

UNIVERSITY OF OTAGO | APRIL 2020

ISSUE

MAGAZINE

50



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BEATS project pushes change

PLUS:

Otago leads antiviral developments
Staff wives' considerable contributions
Universities as critic and conscience



UNIVERSITY
of
OTAGO

Te Whare Wānanga o Ōtāgo
NEW ZEALAND

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VICE-CHANCELLOR'S COMMENT

It is not surprising that the only thing on everyone's mind in recent weeks has been the worldwide outbreak of COVID-19. By now, most people have become mini-experts on the virus and some will be tracking the rapid spread around the world using the WHO graphic. Never before have we had the opportunity to watch a pandemic unfold in real time.

I am a behavioural scientist and, from that perspective, our international obsession with coronavirus is both good and bad news. The good news is that people have been learning what steps they need to take to keep themselves healthy: sneeze into a tissue or your elbow; don't shake hands or touch your own face; stay home if you are unwell and encourage others to do the same; get a flu jab – not to protect you from this novel virus, but so that you avoid the common flu, allowing our medical resources to focus on COVID-19; and, most importantly, wash your hands, wash your hands, wash your hands. Social distancing has become the social norm. These simple changes to behaviour not only reduce the risk of catching coronavirus, but also protect against any other contagious illness floating around at the same time. All of this is very good news.

But there is also some bad news associated with the current intense focus on COVID-19. At Otago, one concern is the potential for xenophobia and racism directed at Chinese people (and many other Asian people) that we have seen elsewhere. We have been on high alert, reminding our students and staff to be vigilant for words or actions that do not reflect our values of kindness and compassion. Another ongoing concern is the inevitable anxiety that is associated with the unknown. The threat of COVID-19 and the associated actions that governments and communities have been forced to take represent the single biggest disruption to the international university sector (and, potentially, the global economy) since World War II.

What does all of this mean for the University of Otago? At the time of writing this column, New Zealand is just about to move to COVID-19 Alert Level 4, with our country effectively entering "lockdown" for the next four weeks, and possibly longer. All University staff who are not involved in critical services are now working from home. Most of our students have returned to their families. Those who have chosen to stay are either self-isolating in their flats or their residential colleges which have stayed open to support them.

Over recent weeks we have been making important decisions to prepare us for this eventuality. We are fortunate to have deep expertise at Otago in the areas of infectious disease and public health. Many of our experts have not only been advising us,

but government as well. We have been working closely with our students, both in New Zealand and overseas, helping them to make the best decisions possible about their course of study in the wake of so much uncertainty and supporting them on day-to-day level as we always do. Our academic and professional staff have been working extremely hard to develop teaching materials we can deliver online, and we suspended overseas and non-essential domestic travel so that we had "all hands on deck".

As usual, Otago is at its best when life is at its worst. I am extremely grateful to the countless members of our professional and academic staff who have been working long hours to keep our community safe and to keep our University on track for whatever the future weeks and months might throw at us. We find ourselves in an extraordinary situation, but it is our best chance of beating this virus and saving lives.

Those of you who are alumni of this fine University will not be surprised that our students have also risen to the challenge, exhibiting the unsinkable spirit who, likewise, have been required to make decisions in a rapidly changing environment. All of these students have been remarkably resourceful and resilient. By the time of the publication of our next *Otago Magazine*, the world is likely to be a very different place than it is now. We can only guess what the world will look like, but I am certain that Otago has the fortitude and courage to tackle whatever comes our way. Please look after yourselves and your families, and keep us in your thoughts.



have study abroad students – largely from North America – some of whom have been asked to return home by their home universities. And we have New Zealand students on overseas exchange and placement all around the world who, likewise, have been required to make decisions in a rapidly changing environment. All of these students have been remarkably resourceful and resilient.

By the time of the publication of our next *Otago Magazine*, the world is likely to be a very different place than it is now. We can only guess what the world will look like, but I am certain that Otago has the fortitude and courage to tackle whatever comes our way. Please look after yourselves and your families, and keep us in your thoughts.

Ngā manaakitanga

Vice-Chancellor
Professor Harlene Hayne

"As usual, Otago is at its best when life is at its worst. I am extremely grateful to the countless members of our professional and academic staff who have been working long hours to keep our community safe and to keep our University on track for whatever the future weeks and months might throw at us."



Going viral

PROFESSOR VERNON WARD WITH ASSISTANT RESEARCH FELLOWS SASHEEN DOWLATH AND GEENA MCKENZIE-GOLDSMITH:
“There is an urgent need for new treatments.”



As countries around the world battle the COVID-19 pandemic, an Otago-led project is working to develop new classes of antiviral drugs, drawing on national and international expertise to meet a vast unmet need.

A PUSH TO DEVELOP new classes of antiviral drugs being led out of Otago and drawing on scientific expertise from around the country and overseas has been awarded a \$13.5 million MBIE Endeavour Fund grant.

New Frontiers in Antiviral Development project leader Professor Vernon Ward (Microbiology and Immunology) says an important part of MBIE funding is the focus on developing discoveries so that they can be taken to market.

Although the commercial imperative is strong, there is also a large unmet need in the antiviral space which continues to grow with the appearance of new virus strains such as the recent COVID-19 outbreak, which began in the Chinese city of Wuhan and is now spreading internationally.

“There are a lot of viruses out there for which there’s no treatment. On top of that, just like you talk about antimicrobial resistance from bacteria, we get antiviral resistance from viruses. So you generally need combination therapy or a range of antiviral options.

“A classic example would be influenza. One group of drugs is called the amantadines, but flu strains got so resistant to them they’re not recommended anymore. So there is an urgent need for new treatments,” he says.

“It is what MBIE would call an unmet need. There’s a vast market out there for antiviral agents.”

Another example is measles, Ward explains.

“You should vaccinate against this disease – that’s a no brainer. In parts of Africa a measles outbreak has caused over 6,000 deaths and the recent outbreak in Samoa shows how devastating this disease can be. But if people have caught measles, wouldn’t it be great to be able to treat them and stop them dying from it?

“There’s a huge market there for antiviral agents and that’s what we’re looking for. There are many people who would benefit from having an agent to treat the disease once they’ve got it.”

In fact, the market for antivirals is expected to reach around US\$63 billion next year.

Ward says they are particularly interested in developing antivirals that have broad spectrum potential. “So drugs that don’t just target one virus, but potentially multiple viruses. It’s a different paradigm to what’s been done in the types of antivirals that have been developed previously – to open up new doors of what antivirals might look like.”

These antivirals can target specific components that the virus uses to replicate

– things that are different about them that you don’t find in the host cell. That ability to differentiate between host and virus is vital, Ward explains.

“A virus has a very intimate relationship with its host. It’s replicating inside the cells of the host using the machinery of those cells to replicate, so the difference between the virus and the host can sometimes not be a lot – and you’re trying to target things inside cells as the virus is replicating.”

To develop drugs capable of tackling new targets requires a strong team of people and he has brought together top researchers.

“You’ve got to have virologists – that’s what I do – but you’ve also got to be able to have the people who can work in cell culture and do the cellular and molecular type work of understanding the proteins and molecules in the virus that you’re trying to target, and interrupt and affect their ability to manipulate a host cell.”

A lot of information about the COVID-19 virus and the disease it creates has become available in a short period of time and that, Ward says, shows the value and importance of a team approach when tackling viruses.

“You’ve got to have people who are able to understand the structure of proteins and do the structural biology. You’ve got to have access to all sorts of different chemical

“We also want to target things that nobody’s targeted before because we think that will open up new opportunities to get that combination of drugs to avoid resistance.”

compounds for your screening assays. How do you know if a potential drug interacts with one of your target proteins?

“Once you’ve got a lead, how do you develop that into something that actually can be used medicinally? Sometimes you get things that work, but are toxic and hence can’t be used, so you’ve got to be able to modify them,” says Ward.

“It’s a matter of getting the right team together and that’s what this grant is about.”

Alongside Otago researchers, they have people from the University of Auckland, the Ferrier Institute at Victoria University Wellington, ESR, Glycosyn – a New Zealand company that makes medicinal-grade drugs – as well as structural biologists and medicinal chemists for all the development and testing work that needs to go on.

It is something of a who’s who featuring the likes of medicinal chemist Professor Dame Margaret Brimble, whom Ward describes as one of New Zealand’s premier scientists in this area.

“We’ve now got a team in New Zealand that’s capable of developing antivirals and we think there are vast opportunities that will benefit a lot of people, but also be viable commercially.”

“We’ve got really good collaborations offshore, such as into the Albert Einstein College of Medicine in the USA, the University of Southampton UK, and we have biotechnology company linkages.”

Group members all share a strong track record of getting income from intellectual

property, have drugs in trial right now and have experience launching start-up companies, says Ward.

“There’s been about \$200 million of intellectual property out of the researchers within this group in the last five years, so the capability to do this is there. What we’ve never done is bring them all together in one place to tackle viruses.

“We have enough leads through previous funding and other work to know where we’re going with that. We also want to target things that nobody’s targeted before because we think that will open up new opportunities to get that combination of drugs to avoid resistance.”

Ward says it is important to think about the commercial side as you are developing a treatment.

“The cost of bringing something to the medical treatment market is large. If you don’t have a commercial position, no one’s going to give you the money to do it. That’s what so many people forget.

“I do basic research where I publish what I find, and I like doing that. But how do you go from bench to bedside? Part of going bench to bedside for drugs, at least, is being able to get a commercial proposition on them,” he says.

“If it is not financially viable to do all the testing and development then no one will ever get helped by it. You can argue about whether that’s good or bad – but that is the reality at the moment.”

Once they develop a reagent against one



PROFESSOR VERNON WARD:
“I’m a card-carrying virologist. I grow viruses, I work with viruses, I study their molecular and cellular biology – which is the detail and understanding needed for this sort of work.”

virus, they will also try it against others.

“We have the capability to develop reagents against a range of viruses. That will benefit people and hopefully also New Zealand as a whole.”

Looking further down the track there is also the possibility that some of the things they develop for human disease could also be used to combat animal disease.

Ward stepped down from five years as Dean of the School of Biomedical Sciences

at the end of last year to concentrate on the new project.

A PhD student at Otago in the mid-1980s, his interest in working on viruses took him to Oxford for his first postdoc and then to the University of California, before eventually returning to Dunedin.

“I’ve worked on viruses for the better part of 35 years now. All sorts of different viruses – insect viruses, arthropod transmitted viruses, human viruses – a whole raft of

viruses over my career.”

It means he has a broad virology background, ideal for the role he is now tackling.

“I’m a card-carrying virologist. I grow viruses, I work with viruses, I study their molecular and cellular biology – which is the detail and understanding needed for this sort of work.”

Otago has a long tradition in virology and Ward sees it as being in a strong

position thanks to a number of very good virologists across several departments and sectors of the University.

“When tackling viruses, you’ve got antiviral drugs, vaccines and public health. They are all areas where Otago has strengths,” adds Ward.

MARK WRIGHT

Wedded to the University

History Professor Barbara Brookes pays tribute to a generation of women – staff wives – who dedicated themselves to building social links on behalf of the University of Otago and the wider community. Their contributions were considerable.

IN THE PREFACE OF *The Whale's Wake*, bearing his name alone as author, historian Harry Morton noted how “my wife and I sought information on three continents, quite apart from our searches in the three islands of New Zealand”. The preface moves easily between “we” and “I” in recording debts. The penultimate sentence reads: “My research assistant and illustrator, Peggy Morton, is also my wife, and has been invaluable to me in all three roles.”

The preface speaks to an era when academic work might be seen as a joint spousal enterprise, even if the man alone was the author and academic employee. Harry Morton retired from the then History Department in 1983, the year I took up an assistant lectureship and moved into his former office. As a young feminist scholar, I had no wife to type my papers or assist with my research, nor would I have imagined that it was a spouse's role to do so.

Prior to the 1970s, the wives of academics did much more than assist with scholarly work at a time when the University was relatively small and much more intimate, and it is that commitment to social well-being by women that I want to honour here. I can, of course, only note a few of the women who dedicated

themselves to building social links on behalf of the University and the wider community.

In an early scholarly study of the role of what was named *The Incorporated Wife* (1984), Hilary Callan described occupations in which “the social character ascribed to a woman is an intimate function of her husband's occupational identity and culture”.

Such was the identity between husbands and wives that married women up until the 1970s were often known by their husbands' first names, such as Mrs Peter Fraser. A wife's status was elevated by her husband's rank. At that time a woman's first duty was to her family. Only “unfortunate women” used childcare facilities – those forced to work to support themselves. If a couple could afford an at-home nanny, that might have made it possible for a professional woman to work.

Amongst the many demands of second-wave feminists that burst on the scene in the 1970s was that women should no longer be identified by their marital status (Ms was the preferred term) and that childcare should be available so that women could work. Some of those feminists came to Dunedin from the United States and Canada (accompanying

their academic husbands) and founded the then-radical Dunedin Collective for Women in 1971. Things, however, were different in the 1950s.

Joyce Joan Herd, known as Bunty to her friends, came to Dunedin from the United Kingdom when her husband, Eric Herd, was appointed to a lectureship in German and French at the University of Otago in 1953. Dunedin was a shock – there were only about two or three restaurants in Dunedin and no decent coffee. A staunch feminist, Bunty Herd later represented the Otago Federation of University Women (FUW) on the National Council of Women (NCW), writing some of the council's most important memos to government at the time. Her commitment to good government meant she served with dedication on the Dunedin City Council.

A long-time Labour Party activist, Bunty

worked alongside Islay Little – married to classicist Doug Little – for Labour Party causes. Bunty volunteered for the YWCA, the Historic Places Ecology Action and the campaigns to save the Clutha and Manapouri. Pat Mark, Bunty's good friend married to distinguished conservationist Alan Mark, was deeply involved in these campaigns and also a local FUW delegate to the NCW.

The year that Bunty and Eric Herd arrived in Dunedin, Professor of Chemistry Frederick Soper became Vice-Chancellor. Eileen Soper, former journalist and Otago Provincial Commissioner for the Girl Guides Association, took up the role of “hostess for the University”, welcoming staff and visitors to the University Lodge. Eileen had been one of the founders of what was then called the Staff Wives Association. That group, established in June 1948, aimed to

“to promote friendship between members and to entertain visitors and new arrivals”. Named at a time when the ideal of the male breadwinner wage dominated social expectations in New Zealand, a group of wives devoted to developing social bonds seemed unsurprising. It then seemed unremarkable that the group was called upon to entertain the wives of distinguished visitors or to provide the floral decorations for capping ceremonies.

When not active in preparing for meetings, Bunty Herd found time to write a number of books, the last – *Cracks in the Glass Ceiling: New Zealand Women 1974-2004* – completed when she was 84. On her death, a former student described Bunty as the “mother of the modern languages department”.

Like Bunty, many women married to academics welcomed students into



Meeting recently for lunch at the University Staff Club (from left): Ann Wylie, Islay Little, Barbara Smith, Florence Stone and Pat Mark.

their homes with a ready listening ear, entertained academic visitors and put special effort into welcoming new faculty wives. Julia Musgrave, wife of the Professor of Philosophy and busy mother of five, was a similar “mother” to the Philosophy staff, enjoying discussions with her husband’s colleagues about film and literature in which she was well-versed, and entertaining them frequently. A young English woman, Heather Dyke, was appointed to the department in 1998 and knew very little about the country or city she was about to move to. Julia wrote to her in England, sent a copy of the *Otago Daily Times*, a list of food prices and rental possibilities. On arrival, Heather and her husband were greeted with a welcoming basket of Central Otago fruit and a treasured lifelong friend.

Women appointed as academics didn’t meet the “staff wife” criteria and some, such as Ann Wylie, felt cold-shouldered by the group when she arrived as a Botany lecturer. For her the Federation of University Women was much more welcoming in an academic world where it was best to behave as an “honorary man”. Other women academics made it clear that they were not “staff wives” and avoided any association with the group.



JANE HIGHAM:
a mainstay of numerous community organisations.

Named at a time when the ideal of the male breadwinner wage dominated social expectations in New Zealand, a group of wives devoted to developing social bonds seemed unsurprising. It then seemed unremarkable that the group [Staff Wives Association] was called upon to entertain the wives of distinguished visitors or to provide the floral decorations for capping ceremonies.

For some women, the transformation involved from lecturer to faculty wife could be a shock. Anne Tarrant, a vivacious assistant lecturer in the French Department, married outstanding geologist Professor Doug Coombs in 1956. When she subsequently announced her intention to study for a PhD, her ambition was apparently dismissed and she was told firmly that her role was to support her husband. While it seems Otago did not have any formal rules that applied at some overseas institutions which prevented the employment of wives, informal sanctions were clearly in operation. Anne Coombs hosted a remarkable stream of visitors from all over the world and went with Doug to many exotic and remote places. Her love of French never abated, however, and was carried on by her daughter, Jane, who is now New Zealand’s ambassador to Paris.

Academics typically cross the world in search of employment and their families have to relocate. When Judy Robinson’s husband was appointed to the Chemistry Department at Otago in 1967, the couple returned to New Zealand from England. Ship-board they met another new immigrant couple bound for Otago, Pauline and Charles Higham. Judy found Staff Wives to be a conservative but very welcoming group, and went to the Thursday morning meetings (where children were welcomed and goods and advice were shared) “rain, hail or snow”.

While the wives of faculty members did much to support the University, they

were also active in the wider community, building social bonds. Shirley Child, married to economic historian John Child, was the valued and lively receptionist for the Family Planning Association. She worked alongside Jane Higham, the efficient office manager, married to Business School lecturer Richard Higham. Jane was a mainstay of numerous organisations, from the Budget Advisory Service, the Otago Peninsula Trust, to the University of the Third Age and the Orokonui Sanctuary.

Apart from Staff Wives, women such as respected language teacher Florence Stone forged firm bonds through the Federation of University Women, now known as Graduate Women International. Dorothea Horsman arrived in Dunedin in 1957. A New Zealander by birth, she completed an MA in History at Auckland University and went teaching, the occupation, along with nursing, regarded as the most suitable for women. At the end of the Second World War Dorothea accompanied her husband Alan Horsman to Oxford. Alan’s appointment as Professor of English at Otago brought the couple and their three children back to New Zealand.

Dorothea became involved in Marriage Guidance, the YWCA and the Fortune Theatre. She added her talents to the Federation of University Women, becoming the FUW representative of the NCW. Dorothea completed two reports that signalled the changing times: *What Price Equality?* (1974 on equal pay for the NCW) and *Women at Home* (1976 for the FUW).



Early childhood education was an initiative driven by the wives of men on staff in the 1960s and has been of enormous benefit to a great many families in the decades since. Photographed at the University of Otago Childcare Association in 1991 were now Professor Barbara Brookes (centre) with her son Liam Roth, Lath Kuy and Joan Knox.

She became national president of both organisations, as well as of the Arthritis and Rheumatism Foundation. For her significant service, Dorothea was made a Dame of the British Empire in 1986.

Two years after Dorothea Horsman’s report on equal pay, members of the Staff Wives Association were still being called upon to serve morning and afternoon teas for the Science Congress held at Otago in 1976. But the currents of change were irresistible. In 1972, the Staff Wives Association decided to record the first names of its women members: no longer were they to be known by their husband’s initials. A decade later the name “Staff Wives” itself came into question and the group changed its name to the Otago University Staff Families Association.

In 2020 there are women on staff whose husbands play the primary care-giving role in the home. There is, however, no societal expectation that these men should contribute their cooking or floral arranging talents to the University. Restaurant fare, rather than home cooking, is likely to be the preferred entertainment for distinguished visitors when both spouses are busy working.

The University now offers first-class early childhood education, an initiative propelled in the late 1960s by wives of men on staff. Jean Dodd, Katherine Dolby and Barbara Smith all believed in the importance of education for women and thought it wrong that women had to abandon study when they became pregnant. The first priority – of what was initially named the Nursery

Association in 1969 – was to assist women to continue tertiary education.

Celebrating its 50th anniversary in 2019, the University of Otago Childcare Association is now likely to caring for the children of staff. My three sons (and my career) benefitted hugely from that care as did many others, including the two daughters of a young American couple hired in Psychology. As a sign of the changed times, Professor of Psychology Mike Colombo now graciously welcomes guests as the husband of Professor Harlene Hayne, the Vice-Chancellor, at the University Lodge.



JONATHON WONG:

“... the Otago alumni network could be a tremendous resource for current students and graduates.”

walking the talk

A University of Otago education gave Jonathon Wong the skills to build a high-powered career in the United States. Now he is looking to give back.

THE NEW PRESIDENT of the Alumni of University of Otago in America (AUOA) wants to help Otago graduates build a stronger alumni network – both in the US and across the world.

Jonathon Wong’s experience in America has helped him understand how important it is to have a strong professional network in order to advance your career, especially if you want to make a change.

While pursuing an MBA at the Kellogg School of Management – Northwestern University, Wong quickly learned that the US graduate business school experience is as much about building one’s professional network as it is about academic growth.

“We just don’t have that kind of culture in New Zealand,” says Wong. “Calling on fellow alumni for professional help does not come naturally to Otago graduates or New Zealanders in general. But the Otago alumni network could be a tremendous resource for current students and graduates.”

As the new AUOA president and the Director of Business Operations and Strategy for Global Partnerships at Google in California, Wong is well-placed to make things happen.

It wasn’t always that way. Wong started from humble beginnings and his involvement with AUOA originated from a desire to give back to the University that gave him a great start in life.

“My journey to where I am now started at Otago. I didn’t have an easy or privileged beginning, but Otago provided me with the foundations for success. I believe it’s a place where anyone from any background can thrive and build the skills they need to pursue their long-term goals.”

Wong was born in China and his family moved to Dunedin when he was just a toddler. “I still consider Dunedin my home town. My parents couldn’t go to university and wanted a better life for me.”

Wong’s maternal grandmother became his guardian from age 10 when his parents returned to China and he soon learned to be self-reliant. “We didn’t have much money so I had to be entrepreneurial. For example, when I visited China I’d buy video games, toys, whatever was in demand at the time to sell back in Dunedin. The exchange rate definitely helped with my operating margins.”

Naturally, Wong’s favourite school subjects were business and economics, which he went on to major in for his Otago Bachelor of Commerce degree with first class honours. While finishing high school he applied for provisional entrance and began doing papers, which gave him a window into campus life.

“The University is such a significant part of the culture in Dunedin. It’s the oldest university in New Zealand and, in

my opinion, one of the best. The people I met at Otago were open, collaborative and intellectually curious. I felt it was a place where I could grow.

“Academically it was tough. I was fortunate to be invited into the honours programme, but it was hard work. I had to put in the hours to keep up on the content and with my more academically-gifted peers. I nearly blew it in my second year, but I had amazing support from my lecturers and classmates, who helped me get through.”

Wong’s lecturers also guided him to an overseas exchange at the Stockholm School of Economics during his third year, an experience that helped him grow personally and set him apart during job interviews.

Wong also benefitted from sports at Otago, training and competing in taekwondo at the University club where he attained his black belt in just four years.

“I tagged along with a friend during orientation week and I’m happy I did. Physical training for two or three hours a day, five to six days a week requires immense focus and discipline. The mental toughness I learned from practising taekwondo transferred over to my studies. I figured if I could condition my body this way, I could do the same with my mind.”

By graduation, Wong’s honours class had dwindled from high double digits to just a dozen. He applied for positions with two of the most prestigious economic institutions in New Zealand – the Treasury and the Reserve Bank – gaining interviews with both.

“I thought I was all set, but what happened next came completely out of left field. I went to a Deloitte recruiting event to support a friend. I wasn’t interested in accounting, but discovered management consulting. I was excited by the travel and tempted by the extra pay relative to the public sector.”

Wong landed one of the few graduate analyst positions at Deloitte Consulting that year.

During his second year he was co-opted

to a project team working with visiting American energy experts. “They needed a number cruncher and I happened to be an analyst lackey with the right qualifications so I supported them for several months. At the end of the project the senior manager suggested that my skill set could be valuable in the US so I applied for a transfer to the Washington DC office. The New Zealand firm was incredibly supportive and kindly talked me up a bit. A year later I found myself living in the US.”

As soon as Wong arrived he realised that America held huge possibilities for growth. After two more years in Deloitte Consulting’s strategy and operations practice, the company offered to sponsor him to attend full-time graduate business school for an MBA. He had intended to return to DC, but an internship led him to San Francisco where he discovered the high-tech world of Silicon Valley. He then spent time as a research fellow at Deloitte’s Center for the Edge think tank.

“That was an incredible experience, spending six months looking deeply into one complex topic. It really expanded my ability to think critically and creatively.”

Inspiration led Wong to co-found a company with a friend from Kellogg. After a charmed run, it was a valuable miss-step.

“It was 18 months of sleepless nights building products that ultimately did not work out. Fortunately, there is a culture in Silicon Valley where failure is a badge of honour. In fact, when I told my primary investor that I was pulling the plug, he offered to write me another cheque for my next venture. He explained that the investment was in me, not the idea.

“I’d learned a lot, not least that running a start-up requires a degree of risk tolerance that stretched beyond the limits of my own at the time. I had to re-evaluate and re-invent myself after that so I looked at the biggest players in tech, like Google and Amazon, and tapped into my Kellogg network for insights and support.”

Wong received two offers and signed with Google. “Everyone I met during

the interview process was so sharp, so intellectually tuned in. It felt like a super high-performance environment, which was both intimidating and attractive to me. I figured, regardless of how well I did, I was going to learn something valuable.”

Wong joined the partnership’s operations and strategy team, advising business leadership and helping run global operations.

“The role immediately offered me opportunities to tackle incredibly complex and challenging problems, collaborating with people who are at the top of their field. It’s an amazing place to be and an environment where you can grow very quickly, and have a positive impact at scale.”

Six years on, Wong is now the Director of Business Operations and Strategy for Global Partnerships.

“I never thought I’d be at Google, but my economics training at Otago, which focused on helping me develop critical thinking skills versus memorising formulas, prepared me for what I do today. On top of that, my Otago experience helped me grow as a whole person, providing me with the confidence and courage I needed to get to where I am today.

“Many of the Otago graduates I know in the US are successful in their respective professions. We are all grateful for the education we received, and proud of our alma mater. Many of us are looking for ways to give back to the University.”

Hence Wong’s involvement with the AUOA.

“I attended an alumni event and met some of the board members several years ago, and ended up as secretary in 2016. That’s an arduous position, but I like jobs that allow you to see the full picture. Later I started discussing new ideas with the team and was asked if I wanted to lead the organisation, so I guess it’s time for me to walk the talk.”

NIGEL ZEGA

“I never thought I’d be at Google, but my economics training at Otago, which focused on helping me develop critical thinking skills versus memorising formulas, prepared me for what I do today.”

Luck of the Irish

The new Éamon Cleary Professor of Irish Studies shares her vision for the position and explains why people are increasingly looking to Ireland for the answers to current global issues.

PROFESSOR SONJA TIERNAN:

“I like the idea of showing people that Ireland is actually a very progressive country now, which isn’t what instantly springs to mind when people think about Ireland.”



WHEN PROFESSOR Sonja Tiernan received an email from the other side of the world inviting her to interview for the Éamon Cleary Chair of Irish Studies at the University of Otago, she was sure it was a scam.

Tiernan, originally from Dublin, was Head of the Department of History and Politics at Liverpool Hope University at the time.

“You don’t realise that you can get a life-changing email out of the blue,” she says. “In the beginning you think ‘This is some

kind of a scam’. But it wasn’t. I came out here for the interview process and loved the University, the people I met and Dunedin.”

Tiernan took up her new post last June following the retirement of Professor Peter Kuch, the inaugural holder of the chair. She joins Professor Liam McIlvanney, who holds the Stuart Chair of Scottish Studies, as co-director of the Centre for Irish and Scottish Studies (CISS).

“One of the biggest things I like about Irish Studies is that it doesn’t box me in to

one particular research area,” Tiernan says. “It doesn’t say ‘Right, you’re a historian, stick to what you know’. It’s a cross-discipline approach to better understanding issues that are of prime global importance now. Issues such as colonisation, famine, rebellion, civil war, nationalism, unionism, economic booms and recession, waves of emigration, sectarianism, civil rights, gender equality.

“Most recently, academics and political commentators have noted the obvious parallels between the ongoing refugee crisis and the Great Irish Famine of the mid-19th century.”

Tiernan’s plans for her new role include broadening Irish Studies to reflect a rapidly changing Ireland.

“Ireland is a country that has experienced so much hardship and yet is now a prime example of a country capable of rapid social reform. This makes Irish Studies relevant and exciting to study.

“I’m not leaving the traditional approach to the study of Irish literature, culture and history behind, because that remains important. But I like the idea of showing people that Ireland is actually a very progressive country now, which isn’t what instantly springs to mind when people think about Ireland.

“Students expect evolution as well. Postgrad students are coming to me to discuss research topics from hunger strikes during The Troubles in the north of Ireland to modern Irish feminist literature. There’s literally a full range of interests.”

Tiernan is teaching through the History programme this semester, including a module on Capital Punishment in the British Empire, which includes a focus on the use of execution to control and rule in the colonies. She has recently designed a 400-level paper that will be available through Gender Studies entitled Sexual Politics in Modern Ireland, which is based on her research on the history of social reform movements in Ireland.

She is currently designing other papers, including one on public history



“Whether it’s through study, public outreach, community events, or research... I can see the evidence of the significant connections between these two countries. It’s a positive story, worth telling.”

and commemoration connected to the establishment of the Irish Free State in 1922.

Tiernan and McIlvanney are also working to create a number of teaching options for the centre that will maximise their complementary research specialities, such as developing postgraduate papers together.

“One idea is a paper on Crime and Punishment: Fact and Fiction, through which I can provide the historical background of criminal cases and Liam can follow through with the literature that emerged from such cases. So it might be, for example, Dame Fiona Kidman’s award-winning book *This Mortal Boy* based on Albert Black, a man from Belfast who was the second-last person to be executed here in New Zealand.

“The other side of teaching is supervision, which is a real strength at CISS,” says Tiernan. “First of all you’ve got myself and Liam and then we’ve got visitors coming through like esteemed crime fiction author Val McDermid, who’s a visiting

professor at our centre for three years.

“The centre is also introducing a writer’s fellowship that will alternate between a Scottish writer this year followed by an Irish writer in 2021, which will continue for 10 years. So we’ll have some really exciting people here who will be available for our students to consult. To get that speciality for students, I think, is pretty unique.”

Tiernan’s own research interests have evolved since moving to New Zealand. While she continues to work on her existing projects, which include books on Ireland’s 2015 marriage equality referendum and on great speeches by Irish women, she is now also the research lead on a project mapping Irish communities and people of Irish heritage in New Zealand. The project, which is the first to cover an entire country, is funded by the Department of Foreign Affairs in Ireland through the Irish Embassy in Wellington.

“The Irish Embassy opened here just before I arrived so it was such good timing for me and also highlights the increasing connections between Ireland and New Zealand,” she says. “It’s lovely really, like the stars aligned that all this happened.”

Tiernan will use immigration figures and online surveys to gather information for the project, which could then inform future research and increase connections among Irish migrants, community groups and government representatives, she says.

“Immigration figures show that there has been an increase of nearly 14 per cent of Irish-born people moving to New Zealand last year from July 2018 to June 2019. And I was one of them!”

Tiernan offered an update on this project at the first of a series of monthly public talks at Toitū Otago Settlers Museum in February. The Luck of the Irish series continues throughout the year, on the first Sunday of every month, featuring talks by academics and fiction writers on a variety of topics connecting Ireland and New Zealand.

“Everything from Rosaria Hall – an Irish woman who came from Bantry Bay in

Cork and was ‘the’ fashion designer in New Zealand in the ‘60s – through to Irish-born poet and politician Thomas Bracken.”

Tiernan is keen to provide further opportunities for community engagement: CISS hosts regular Irish and Scottish film nights and last year it marked its 10th anniversary with the Celtic Noir Crime Writing Festival featuring top Irish, Scottish and New Zealand authors.

She is also on a mission to reclaim Halloween, which originated from a Celtic festival called Samhain and is one of the most important events in the ancient Celtic calendar.

“In 2019, we had an event at the Dunedin City Library on Halloween night. Cherry Smith, a northern Irish poet, performed *Famished*, centred on the great famine in Ireland. And we had fire dancers, which sounds funny – to have fire dancers in a library – but Samhain is a fire festival.

“To me it’s all about carving out more of a recognition of the connections between Ireland and New Zealand. That really is the key thing. Whether it’s through study, public outreach, community events, or research... I can see the evidence of the significant connections between these two countries. It’s a positive story, worth telling. Watch this space.”

LAURA HEWSON

For more information on the Centre for Irish and Scottish Studies and to access the survey on Irish people in New Zealand go to otago.ac.nz/ciss

The school BEAT

Research into how adolescents get to school and its impact on their level of physical activity is prompting a rethink in transport policy and practice.

ASSOCIATE PROFESSOR SANDRA MANDIC:

“Walking and cycling have different barriers and different enablers – especially with respect to infrastructure.”

Photo: Alan Dove

“The BEATS research stemmed from our work that involved the DCC, the schools, the communities and input from individuals outside academia. The impact of this is now spreading nationally and even internationally.”

OVER THE PAST seven years the multidisciplinary BEATS (Built Environment and Active Transport to School) research programme has spanned the fields of exercise science, public health, environment, transport and education, gathering a breadth and depth of data related to adolescents’ transport to school – including survey data from more than 2,600 adolescents and 400 parents across Otago.

Led by Associate Professor Sandra Mandic (School of Physical Education, Sport and Exercise Sciences), the BEATS team received the University of Otago 2019 Research Group Award.

The programme developed from Mandic’s research who, as an exercise scientist, had been collecting and analysing data on adolescents’ physical activity, including how they travel to school. That piqued the interest of the Dunedin City Council (DCC) which wanted to understand more about road safety around secondary schools, particularly around the city centre.

“We reviewed the literature and identified a wide range of factors that influence how young people travel to school. In addition to age and gender, there’s also the influence of family, peers and the school,” says Mandic.

“The built environment around an adolescent’s home and their school is also important in determining how they travel from place to place. There’s also the

influence of educational policies such as school choice.”

Mandic says the original BEATS Study, which was supported by all 12 Dunedin secondary schools, looked initially at the patterns of how young people travel to school in Dunedin.

“We looked at their home neighbourhood environment and examined their physical activity levels. We didn’t just collect information from students, we also collected data from parents, teachers and school principals.”

Parents and adolescents were surveyed, while focus groups were also conducted with students, parents and teachers. School principals were interviewed.

“Adolescents marked their route to school and the safe and unsafe areas on a paper map. We presented the findings to the city council to make some changes around the central city school areas.

“Some adolescents also wore activity meters for a week so we could measure how much physical activity they do. The initial BEATS Study was quite comprehensive and took us three years to collect the data.”

Members of the research team are now busy publishing findings from the initial study. Meanwhile, the programme of research kept developing and, two years ago, was extended to 11 rural Otago schools.

“We now have data to compare urban versus rural areas. A lot of what researchers understand about how young people travel

to school has been done in the cities, but does the same thing apply for a smaller place like Roxburgh, Tapanui or Wanaka?”

In the most recent Health Research Council (HRC) funding round the BEATS research team received almost \$1.2 million to extend the original study and examine whether cycleway construction in Dunedin since 2014 had changed students’ travel behaviours and perceptions of the built environment for walking and cycling to school.

Since the original study, the Dunedin City Council has carried out considerable infrastructure changes to improve safety around schools near the central city area, using some of the BEATS findings to inform their changes.

Among 12 schools that participated in the original BEATS Study, six have had infrastructure changes in their neighbourhood, while the other six didn’t. “As we collected initial data before

infrastructure changes, new data collected in 2020 will enable us to compare the changes in transport to school behaviours between the schools that had infrastructure changes in the meantime and those that did not. That is what’s called a natural experiment,” says Mandic.

One of the key findings their research to date has shown is that while walking and cycling are both forms of active transport, they are very different and need to be treated that way.

“Walking and cycling have different barriers and different enablers – especially with respect to infrastructure.

“If we are designing interventions to improve rates of active transport to school, we need to know if we are trying to improve rates of walking or cycling (or both) because each mode of transport will require different interventions.”

Another important finding from this research related to school choice.

“Some Dunedin adolescents live within walking distance of their closest school yet they’re driving, or being driven, 10 kilometres to the school of their choice,” says Mandic.

“So, regardless of what we do as health promoters – and we can build all the cycleways we like – if those adolescents are travelling a long distance to school they are not going to walk or cycle. Changing the infrastructure won’t change their travel habits if it is not supported by other changes.

“We have found the optimal distance for walking to school in Dunedin is up to 2.25 kilometres. Students living beyond that distance are unlikely to walk to school, but they could potentially cycle if living within cycling distance and if cycling was perceived as safe.

“For those living beyond reasonable walking and/or cycling distances to school, we could encourage parents to drop them



THE BEATS RESEARCH GROUP:

Back row (from left) Gavin Kidd, Long Chen, Charlotte Flaherty, Dr Anna Rolleston, Associate Professor Sandra Mandic, Associate Professor Susan Sandretto, Dr Kirsten Coppel and Associate Professor Antoni Moore. Front row (from left) Olivia Eyle, Jessica Calverley, Brittany White, Kimberley King and Tessa Pocock.

Photo: Sharon Bennett

Study snapshots

SCHOOL BAG WEIGHT STUDY

An examination of school bag weight showed that both adolescents and parents perceived it as a barrier to active transport. The average weight of Dunedin adolescents’ bags was 5.5kg – nearly 10 per cent of their total body weight.

“School bag weight was perceived as a greater barrier by those who travelled to school by car or by bus compared to those who walked to school. But our findings show that the actual school bag weight was the same across those groups.”

Mandic says school bag weights should be considered in future active transport interventions.

PHYSICAL ACTIVITY

Using devices to measure physical activity, researchers found adolescents using active transport to school only get about as much exercise as those who combine active transport and some forms of motorised transport, such as walking and taking a bus. Those who relied solely on motorised transport did much less physical activity.

“These findings are basically saying, even if you live 10 kilometres away from school and you can’t walk all the way to school, you should look at using active transport for at least part of the journey – maybe at the start, maybe at the end. This is one way adolescents can incorporate physical activity into their everyday lives.”

SCHOOL NEIGHBOURHOODS

Master’s student Tessa Pocock completed an environmental audit of the streets in a 500-metre radius around each of the 12 Dunedin secondary schools. This took into account big features, like the number of intersections and what’s available in the neighbourhood, with some of the specific street features.

“When built environment features were analysed together with adolescents’ perceptions of the route to school, the most important predictor of whether they walked to school was whether they thought walking to school was safe or unsafe,” says Mandic.

“Many built environment features are contributing to the perception of safety, so we need to address them to change safety perceptions. The area may have favourable built environment features, like for example cycle lanes, but if people perceive that environment as unsafe, they’re not going to use active transport.”

off and pick them up further away from school instead of driving them to a school gate. This would reduce traffic congestion near the schools at drop-off and pick-up times and adolescents can get some physical activity and the benefit of socialising with their friends while using active transport to and from school.”

POLICY IMPACT

Many of the BEATS research team’s findings are now feeding into policy. They have also been organising symposia for the community to share their latest findings.

In 2017, Mandic initiated The Active Living and Environment Symposium (TALES) – a multi-sector event bringing together researchers, policymakers, practitioners from the health sector, transport sector and urban environment sector.

“In 2019, as part of the TALES Symposium, a working group of experts from different sectors was formed and developed the key policy recommendations for increasing active transport in New Zealand.”

Mandic says that the BEATS team is now starting to look at multiple layers of the BEATS research data together and looking across the issues related to adolescents’ transport to school.

“The BEATS research stemmed from our work that involved the DCC, the schools, the communities and input from individuals outside academia. The impact of this is now spreading nationally and even internationally.”

MARK WRIGHT

BEATS RESEARCH PROGRAMME:
otago.ac.nz/beats

ACTIVE LIVING LABORATORY:
otago.ac.nz/active-living



PAPALI'I DR VIOPAPA ANNANDALE-ATHERTON:
 "I think one of the most important lessons, especially for students, is to keep a balance between study and 'time out'. There will be many challenges. Deal with them with patience, respect and dignity."

Photos: Sharron Bennett

A woman of the Pacific

New Zealand's first female medical graduate from the Pacific, Papali'i Dr Viopapa Annandale-Atherton, has had a distinguished career, championing work related to improving health outcomes for women and children's health, including sexual, reproductive and public health.

"I was able to travel widely mostly to developing countries assisting and advising on their family planning programmes. However, the experience was tinged with an awareness that the dreams and hopes for improved health and quality of life for all leads to many questions and challenges."

WHEN A TEENAGE Viopapa Annandale-Atherton first applied for a Pacific scholarship to study medicine at the University of Otago, her aspirations of becoming a doctor were dashed.

As a female scholarship student from Samoa, awarded a New Zealand government scholarship to attend Auckland's Epsom Girls Grammar, she was told she had just two study choices available to her – become a nurse or a teacher.

But encouraged by her mother Sina, the only female plantation manager in the area, running her family's cocoa plantation, Viopapa fought to pursue her dream. Her parents were asked to pay half the fees (however, in the end, this payment was never requested) and in May 1964 – two years after Samoa gained independence from New Zealand – she became New Zealand's first female medical graduate from the Pacific.

"My time in Dunedin was exciting, challenging and stimulating. I made many friends, male and female – some of us studied together and we partied together. The overall ambience of Dunedin and especially the Otago University campus environment created a balance between study and relaxation, which also contributed greatly to achieving my goals.

"I think one of the most important lessons, especially for students, is to keep a balance between study and 'time out'. There will be many challenges. Deal with them with patience, respect and dignity."

From the University of Otago, Viopapa

went to Edinburgh – working as a house surgeon at the Royal Infirmary – walking the same halls as her great-grandfather Thomas Annandale, a Professor of Clinical Surgery, had done decades before. She went on to gain her Diploma in Tropical Health (London School of Hygiene and Tropical Medicine) and spent five years on the World Health Organization's advisory committee on long-acting contraceptives.

In Edinburgh, she also met her husband – surgeon Dr John Atherton – and with their sons, Malvern and James, spent many years travelling between the UK and Samoa until permanently returning to Samoa in 1992 where the couple set up a general medical practice.

"As a child, politics and spending time with my Samoan grandmother's family at the family village at Poutasi were the most informative influences at the time," Viopapa says.

"The awareness that I was extremely privileged and having had a grandfather and other family members who sacrificed much in their fight for Samoa to be self-determining [her grandfather was twice exiled by the New Zealand government] influenced me to feel that I needed to give something in return."

That gift has been a lifetime commitment to health care in Samoa, particularly women's and children's health, and campaigning to eliminate discrimination against women.

The head of Samoa's Maternal and Child Health Department from 1971

to 1982, Viopapa was also a founding member of Aoga Fiamalamalama (School of Special Needs Children) in 1979, and Mapusaga o Aiga (focusing on domestic violence, children and human rights) in 1994, and former president of Soroptimist International of Samoa, a global volunteer organisation that empowers women and girls by supporting access to education.

She represented the Pan Pacific and South-East Asia Women's Association on the taskforce of the Samoa Umbrella of Non-Government Organisations for many years. Under her leadership, she secured resources for external agencies, including USAID to empower women's groups in tsunami affected villages, EU funds to end violence against women and girls, and the Civil Society Support Programme for local projects.

Says Viopapa: "When I started the WHO-funded Maternal and Child Health and Family Planning [MCH/FP] project in 1973 in Samoa I realised that there were greater benefits other than improved health for women and children. I saw it as a tool for women empowerment and socio-economic advancement, not only for the family, but also for the village community.

"Joining women's international organisations such as the Pan Pacific and South-East Asia Women's Association [she was International President from 2004-2010] also allowed further inroads into raising awareness of the role of women in promoting equality, peace and understanding amongst all regardless of ethnicity, religion, gender and diversity of any kind."

Viopapa was responsible for making

maternal and child health and family planning services more readily available, including vaccinations for all children by trained nurses, to all the district hospitals on Upolu and Savaii Islands.

She also fought for the health of her beloved Samoa and the Pacific Ocean that surrounds her homeland, protesting the Japanese government's attempt to dump nuclear waste into the Pacific Ocean in the 1970s – and joined the movement against testing of nuclear weapons in French Polynesia.

This included a heartfelt address to the WHO General Assembly in Geneva while Samoa's Acting Director of Health, highlighting concerns for the health and welfare of the people of the Pacific – specifically those in French Polynesia – arising from the French nuclear testing in their area.

Says Viopapa: "I felt that as a woman of the Pacific this was an opportunity I could not ignore, so I raised my hand and walked up to the podium. A number of people thanked me afterwards."

Almost 60 years since Samoa gained independence – a day Viopapa remembers clearly and describes as one of the most memorable of her life at that time – she has spent a lifetime dedicated to women's and children's health. Still, she doesn't consider herself a "career woman".

"I enjoyed my professional work and challenges, but being a wife and mother was also important. My husband and I travelled to and from the UK and Samoa depending on his contracts with the Samoan government and the educational needs of our children. I was fortunate to find

employment wherever we found ourselves. While I enjoyed working in the UK, the highlights were in Samoa.

"In my role as an advisor to a WHO special committee on long-acting injectable contraceptives, I was able to travel widely mostly to developing countries assisting and advising on their family planning programmes.

"However, the experience was tinged with an awareness that the dreams and hopes for improved health and quality of

life for all leads to many questions and challenges."

Viopapa is humbled by the praise others bestow on her and was surprised by recognition during last year's Otago University's 150th celebrations as one of four outstanding alumni to be awarded an honorary doctorate at a special 150th anniversary convocation ceremony at Queen's Birthday weekend last year.

"I was invited by Faumuina Associate Professor Fa'afetai Sopoaga (whom I

greatly admire) to attend the Pacific Island celebrations for the 150th anniversary of Otago University," says Viopapa.

"The treatment of great honour and respect I received from my Pacific and other friends and colleagues in Dunedin was most humbling and touched me deeply. Receiving the honorary doctorate will endure in my memory."

And what does the future hold for Papali'i Dr Viopapa Annandale-Atherton and her beloved Samoa? Like many, she

recognises the immense threat facing Samoa and all Pacific nations caused by the climate crisis and its consequences.

"I am very proud of what our tiny nation and others in the Pacific are trying to do about reducing our carbon footprint, even though we contribute a miniscule compared to that of other nations. We must continue to speak out and defend and protect our blue Pacific."

AMIE RICHARDSON



Papali'i Dr Viopapa Annandale-Atherton receives an Honorary Doctor of Laws degree from University of Otago Chancellor Dr Royden Somerville QC.

‘Expert’ comment part of the job

Faculty of Law Professor Andrew Geddis discusses the role of universities as the critic and conscience of society.

IN MAY OF 2019, I had the good fortune to be awarded the Gama Foundation Critic and Conscience of Society Award to recognise academics who have frequently provided the public with independent, expert commentary on issues affecting New Zealanders. Grateful and honoured as I was to be selected for this prize, I can’t help but think that it was in some ways an acknowledgement of just doing my job.

(Does this then mean that I intend returning the \$50,000 research funding attached to the award? Not at all! As I will suggest below, accepting that academics have a role as society’s “critic and conscience” is not the same as claiming we should be saints.)

You see, under the Education Act 1989, s 162(4), before an institution can be designated a university (or other tertiary provider, for that matter) it must “accept a role as critic and conscience of society”. That legislative requirement recognises that such bodies are expected to play a particular role in our society, above and beyond being “knowledge factories” that churn out academic papers, credentialed graduates and branded sweatshirts.

Universities like Otago ought to be involved in evaluating, debating and proposing solutions for the various problems that society confronts.

And, of course, institutions like the University of Otago are made up of flesh-and-blood individuals that play diverse roles in enabling it to thrive. “The University” can do nothing without the active efforts of all who labour within it. Just as the University of Otago cannot meet the Education Act’s mandate to “maintain, advance, disseminate, and assist the application of, knowledge” without the research and teaching efforts of its academic staff, so too it cannot be a critic and conscience for society unless individuals within it commit to undertaking that role.

That is, in its way, the compact we enter into when we take on the academic job. Despite the ever-creeping spread of managerialism and relative decay of pay and conditions, it still represents a quite privileged position in society. Research allows us to pursue questions that we find interesting, with time to investigate matters because we want to. We get to interact with many of the nation’s brightest young

people, and maybe even help some of them find their passion in life. And for this we are paid a salary that allows for a comparatively comfortable standard of living.

The society that funds all of this then asks for something in exchange. Yes, we must hit our performance metrics in terms

“Sometimes the most valuable thing we can contribute is a caution that a societal problem is much more complex and uncertain than it appears on its face.”

of publications, teaching evaluations and other such nonsense. But beyond this, when society finds itself facing some problem that we can speak to, we ought to actively

engage in the public debate over how it should be resolved.

Of course, there may be reasonable disagreement over just how to fulfil this critic and conscience role. My view, for what it is worth, goes something like this.

First of all, accepting such a role cannot be a licence to say whatever you want on whatever you choose without potential consequences. Any idea that a university academic is some sort of morally pure, higher being whose views on any and all issues must be accepted as “the right ones” withers as soon as you attend a departmental staff meeting.

A degree of humility is required instead. As academics, we really only have one quality that “adds value” above and beyond being ordinary, concerned community members. We have become somewhat expert in our chosen fields through having had the time to study, reflect and debate in an environment that provides the freedom to follow ideas wherever they may lead.

That expertise and how it is nurtured is something that is missing from other societal institutions. Officials within government departments ultimately are subject to the political constraints of their

ministerial overlords. Company employees are subject to the bottom line. General members of the public with access to the internet may only learn what the top three returns on a Google search tells them; or, even worse, what Facebook feeds to them.

As such, what we can (and are expected to) add to the public debate is what otherwise will be missing. That does not mean we need to claim we know everything about an issue. Indeed, sometimes the most valuable thing we can contribute is a caution that a societal problem is much more complex and uncertain than it appears on its face.

But if our role as academics at the University of Otago has given us expertise relevant to some social issue, then it really is a basic part of our job to bring this to the public forum. Our society has paid for us to be in a position to do so. And if we don’t do so where we can, then we are welshing on that deal.

Professor Andrew Geddis’ research interests include public law, rights jurisprudence and democratic theory, with a particular focus on the legal regulation of elections.

PROFESSOR ANDREW GEDDIS:
“When society finds itself facing some problem that we can speak to, we ought to actively engage in the public debate over how it should be resolved.”

Photo: Alan Dove

Pacific genes

The evolution of protection against one disease ironically might explain why Pacific people are more susceptible to other diseases.

Otago scientists are involved in a major interdisciplinary research project to investigate the genetic links to metabolic diseases such as diabetes and gout among Pacific populations.

Professor Tony Merriman (Biochemistry), Professor Lisa Matisoo-Smith and Dr Anna Gosling (Anatomy) are leading the three-year project, along with researchers from the universities of Guam and Papua New Guinea.

The researchers note that diverse Pacific populations share disproportionately high rates of metabolic disease, including type 2 diabetes, gout, obesity, heart and kidney disease.

“I have been really struck by what sort of an impact gout and diabetes have on people in remote areas in places such as Guam,” Gosling, a research fellow, says.

The researchers say that evidence of metabolic disease has been identified in the skeletal remains of the earliest inhabitants across Oceania, including among the earliest arrivals in New Zealand.

They believe that this, along with evidence from genetic studies in New Zealand, indicates that Māori and other Polynesian populations are likely to have inherited genetic predispositions to metabolic disease.

The aim of the project is to understand when, where, why and how this predisposition evolved, and if there is a consistent pattern of metabolic disease across the Pacific.

“A central hypothesis is that the high rate of metabolic disease evolved through genetic selection by infectious disease, in particular malaria,” Gosling explains.

“Infectious disease is one of the strongest evolutionary forces that has shaped the human genome and driven genetic variation. As people began to migrate around the world, they encountered new pathogens and natural selection would favour individuals who had genetic variants that made them resistant to those pathogens.”

Gosling says that a genetic characteristic called the hyperuricaemic phenotype – which is linked to very high levels of uric acid in the blood and is a common factor in metabolic disease – might have evolved in Pacific ancestors as a protection against malaria.

The team will test the hypothesis

through the collection of new genome, biochemical and health data from a range of Pacific populations with different settlement histories, and combine this with existing data from New Zealand.

“We aim to understand how there could have been historical benefits of genetic variations that now cause disease, which will provide insight into the prevalence of metabolic disease in Pacific populations,” Gosling says.

The researchers say that their work could have important social and health implications for Pacific people.

Matisoo-Smith, who specialises in biological anthropology, says, “The presence of skeletal evidence of metabolic disease being found in ancient burials across the Pacific clearly indicates that gout and diabetes is not solely the result of a ‘Westernised’ diet and lifestyle, as it is often assumed.”

“This project, therefore, has the potential to change the erroneous and stigma-producing perspective that modern metabolic disease is purely caused by a modern lifestyle,” Gosling says.

“This social stigma and shame can prevent some Pacific people from visiting the doctor for diabetes and gout, but hyperuricaemia is relatively easily treatable.”

The research team has been awarded one of the first two Marsden Fund Council Awards, which are a new category established by the Royal Society to support large interdisciplinary projects. Gosling has separately received funding from the Society’s Rutherford Foundation.



DR ANNA GOSLING, PROFESSOR LISA MATISOO-SMITH AND PROFESSOR TONY MERRIMAN: “A central hypothesis is that the high rate of metabolic disease evolved through genetic selection by infectious disease, in particular malaria.”



Connecting the dots

A \$1.2 million Health Research Council funded research project at the University of Otago, Wellington will study the effect of climate change on patterns of heavy rainfall and drought in New Zealand and its impact on the health of our drinking water.

The three-year project, led by Associate Professor Simon Hales from the Health, Environment and Infection Research Unit (Public Health), builds on overseas evidence linking extreme weather events to the contamination of drinking water, particularly in rural areas reliant on groundwater.

Hales says the way extreme rainfall can cause a gastro outbreak is well understood.

“Contaminants from animal faeces can build up on land during a drought and are then washed into sources of drinking water, such as ponds, rivers and lakes, in heavy rainfall that follows.”

The study follows a major campylobacter outbreak in Havelock North in 2016 when 5,500 of the town’s 14,000 residents fell ill after their drinking water supply was contaminated with sheep faeces.

If the research team can develop a statistical model showing a connection between heavy rainfall and an increased risk of gastrointestinal disease they could create national maps of community vulnerability, he says.

“It might be that in some locations we can show that heavy

rainfall above a certain amount is associated with an increase in disease notifications or possibly prescriptions for gastroenteritis, so that could be used to change the way water treatment is managed.

“Part of the motivation is to alert society to the risks of climate change and to encourage countries to take these risks more seriously.”



ASSOCIATE PROFESSOR SIMON HALES: “Part of the motivation is to alert society to the risks of climate change and to encourage countries to take these risks more seriously.”

Copy cats

An Otago academic has written a book about poets doing what he implores his students not to do: copy other people’s work.

Professor Jacob Edmond (English) has penned *Make it the Same: Poetry in the Age of Global Media*, which has been published by Colombia University Press.

He explains that he came to write the book because he was fascinated by how contemporary poets respond to our world of proliferated copies – of texts, images and videos – that travel around the globe at the click of a button.

He says that poets react to the negative effects of copying – such as the impact on local languages, cultures and traditions, and the promotion of “click-bait culture” – but also use it positively in their own work.

He summons examples from English, Russian and Chinese in his 360-page study, from “digital parodists” in China, to “Twitter-trolling provocateurs” in the United States.

Edmond says that poetry’s turn to “sampling, appropriation, translation, remediation, performance, and other forms of repetition” is not just a product of the internet, but dates back to earlier technologies such as tape recorders, typewriters and photocopiers.

Reactions to the book have been positive, one reviewer praising

Edmond’s “breathtaking levels of attunement to 20th-century and contemporary poetry”.

The book title references the poet Ezra Pound’s injunction to “make it new”. This catchphrase for innovation was, ironically, copied from an ancient Chinese text. Edmond suggests that “make it the same” might be a better catchphrase for our age of global media.



PROFESSOR JACOB EDMOND: He was fascinated by how contemporary poets respond to our world of proliferated copies.

Cultural climate

Helping rural Māori communities create a low-carbon, high-culture future is the mission of a major Otago research project.

Project leader Professor Merata Kawharu (Centre for Sustainability) says that the research is pioneering the development of novel Māori-researched and marae-based approaches to reducing carbon emissions and increasing a feeling of connectedness with Māori culture.

“The environmental and economic ramifications of climate-change mitigation and environmental resilience for Māori land and kainga are significant,” Kawharu says.

She cites as one example the pressure to reduce agricultural greenhouse gas emissions in the face of half of farmed Māori land being agricultural and an 85 per cent increase in dairying in a decade.

“The socio-cultural implications for Māori are equally troubling,” Kawharu says. “Today, most community members of kainga are urban-based and disconnected from their homelands.”

She suggests as one option developing micro economies from locally-produced food and traditional medicines to connect local Māori and absentee Māori investors more closely to their land.

She says that a further option would be the use of modern technology that is guided by tikanga or traditional Māori values to better equip communities to contribute to a low-emissions long-term future.

Research team member and Centre for Sustainability director Associate Professor Janet Stephenson says that the research will be of wider interest to rural communities in New Zealand and will have a strong resonance for indigenous communities globally.

The five-year research project is supported by a \$7.25 million grant from the Ministry of Business, Innovation and Employment’s Endeavour Fund.



ASSOCIATE PROFESSOR JANET STEPHENSON AND PROFESSOR MERATA KAWHARU: “The ... ramifications of climate-change mitigation and environmental resilience for Māori land and kainga are significant.”

Salt and heart failure

A University of Otago, Christchurch research group is part of an international effort to investigate the real impact of salt on heart failure.

“The study will find out whether or not reducing salt intake, together with usual medical care, lowers the chance of heart failure in patients being readmitted to hospital or the emergency department, helps patients live longer or improves a patient’s quality of life,” says Dr Allamanda Faatoese of the Christchurch Heart Institute.

The group, together with cardiology experts from Auckland and Middlemore Hospitals, are providing a unique aspect to the international research project by gathering details on Māori and Pacific people and their diet.

“Māori and Pacific people are at risk of developing heart failure at a much younger age compared with other ethnic groups... it can occur any time from in their 20s onwards,” Faatoese says.

Heart failure is where the heart is unable to pump enough blood to meet the body’s needs and can result in water and salt retention, difficulty breathing and swelling of the legs.

Although there have been many small studies around the world on the effects of salt in heart failure, there is still uncertainty about the optimal salt intake. This current study aims to remedy that, says Faatoese.

Traditional Māori and Pacific Islands’ cuisine is being studied, with funding from the Health Research Council, to consider how much salt content is present in these diets so appropriate guidelines can be drafted that incorporate cultural food preferences.



DR ALLAMANDA FAATOESE: “Māori and Pacific people are at risk of developing heart failure at a much younger age compared with other ethnic groups...”



Consent and reasonable belief

The appropriateness of laws in New Zealand covering sexual violence is the focus of a major study by an Otago academic.

Dr Anna High (Law) is analysing the law on consent and reasonable belief in rape cases in New Zealand and comparing it with overseas jurisdictions – such as Canada, Germany, Sweden and India – in which the laws have been reformed.

High explains that her interest was sparked by the Supreme Court in 2017 effectively ruling that current New Zealand law does not preclude a defendant from claiming they reasonably believed that a person who was passive throughout a sexual encounter was consenting.

High notes that some jurisdictions have adopted an “affirmative consent” model under which a reasonable person will look for a positive expression of willingness in a sexual encounter, rather than assuming consent from failure to resist.

She says that this model – that only yes means yes, rather than no means no – is gaining increasing support, in light of anti-coercion and harassment campaigns such as #MeToo.

High is developing what she describes as a novel “sexual dignity” theoretical framework in order to critique and challenge sexual violence legislation in New Zealand and comparable overseas jurisdictions, and make any recommendations for reform of the relevant sections of the Crimes Act.

She says that her research will feed into the government’s long-term law reform programme, which includes examining the definition of consent in sexual violence cases.

The three-year research project is supported by the Marsden Fund.



DR ANNA HIGH: She is developing a novel “sexual dignity” theoretical framework in order to critique and challenge sexual violence legislation in New Zealand.

Equity markets feel the heat

Very hot weather leads to declining equity market prices according to a study by Otago’s Professor David Lont (Accountancy and Finance) together with Associate Professor Martien Lubberink (Victoria University of Wellington) and Professor Paul Griffin (University of California, Davis).

The study quantifies the impact of extreme heat events on corporate market values in public companies in the United States, but has important lessons for New Zealand, the researchers say.

They used National Oceanic and Atmospheric Administration data on thousands of heat events between 2003 and 2017, layering the timing and geography of these events with the public companies’ head office location, enabling them to measure the equity markets’ response.

The researchers found equity prices of firms exposed to a heatwave experienced a 0.42 per cent loss over the following month – and more if the heatwave was of longer duration. Investor losses grew to 1.38 per cent for more costly weather events and smaller firms were more vulnerable. The most exposed firms lost 1–2 per cent of their market value.

Lont says investors responded more negatively in the most recent years of the study as extreme weather events and climate change gained more media attention, suggesting equity markets

are recognising weather-related climate risks, but are still underestimating their financial impact.

These findings are particularly relevant to companies with greater exposure to extreme heat, such as wineries, agricultural businesses and hydro-electric power generators. The researchers say these risks need to be better disclosed, quantified and managed by boards of directors and fund managers/investors.



PROFESSOR DAVID LONT: He suggests equity markets are recognising weather-related climate risks, but are still underestimating their financial impact.

Sleepy eating

Children’s bedrooms are being turned into sleep laboratories to try to understand the connection between sleep loss and unhealthy eating.

Associate Professor Barbara Galland (Women’s and Children’s Health) and Professor Rachael Taylor (Medicine) are leading the research project, which focuses on the sleeping, eating and activity patterns of 110 Dunedin children aged eight to 12, recruited via Facebook.

They are fitted with 24-hour wrist devices that measure movement, and awake-time wearable chest cameras that capture what, when and where they are eating.

Galland, who heads the Paediatric Sleep Research Group, explains that part of the research involves monitoring the eating and physical activity of children as they experience a week of their normal sleep, a week of going to bed an hour earlier, and a week of staying up an hour later. They wake at their normal time each morning.

The children also participate in associated laboratory experiments, such as being offered treat foods after a meal, to see if the amount they eat differs between the tired and refreshed weeks.

As a foodless treat, the children and their parents receive vouchers for taking part.

Taylor, who is the Karitane Fellow in Early Childhood Obesity,

says that understanding how sleep loss in children changes their eating behaviours and appetite should lead to additional intervention strategies to tackle childhood overweight and obesity.

The research team also includes nutritionist Dr Claire Smith, statistician Jill Haszard, and PhD students Rosalie Jackson and Silke Morrison. The research is supported by the Marsden Fund.



Good and bad nature

New Zealanders’ tolerance for invasive species and support for their control is under scrutiny.

Professor Brent Lovelock and Associate Professor Anna Carr (Tourism) are leading a research project aimed at understanding how people form attitudes to invasive plants and animals.

They say that the research also has the potential to provide insights into the positive aspects of such species or, alternatively, how to generate support for control programmes that take people’s attitudes towards invasive species into account.

Lovelock says that controlling invasive species – at a cost of \$1.4 billion a year – depends upon a strong public mandate, but some invasive species are seen by local communities as being important, for example, for food, firewood, recreation or tourism.

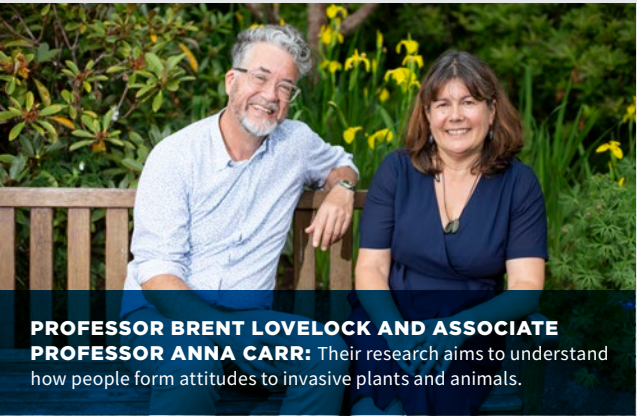
He says that New Zealand is becoming more culturally diverse, and they particularly want to know more about how Māori – as well as Pacific people, recent migrants and young New Zealanders – value invasive species.

The research is case-studying a range of contentious species, including wild pigs in Northland, wilding conifers in the Southern Lakes, Himalayan tahr in the Southern Alps, and koi carp and rudd in the Waikato.

Carr says that wild pigs are a good example of the tensions

between “good” and “bad” nature: they cause damage to the ecosystem, but are culturally important for Māori and other communities in Northland and elsewhere.

The research team will also include three postgraduate students and a research assistant. The three-year project is supported by the Marsden Fund.



Meth and violence

Almost a third of middle-aged New Zealanders have tried methamphetamine at least once, according to a new University of Otago, Christchurch study looking at the link between using the drug and violence in the general population.

The study found those who used methamphetamine at least weekly were between two and four times more likely to be involved in violence, whether it be as a victim or as the perpetrator, than those who had not used it at all. People who had used the drug once or twice were more than 60 per cent more likely to be involved in violence during the same time period as using the drug, compared with non-users.

The study, published in the Drug and Alcohol Dependence journal, was the first to quantify the impact of the drug on violence in a life course or longitudinal study.

The Christchurch Health and Development Study has tracked more than 1,000 people since their birth in the city in 1977. Its researchers asked participants at ages 21, 25, 30 and 35 about their use of the amphetamine and their involvement in violence, either as a victim or perpetrator.

They found 28 per cent of participants reported using methamphetamine at least once between the ages of 18 and 35. Just over 10 per cent reported using the drug at least monthly at

some point, while almost five per cent of participants said they used the drug at least weekly for a period of time between 18 and 35 years of age.



Diet benefits

There are weight loss and health benefits for overweight adults who follow the Mediterranean, intermittent fasting and paleo diets, an Otago study shows.

Dr Melyssa Roy (Medicine) says the aim of the research was to examine how effective all three diets were in a “real world” setting, where participants self-selected which diet they wished to follow, without any ongoing support from a dietitian.

Of the 250 participants, 54 per cent chose the intermittent fasting diet, limiting their energy intake to about 25 per cent of their usual diet on two self-selected days per week. A further 27 per cent chose the Mediterranean and 18 per cent the paleo (Paleolithic) diet.

After 12 months, the average weight loss was 4.0kg for those on the fasting diet, 2.8kg on the Mediterranean diet and 1.8kg on the paleo diet, and reduced blood pressure was observed among those on the fasting and Mediterranean diets, together with reduced blood sugar levels in the Mediterranean diet.

Dr Michelle Jospe (Medicine) says the results showed the Mediterranean diet appeared the easiest to adhere to. After 12 months, the Mediterranean diet had a retention rate of 57 per cent, with 54 per cent still fasting and 35 per cent on the paleo diet.

This work supports the idea that there isn’t a single “right” diet, the researchers say. “The best diet is the one that includes healthy

foods and suits the individual. The evidence shows that for some people the Mediterranean, fasting or paleo diets can all be healthy, beneficial ways to eat.”



Funding successes

University of Otago scientists have received their largest ever allocation from the Government’s Endeavour Fund with a total of almost \$38.5 million, of which \$29.5 million was awarded to three significant programmes – the New Frontiers of Antiviral Development project (see pages 6-9), an initiative to empower Māori communities’ response to climate change (see page 32), and a project to develop new antimicrobials. A further nine successful “Smart Ideas” research projects represent a wide range of fields across the University with a mix of both experienced and early-career researchers being supported.

Otago researchers received an inaugural Marsden Fund Council Award of \$3 million to investigate genetic predisposition to metabolic diseases such as diabetes and gout in Pacific peoples (see page 30). The Marsden Fund awarded a further \$19 million to 31 Otago projects, including 14 Fast-Start grants, with projects on subjects including gravitational waves, sleep loss in children, the psychopathic personality, cancer and Austronesian colonisation.

Deputy Vice-Chancellor (Research and Enterprise) Professor Richard Blaikie says this is an excellent outcome for the University, particularly to have the honour of receiving one of the first major Marsden Fund Council Awards.

International rankings

The University has maintained its position in the influential Times Higher Education World University Rankings, again being ranked in the 201-250 band. Otago also placed 176th in the 2020 QS World University Rankings. The rankings are based on assessments of research-intensive universities across all their core



missions: teaching, research, knowledge transfer and international outlook. These results confirm Otago’s place in the top one per cent of universities internationally, as one of New Zealand’s top two universities and one of Australasia’s top 10.

Energy sustainability plan

The University has embarked on a new programme to significantly reduce its energy use, greenhouse gas emissions and costs. The programme will improve the way energy is measured and controlled, and is expected to reduce energy use University-wide by 16 per cent within five years, with greenhouse gas emissions reduced by an estimated 2,600 tonnes of CO2-e (carbon dioxide equivalent).

Chief Operating Officer Mr Stephen Willis says the plan will help the University in taking a major step forward towards its goal of reducing its carbon footprint.

World-class clean lab opened

A world-class research facility producing filtered air 100,000 times cleaner than outside air, is the newest addition to the University of Otago’s Mellor Laboratory, and will enhance Otago’s established reputation in trace metal research.

The Clean Lab’s high design specifications include the filtered air being renewed at a rate of 100 changes per hour, positively pressured rooms that ensure any residual air moves from the inside to the outside of the labs, and access to high-purity water on-tap for processing samples. The Clean Lab will support a growing diversity of applications from earth sciences to archaeology, and forensics to climate change.



Te Rangi Hiroa College

A new 450-bed residential college is to be built on University-owned land on the corner of Albany and Forth Streets. Respecting a gift bequeathed by descendants of distinguished former student Te Rangi Hiroa (Sir Peter Buck), the name and identity will transfer to the

new facility from the existing 125-bed Te Rangi Hiroa College which is likely to be impacted by the new Dunedin Hospital project.

The college is scheduled to be operational for the 2023 academic year, to meet the needs of a forecast increase in student enrolments.



PROFESSIONAL STAFF AWARDS

The University’s 2019 Award for Exceptional Performance by Professional Staff was won by Brian Donnelly (second from right), Senior Advisor, Superannuation, Retirement and Staff Benefits, from the Human Resources promotions and remuneration team. Excellence Awards in Health and Safety were presented to Gross Anatomy Manager Rachel Kinnaid (left); Campus Watch (received by team leader Peter Corbett, second left); and Physiology’s compliance officer Rachael Holloway (right).

Rural health collaboration

The University has signed a memorandum of understanding with the Otago Polytechnic and Central Otago Health Services Limited to establish a virtual health centre focusing on rural health-care practice, service, education and research.

This formalises existing collaborations and promises further collaboration in the future to improve rural health care in New Zealand.

Pro-Vice-Chancellor (Health Sciences) Professor Paul Brunton says that while this project begins with Otago-based partners, the aim is to contribute to the development of capability and capacity within the rural sector nationally as it evolves and develops.

Research retreat

The University has announced plans to develop an academic retreat at the four-hectare Woolshed Bay property gifted to the University by the Jardine family in 2016. The retreat has been given the name Hākitেকura by Ngāi Tahu. The project will include the redevelopment of the existing homestead and the construction of a new 60-seat lecture theatre to create a linked conference and seminar facility. Lakeside accommodation units with 16 self-contained rooms will complete the complex.

2020 Arts Fellows

The University of Otago’s 2020 arts fellows will continue Otago’s proud contribution to New Zealand’s cultural canon. They are: **Bridget Reweti** (Frances Hodgkins Fellow); **Dr John Newton** (Robert Burns Fellow); **Kristie Mortimer** (Caroline Plummer Fellow)

in Community Dance); **Elena de Roo** (Creative NZ University of Otago College of Education Children’s Writer in Residence); and **Kenneth Young** (Mozart Fellow).

Honorary degrees

In December 2019, honorary degrees were bestowed on the following recipients for their contributions to the University and to society: former chair of ANZ Bank New Zealand Ltd and Te Papa Tongarewa **John Judge** (Honorary Doctor of Commerce); internationally-renowned surveyor and former New Zealand Surveyor General **William Robertson** (Honorary Doctor of Science); a past president of the World Dental Federation and chair of the New Zealand Dental Council Dr **Clive Ross** (Honorary Doctor of Laws); and former director of the New Zealand International Arts Festival **Carla van Zon** (Honorary Doctor of Laws).

Professorial promotions

The following University of Otago academics were promoted to the position of Professor (effective from 1 February 2020):
Gillian Abel (Population Health, UOC); **Joanne Baxter** (Health Sciences Divisional Office); **Rhiannon Braund** (Preventive and Social Medicine); **Rachel Brown** (Human Nutrition); **Pat Cragg** (Academic Division and Physiology); **Jacob Edmond** (English and Linguistics); **Colin Gavaghan** (Law); **Jean Hay-Smith** (Medicine, UOW); **Julia Horsfield** (Pathology); **Lisa Houghton** (Human Nutrition); **Caroline Horwath** (Human Nutrition); **Christine Jasoni** (Anatomy); **Niels Kjaergaard** (Physics); **Miles Lamare** (Marine Science); **William Levack** (Medicine, UOW); **Richard Macknight** (Biochemistry); **Fiona McDonald** (Physiology);

Alexander McLellan (Microbiology and Immunology); **Suzanne Pitama** (Māori/ Indigenous Health Institute, UOC); **Bruce Robertson** (Zoology); **Katrina Sharples** (Mathematics and Statistics, Medicine); **Will Sweetman** (Religion); **Neil Waddell** (Oral Rehabilitation); **Esko Wiltshire** (Paediatrics and Child Health, UOW); **Yolanda van Heezik** (Zoology); **Rachel Zajac** (Psychology). Research professors: **Joseph Boden** (Psychological Medicine, UOC); **John Pickering** (Medicine, UOC); **Debra Waters** (Physiotherapy); **Tim Woodfield** (Orthopaedic Surgery and Musculoskeletal Medicine, UOC).

Emeritus Professors

The University Council awarded the status of Emeritus Professor to: Professor **Ross Notman** (College of Education); Professor **Lisa Smith** (School of Social Sciences).

New Year Honours

A number of alumni and staff were recognised in the 2019 New Year Honours.
Dame Companion of the New Zealand Order of Merit: Dr **Anna Louisa de Launey Crichton**, for services to heritage preservation and governance.
Companion of the New Zealand Order of Merit: Ms **Helen Mary Heffernan**, for services to health; Mr **Donald Evan Murray (Murray) MacCormick**, for services to health, particularly surgery; Dr **Edward (Ted) Ward**, for services to intensive care practice.
Officer of the New Zealand Order of Merit: Ms **Priscilla Jane (Scilla) Askew**, for services to music; Ms **Jan Patricia Bolwell**, for services to dance and theatre; Dr **John Wayne Delahunt**, for services to endocrinology and the transgender community; Mr **William Morris (Bill)**

Gosden, for services to the film industry; Ms **Susan Jane (Sue) Kedgley**, for services to women and governance; Ms **Annette Margaret Milligan**, for services to health, particularly nursing; Mr **Shayne William Walker**, for services to fostering children and social work.

Member of the New Zealand Order of Merit: Ms **Gillian Margaret Bibby**, for services to music education; Ms **Judith Grace Geare**, for services to language education and New Zealand-Germany relations; Professor **Ngaire Margaret Kerse**, for services to seniors and health; Mr **Gordon Alan Wilson**, for services to education.

Queen’s Service Medal: Mr **Norman Rodney Crawshaw**, for services to the community and sport; Dr **Alison Heather Gaston**, for services to health and health education; Mr **Kenneth Alan (Alan) Hamilton**, for services to athletics and youth; Mrs **Beryl Joy Maultby**, for services to the community; Mr **Terence Patrick (Terry) O’Neill**, for services to sports journalism; Mrs **Rosemary Margaret Stott**, for services to music.

Appointments and achievements

Neuro-radiologist and nuclear medicine physician Professor **Rathan Subramaniam** is the new Dean of the University of Otago Medical School. Professor Subramaniam has come to Otago from the University of Texas Southwestern Medical Centre, Dallas (United States).
Professor **William Levack** has been appointed as Dean and Head of the University of Otago, Wellington. Professor **Jeffrey Smith** has been appointed Dean of the University of Otago College of Education and Professor **Michael Schultz** has been appointed to the Mary Glendinning Chair in Medicine.

Professor **Paul Cooper** has taken up the role of Professor of Oral Biology in the Faculty of Dentistry. Professor Cooper has come to Otago from the University of Birmingham.

Behavioural economist Associate Professor **Nathan Berg** has been appointed to the Dunedin City Council Chair of Entrepreneurship.

A 2007 gift via the Leading Thinkers’ Initiative from Otago businessman Mr Trevor Scott has led to the appointment of a new Associate Professor of Urology, Dr **Amir Zarrabi** to boost research in this specialist area.

Senior lecturer in Māori physical education and health Dr **Anne-Marie Jackson** has been awarded the 2019 Te Kōpūnui Māori Research Award from the Royal Society Te Apārangi for community research forging new knowledge at the interface of mātauranga Māori and Physical Sciences.

Department of Chemistry senior teaching fellow Dr **David McMorren** has received a National Teaching Excellence Award from Ako Aotearoa. He had earlier received a University of Otago Teaching Excellence Award.

Two Otago researchers, Dr **Olivia Faull** and Dr **Damian Scarf**, have been awarded Rutherford Discovery Fellowships from the Royal Society Te Apārangi. They will each receive \$800,000 over five years to further their research careers.

Professor **Keith Gordon** (Chemistry) received the MacDiarmid Medal from the Royal Society Te Apārangi for his innovative use of light to understand molecular structure across a range of areas that impinge on technology, health and the environment.



Professor **David Baxter** (School of Physiotherapy) received a Fellowship from the Chartered Society of Physiotherapy in the United Kingdom in recognition of his outstanding contribution to international physiotherapy research, leadership and supervision and support of others in research.

Department of Medicine senior lecturer and medical oncologist Dr **Sharon Pattison** has been awarded the Roche NZ Translational Cancer Research Fellowship to further her work on interactions between cancer cells and the immune system.

Professor **Hallie Buckley** (Anatomy) has been awarded a James Cook Research Fellowship for her research into the lives of long-forgotten colonial settlers and miners.

Marine Science Professor **Abby Smith** has received the 2019 Miriam Dell Award for excellence in science mentoring from the Association for Women in the Sciences.

Geology Professor **Ewan Fordyce** received the Riversleigh Medal from the Australian-based Riversleigh Society.

Professor **Elaine Reese** (Psychology) and Professor **Philip Seddon** (Zoology) were elected as Ngā Ahurei a Te Apārangi Fellows to the Academy of the Royal Society Te Apārangi.

Associate Professor of Immunology **Roslyn Kemp** has been elected as Secretary General for the International Union of Immunological Societies.



Professor **Suzanne Pitama**, Director of the Christchurch-based Māori/Indigenous Health Institute (MIHI), has been appointed as the first chair of the Australian Medical Council’s (AMC) Aboriginal, Torres Strait Islander and Māori Committee.

The **Christchurch Health and Development Study** won the New Zealand Medical Association’s Robinson Award for an article published in the *New Zealand Medical Journal* titled “Childhood Predictors of Adult Adiposity”.

The University’s **Career Development Centre** has been voted the best University Careers Service by the New Zealand Association of Graduate Employers for 2019.



Obituaries

Emeritus Professor **Terence Crooks**. His leadership as Director of the Higher Education Research and Advisory Centre, and then as Director of the Higher Education Development Centre was pivotal to ground-breaking and radical developments in higher education.

Dr **Samantha Farrimond** (Psychological Medicine). From 2007 until 2019, she was a highly accomplished clinician and teacher in the Dunedin School of Medicine, inspiring many students with her clinical stories and practical wisdom.

Emeritus Professor **Weston (Wes) Sandle** ONZM. A physicist who specialised in the study of lasers, Professor Sandle joined the University of Otago’s Physics Department in 1962, was appointed professor in 1986 and served as Head of Department.



STEPPING up SPEAKING out

Alumna Jane Ludemann founded the Cure Our Ovarian Cancer Charitable Trust after being diagnosed with a rare form of the disease in 2017. Funds raised are now supporting research into potential new treatments at the University of Otago, Christchurch.

JANE LUDEMANN:

"No one was standing up for low-grade serous carcinoma and pushing for better outcomes and I realised if I didn't, no one would."

Photo: Alan Dove

"I'M IN MY EARLY 30S. Most of my friends are having kids, paying their mortgages and thinking about how to progress their careers. I'm worried about dying."

Jane Ludemann is a 34-year-old wife and University of Otago optometry graduate who loves the outdoors and bakes "a good cake".

She is also the founder of the Cure Our Ovarian Cancer (low-grade serous) Charitable Trust, established after she was diagnosed with the disease in 2017 and given a life expectancy of between five and 15 years.

Jane was diagnosed with stage 2 low-grade serous carcinoma, one of at least six distinct cancers that fall under the ovarian cancer umbrella. It typically affects younger women and is usually resistant to chemotherapy. The charity Jane founded focuses on raising awareness and money for research into this particular type of the disease.

Jane's diagnosis came after several years of niggling health problems. The doctors she consulted dismissed the idea of cancer because of her young age. However, emergency gynaecological surgery both identified cancerous growths and ruptured them, spreading cells throughout her abdomen.

Following her diagnosis, Jane researched the rare form of ovarian cancer. What she learnt was "shocking and disturbing". There was little research and the "latest" treatment advance involved breast cancer drugs more than two decades old.

"The survival of many cancers has improved massively. A lot of that is related to research. But while rare cancers account for nearly half of all cancer deaths internationally, they receive just 13.5 per cent of research funding. Low-grade serous carcinoma is one of these rare cancers and has been left behind."

In June 2018 Jane decided to do something about that. She founded the Cure Our Ovarian Cancer (low-grade serous) Charitable Trust.

"Not many people talk about ovarian cancer, but it is the fifth most common cancer that kills New Zealand women. The brutal reality is that most of us die and are quite unwell before this happens. It makes it very difficult to mobilise and advocate for change," she says.

"I loved my job and my life and I would never have started a charity unless it was really necessary. But no one was standing up

"A lack of attention and funding in the past means that this type of cancer is deadly for most women. That's what Cure Our Ovarian Cancer is working hard to change."

for low-grade serous carcinoma and pushing for better outcomes and I realised if I didn't, no one would."

In little more than a year and a half, Cure Our Ovarian Cancer has raised more than \$150,000 for research, including \$75,000 awarded to a University of Otago, Christchurch researcher Dr Kenny Chitcholtan [see story page 42].

"All that money means research to find better treatments, so that's fantastic. Because the reality is that if we don't do a lot more research the survival rate for this cancer won't improve. And in 20 years' time young women will continue to get this

cancer and die and that doesn't seem fair."

The charity work involves sharing her story at public speaking events or in the media. This aspect has been difficult.

"It was really hard to go public because I like my privacy and this cancer takes so much from you. Medical examinations are invasive, and it is really challenging and scary living with this disease and coming to terms with your mortality. I don't enjoy being in the spotlight, but if I want others to speak up I need to lead by example."

Jane says she does not know how long she has, but will work hard on Cure our Ovarian Cancer as long as she can.

"I hope we can raise a lot of money for research and find something in time for myself or, if not, for others with this disease. We need to raise a lot of money because research is expensive and takes time. A lack of attention and funding in the past means that this type of cancer is deadly for most women. That's what Cure Our Ovarian Cancer is working hard to change.

KIM THOMAS

To find out more about Cure Our Ovarian Cancer and the stories of those who have the disease, visit cureourovariancancer.org

RESEARCH OFFERS *hope*

DR KENNY CHITCHOLTAN is a senior research fellow at the University of Otago, Christchurch. He has been awarded \$75,000 by the Cure Our Ovarian Cancer charitable trust to grow a rare form of the cancer in three-dimensional form in the laboratory, mimicking as closely as possible how the cancer would grow in a woman's body.

Chitcholtan says there are a number of different sub-types of ovarian cancer, each with their own unique biology. "However, there is only really one treatment for ovarian cancer and this one-size-fits-all approach doesn't acknowledge the differences in the disease."

His Cure Our Ovarian Cancer-funded study will focus on the low-grade sub-type. This is an uncommon sub-type, but one that typically strikes women aged under 50. It grows very slowly and doesn't respond well to chemotherapy, Chitcholtan says.

There is a new drug, not currently funded in New Zealand, that it is hoped could provide a better alternative to chemotherapy for about of third of those with this type of the often-deadly cancer.

"I will grow low-grade cancer cells in 3-dimension in the laboratory. This is a new way of growing cells, but is very appropriate for this type of cancer as it usually grows very slowly. Once we have the cells, we can watch how they grow and change, and how they respond to the new drug.

"This 3-dimensional technique is also more complex than the more traditional technique of growing cells in a flat dish and better reflects the way the cancer actually grows inside the body."

Chitcholtan says he was "over the moon" to be given money to devote serious time to studying a cancer that typically doesn't get

much attention or funding support.

"I'm so happy because ovarian cancer research doesn't get as much funding as other types of cancer such as breast or bowel cancer because it is rarer. But it's a cancer that is devastating for the women who get it and often comes out of the blue and with few treatment options.

"I am really grateful to the Cure Our Ovarian Cancer Charitable Trust for giving me this opportunity to try to provide more information for doctors – and hope and options for patients."

KIM THOMAS



DR KENNY CHITCHOLTAN:

"There is only really one treatment for ovarian cancer and this one-size-fits-all approach doesn't acknowledge the differences in the disease."

"This 3-dimensional technique is also more complex than the more traditional technique of growing cells in a flat dish and better reflects the way the cancer actually grows inside the body."

Books by **Otago alumni**

Tom Lawn: Mystery Forward, A Life in Business and Rugby, by Mark Pirie, Earl of Seacliff Art Workshop, 2018.

Indigenous Pacific Approaches to Climate Change: Pacific Island Countries, by Jenny Bryant-Tokalau, Palgrave MacMillan, August 2018.

Mind that Child, by Simon Rowley, Penguin Random House, 2018.

The Armenians of Penang, by Nadia H. Wright, Entrepot Publishing (Penang), November 2018.

Electrimotive: Music Poems, by Mark Pirie, Earl of Seacliff Art Workshop, December 2018.

A Frozen Destiny, by Alan Mundle, Amazon Kindle.

Athlete Learning in Elite Sport: A Cultural Framework, edited by Natalie Barker-Ruchti, Routledge, February 2019.

The Gulf Between, by Maxine Alterio, Penguin Random House, April 2019.

Soil Clays: Linking Geology, Biology, Agriculture and the Environment, by G. Jock Churchman and Bruce Velde, Taylor & Francis, Boca Raton, June 2019.

A Good Joke: The Life and Crimes of Notorious New Zealand Art Forger Karl Sim, by Ian Dougherty, Saddle Hill Press, June 2019.

Shell Shock Doctors: Neuropsychiatry in the Trenches 1914-18, by A.D.(Sandy) Macleod, Cambridge Scholars Publishers, 2019.

The Armenians of Singapore: a Short History, by Nadia H. Wright, Entrepot Publishing (Penang), July 2019.

My Life in Public Health: A Memoir from the Frontlines of Global Disease Eradication, Children's Health and Ending Smoking, by Dr Murray Laugesen, foreword by Rt Hon. Helen Clark, Health New Zealand, September 2019.

Sustainable Development Goals: Harnessing Business to Achieve the SDGs through Finance, Technology and Law Reform, by Julia Walker, Alma Pekmezovic, Gordon Walker, Wiley UK, September 2019.

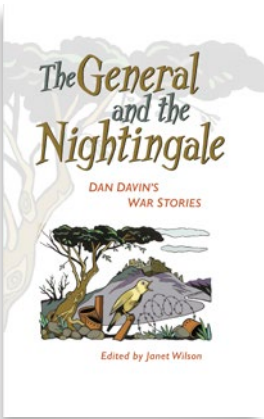
Inequality and Energy: How Extremes of Wealth and Poverty in High Income Countries Affect CO2 Emissions and Access to Energy, edited by Ray Galvin, Elsevier, October 2019.

Professional Ethics in Obstetrics and Gynecology, by John Cloverdale, Laurence McCullough and Frank Chervenack, Cambridge University Press, January 2020.

David Sheppard Batting for the Poor: The Authorised Biography of the Celebrated Cricketer and Bishop, by Andrew Bradstock, foreword by Desmond Tutu, SPCK (UK), November 2019.

An Alien Helped me with My Homework, by Lisa Smith and Kimberley Arcand, Stillwater River Publications, January 2020.

Alumni: if you have recently published a book please email mag.editor@otago.ac.nz



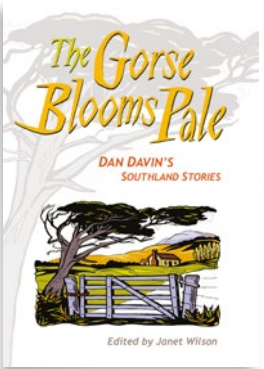
The General and the Nightingale

Dan Davin's War Stories
Edited by Janet Wilson

The General and the Nightingale brings together 20 of Dan Davin's war stories, some drawn from his war diaries, and loosely based on his experiences as "a wartime scholar-soldier" and those of his fellow soldiers in the British and New Zealand armies. They yield an unparalleled insight into the Kiwi or Anzac soldier at war during the Mediterranean and African desert campaigns of World War II.

Davin was a University of Otago alumnus and Rhodes Scholar, and had recently completed a degree at Oxford when he enlisted in the British Army in 1939. After receiving a commission in 1940 he transferred to the New Zealand forces. He saw active service in Greece and North Africa, and rose to become General Freyberg's intelligence officer in the Italian campaign.

The General and the Nightingale updates an earlier collection of Davin's war stories published in 1986 as *The Salamander and the Fire* and long out of print.



The Gorse Blooms Pale

Dan Davin's Southland Stories
Edited by Janet Wilson

The companion volume to *The General and the Nightingale*, *The Gorse Blooms Pale* reissues 26 stories and a selection of poems reflecting Davin's experiences while growing up in a working-class Irish-New Zealand family in Southland.

Comic, haunting, poetic and profound, the stories have a regional flavour, capturing the character of a close-knit rural community

and its post-British social relationships and tribulations, with a flair equal to such other New Zealand writers as Sargeson, Frame, Middleton or Marshall.

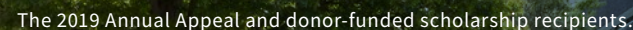
Janet Wilson is Professor of English and Postcolonial Studies at the University of Northampton, UK, and formerly taught at the University of Otago. She has published widely on New Zealand postcolonial/diaspora writers.

For further information:

Otago University Press
otago.ac.nz/press | university.press@otago.ac.nz

Thank you to all the alumni, staff and friends of the University who generously responded to the Annual Appeal call for support in 2019. Your combined donations provided over \$125,000 for critical priorities including scholarships, research and community outreach programmes.

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Giving back

Alumnus Dr Stanley Paris and his wife Dr Catherine Patla have pledged more than \$1 million to the University of Otago School of Physiotherapy to support fellowships for staff, scholarships for postgraduate and PhD students, and a fellowship for a distinguished scholar to visit the school.

This will be a huge boost to the school, specifically encouraging research and advanced practice initiatives in musculoskeletal and orthopaedic manual therapy (OMT), further enhancing its national and international profile and leadership role in research and in clinical practice.

The Stanley Paris Musculoskeletal and Manual Therapy Fund is named after Stanley G. and Stanley V. Paris, father and son graduates of Otago’s School of Physiotherapy.

An internationally renowned physiotherapist, Dr Stanley Paris is a pioneer in manual and manipulative physiotherapy, an endurance athlete and a noted philanthropist. He graduated from Otago in 1958 and, in 1963, received a scholarship to investigate the treatment of backache in Europe and North America. Returning to Dunedin he taught at the Physiotherapy School and entered private practice with his father, Stanley G. Paris. In 1966 he moved permanently to the United States, where he still resides.

He published his first book, *The Spinal Lesion*, in 1965 and has since published more than 40 articles in physical therapy,

medical and osteopathic journals. He was the founding president of the University of St Augustine and the founding chairman of the International Federation of Orthopaedic Manipulative Therapy.

In 2011, the World Confederation for Physical Therapy recognised Dr Paris through its Mildred Elson Award “for outstanding leadership contributing significantly to the development of physical therapy internationally”. He received an Honorary Doctor of Laws degree from the University of Otago in 2017.

His many sporting achievements include twice swimming the English Channel and completing the World Championship Ironman Triathlon in Hawaii. He motorcycled from Alaska to Key West Florida in less than seven days, and cycled across the United States in 30 days at the age of 79.

Physiotherapy Dean Professor Leigh Hale says Dr Paris is one of the school’s most prominent alumni and a leader in orthopaedic manual therapy, helping to develop this field as it is known today.

Dr Paris and his wife have been very

generous in previously supporting a postdoctorate fellowship at the school, however Dr Paris says they wish to do more.

“I created the largest physiotherapy school in the United States at the University of St Augustine, which I sold six years ago. Now it’s time to give back. And where better to give back than to the school that my father and I graduated from, that has such a fine reputation and which we think we could enhance.”

Dr Paris says that he and his wife wish to fund development and research, with the goal of enhancing the teaching of manual and manipulative therapy in particular, and musculoskeletal care in general.

“My biggest disappointments in the profession focus around our collective failure as phsiotherapists to market our success and our position as the preferred primary portal of all musculoskeletal conditions and, indeed, all forms of physical impairments.”

Dr Paris says that when he graduated in 1958 the medical physician was all powerful and legally physiotherapists couldn’t see a patient without a medical referral, but today they have achieved autonomy and are respected health professionals.

Now retired, Dr Paris is currently developing a winery in Central Otago with help from his sons, but has some advice to offer new graduates: travel if possible, be well grounded in the basics, and find a mentor to help them fully experience the profession.

Award winners

The new Stanley Paris Research Fellowship provides support to academic staff of the School of Physiotherapy to pursue a designated research project.

The inaugural winner, Dr Cathy Chapple, says the fellowship is providing a wonderful opportunity to undertake new research in an area of particular interest to her and will help towards establishing a full clinical trial.

“We are trying to determine the optimal time between treatments for those suffering from osteoarthritis in the knee,” she says.

The Stanley Paris Postgraduate OMT Scholarship provides an annual stipend of living costs up to \$10,000 and provide consumable and travel costs up to \$2,000 per year, while the PhD OMT Scholarship provides a stipend of living costs up to \$27,000 per year, and up to \$10,000 in travel and consumable costs.

Postgraduate scholarship winner Daniel Sela says, “it’s wonderful to win the award, I feel very honoured and it will help greatly towards my studies”. He is studying toward a postgraduate diploma in orthopaedic manipulation and plans to eventually move on to a master’s degree.

Dr Stanley Paris and his wife Dr Catherine Patla with award winners Daniel Sela (left) and Dr Cathy Chapple (right).



Events & reunions

2020 ALUMNI EVENTS

Wellington	Breakfast with Highlanders' coaches: 17 April – postponed
Brisbane	23 April – postponed
Sydney	28 April – postponed
Melbourne	30 April – postponed
Shanghai	May tbc
Auckland	29 May
London	25 June
Invercargill	16 July
Wellington	30 July
Singapore	August tbc
Kuala Lumpur	August tbc
Hong Kong	August tbc

2020 REUNIONS

BDS class of 1970	1-4 October, Dunedin
MB ChB class of 1980	2-4 October, Dunedin
Phys Ed class of 1980	23-25 October, Dunedin
MB ChB class of 2000	early November tbc, Dunedin
MB ChB class of 1970	18-20 November, Dunedin

2021 REUNIONS

Home Science class of 1970	February tbc, Dunedin
MB ChB class of 1976	18-20 March, Christchurch

otago.ac.nz/alumni/news/events



BLenheim 25 July 2019, Wither Hills Winery



From left: Louise Towers, Paul Towers.

CHRISTCHURCH 1 August 2019, Great Hall, The Arts Centre
Te Matatiki Toi Ora



KUALA LUMPUR 26 August 2019, NZ High Commissioner's residence



Chin Ting Teoh, Ke Xin Lim.

HONG KONG 29 August 2019, NZ Consulate-General



James Pickford, Rose Chambers, Ming Nichols, Reyon Lo, Jo Tse.

SAN FRANCISCO 30 October 2019, University Club of San Francisco



Joseph Euphrat, Aaron Dowe, Stephanie Burkhart.

TORONTO 5 November 2019, University Club of Toronto



SINGAPORE 27 August 2019, NZ High Commissioner's residence



Diana Ting, Eugene Tan, Kamani Suppiah, Kelly Leong, Philip Gumm.

WANAKA 15 October 2019, Edgewater



Bruce Turnbull, Gavin James.

WASHINGTON 2 November 2019, NZ Embassy



VANCOUVER 7 November 2019, Terminal City Club



Zara Kuperus, Daniel Munro, Tom Cornford.

Bad Girls: great show

PHD STUDENT LAUREN MECKEL:

"Jo Carol was writing ahead of her time and now, in this #MeToo moment, her words are more relevant than ever."

Almost three decades after it was first performed in the US state of Texas, Jo Carol Pierce's critically acclaimed one-woman autobiographical musical, *Bad Girls Upset by the Truth*, has been brought back to the stage by an Otago alumna and doctoral student determined to revive the work for a modern audience.

WITH A ROLLYING narrative that explores themes around sex, religion, and the societal values that inform views around sexual freedom, slut-shaming and bodily autonomy for women in Western societies, it's no wonder that Jo Carol Pierce's *Bad Girls Upset by the Truth* set in Lubbock, Texas, was in line for a revival. What is more surprising is that it has been re-visioned half a world away – from the University of Otago.

But Otago alumna, director Marea Colombo, and PhD student, producer-performer Lauren Meckel, are on a mission to bring Pierce's "honest words" back to the stage.

"Jo Carol was writing ahead of her time and now, in this #MeToo moment, her words are more relevant than ever," says Meckel, a fellow Texan, who first performed the one-woman show at the Dunedin Fringe in March 2019.

Pierce grew up in a small west Texas

"I think that what I have learned is that everyone has a contribution to make to this world, and we need to harness creativity and diversity to make that happen."

town and struggles to meet the expectations of her family, her friends and herself. Using song and storytelling, she seeks to answer life's burning question: what are these boys for and what am I supposed to do with them? The responses lead her astray and her religious awakening causes chaos. One reviewer described Meckel's performance as "as alluring as it is funny", perfectly capturing Pierce's desperation and confusion as things escape her control, while amusing the audience with anecdotes and sillier moments to see the funny side.

In August 2019, the pair took *Bad Girls* to Edinburgh, as part of the Festival Fringe at Sweet Venues. The 11-day performance met with rave reviews. The show is now "back home" in Texas, with the pair focused on reaching as many people as possible over the coming years.

"We really believe in this story and think that it deserves to be told again and again," says Colombo.

Despite their dedication to *Bad Girls*, the world of performance theatre is outside their usual "day jobs". Colombo, who has a PhD in Psychology, is currently working as a marine science instructor on an island off the coast of California, while Meckel is finishing off her PhD in Anatomy. The pair met while Colombo was general manager of Improsaurus (Dunedin's improv troupe) and Meckel acted in her directorial debut, *Throupledom*, at Allen Hall's lunchtime theatre.

"Lauren had this amazing fire and focus and I knew I wanted to work with her," says Colombo. "I was pretty nervous because

it was my first directing opportunity. But Lauren is the kind of actress you dream of having: she takes direction, studies her text and really, really cares. I think those three skills were – and are – the key to our current production."

Both credit the liberal arts education they received from the University of Otago as world-class – Meckel's master's degree is in the liberal arts while her PhD is in Health Sciences – which exposed them to new directions and ways of thinking.

Says Meckel: "To me, art is the most accessible way into a world different than your own and, as a scientist concerned with human rights, I am interested in exploring ways to simulate alternative life experiences that generate empathy, understanding and encourage open mindedness. The arts are the perfect outlet for this and I hope to continue to incorporate the arts into my career as a scientist and educator."

Colombo agrees. "I cannot speak enough for my liberal arts education: it provided me the opportunity to take a wide range of classes and develop many, many passions.

"I joined the Capping Show at the University of Otago, which springboarded me into Improsaurus and afforded me many acting opportunities. I think that what I have learned is that everyone has a contribution to make to this world, and we need to harness creativity and diversity to make that happen."

AMIE RICHARDSON

Painterly puzzle

A new acquisition by the Hocken Collections is something of a mystery: where is this homestead, why has the artist focused on it in this way, who lived there, was it ever built?

LAST YEAR the Hocken Collections purchased this delicate and unusual watercolour by 19th-century artist George O'Brien (1821-1888). The Hocken has other examples of watercolours and drawings by O'Brien, but none like this. Nor have O'Brien scholars in New Zealand seen another like it.

Titled *Dunedin Homestead* and dated circa 1880, it depicts several houses set in a landscape view over the Dunedin Harbour across to the Otago Peninsula. Finely drawn and predominantly painted in subtle shades of blue and green, the scope of the view and attention to detail, combined with a luminous air are characteristic of O'Brien's style. It is as if we are looking through a timeless portal at Ōtepoti Dunedin on a great day – 25 degrees, a light breeze and clear skies.

However, while this painting is an exceptional work of art, it is unique among O'Brien's oeuvre because of the format used, whereby a small horizontal oval is painted into the foreground of the larger oval. This elegant compositional device enables the artist to depict a different view of one of the houses probably included in the larger view.

Born in County Clare, Ireland, and employed as an engineer and architectural draughtsman in Melbourne, O'Brien had secured his reputation as an accomplished water-colourist before arriving in Dunedin in 1863. Here he worked initially as a perspectivist for leading New Zealand architects including William Mason, Robert Lawson, Thomas Forrester and William Clayton. He went on to become a founding member of the Otago Art Society in 1876 and dominated the society's first exhibition with 28 works. While his topographical paintings and skills as a draughtsman were much admired, his work wasn't considered "art" by some aesthetes and art critics of the day. Instead, the moody and atmospheric romantic painting style of O'Brien's contemporary John Gully (1819-1888) was considered the high point of artistic achievement.

It wasn't until the 1980s that O'Brien officially received his due when local art historians Dr Roger Collins and Peter Entwisle presented the exhibition and associated publication *Pavilioned in Splendour* at the Dunedin Public Art Gallery. Their research cemented O'Brien's

reputation in New Zealand's art history as both an artist and draughtsman of exceptional merit, whose work to the modern eye is remarkable for its aesthetic qualities.

The Hocken Pictorial Collection contains more than 40 George O'Brien paintings, some of them originating from Dr Hocken, whose interest in history rather than aesthetics, led him to acquire O'Brien, but not Gully! Subjects represented among the Hocken's O'Briens include architectural paintings of domestic houses and dwellings, and of institutions such as Otago Boys' High School, Knox Church and Seacliff Hospital, landscapes of the Otago Harbour and the Otago Peninsula, views of Dunedin and its hinterland, and studies of natural features such as waterfalls, lakes and mountains. There are also working drawings and several finely executed, highly accomplished pencil drawings, some in the oval format. One exceptional watercolour is *Perspective Drawing of House Designed by R. A. Lawson, 1879: Dunedin Homestead* shares similarities with this work, particularly in the painterly treatment of the foliage.

So where is *Dunedin Homestead*?

Was the house depicted in the small oval, with its terraced manicured lawn and the group of houses cosily nestled among greenery, ever built? And, if so, for whom and where? Because O'Brien often worked from architects' drawings and elevations rather than directly from finished buildings, he sometimes set buildings in attractive, recognisable locations; and the details of these buildings may not be shown as they eventually appeared if constructed.

Dunedin Homestead is, therefore, quite a tease. The mid-ground border of dense trees suggests a location around the Town Belt, and the view of the Peninsula landscape in the distance – which is recognisable today – make it tempting to believe this painting depicts an actual domestic property, rather than just an architect's drawing set into a real, but fictitious location.

If you know, or think you know this house, live in it or have worked out what's

going on in this picture, please let us know and help us solve the mystery of the Hocken's *Dunedin Homestead*. If you'd like to see the painting, you're welcome to come and take look at it in Hocken Pictures: please telephone 479 8868 or email hocken@otago.ac.nz

ROBYN NOTMAN

Head Curator, Pictorial Collections, Hocken Collections, Uare Taoka o Hākena.



George O'Brien (1821-1888), *Dunedin Homestead*, c. 1880, watercolour on paper, 370 x 290mm (oval), Acc: V2019.10.2, Hocken Collections, Uare Taoka o Hākena, University of Otago.

Sir John Eccles' exceptional legacy

The University's new \$49.8 million Research Support Facility will future-proof Otago's status as a leading scientific institution. The 3,936m², five-storey building features state-of-the-art technologies to underpin important health and biomedical research, and meets stringent animal welfare regulations and health and safety requirements. Soon to be opened, the facility is named after Sir John Eccles, the Nobel Prize winning scientist whose research undertaken during his years at Otago continues to have a profound effect on neuroscience today.



John C. Eccles, Professor of Physiology, Medical School, University of Otago, 1949. Prime Minister's Department photograph, Box-184-128, Hocken Collections, Uare Taoka o Hākena, University of Otago.

NOBEL PRIZE WINNER Sir John (Jack) Eccles was head of Otago's Department of Physiology when he made the breakthrough discovery that ultimately led to his prestigious award.

In a triumph for science, Professor Eccles and his Otago team disproved an early theory about brain function, thereby confirming an alternative theory that became a fundamental concept in brain research.

Eccles effectively established that the way in which nerve cells in the brain transmit information between them – synaptic transmission – is a chemical process rather than an electrical one. The discovery is still the current basis for understanding brain function both in health and in the treatment of mental illness and neurological disease.

Eccles came to Otago following a Rhodes Scholarship to Oxford, earned in his native Australia, where he had graduated in medicine and surgery in 1925. At Oxford, he studied Physiology and Biochemistry and launched his stellar research career under the supervision of early neuroscientist Sir Charles Sherrington, who in 1932 won the Nobel Prize in Physiology or Medicine for discoveries about how neurons function.

Working at Sherrington's laboratory led Eccles into a controversial scientific debate that set him up in opposition to another research giant, pharmacologist and physiologist Sir Henry Dale. Dale and Otto Loewi won the Nobel Prize in Physiology or Medicine in 1936 for work establishing chemical synaptic transmission in the peripheral nervous system, and went on to speculate that the central nervous system might also use neurochemical transmission.

Eccles was prominent among other neurophysiologists who supported the alternative view that the speed of transmission at synapses where neurons communicate in the brain was too rapid to be a chemical process and was more likely to be electrical.

With Sherrington's retirement and the imminent approach of war in Europe, Eccles decided to leave Oxford for a post at Sydney Hospital with the debate still unresolved. His new position allowed him to continue his research, but the outbreak of war severely limited its scope and in 1944 he accepted a Chair of Physiology at the University of Otago.

Here he set up a talented multidisciplinary research team, including Lawrence Brock, who had graduated from Otago in Chemistry and Medicine, and Jack Coombs, an electronics engineer from the Department of Physics.

Between them, they developed solutions

to the problems Eccles and others had faced for years in trying to solve the outstanding chemical-electrical controversy – how to successfully measure and record intracellular voltage changes in the spinal cord.

Coombs, described by Eccles as a shy genius, devised a highly sensitive electronic stimulating and recording unit (ESRU) that outclassed anything found in neurophysiology laboratories elsewhere and became known as the world's best general research instrument for electrophysiology for many years.

Brock succeeded in inserting a fine glass micro-electrode less than a micrometre wide into a single nerve cell so it could pick up the changes in the action potential to feed to Coombs' ESRU.

The pressures of a heavy teaching load during the day often saw researchers continuing late into the night, as was the case in August 1951 when one of the key experiments – on an anaesthetised cat – was temporarily put on hold for Brock to deliver a baby girl for Coombs' wife, while Eccles cared for the cat.

The experiment resumed and continued into the early morning hours, with the result becoming a pivotal moment in the history of neuroscience. Eccles' team finally proved that their theories that synapse transmissions in the central nervous system were electrical were wrong. They were chemical, as Dale had suggested.

Eccles was swift to accept the science. Disproving his own theory was as important as supporting Dale's, which fitted with discussions he had had with visiting Philosophy Professor Karl Popper.

Popper suggested that the strength of a scientific hypothesis depended not just on it being clearly formulated and checkable by experiment, but also on the failure of rigorous investigation to falsify it rather than on evidence that apparently supported it.

Eccles took heart in following the deductive process, which enabled the development of daring hypotheses as long as they could be rigorously tested until

they either failed, or added weight to alternative ideas.

Following the breakthrough, Eccles did a lecture tour of the UK, publishing his findings in *The Neurophysiological Basis of Mind: The Principles of Neurophysiology*, one of the most influential texts in neuroscience in the 20th century, representing the beginning of a new era in neuroscience and the developing discipline of neuropharmacology.

In 1953 he took up the founding Chair of Physiology at John Curtin School of Medical Research in Canberra, where he could continue research without the pressure of teaching.

In 1963 Eccles was awarded the Nobel Prize in Physiology or Medicine with A.L. Hodgkin and A.F. Huxley, for fundamental contributions to the biophysical properties of synaptic transmission in the brain.

He went on to research in Chicago and Buffalo before retiring to Switzerland, where he continued to be involved in debates and wrote extensively. His last book, *How the Self Controls its Brain*, was published in 1994, just three years before his death at 94.

At Otago, Eccles left a legacy of daring experimentation, supported the founding of the Portobello Marine Research Laboratories, and mentored students and faculty members who went on to highly successful careers.

Internationally, Eccles is regarded as one of the leading neuroscientists of last century and his work continues to influence research, says Physiology Associate Professor Phil Sheard.

"Everything that makes us who we are, every mechanism we use to sense our world, to think about it, and to interact with it is dependent upon chemical signals between nerve cells. When these signals go awry we recognise major neurological or psychiatric problems, and many of these problems are fixable because we know how to modify the chemical signals that Eccles discovered."

NIGEL ZEGA



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