adviser for the implementation of Te Hurihanga, a youth justice programme that aimed to prevent re-offending by young people. She established, and continues to chair, the Henwood Trust, which provides independent policy advice and services to people and organisations working with young offenders. One notable example of the Trust's work

was its drafting of the Covenant for our Nation's Children, which aims to protect children from violence, abuse, and neglect and was endorsed by a range of political parties and non-govermental organisations, including the Iwi Chairs Forum.

More recently, she served as the chair of the Confidential Listening and Assistance Service, which offered people a chance to be heard by an independent panel if they had historic allegations of abuse or neglect while in the care of the state before 1992. This panel heard from more than 1,100 people, and made seven recommendations in 2015 to prevent future abuse and improve the way complaints are investigated.

In addition to her work in the judiciary, Judge Henwood has been involved in the theatre and arts sector for many years. She was a founding member of Circa Theatre in Wellington, a foundation trustee of the Theatre Artists Charitable Trust, and she remains an active member of both organisations. She has also served as deputy chair of the New Zealand Drama School / Toi Whaakari.

# SUSTAINABILITY

"We need to be ambitious if the world is to avert the potentially catastrophic impacts of climate change. There is a pressing need for universities like ours to lead change and to enhance societal commitment to sustainability through our teaching and research."

—PROFESSOR GRANT GUILFORD

Vice-Chancellor

# Wet and wild

FOURTEEN YEARS AGO, THE WAIRIO BLOCK ON THE EASTERN SHORES OF LAKE WAIRARAPA WAS AN AREA OF BARREN PADDOCKS, BOGGY PASTURE, AND FEW OBVIOUS PROSPECTS FOR BIODIVERSITY.



oday, the 132-hectare site is a mosaic of thriving wetland habitats thanks to a collaborative conservation project involving a team from Victoria University of Wellington, led by Associate Professor Stephen Hartley, director of the Centre for Biodiversity and Restoration Ecology in the School of Biological Sciences.

In 2011, Stephen was given free rein to carry out a largescale field experiment to try to restore a kahikatea 'swamp forest'—a forest that is inundated with freshwater, either permanently or seasonally—on the land.

Driven by a desire to test and improve habitat restoration, Stephen and postgraduate students from the University trialled five different techniques for suppressing tall fescue an invasive grass species that smothers and prevents tree seedlings establishing. They planted a five-hectare block with 2,500 trees of eight species, including kahikatea, tōtara, mānuka, and ti kouka (cabbage tree), among others. "After eight years, many of the trees are well over three metres tall and setting their own seed," says Stephen.

"Due to increased winter flooding of the area, not all of the original trees survive today. But regular monitoring of growth and survival has enabled us to gain a better understanding of each species' environmental tolerances how trees help each other, and which species to plant where in the remainder of Wairio," he says.

"Now that the planted trees have the upper hand over tall fescue, a process of natural regeneration is starting to take hold. A large number of birds are using Wairio now. We have a variety of native ducks and black swans, and small flocks of royal spoonbill that have not been seen in this area for many years."

The secretive and critically endangered Australasian bittern, or matuku, now call Wairio home too, and the hope is that their numbers will climb as the cover of reed bedthe matuku's preferred breeding habitat—increases.

But the benefits of the restoration and the University's involvement don't end there. The rejuvenated wetland will play a key role in cleansing nutrient-rich water, which flows off surrounding farmland, before it enters Lake Wairarapa. Stephen also estimates that the restoration plantings have absorbed four to five tonnes of carbon so far—a figure that will increase exponentially over the coming years as growth of the larger trees accelerates.

The project, which was carried out in partnership with conservation group Ducks Unlimited New Zealand, the Department of Conservation, and the Greater Wellington Regional Council, has become a focal point for practical research and community collaboration, with other academics from the University's Landscape Architecture, Science and Society, Geography, and Biological Sciences programmes developing transdisciplinary research and teaching links with the Wairio Wetland Restoration Trust and local Ngāti Kahungunu iwi.

Stephen says the project could also help to set the direction for future conversations about biodiversity in New Zealand.

"My hope is that our work here will inform future restoration activities, highlighting the important functions of wetlands and demonstrating the numerous gains that are possible when communities and researchers work together for sustainable and equitable futures."

☑ stephen.hartley@vuw.ac.nz



#### He pā anamata—Building a sustainable future

Tmagine stepping into a modern, uniquely Māori precinct on campus, designed using **L**gold standards for sustainability in the built environment.

That is the intent of The Living Pa, a proposal that would see the area around the University's Te Herenga Waka marae on Kelburn Parade transformed into a multipurpose space for teaching, learning, research, and engagement.

The project is founded on the twin pou—or pillars—of mātauranga Māori and sustainability. The work will be guided by the internationally recognised Living Building Challenge, putting the University at the forefront of sustainable design. The Challenge requires everything, from building materials to water use and the reuse or removal of existing buildings, to be managed in a sustainable way.

The existing wharenui (carved meeting house) built more than 30 years ago will be at the heart of the new complex and the additional, connected facilities will combine mātauranga Māori with cutting-edge environmental and technological features. These include closed-loop systems to gather, use, and recycle water, and solar power generation for the building's energy needs.

"This complex will reshape our understanding and relationship with the environment to promote a sustainable future," says Deputy Vice-Chancellor (Māori) Professor Rawinia Higgins. "Māori have a deep relationship and connection with the environment that is synonymous with sustainable practices, making the proposal to utilise the Living Building Challenge a natural fit."

She says a plan to redevelop the marae precinct has been a dream for more than 30 years. "The Living Pa is an exciting, expansive project that will enable us to raise the scale, quality, and profile of matauranga Maori and sustainability in ways that will benefit both the University and the wider community."

The proposed new space will accommodate growth in students and staff, and increase the University's capability for civic, culturally affirming, and progressive engagement. The director of sustainability, Andrew Wilks, says it is a fantastic opportunity for the University to show leadership in sustainable development in a way that goes far beyond just a building.

"The Living Pā represents innovation and ambition plus. The idea is that it generates all its own resource needs, such as energy, and creates a positive impact on the human and natural systems that interact with it," he says.

Rawinia and Andrew stress that The Living Pā has a focus on a sustainable future. "The Living Pā is about the sustainable future of a people, a language, culture, knowledge, and the environment for future generations."

#### The Living Pā vision

He pā mataora. He pā kaiao. He pā anamata. A thriving community. A living lab. A bright future.

#### www.victoria.ac.nz/living-pa

#### **Bold plans** to tackle the University's carbon footprint

The University is developing a plan to reach net-zero carbon emissions by 2030—the first New Zealand university to plan for such an ambitious target.

Work has begun to develop key parts of the plan, which will bring together operational performance, academic opportunities, and a strong connection to Wellington city's own carbonreduction plan.

"The University is wholly committed to playing its part in fighting climate change through our world-leading research, and we want to match that in the actions we take as a university," says Vice-Chancellor Professor Grant Guilford. "We need to be ambitious if the world is to avert the potentially catastrophic impacts of climate change. There is a pressing need for universities like ours to lead change and to enhance societal commitment to sustainability through our teaching and research."

Sustainability director Andrew Wilks says the University has reduced its total greenhouse gas emissions by 20 percent over the past decade despite increasing staff and student numbers. Getting to net-zero carbon will require more innovative approaches and increased commitment from the University as a leader in climate action.

"It will mean increasing investment in our existing and future campus infrastructure and facilities, offsetting air travel, and investment in forestry projects to sequester carbon, enhance biodiversity, and involve our community with planting trees that anchor us to the city," says Andrew. "It provides a platform to connect our academic expertise with the operational practices of the University through living labs, scholarships, and enhanced research outcomes across the University."

Many hands — Make light work

ith many people finding it increasingly challenging to enter New Zealand's housing market, some Kiwis are taking matters into their own hands.

"Co-housing is a growing movement across the country," says Mark Southcombe, senior lecturer in the University's School of Architecture.

"An increasing number of people are realising its potential benefits—be they the desire to live in a certain area or save money, to follow certain interests such as living more sustainability, or to simply meet like-minded people and be part of a group."

Mark says the term 'collective housing' is more appropriate than co-housing.

"There's misperception out there. The essential focus is sharing resources and building housing that benefits everyone. In New Zealand it's not governmentally run or supported, or reliant on property developers—it's a participatory movement that is driven from the bottom up."

In February, Mark was part of an organising group that held the first nationwide conference on collective urban housing in New Zealand.

Hosted at the University's Te Aro campus, CoHoHui was a one-day sold-out event bringing together builders, architects, lawyers, bankers, representatives of iwi, councils, and government, as well as other individuals and groups working on collective urban housing.

The conference focused on how to build up the burgeoning movement. "It covered the past, present, and future of collective housing in New Zealand—what lessons we can take from what's been done, how it is working now, and what is needed to get more people informed and involved," says Mark.

Mark says one of the key things to emerge from the conference was a group that will function as a shared voice for collective housing, with the ability to advocate with local and national government. The group's main aspiration is to create open-source resources for anyone interested in collective housing.

"This will help facilitate the emergence of more collective housing across the country," says Mark. "There are a number of projects emerging, so if people are interested in the process, they don't have to reinvent the wheel every time, particularly for New Zealand conditions that are different from overseas. We are also taking the concept of papakāinga, communal Māori land, homes, or villages, into account."

Mark says collective housing can be as diverse as the people who live in it. "It could be a large group of separate apartments with shared family spaces like gardens or laundries; it could be that more spaces are shared and members eat their meals together. It could also just be a group of single people buying or building a house together. There are lots of options.



"With shared spaces and resources comes less impact on the environment too—for example, it may mean shared cars or bikes. It's also more socially sustainable, as 25 percent of New Zealanders live on their own. It's about building a community and, hopefully, reducing loneliness or isolation.

"We're not saying collective housing is the only answer, but we're saying by adding diversity it's a good option for people at different stages in their lives."

mark.southcombe@vuw.ac.nz





## **Energy lessons from** South Korea

PROFESSOR JOHN TOWNEND FOUND HIMSELF AT THE EPICENTRE OF MEDIA ATTENTION AND RESIDENTS' ANGER WHEN HE AND OTHER EXPERTS PRESENTED THEIR FINDINGS INTO A MAGNITUDE 5.5 EARTHQUAKE ASSOCIATED WITH DEEP GEOTHERMAL DRILLING IN SOUTH KOREA.

ohn, a seismologist in Victoria University of Wellington's School of Geography, Environment and Earth Sciences, was part of a team of five experts from China, New Zealand, Switzerland, and the United States, appointed by the Geological Society of Korea to investigate the earthquake for the South Korean Government.

The earthquake occurred in Pohang in the southeast of the country in November 2017. It injured 135 residents, displaced many people into emergency housing, and caused more than US\$75 million in direct damage to more than 57,000 structures. Total economic impact exceeded US\$300 million.

"The question we were asked to answer was whether fluid injection processes associated with deep geothermal exploration played a role in the earthquake's origin. The answer we came to was an unequivocal 'yes," says John.

Presenting their findings earlier this year at a press conference in Seoul, John and his colleagues were met with "several hundred frustrated residents shouting and waving banners and placards, plus 20-odd TV cameras and untold photographers and reporters.

"The reason it's been such a big deal is that the Pohang project was meant to demonstrate the feasibility of enhanced geothermal systems in South Korea as it weans itself off hydrocarbons and nuclear energy. There were no fatalities, fortunately, but lots of damage to buildings and infrastructure during the earthquake, and law suits are now being sharpened against the Government and various organisations involved in the project."

As the research team has since outlined in an article for the journal Science, their findings provide lessons not only for South Korea—which shut down its geothermal exploration and carbon sequestration programmes following the earthquake but worldwide.

"Operators and regulatory authorities need to do a better job of monitoring seismicity and need more comprehensive ways of evaluating the evolving seismic risk—and communicating that risk to the community," says John.

He thinks the inquiry's findings also highlight a wider issue of energy and the environment.

"Everyone wants to switch off from petroleum and to decarbonise as quickly as possible, but we also expect to sustain our high level of energy consumption.

"It's vital to realise that swapping one energy source for another, or hydrocarbons for renewables, addresses only part of the problem. If we expect to continue using energy at current levels, then we'll have to tackle questions of resources. Whether it's silica for solar panels, lithium for batteries, or copper and neodymium for motors and turbines—which must be mined somewhere—our energy choices all have resource and environmental repercussions.

"We might think that going electric solves all our problems in one go; that's not the case. Every energy technology uses resources and affects someone's environment somewhere. They all have drawbacks and we should be looking at how we reduce energy use, not just changing our energy supply."

john.townend@vuw.ac.nz



## IN ORDER TO PRESERVE NEW ZEALAND'S RICH BIODIVERSITY, WE MAY NEED TO RETHINK OUR APPROACH TO PESTICIDES—EVEN IF THAT'S A FLY IN THE OINTMENT FOR FARMERS AND OTHERS WHO USE THEM.

"We use a lot of pesticides in New Zealand because we're a very agricultural nation," says Catherine Iorns, a reader in the Faculty of Law. "But they may be doing more harm than good. We need more than a review of the pesticides under the current framework; we need an overhaul of the whole system."

After attending an international seminar in Perth on comparative approaches to pesticide regulation in 2017, Catherine published an academic article calling for a complete overhaul of New Zealand's pesticide regime, as well as its approach to protection of biodiversity. She argues that not all the necessary information is considered in pesticide approvals, from effects of the chemicals used to possible alternatives.

A contributing issue is the general lack of knowledge about insect numbers.

"People say 'Why do we have to do anything differently? We don't see a problem'—that's because there hasn't been any coordinated counting or monitoring of invertebrates in New Zealand.

"No one counted before they started using pesticides, or after, so all we have are anecdotal stories about bugs not hitting windscreens anymore, or that we used to see lots of butterflies and now we don't see as many of them."

Catherine also notes that the Hazardous Substances and New Organisms Act governing pesticide regulation is often at odds with Treaty of Waitangi principles.

"Generally, the legislation is not compliant with Treaty principles, because these principles require a partnership approach to decision-making, as well as the active protection of Article Two assets."

Article Two of the Treaty guarantees Māori rangatiratanga (sovereignty) over their resources and taonga. "Arguably, the insects themselves—and even their ecosystems—could be seen as assets, and something that Māori want to protect."

She says Māori groups are often not consulted or feel their views are not given sufficient weight in pesticide application decisions. "Too often, Māori concerns appear to be discarded in favour of commercial imperatives to make money."

Catherine says she welcomes the recent news that the Environmental Protection Agency has invited public submissions on some pesticides for potential reassessment of their approvals, and that it has started to incorporate mātauranga Māori into its decision-making. She also notes there has been an increase in overseas studies into pesticide use.

However, she's concerned it's a case of too little, too late. "We're too slow to move from the status quo, even when a problem becomes apparent—people seem to be too scared to do something different."

When she's not teaching or researching, Catherine is busy with other biodiversity initiatives, including her involvement in various government-organised National Science Challenges and a bioethics panel that recently reported on the ethics of predator-free campaigns.

She says a holistic, multidisciplinary approach that considers ecosystems rather than individual variables is vital to address biodiversity loss.

"There is a push in a lot of places in the world to recognise the systemic, interlinked nature of ecosystems. We often focus on specific species—for instance, protecting Maui's dolphins— but you have to protect the whole system they live within.

"If we're not looking at the overall impact on ecosystems we're going quickly to run outside the planetary boundaries."

# DR MIKE JOY BELIEVES THE KEY TO IMPROVING NEW ZEALAND'S WATERWAYS AND NATURAL ENVIRONMENT IS THE POWER OF THE PEOPLE.

"MY MESSAGE
AT MY PUBLIC
TALKS IS, 'YOUR
RENT FOR LIVING
ON THIS PLANET
IS ACTIVISM'.
IT'S BECOME
CLEAR THAT IF
GOVERNMENT
CHANGES
ANYTHING, IT'S
WHEN PEOPLE
PUSH FOR CHANGE,"
HE SAYS.

# Out of our depth

"The science is clear, and my role is about public awareness and getting as much information as I can to the public about what's going on."

Mike, a freshwater ecologist based at the University's Institute for Governance and Policy Studies, says the main issues are the intensification of agriculture and our failures in wastewater management.

A recent study found drinking water supplies in some parts of New Zealand have nitrate levels more than three times higher than a threshold level for colorectal (bowel) cancer risk.

"The nitrate pollution comes from dairy farming mostly," says Mike. "Nitrate fertiliser is added to pasture and crops to accelerate plant growth. Much of it enters waterways either directly with rain and irrigation or through animal urine."

Moving away from farming intensity is a single solution to multiple problems, he says.

"Decrease the number of cows and you reduce the loss of nutrients to waterways, you reduce methane, nitrous oxide, and carbon emissions to the atmosphere, you reduce pathogens that get into waterways, you reduce antibiotic and hormone use, meaning less of both in soil and waterways, you reduce the heavy metal contamination of soil, and you reduce the compaction of soils.

"Focusing on adding value and diversity will give us all a much better future." Another recent study has shown 74 percent of New Zealand's native freshwater fish are threatened or at risk. This compares to 22 percent in the early 1990s.

"The legislation intended to protect biodiversity in New Zealand is neglected and largely ineffectual," says Mike. "Our native fish are not covered by the Wildlife Act. The only species that the Freshwater Fisheries Regulations from 1983 protects is the grayling—and that went extinct 50 years earlier, in the 1930s.

"Others are protected except if you want to use them for human consumption or scientific purposes, which in practice translates to zero protection. Of our threatened native fish, including whitebait, longfin eel, and black flounder, seven of them are commercially harvested and exported."

Mike says it's the past 50 years where we've accelerated beyond our boundaries. "New Zealand's clean green image is crucial to tourism and agriculture, and because we've gone backwards too fast and we're so isolated, people haven't caught up. It's the value add to everything we export—and if we lose that, we never get it back.

"Our freshwater systems are in awful shape, and getting worse fast. Our grandchildren won't be swimming in our rivers, and there won't be native fish in them either, unless we make changes now."

mike.joy@vuw.ac.nz



TONGARIRO NATIONAL PARK IS NOT JUST CENTRALLY LOCATED -IT'S A CENTRAL PART OF NEW ZEALAND CULTURE.

he park is home to Mount Ruapehu, known as Koro (grandfather) to local iwi Ngāti Rangi. His slopes and the surrounding park are home to several biodiversity hotspots supporting many of New Zealand's unique plant species—sites that, like many other natural landscapes around the world, are under threat from climate change.

Dr Julie Deslippe from the School of Biological Sciences is working with Ngāti Rangi and the Department of Conservation to help determine how climate change will affect the taonga tipu (sacred plants) living in the park and how they can be protected. "If we don't work to address the impacts of climate change, the landscapes we engage with on a cultural and spiritual level will be gone. Biodiversity underpins everything—the air we breathe, the water we drink, and the climate we live in," Julie says.

Julie's project began by gathering knowledge from Ngāti Rangi on what plants in the area are used by the iwi and their cultural significance. These interviews, led by Ngāti Rangi iwi member Deborah Te Riaki, identified 45 of the most culturally significant plants in the park. Julie's team then collected data on where these plants grew in the park and how abundant they were. The field surveys, led by PhD student Justyna Giejsztowt, also employed two local school students from Ngāti Rangi, providing a unique on-the-job training opportunity in their own rohe.

"Working with Ngāti Rangi on this project was essential," Julie says. "The exchange of cultural and ecological knowledge among the members of the team provided a much more holistic understanding of the place."

There are two major threats to the taonga tipu in Tongariro National Park—increasing temperatures, and the invasion of

"Now we have more information, we can make an informed decision on how to counter this threat and figure out which conservation tools could help preserve these landscapes," Julie says.

European heather, a problem weed. Julie's team created digital models of how these risk factors would impact a representative sample of five of the 45 plants identified by Ngāti Rangi.

Julie says, regardless of the degree of warming, all models predict increasing infestation of heather in the park, with negative consequences for the spread of taonga tipu in the park. However, Julie believes New Zealand has the ability to use this knowledge to make real progress in countering climate change.

"Now we have more information, we can make an informed decision on how to counter this threat and figure out which conservation tools could help preserve these landscapes," Julie says. "We have the political will and expertise, and the bicultural dialogue in New Zealand is world-leading—if we can manage climate change anywhere, it's here."

An expert from Ngāti Rangi is using the information gathered as part of this project to create educational resources for children to help educate all New Zealanders about taonga tipu and how we can help preserve them for future generations.

"We want to help preserve mātauranga Māori," Julie says.

julie.deslippe@vuw.ac.nz

#### **ALUMNI PROFILES**



#### What have you been doing since graduating?

I have worked in various environmental science and science outreach positions, including at Landcare Research, Environment Canterbury, environmental consultancies in both New Zealand and the United States, Montana State University, and with the World Bank.

#### What's been a highlight of your career so far?

I have travelled to some amazing places as an environmental scientist, including remote parts of Fiordland and the West Coast, the Dry Valleys of Antarctica, Montana, Viet Nam, Tonga and, most recently, to Kiribati and Christmas Island.

#### What is your current job, and what do you love about it?

I am currently working as an environmental consultant based in Bozeman, Montana. Recent projects have included environmental permitting for The North Face Expedition Antarctica and environmental safeguards for the World Bank in the Pacific. I love the flexibility of my job and the challenges of working with a team of specialists, many of whom are based remotely. I get to travel to some extremely remote and interesting places with teams of dedicated and passionate people.

Recently, I worked as part of a World Bank team on a sustainable fisheries project in Tonga (Tonga Pathway to Sustainable Oceans). The people I worked with in Tonga are incredibly hardworking and passionate about restoring and sustainably managing fish populations for future generations.

#### What do you think are some of the big challenges facing society in terms of sustainability?

The biggest challenges I see in my profession are poverty, uneven distribution of resources, and climate change impacts. My recent work with small island developing states in the Pacific has shown me that it is critical that sustainable development be inclusive and environmentally sound in order to assist our most vulnerable in the long term. Climate change is a global problem, but it will not be uniform with regard to its impacts—developing nations may be hardest hit by climate change impacts due to poverty and lack of access to resources.

#### What advice do you have for current students?

Be your own best advocate, at university and in other aspects of your life. No one knows your skill set and your positive qualities better than you do.



#### How would you describe your student experience at the University?

I found student life a good mix, with a diverse student group and plenty of activities to be involved in. I've always loved how the University is such a part of Wellington, with everywhere within easy walking distance. The orientation week concerts were always good and I remember seeing Supergroove and Shihad, which was pretty cool.

#### What have you been doing since graduating?

I've been lucky to spend some time travelling and living in parts of South America and Asia and, since graduating, I've held a number of sustainability roles. I've got two amazing children who inspire me every day to work harder at what I do.

#### What are some of the challenges of your job?

The main challenges of my role relate to the global context of my organisation. We sell into more than 120 countries, so I need to be aware of global environmental law, developing norms, and customer and investor expectations. Decoupling economic growth from environmental impact underpins everything my team does. We aim to position climate change as a design challenge where we need to design carbon out of our organisation.

#### What do you think are some of the big challenges facing society in terms of sustainability?

The key sustainability challenge for our generation is climate change, which unfortunately is closely followed by the global challenges of clean water availability and waste and recycling system failures.

Even recently, with the tabling of the Zero-Carbon Bill in New Zealand, there has been a noticeable increase in the uptake in awareness and understanding of the global carbon situation. Cross-party support for climate change and carbon legislation will be crucial, and the sooner a global carbon price is agreed, the sooner the global community can find synergy in confronting climate change.

The frog literally has been boiling in the pot, and now is the time when all of us who have studied and now work in sustainability need to use our ability to influence to support positive change.

#### What was the most useful thing you learnt at university?

The most useful thing I learnt was that you don't need all the information in your head—but you do need to know where to find it. This is still key to my work life now.



## Designing our future

TONYA SWEET, SENIOR LECTURER, SCHOOL OF DESIGN

"In the School of Design, where I engage students in navigating the complex marriage between design and nature, the onus to save the world is a challenging prospect."

he topic of sustainability is complicated. While we each work to make positive changes to our daily behaviour, reports indicate that the health outlook of our planet's ecosystem is increasingly bleak. As New Zealand's Government considers declaring climate change a national emergency, the heightened awareness of our collective predicament is palpable.

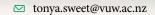
For students, the sense of purpose they exude reflects the seriousness of climate change as the defining issue of their time, as well as reflecting their capacity to inspire and sustain hope for a prosperous future. Their voice as agents of change is evident around our campuses, where students are harnessing their education in pursuit of careers that will enable them to propel meaningful transformation and contribute, in small and in big ways, to saving the world.

In the School of Design, where I engage students in navigating the complex marriage between design and nature, the onus to save the world is a challenging prospect. Design is, after all, a discipline inherently complicit in feeding the patterns of nonsustainable production, consumption, and mass-industrialisation. Like all millennials, my students carry an unwanted burden that has been passed down from previous generations. As fledging designers, however, they also face an existential conflict in aligning with a profession that hinges on the transformation of natural resources into the 'stuff' we enjoy in our everyday lives: games and apps and the devices that support them, products, furniture, and fashion, the packaging

scope of design, this amounts to a complete reconceptualisation of established practices that dictate how we take, make, and waste natural resources. While manoeuvring the latest technology to lead this transition may seem like an obvious strategy, as Albert Einstein once elegantly noted, "We cannot solve our problems with the same thinking we used when we created them."

It goes without saying that innovation will play a significant role in shaping our future, but innovation might be best applied to our mindset. A sustainable mindset is one that is resilient and open to different perspectives and world views, including indigenous knowledge.

As members of the Victoria University of Wellington family, we are fortunate that many of these lessons are embedded in the University's values: akoranga (to teach and to learn), whanaungatanga (a sense of belonging), whai mātauranga (the pursuit of knowledge), kaitiakitanga (care and guardianship), manaakitanga (generosity, respect, and hospitality), and rangatiratanga (leadership, nobility, and autonomy). It is these values that position New Zealand at the forefront of positive policy change and that will guide us in achieving sustainable development as a nation. With these values in our toolkit, each of us has an opportunity to contribute, in small and in big ways, to saving the world.







# How do people save the planet?

DR WOKJE ABRAHAMSE, SENIOR LECTURER, SCHOOL OF GEOGRAPHY, ENVIRONMENT AND EARTH SCIENCES

cientists are more certain than ever that climate change is happening and that people's actions are contributing to it. Profound lifestyle changes are needed to avoid the impacts of climate change. Enabling people to adopt sustainable behaviours can form an integral part of the solution to the climate change challenge.

Encouraging people to change their behaviour can be notoriously difficult. Even when people have high levels of environmental concern and a strong willingness to do something for the environment, this does not always translate into action. When it comes to making daily choices, environmental concern is often at odds with concerns such as cost, convenience, or social pressure—to name but a few.

My research focuses on understanding people's motivations to adopt sustainable behaviours and on the effectiveness of initiatives and policies to encourage behaviour change. In other words, I look at what works and what does not work so well, and why this might be the case.

One commonly held assumption seems to be that people are motivated only by money. Obviously, cost and financial considerations are important to people when they make daily choices, but it is by no means the only motivator. In my research, and that of my students, we have found that people with strong environmental values are more likely to do a range of pro-environmental behaviour, such as conserving energy at home and reducing their meat consumption. It is important that behaviour-change campaigns are aligned with people's motivations.

So, what is the most effective way to change people's behaviour? I get asked this question a lot. And I usually respond by saying, "It all depends." When doing research for my recent book Encouraging Pro-environmental Behaviour: What Works, What Doesn't, and Why, I found that different kinds

"My research focuses on understanding people's motivations to adopt sustainable behaviours and on the effectiveness of initiatives and policies to encourage behaviour change. In other words, I look at what works and what does not work so well, and why this might be the case."

of sustainable behaviours are associated with different motivators. In the energy domain, an approach that seems to work quite well is the use of social norms. When people are told that their neighbours are conserving energy, they are then more likely to conserve energy also. This is the power of peer pressure. But in the transport domain, people's travel habits and their environmental concern play an important role.

Habits refer to our daily routines: we do not think about these behaviours too much, we just do them. Interventions to encourage sustainable transport choices are more effective when people have weak car-use habits and when they have high levels of environmental concern. Research in the area of sustainable food consumption is starting to look into 'nudging'—by making foods with a low environmental impact the default (e.g. by placing them at the check-out counter), people could be 'nudged' into making sustainable choices.

We need urgent action to address current environmental problems. Research findings on what motivates people to adopt pro-environmental behaviours could, and should, be used to inform policymaking. Ultimately, policies that are informed by research from the social and behavioural sciences can benefit people and society in a shift towards a more environmentally sustainable future.



"If we want environmental issues to resonate with people, we need to connect with their hearts and minds in a different way."

here may be plenty of figures and graphs to support climate change research, but Professor James Renwick says not everyone is interested in hearing the cold hard facts.

As the winner of the 2018 Prime Minister's Science Communication Prize, James hopes to use more emotive methods, such as art, to better engage with the wider public about the complexities of the issue.

"If we want environmental issues to resonate with people, we need to connect with their hearts and minds in a different way," he says. "Artistic expression, like music, songs, and artworks, can be a great way to do that."

James, a climate scientist and head of the University's School of Geography, Environment and Earth Sciences, was awarded the prestigious science communication prize valued at \$100,000 at an event at Parliament in March. The award judges praised James's warmth, humour, and positivity when dealing with the issue.

In the past five years, James has been involved in more than 100 public presentations, given more than 200 media interviews, and presented at numerous conferences. This includes leading the organising committee for the 2016 and 2018 Pacific Climate Change Conferences, co-hosted by the University. He has contributed to the work of the Intergovernmental Panel on Climate Change (IPCC), which informs global agreements on climate change action, and is currently a convening lead author for the next IPCC assessment report that is due in 2021.

Some of James's prize money, which is partly designated for science communication activities, will be used to help build collaborations between scientists and artists, including continued support of the Track Zero Charitable Trust, which brings together climate scientists and local artists around the country.

"I feel humbled and privileged," says James. "If winning this award helps to further the conversation around taking action on climate change, then that's fantastic. All I really want to see is us getting on top of the problem and avoiding the worst possible future."

☑ james.renwick@vuw.ac.nz

Professor James Renwick pictured with Peacemaker, by Chris Booth. Photograph by Mike Heydon, Jet Productions.

# Thinking outside the box



We know that natural forces can be harnessed for power, but obtaining reliable data can be an obstacle for communities looking to move to renewable energy.

With this in mind, Associate Professor Ramesh Rayudu from the Faculty of Engineering has been working with iwi partners, including Ngāti Raukawa and Ngāti Tuwharetoa in Feilding, to generate data that could help them develop and effectively use renewable energy-based resources.

Together with his colleague Dr Daniel Burmester and students Angus Weich, Daniel Satur, and Jasper Kueppers, Ramesh has developed a 'black box' with sensors that collect information, such as the number of sun hours each day and how much wind the area is exposed to, to determine which renewable resources are available on the site. Dependent on location, this could be solar power, hydro power, wind turbines, or a combination.

The black box can also measure agricultural data such as water quality and soil temperature and moisture, which will help determine the best use of that area.

Ramesh says the idea for the black box came about when he and his team were approached by iwi wanting advice on becoming more self-sufficient.

"Some of the locations didn't have any data of their land. The iwi at Omaio was getting its data from Tauranga—which is almost 200 kilometres away. We wanted to provide them with localised information that would be beneficial for them," he says.

The first black box prototype was installed in July 2018 in Omaio, and Ramesh's team is working on 'version 2.0'. He hopes further boxes will be installed at Feilding and on Great Barrier Island later this year.

Ramesh and his team work with iwi to help analyse the data and decide their best options. He says the big-picture goal is to develop a solar and wind map of provincial New Zealand.

"While the primary interest of this project is in renewable energy and looking at what we can do to be self-sufficient, the black box will also provide intelligent information about cultural land.

"It can be used anywhere to identify renewable resources, especially by anyone with agricultural land who wants to find out about the sun hours and what kind of wind speeds and directions the land is exposed to.

"The great thing about the box is that you install it and the readings are transferred through wireless technology. You can just set it and forget about it."

□ ramesh.rayudu@vuw.ac.nz

# The inbetweeners

IF WE'RE GOING TO ADDRESS THE BIG ISSUES AFFECTING OUR PLANET, ASSOCIATE PROFESSOR REBECCA PRIESTLEY SAYS WE NEED TO LOOK BEYOND SCIENCE.

Rebecca is director of Victoria University of Wellington's Centre for Science in Society, and programme director of the new Master of Science in Society. Launched last year, the one-year Master's builds on the success of the undergraduate Science in Society programme that was developed by Rebecca and Dr Rhian Salmon and has been offered since 2013.

Rebecca says she first got the idea for the multidisciplinary Master's at the 2012 Transit of Venus Forum, which brought together scholars, dignitaries, and iwi representatives from around New Zealand to address Sir Paul Callaghan's vision of New Zealand as 'a place where talent wants to live'.

"At the end of the forum, we were asked how we were going to make a difference in the world. The next year I met Rhian and we started planning what is now the Centre for Science in Society. Rhian led the development of our undergraduate programme and, in 2017, we were able to launch a postgraduate programme.

"Most people who do a science degree don't go on to be research scientists, but many still work in the science sector. The Master's can give them a broader context for their degree and make them more aware of the relationship between science and wider society."

The programme takes a multidisciplinary approach, with perspectives from the sciences, humanities, arts, and mātauranga Māori on contemporary issues such as freshwater decline, artificial intelligence, climate change, and biodiversity loss. Students also develop science communication skills and an understanding of theories that inform public engagement with science.

Rebecca says not all students in the programme have a science background—some come from arts and humanities backgrounds, and this year's cohort includes practising artists.

"We're very comfortable sitting between science, the humanities, and the arts, and we seem to attract students who are excited about working at that dynamic interface between different disciplines and traditions."

The first cohort of Master's students graduated in May and have either gone on to do further study or have secured jobs in the science sector.

Students doing the Master's have the opportunity to do a summer internship with partner organisations. Last summer, students had placements with the Science Media Centre, the Ministry for the Environment, the Robinson Institute, and the Society of Māori Astronomy Research and Traditions. Two of the first graduates now have ongoing paid work with their intern hosts.

"We had many more opportunities for internships than we had students to take them up—our partners are really keen to have our students in these roles," Rebecca says.

Graduate Shaun Thomason says, "The programme developed my science communication skills and allowed me to meet and work with people involved with conservation in Wellington. The internship also gave me 'real-life' work experience in the field I wanted to work in.

"I was lucky enough to be offered a graduate position before I finished studying, and I'm now with Land Information New Zealand as a biodiversity and biosecurity adviser."

Rebecca says the course reflects a more holistic approach to problem-solving that is gaining traction across the academic spectrum.

"We saw a real demand for this—it's the sort of Master's I would have wanted to do if it had existed back in the 1990s."



"Most people who do a science degree don't go on to be research scientists, but many still work in the science sector. The Master's can give them a broader context for their degree and make them more aware of the relationship between science and wider society."



#### **Attachment issues**

fter winning the prestigious Adam Prize for the top Creative  $oldsymbol{A}$ Writing Master's portfolio in 2018, Laura Southgate builds on her reputation as a writer to watch with her debut novel The Boyfriend, a cautionary tale about love and relationships set in the late 1990s.

*The Boyfriend* tells the story of a dysfunctional relationship between a young woman, Erica, and an older man, Donny. Erica is only 17 when she meets Donny, who is 42, yet she finds herself running into him everywhere—in her yoga class, at German Club, in her parents' spare room.

Turning traditional love narratives on their heads, The Boyfriend explores issues of personal boundaries and appropriate behaviour, which are more relevant than ever in the wake of the #metoo

> movement. By turns dismaying and hilarious, the novel plays out these issues against an examination of sexual desire and trauma.

Laura says that while the story is firmly on protagonist Erica's side, she found it important to step outside her point of view to find out what would happen next as she wrote.

"The most surprising thing was how much I enjoyed writing Donny. Even when he's ranting or hurling abuse at Erica, I often found him a



fun character to inhabit, because he tends to be the one driving the narrative forward or providing the drama, plus he's probably about as different from me as it's possible to be."

She says that her year studying for a Master of Creative Writing at the International Institute of Modern Letters was an invaluable experience to learn more about the craft of the novel.

"There's a complete lack of ego in the culture there—it's not fancy or competitive, just very practical. You're there to read, write, and encourage each other. I learnt a lot from my fellow students."

The Boyfriend by Laura Southgate, Victoria University Press (August 2019), paperback, \$30.

Right: Greville Texidor in the

https://bit.ly/30PdDqi



### All the Juicy Pastures

reville Texidor was many things—a one-time Bloomsbury Uinsider, a chorus-line dancer, former heroin addict, and anarchist militiawoman—as well as a writer who was influenced and encouraged by Frank Sargeson and his literary circle. A new biography by Margot Schwass has shed light on the little-known glamorous and tragic life of this writer who died by her own hand in 1964.

Margot Schwass 'discovered' Greville Texidor's work in 1987 when she picked up the Victoria University Press edition of her short story collection *In Fifteen Minutes You Can Say A Lot*.

"I was instantly starstruck with what I found. This sophisticated, cosmopolitan female sensibility was something I'd never imagined encountering in mid-century New Zealand writing, which had seemed to me a very austere, taciturn, and masculine business."

Margot took up a PhD with the University's School of English, Film, Theatre, and Media Studies to research Texidor's life with a singular question in mind.

"How did someone who had been painted by Augustus John, who had danced the Charleston in theatres from Paris to Buenos Aires, and been incarcerated in Holloway for her politics, end up washing clothes in a farm creek by the Kaipara Harbour?"

All the Juicy Pastures: Greville Texidor and New Zealand is the result of that research. It tells the story of an extraordinary life and puts Texidor's small but essential work in vivid context. A new edition of In Fifteen Minutes You Can Say A Lot has been published alongside the biography.



All the Juicy Pastures: Greville Texidor and New Zealand by Margot Schwass. Published by Victoria University Press, paperback, photographs throughout, \$40.

*In Fifteen Minutes You Can Say A Lot* by Greville Texidor. Published by Victoria University Press, paperback, \$30.

https://bit.ly/30PdDqi



## Who's in my room?

TAMATHA PAUL (NGĀTI AWA AND WAIKATO TAINUI), CURRENTLY THE PRESIDENT OF THE VICTORIA UNIVERSITY OF WELLINGTON STUDENTS' ASSOCIATION, STAYED AT WEIR HOUSE IN 2016.

On a sunny winter's day, she went back to meet the current resident in her former room—first-year Theatre and Film student Thomas Smith. The pair quickly bonded over student politics, hall food, and cable car rides.

#### Tamatha

#### What's it like to be in your old room?

When I was here it looked different, but I think I had a lot more stuff everywhere. It's cool, it definitely brings back memories.

#### Why did you choose Weir House?

Weir House was my first choice because one of my teachers had stayed here and recommended it. It seems a little bit different now, because the students who stay here are often really engaged. I don't know what it is about Weir House, but it seems like there's almost a civic component—people like to engage with the wider university

#### Are you still in touch with your friends from the hall?

I'm still friends with most of the people I met here. I've actually probably met more people from Weir House since leaving...but I made some really good lifelong friends here.

#### What's your strongest memory of staying here?

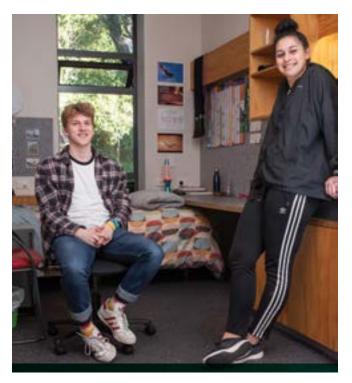
On my first day, I was surprised by how big everything was. It was totally different from Tokoroa, where I'm from. One memory that stands out is making friends with Jo, the night manager—I still talk to her now, we're really good friends. She still works here. I'm also still in touch with other staff members at the hall.

#### What type of student were you?

I just did my study, volunteered, and got involved in issues that I cared about. I think I used my first year really productively. I made the most of it in terms of taking new opportunities within the hall and the University. It was a good year.

#### What advice do you have for Thomas?

I would say the important thing about being at university is taking advantage of all the opportunities, like joining clubs and societies, because that's what's going to make your degree different from everyone else's. You've got to add some fun in there too, otherwise you can get bored.



#### Thomas

#### Where did you grow up?

I'm from Dunedin—I had lived there my whole life and then just decided to move to Wellington. I felt like changing cities and changing islands.

#### What's been a highlight so far of living at Weir House?

I like how there're always people around, even really late at night— I don't have to go out of my way to interact with people. I'm also really enjoying living in Wellington—it's got a lot of creativity and I find it really easy.

#### What are your plans once you graduate?

I'm studying Theatre and Film, and I'm doing what I really enjoy and what my passion is. I'd love to find any work in theatre, film, or performing. That's where I'm heading, but I guess I'll see what comes up. I just moved here a couple of months ago. I did improv for a while, but I'd love to join more clubs and do things outside the University.

What's it like to meet someone who used to stay in your room? It's really cool—kind of inspirational. I'm not sure if I'm inspired to run for VUWSA-but you never know!

#### What's the food like at the hall?

Thomas: I think it's all good. People complain sometimes, but it's not as bad as they say.

**Tamatha:** It was all good when I was here. I'm better at cooking now that I'm an adult, but when I left here, in my second and third year, I was shocking with meals—like I would just make noodles all the time, I couldn't be bothered. I really missed having a cooked meal with different nutrients, because I was just 'carbs, carbs'. So you might miss it.

Thomas: [laughs] Yeah, I probably will.

Tamatha: The lunches and the breakfasts are the other thing that I miss the most. Like, going to uni, boosting back for lunch, making myself a toasted sandwich, and then going back. I also miss the cable car. Do you use it much?

**Thomas:** I don't use it heaps, but when I need to, it's right there.

Tamatha: Yeah, good old cable car. And that 'ding ding' noise—

I miss that.

Thomas: Yeah, I hear it about 100 times a day.

# Hidden voices

WHAT HAPPENS TO OUR SENSE OF THE PAST IF WE PAY ATTENTION TO DIFFERENT VOICES?

his is just one question being asked by Associate Professor Sarah Ross from the School of English, Film, Theatre, and Media Studies as she nears the end of her three-year Marsden-funded project, Woe is Me: Women and Complaint in the English Renaissance.

The research explores what Sarah describes as 'the literature of complaint'—the voices of woe, loss, and protest that make up one of the most powerful and ubiquitous modes in the English Renaissance. Although 'female complaint' is usually thought of as the voice of a lamenting woman, it has been largely understood as male-authored—an act of literary ventriloquism.

A key part of the project was the discovery by Sarah and her research team of a comprehensive body of previously unknown complaint poems written by Renaissance women. Sarah's research explores, for the first time, these newly discovered complaint poems and seeks to produce a new account of how the voices of the disempowered, railing against their circumstances, helped to shape the literary and social cultures of the English Renaissance.

"I am curious about where 'real' women are in our cultural histories," says Sarah. "The dominant view of literary history is predominantly a white male view, so in a broad sense my work is about finding and understanding the missing female voices of the past."

A useful device for male writers during the period was to use women as figures of loss. "Poetry is populated by nymphs sitting and weeping on the banks of rivers, or singing like nightingales in gloomy forests," says Sarah. "The great male writers often use women in their poetry as figures of vulnerability and heightened emotion, a way of expressing loss or disenfranchisement.

"Hamlet's Ophelia gives us one kind of female voice from literature that is very dominant—violated, lamenting, going mad, and dying. She and Gertrude are there as Hamlet's collateral—their woes show how badly things have gone wrong, not just for them, but for all of Denmark. And literature gives us endless versions of these women, lamenting their own losses, or lamenting the losses of their nation."

But how do women writers pick up on this figure of the lamenting woman? What use is she to them? Do they use her; and if so, how do they (re)write her to find a place from which to speak?

"These are our guiding questions," says Sarah. "Now that we've discovered this large body of writing by women, we're in a phase of finding out how these women's voices can change our view of our cultural and intellectual history. We must complicate and diversify the stories we tell about our past."





Hannah Goldblatt

# Make believe with Weta Workshop

HAVE YOU EVER WANTED TO BRING YOUR IMAGINARY WORLD TO LIFE? PERHAPS MAKE THAT RELIC LOOK AS IF IT WERE FOUND IN THE CAVERNS OF A FEARSOME CREATURE'S LAIR, OR GIVE THAT TOY LASER GUN SCARS FROM AN INTERGALACTIC BATTLE?

ictoria University of Wellington is partnering with Weta Workshop, Wellington's five-time Academy Award-winning concept design and manufacturing facility, to offer a five-week online course on how to make props and costumes feel believable enough to bring alive any fictitious world you can conjure up. It is the latest offering from the University's programme of massive open online courses (MOOCs) on the edX platform, several of which have been world-leading.

Starting in early 2020, the course will teach some of the skills that have earned Weta Workshop global acclaim for the physical props, costumes, weapons, armour, make-up, and environments that feature in iconic Hollywood films such as Avatar, Blade Runner 2049, King Kong, The Hobbit, and the Lord of the Rings trilogies. Hosted by School of Design lecturer Hannah Goldblatt and Weta Workshop project supervisor Luke Hawker, the course will focus on the technique of 'world weathering'—making props and objects look like they belong in distinct worlds or realities.

"This course will give students the chance to learn from some of the best in the business, and to really explore and develop the worlds they have imagined. They'll get to think about how to make their creations believable by learning the theory behind

world weathering," says Hannah.

"It's a fantastic opportunity to learn how to bring your imagination to life, and we're excited to be working with Weta Workshop on this course. It will appeal to people wanting to learn practical skills, such as cosplayers and film enthusiasts wanting theoretical knowledge about creating a fictional world, and will inspire people considering a career in the industry."

With a decade of experience making costumes and wearables for film, television, and theatre, Hannah is ideally placed to encourage innovation from students through the School of Design's trial-and-error design approach, while also giving them a feel for the realities of the industry.

"This is a first explorative step into online learning for Weta Workshop, and it's a course that anybody can try their hand at,"

"It's one small component of what our artists and technicians do, but it's an important skill to master. World weathering requires makers to consider the context and history of their prop or costume. By understanding this, story worlds immediately become more believable."

www.victoria.ac.nz/edx-victoria



VICTORIA UNIVERSITY OF WELLINGTON ALUMNA TOR ROBINSON IS HAVING NO TROUBLE KEEPING HER CAREER IN WELLINGTON'S CREATIVE SECTOR IN FOCUS.

or, who recently completed a Master of Design Innovation, has embarked on a job in Weta Workshop's 3D modelling department where she creates realistic prosthetic eyeballs.

She says that when it comes to hyper-realistic sculptures such as those Weta Workshop has become famous for, the eyes play a crucial role in maintaining believability.

"Eyes are so incredibly detailed and, if they look fake, it can really impact how you see the whole sculpture."

At Weta Workshop, Tor is overcoming this challenge with a state-of-the-art Stratasys J750 3D printer that is based at the University's Te Aro campus and the only one of its kind in New Zealand. This printer uses advanced technology and allows up to six materials to be used at once. It provides her with access to voxel printing, a technique that gives the user control over every single droplet of material that goes into the printer.

"The problem is that you have to find your own way to do this, as there is no voxel printing software available," she says.

As well as becoming an expert with the printer, Tor has done a lot of research into eye anatomy to accurately reproduce the complex organ.

"There's a big difference in eye structure from person to person. Not only is there a range of sizes, but they can also change shape depending on what they're doing. Aspects like iris, limbus, veins, and scleral geometry vary, and this can make the eyes look completely different. With the original casting process it was difficult to show these differences, but that's one of the strengths of using this 3D printer."

Tor says an example of this can be seen in the exhibition Gallipoli: The Scale of our War, a collaboration between Weta Workshop and Te Papa. The exhibition features giant figurines each 2.4 times the size of the humans they're based on. Tor points out that the eyes in these figurines were created with an older casting process. "That was a few years ago. With the 3D printer we could make the eyes five to 10 times more detailed."

When Tor began her Bachelor of Design, she had no idea she'd become so hooked on 3D printing. But a summer scholarship with the University's Industrial Design programme director, Ross Stevens, led to her Master's research project using the Stratasys J750 printer, which in turn led to a six-month research and development grant from government agency Callaghan Innovation.

"I joined Weta Workshop on this grant to focus on voxel printing, but am now in a permanent role. Once I've cracked the challenge with the eyeballs, the plan is to appropriate the process for other projects, so it could be used for all sorts of props.

"I love the amount of problem-solving and creativity the work has, while giving me the opportunity to overcome some really technical problems. When I was younger, I never imagined I would get to become so focused on one very complex type of 3D printing!"

www.torrobinson.co.nz



Tor Robinson

# Out of order

RUDE NAMES, BARBED DIGS, AND SLY INNUENDOES GET THROWN ACROSS THE PARLIAMENTARY DEBATING CHAMBER APPARENTLY IN THE HEAT OF THE MOMENT—BUT RUTH GRAHAM'S RESEARCH SUGGESTS THE LANGUAGE IS OFTEN CALCULATED AND STRATEGIC.

Ruth—a research services librarian at the University—scoured the pages of New Zealand parliamentary debates from 1890 to 1950 to study unparliamentary language for her PhD in Applied Linguistics in 2016. Since then, she has continued to study the colourful but rarely explored area in New Zealand and, in recently published research, she has honed in to identify the parliamentarians most likely to get called 'out of order' for their language.

Early offenders from the 1890s were a group she categorises as "mavericks, loners and bullies"—often Members of Parliament pushing a single issue such as prohibition, or those on the margins of a political party. An example is MP Frederick Pirani—at different times a Liberal, Conservative, and independent MP—who responded to a comment about his wife breaking an umbrella over his head in a public place by accusing Premier Richard Seddon of 'slander'. Pirani refused to withdraw the comment and was suspended from Parliament for a day.

Ruth says Seddon himself was a serial transgressor, using unparliamentary language to target opponents and warning others not to challenge him. "He was expert at saying something quite outrageous about a person and then withdrawing and apologising and, when he died in 1906, occurrences of unparliamentary language plummeted for a time."

Among others to employ strategic insults were a small group of socialist MPs who entered Parliament from about 1906. "People like miners, Australians, often quite rough, who wanted to strongly push their philosophy."

One of them, John Payne, was suspended from Parliament for phrases such as "you miserable dodger" and "you are becoming a professional crawler", while Australian-born Alfred Hindmarsh—the first leader of the New Zealand Labour party—was rebuked several times for using the term "cur", meaning mongrel dog.

Insults involving animal and bird metaphors were a regular occurrence and it's an area Ruth would like to explore further.

"I identified over 100 in the first part of the research—all sorts of animal names people called each other, like 'dirty dingo', 'political magpies'—dogs feature a lot, also birds and rats."

Then there is the more elegant phrase, "a transparent piece of insincerity", which earned New Zealand's first woman MP, Elizabeth McCombs, a rebuke.



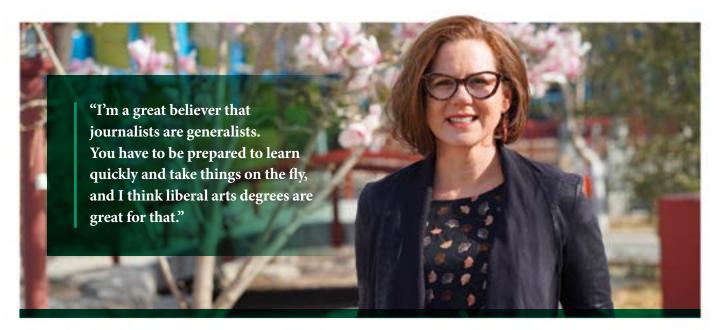
A caricature of Richard Seddon, by Sir Leslie Ward. Image: Alexander Turnbull Library, A-096-029.

Ruth says Seddon himself was a serial transgressor, using unparliamentary language to target opponents and warning others not to challenge him. "He was expert at saying something quite outrageous about a person and then withdrawing and apologising and, when he died in 1906, occurrences of unparliamentary language plummeted for a time."

In the 1930s, three Labour MPs were the main perpetrators, particularly Bob Semple who asked of the United–Reform Government, "how can decent men listen to such cant, humbug, hypocrite, and somersaulting?" Ruth says the unstable political situation, set against the background of the Great Depression, led the MPs to step up the use of unparliamentary language to challenge the Government.

Ruth juggles her ongoing research with her library work, often writing at the weekends. She says that continuing her research is helpful to her day job. "I work with a team that supports academics and our early researchers in their journey, so the fact I can relate to the things they are saying is really invaluable—such as to guide them to publish with the good journals and to stick with it."

☑ ruth.graham@vuw.ac.nz



# A global perspective

AS A TEENAGER IN THE 1990s, ALUMNA ANNA FIFIELD WATCHED NEWS REPORTS OF CONFLICTS IN RWANDA AND THE BALKANS, SPARKING AN INTEREST IN JOURNALISM AND A FUTURE AS A FOREIGN CORRESPONDENT.

fter completing a degree in English Literature and Language at Victoria University of Wellington, Anna embarked on just such a career and is now the Beijing bureau chief for the Washington Post.

While her reporting has encompassed everything from Iranian foreign policy to Japanese school lunches, she has gained a reputation as one of the world's best sourced reporters on North Korea. Over the past 15 years, Anna has established links with state officials and defectors alike and has broken major stories, including news of American student Otto Warmbier's return home in a coma after a 17-month imprisonment in North Korea and the Trump Administration's agreement to pay for the cost of Warmbier's medical treatment.

Anna has brought together the insights she has gained on life and politics in the pariah state, and the motivations of its leader, in a new book The Great Successor: The Divinely Perfect Destiny of Brilliant Comrade Kim Jong Un.

"It's impossible to write a complete biography of Kim, given how little information about him is available. But my book aims to be the closest thing to a biography we can produce, describing what we know of Kim's background and upbringing and analysing why he acts the way he does," Anna says.

"Western reporting on North Korea tends to be sensational or exaggerated. One thing I wanted to correct is the perception you often get in Western media that Kim is an irrational tyrant—that he's an almost cartoonish villain who has walked straight out of a James Bond movie.

"In fact, he has acted in a very strategic way from the moment he came to power as a 27-year-old. From pursuing a nuclear weapons programme to opening a dialogue with the United States to pursuing certain economic reforms—it's all about consolidating his grip on power."

Looking back on her career so far, Anna says she feels incredibly lucky to have been able to fulfil her teenage ambition of being a foreign correspondent.

"I never really planned all this out. It's very much been a case of putting my hand up when opportunities came along. My first big break came at the Financial Times in London. I was supposed to go for three months' work experience but I volunteered to do various other bits and pieces when they came up and I ended up spending 13 years there."

Anna reported from places as far-flung as Iraq, Libya, and the Arctic Circle, before taking on a role as White House correspondent in Washington, D.C. She then spent a year as a Nieman Fellow at Harvard University before joining the Washington Post.

"I'm a great believer that journalists are generalists. You have to be prepared to learn quickly and take things on the fly, and I think liberal arts degrees are great for that.

"My passion at university was Anglo-Saxon poetry—in my final year, I didn't study anything written after 1500. But the basic skills—how to research and write, how to structure an argument, how to analyse and think about what's in front of you—are relevant for a whole range of careers."



## A record year for philanthropy

THANKS TO THE GENEROSITY OF DONORS, PHILANTHROPIC INITIATIVES AT VICTORIA UNIVERSITY OF WELLINGTON ARE CHANGING LIVES.

ast year was the most successful year for fundraising for ₄the University and the Victoria University of Wellington Foundation to date, with donations of \$32 million. The positive impact of that philanthropy is being seen across the University.

Great Futures, the University's philanthropic scholarship programme, was launched in August 2018. Donors contributed \$1.8 million towards scholarships and prizes, offering more than 400 students essential support with their studies. Donations from alumni will provide Great Futures Alumni Appeal Scholarships to 15 students from backgrounds of hardship.

Vice-Chancellor Professor Grant Guilford says, "Great Futures represents a tangible commitment to two fundamental aspirations of Victoria University of Wellington's strategic plan-first, to provide a student experience that is second to none, and second, to secure the intellectual potential put at risk through experience of disadvantage."

Grant says not only do scholarships make a financial difference, but they "demonstrate to a young person that somebody not only cares about them, but also believes in them and has confidence in their ability to succeed".

The planned national music centre in central Wellington, which, once completed, will be home to the University's New Zealand School of Music—Te Kōkī and the New Zealand Symphony Orchestra, also attracted significant support in 2018, including lead gifts totalling \$6 million from the T.G. Macarthy Trust and the Lottery Significant Projects Fund. The total funds for the centre raised reached \$10.4 million. The centre will provide a foundation for musical performance, education, culture, and the arts in Wellington and strengthen New Zealand's international reputation as a major destination for arts and culture.

Executive director of the Development Office and the Foundation Patricia Danver says she looks forward to securing further philanthropic support to make a positive difference within our community. "Philanthropy plays a large role in addressing the knotty problems of our society by providing support that helps solve, not just alleviate, them. We are thankful to our donors for their generosity and leadership in supporting our students, projects, and research programmes."

www.victoria.ac.nz/engage/giving

### **Creating Great Futures**

A NUMBER OF NEW SCHOLARSHIPS HAVE BEEN ESTABLISHED SINCE THE LAUNCH OF GREAT FUTURES, THE UNIVERSITY'S PHILANTHROPIC SCHOLARSHIP PROGRAMME.

Indergraduate student Harry Fergus from Christchurch was awarded the inaugural L.T. McGuinness Scholarship in 2019, worth \$40,000 over three years. Harry says the support of the scholarship has been invaluable.

"Receiving this scholarship has been the highlight of my life so far. It allows me to push hard through my degree and maintain the highest grades possible without having financial pressure.

"It also means I can live life the best I can. It is giving me the opportunity to spend my time ensuring my work is up to a quality standard, exercising, and spending time with friends and family instead of constantly working. I am so thankful

to L.T. McGuinness and the University for giving me this life-changing opportunity."

Wellington construction company L.T. McGuinness set up the scholarship in 2018 in the School of Architecture to support a student undertaking a Bachelor of Building Science. Dan McGuinness, director at L.T. McGuinness says, "We believe strongly in good education and training for the future strength of the construction industry. L.T. McGuinness has a number of successful Building Science graduates from the University, all of whom are a valued part of the business."

www.victoria.ac.nz/great-futures

## **Enriching New Zealand** scholarship

LONDON-BASED ALUMNA JULIA PATON WAS KEEN TO SUPPORT THE UNIVERSITY'S RESEARCH INTO NEW ZEALAND'S HISTORY, CULTURES, AND SOCIETY.

The also wanted to maintain her Kiwi connection and support Italented students to achieve their academic goals. Julia recently established a new scholarship in her maiden name—the Buchanan Scholarship in New Zealand History

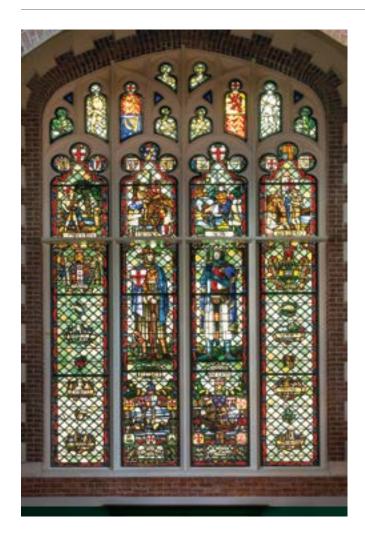
and Society.

Worth \$10,000 per year, the scholarship will be awarded to a full-time Master's thesis student undertaking research into New Zealand topics, in association with the University's Stout Research Centre for New Zealand Studies in the Faculty of Humanities and Social Sciences. Part of the Great Futures scholarship programme, Julia's generous gift supports talented students to pursue their research interests and contribute to a greater collective understanding of New Zealand society and history.

"As an expatriate New Zealander, I never forget the great start in life and the outstanding education from Victoria University of Wellington that I received. I hope that, going forward from 2019, the recipients of this scholarship will add to the enrichment of New Zealand identity," Julia says.



Associate Professor Kate Hunter, Professor Sarah Leggott (Dean of the Faculty of Humanities and Social Sciences), Julia Paton, Professor Jennifer Windsor (Pro-Vice-Chancellor of the Faculties of Humanities and Social Sciences and Education)



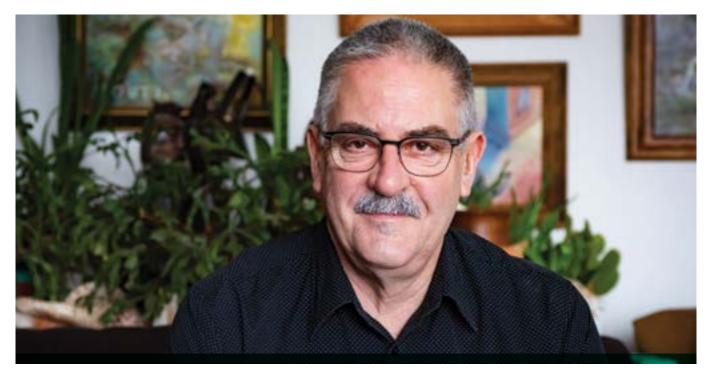
### Restoring the Council Chamber

The Council Chamber in the Hunter building has hosted ▲ thousands of university events over the past 100 years—and now specialist renovation work has preserved this important taonga for future generations.

The Chamber features beautifully carved stonework and the stunning stained-glass Memorial Window honouring the sacrifice of staff and students who served in World War I. A project to conserve these, and other features, began in 2014 and a complete restoration of the Memorial Window was completed in 2015.

From late 2018 to June 2019, heritage architects, specialist glass restorers, and stonemasons worked together on a project to restore the West Window and the surrounding stonework in the Chamber.

"The University is committed to honouring our heritage and this restoration is another step in the ongoing Hunter building conservation programme," says chief operating officer Mark Loveard.



# Remembering Roger Blackley

VICTORIA UNIVERSITY OF WELLINGTON AND THE WIDER ART HISTORY COMMUNITY SUFFERED A TREMENDOUS LOSS THIS YEAR WITH THE PASSING OF ASSOCIATE PROFESSOR ROGER BLACKLEY—BUT HIS MEMORY LIVES ON.

celebrated art curator, writer, teacher, and scholar, Roger was internationally renowned for his research on colonial New Zealand art. He began teaching at Victoria University of Wellington in 1998 and remained in the University's Art History programme until his retirement earlier this year.

His scholarship had a strong bicultural underpinning and helped to forge a new appreciation of the way painters such as Charles Goldie and Gottfried Lindauer worked in partnership with Māori rather than treating them as passive subjects. He was also an authority on spotting forgeries and was often called on by art institutions and the media to comment on forged works or thefts.

Roger was the author of many books, including the recent work *Galleries of Maoriland: Artists, Collectors and the Māori World,* 1880–1910, which was shortlisted for the University of Melbourne's Ernest Scott Prize. He also curated two exhibitions at Adam Art Gallery Te Pātaka Toi at Victoria University of Wellington.

Former student Dr Rebecca Rice, who now works at Te Papa Tongarewa as a curator of historical New Zealand art, remembers Roger as an outstanding teacher and mentor.

"Roger and I both began our careers at Victoria University of Wellington in 1998. I was a slightly 'mature' student who thought I was majoring in music. He was a curator-turned-lecturer who'd just arrived from Auckland Art Gallery," Rebecca says.

"The shift from museum to academia came easily to Roger. He was a charismatic teacher with an endlessly erudite and often

entertaining approach to what he called an 'anecdotal' art history. In the face of this talent, I'd changed my major within a year and, 12 years later, I graduated with a PhD in colonial New Zealand art, guided by Roger every step of the way.

"He was proud of all his students, who have ended up all over the globe, in all kinds of roles. He instilled in us a great love of art, great intellectual rigour, and the importance of attending to both over kai!

"We are all feeling the loss of a remarkable and much-loved teacher, scholar, mentor, colleague, and friend. Moe mai ra e te rangatira."

Emeritus Professor Lydia Wevers warmly describes a "delightful, humorous, and generous colleague".

"He always had time for a cup of tea at the table in the Art History department, while students and colleagues picked his brains and laughed at his jokes. But his easy-going and ironic manner was just the shop window for what was an encyclopaedic and brilliant mind.

"No one knew as much as Roger about nineteenth-century New Zealand or could diverge as fluently into Victorian narrative painting, contemporary artists, or weird objects across the world.

"His presence on the Kelburn campus is deeply missed, but his intellectual presence, exemplified in his overcrowded office that broke all the rules of health and safety, lives on in the work of many of his students and colleagues.

"Haere ra Roger, life is not the same without you."

# Bridging time and space

NESTLED AT THE HEART OF THE KELBURN CAMPUS, ADAM ART GALLERY TE PĀTAKA TOI HAS A STORIED HISTORY—AND THIS YEAR IT CELEBRATES 20 YEARS OF GROUNDBREAKING EXHIBITIONS.

irector Christina Barton traces the Gallery's genesis back to the mid-1990s when the University was looking for bigpicture ideas to mark its centenary.

Together with former head of the Art History programme Jenny Harper, Christina was involved in writing the original proposal, selecting the architect, and developing the Gallery's programme.

"It really just came about through a confluence of lucky things— Jenny's enthusiasm and ability to drive a project, Denis and Verna Adam's generosity in presenting us with the first million dollars, and the Foundation's commitment to backing us and running a good fundraising campaign."

The first exhibitions were focused on works from the Victoria University of Wellington Art Collection, which the Gallery was in part established to manage. Over time, the Gallery has built a considerable reputation for its independent programme of exhibitions that challenge and captivate audiences.

"Having that independence means we can provide a platform where the University can meet wider communities and different disciplines can come together," says Christina.

She says the Gallery also strives to engage students and enhance the student experience, whether through teaching classes there or through its volunteer and internship programmes. "If you look around the country at people working in art galleries and the wider arts sector, many of them will have on their CVs that they volunteered at the Adam while studying."

Designed by Sir Ian Athfield, the iconic building occupies an unusual site straddling what used to be a flight of stairs connecting the Library to the Hunter Building. Christina recalls when Athfield first presented his plans.

"We looked and said 'How can you have a gallery that's only four metres wide but 20 metres long and 10 metres high?' But he understood the campus and saw how the Gallery could connect with other parts of the University. He convinced us that this crazy idea could work.

"Over the years, we've invited artists to respond to the building, and every exhibition we do there looks different just by dint of the architecture."

The foyer wall was built to a sufficient scale to hang Colin McCahon's imposing *Gate III*, the most significant and valuable work in the University's art collection. For the Gallery's birthday celebrations in October, the Gallery team will bring the large painting back from its current home in Rutherford House as part of a series of exhibitions.

Christina is hard pressed to pick a personal highlight from the past two decades, but says Simon Denny's 2014 solo exhibition *The Personal Effects of Kim Dotcom* would be high on her list. The Adam was the first public gallery in New Zealand to give the Berlin-based artist a major show, and he later went on to represent New Zealand at the Venice Biennale.

Christina also recalls a show of contemporary art she curated called *The Subject Now* that ran alongside the late Roger Blackley's exhibition *Te Mata: The Ethnological Portrait*, presenting Māori ethnographic busts by Nelson Illingworth borrowed from Te Papa.

"Those two exhibitions were chalk and cheese—completely different. But there was one moment where Roger's busts were at one end of the Gallery and at the other end I'd installed a video work by Turkish artist Halil Altındere that documented Kurdish elders sharing stories by singing in a circle.

"There was this striking parallel with what goes on in a marae—it was like these two indigenous peoples were talking to each other across time and space.

"It was a lovely moment and I remember thinking, 'Gosh, this gallery is amazing."





## Get your ticket to the

# 2019 Distinguished AL/UNINI

Awards Dinner

Congratulations to the 2019 recipients: Pamela Bell, Rob Campbell, Whaimutu Dewes, Tagaloatele Professor Peggy Fairbairn-Dunlop, Dr Alexander Gerst, and Judge Carolyn Henwood.

Join us to celebrate their achievements with an evening of fantastic food, drink, entertainment, and excellent company.

#### **Distinguished Alumni Awards Dinner**

6.30 pm, Thursday 14 November 2019

TSB Arena, Wellington

Tickets available at victoria.ac.nz/distinguished-alumni-awards

CAPITAL
THINKING.
GLOBALLY
MINDED.