

on mas

AUTUMN 2020

Brian Ward

A Kiwi innovation success story

Greater good Innovation / Weaving the way to safety

Money Technology / The future of managing our money

Professional life Member profile / The doctor breaking through the bias

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PUBLISHER

MAS
Level 3, PWC Centre
10 Waterloo Quay
Wellington 6011

PHONE

0800 800 627

WEBSITE

mas.co.nz

EDITOR

Sophie Speer

MAILING ADDRESS

OnMAS
PO Box 13042
Johnsonville
Wellington 6440

HEAD OFFICE

+64 4 478 8863

EMAIL

onmas@mas.co.nz

DESIGN

eightyone.co.nz

THE HUB

For more stories, videos and to share your views, visit the MAS Hub at mas.co.nz/hub. The hub is the go-to site for features from OnMAS issues, as well as helpful information and useful tips on all the things that matter to us – and to you. You can easily share stories from the hub with friends and family, see videos that delve deeper and have your say on issues affecting you and your community.

SUSTAINABLE PRODUCTION

Every effort has been made to guarantee the pages of OnMAS are sustainably sourced and produced using paper that meets the environmental standards shown below. It is then packaged in an eco-friendly degradable wrap for protection in transit.



From MAS

This month, we welcome a new decade with an OnMAS issue focused on innovation.

We talk to one MAS Member about his revolutionary wound dressing made from sheep gut and to another about a woven bassinet he invented that is helping reduce infant mortality by allowing safer co-sleeping.

We take a look at some of the new directions our Members have taken in their own lives, from overcoming unconscious bias to going teetotal to rethinking their approach to exercise.

And in travel, we take a 1,300km 30-hour ride on Turkey's Doğu Ekspresi, one of the most exotic train journeys left on the planet.

As always, we value your feedback. If you have any ideas for stories for future OnMAS issues, please email us at onmas@mas.co.nz.

And remember, you can read OnMAS online at mas.co.nz/onmas, and if you'd prefer to stop receiving the magazine by post, you can also update your details at mas.co.nz/updateonmas.

I tēnei marama kua tahuri mātou ki te pōwhiri i te tekau tau hou mā tētahi putanga o OnMAS e arotahi ana ki te auahatanga.

E kōrero ana mātou ki tētahi Mema o MAS i mahia ai tōna takai tūnga ki tētahi whēkau hipi, ki tētahi atu e whatu ana i tētahi moenga pēpi nāna i waihanga e āwhina nei i te whakahekenga matenga pēpi, mā te whakawātea i te moe ngātahi.

Ka titiro mātou ki ētahi o ngā ara hou e whāia nei e ā mātou Mema i te ao, mai i te patu i te titiro kōtaha i runga i te whakaaro-kore, te whakamutu i te kaiwaipiro, me te whiriwhiri anō i ō rātou whakaaro mō te kori tinana.

Ā, i te taha hāereere, ka piki mātou ki tētahi tereina mō tētahi haerenga 1,300km, he 30-hāora te roa, i te Doğu Ekspresi i Tākei, tētahi o ngā tino hāerenga tereina whakamiharo o te ao katoa.

Rite tonu ki ō mua wā, he tino pai ki a mātou ō whakaaro. Me he whakaaro ōu mō ētahi kaupapa kōrero mō ngā putanga OnMAS ā ngā rā e tū mai nei, tēnā imēratia mai mātou i onmas@mas.co.nz.

Kia maumahara hoki ka taea e koe te pānuī tuihono i OnMAS ki mas.co.nz/onmas ā, ki te hiahia koe kia kaua e tae atu te moheni kikokiko mā te poutāpeta, ka taea hoki te whakahou ō taipitopito ki mas.co.nz/updateonmas.

Mike Davy

MAS, General Manager
Marketing and Products

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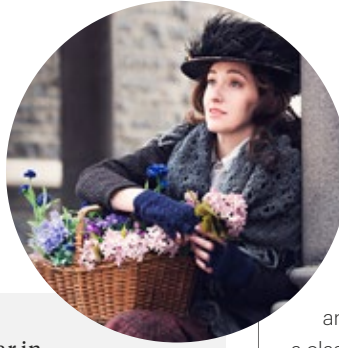
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News briefs



MY FAIR LADY

FRIDAY 3 APRIL – SATURDAY
18 APRIL, ISAAC THEATRE
ROYAL, CHRISTCHURCH
TICKET PRICES: FROM \$65

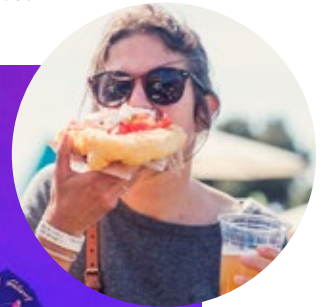
The “musical of all musicals” is returning to Christchurch this April and is sure to be a hit. Be prepared for a clash of class, intellect and personalities with some of musical theatre’s wittiest banter and most memorable songs, including *Wouldn’t It Be Lovely?*, *The Rain in Spain*, *On the Street Where You Live* and *I Could Have Danced All Night*.

A TASTE OF MATARANGI

SATURDAY 4 APRIL, 10AM–4.30PM
VILLAGE GREEN RESERVE,
MATARANGI

TICKET PRICES: \$5 – \$20

Bring along the whole family for a day of non-stop entertainment, top-quality food, great wine and tasty craft beer. With country rock, pop, reggae and blues drifting through the festival, a dedicated kid zone and a mystery cook-off, there’s something for everyone. Organised completely by volunteers, the festival is raising money for the Coromandel Rescue Helicopter Service and Kuaotunu Search and Rescue. Enjoy a great day out and support a wonderful cause while you’re at it.



MAS scoops Consumer NZ award for the fourth year



For the fourth year in a row, MAS has taken out the Consumer NZ People’s Choice Award for house, contents, car and life insurance. MAS had overall satisfaction scores above 90% for each of the house, contents and car insurance categories. We also topped the life insurance category with an overall satisfaction score of 80%, which was 33 percentage points higher than the second-ranked insurer. Consumer NZ General Manager Derek Bonnar said, “Consumer NZ endorsements are hard to achieve, and MAS thoroughly deserves this accolade.”

What’s on

LENNY KRAVITZ – HERE TO LOVE WORLD TOUR

TUESDAY 31 MARCH, 7PM
SPARK ARENA, AUCKLAND
TICKET PRICES: FROM \$99

Lenny Kravitz is coming to New Zealand for the very first time as part of his Here to Love World Tour. As one of the most successful and best-selling artists of his generation, Kravitz has transcended genre, style, race and class over the course of a 30-year musical career. In what is set to be a spectacular concert, Kravitz promises to deliver all his classic hits including *You Gonna Go My Way*, *It Ain’t Over ‘til It’s Over* and *Fly Away*, along with material from his most recent album *Raise Vibration*.



In brief

Growth is good

MAS has been around for nearly 100 years, and we want to be here for another century. To do this, we need to continue growing and attracting new Members from the next generation of professionals. This is why we recently launched an advertising campaign in Auckland to create further awareness of who we are and what we do. We embarked on a new wave of advertising towards the end of last year and are excited to see this continue throughout 2020. But our best advocates will always be our Members,



so if you have family or friends looking for a new insurance provider, please ask them to give us a call on **0800 800 627** or by visiting **mas.co.nz/experience-mas**

Working towards a sustainable New Zealand

The Sustainable Business Network is a social enterprise made up of more than 600 member organisations working together and sharing ideas about how to make New Zealand a more sustainable nation. Now, that network includes MAS. As you know, MAS is committed to sustainable and responsible investing, only advocating for companies that we believe will have a meaningful long-term positive impact. That's why joining the Sustainable Business Network was a natural next step.

New look

MAS is currently working behind the scenes to revamp the Members area of the website. Accessible by logging in on the main page, the Member portal is handy for updating your contact details and seeing an overview of the policies or investments you hold with MAS. When our work is complete, the Members area will have a fresh new look and a redesigned online claims process. Watch this space.

Six incredible inventions from recent years

1 MyMe

The mini camera that sits on your collar or pocket with an inbuilt facial recognition camera so you never forget a name again at a networking event.



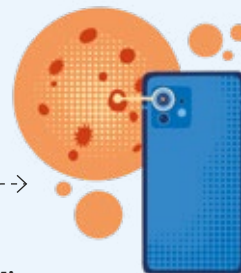
2 The Smart Buckle

A buckle you can attach to your old watch to turn it into a smart fitness tracker.



3 Geopress Purifier

A gizmo that uses zeolites for ion exchange along with an activated carbon filter to remove disease-causing elements and other chemical impurities from dirty water.



4 iMicro

Have a makeshift lab at home by hooking this small layer of lenses (smaller than a fingertip) onto your smartphone.



5 Eyclights

A hologram on your windscreen instead of a real screen so you can keep your eyes on the road.



6 Padrone Ring

A nimble finger ring that can be used as a computer mouse, recognising clicking and scrolling gestures.





The power to heal

MAS Member Brian Ward is the founder and CEO of Aroa Biosurgery – the New Zealand company responsible for developing a revolutionary tissue scaffold made from sheep forestomach. We sat down for a chat with Brian to find out how this small piece of tissue is changing patients' lives, in New Zealand and around the world.

At first glance, the Endoform Natural Dermal Template – one of the products made by Kiwi company Aroa Biosurgery – looks unremarkable. It's a small, square-shaped wound dressing, bright white and as thin and flexible as paper.

You would never guess that this sterile, neatly packaged product is made entirely from tissue taken from a sheep's forestomach. Nor would you imagine that it had the power to drastically change patients' lives.

To understand how, we need to go back to 2008. Brian Ward was then the CEO of bioscience organisation NZBio in Wellington, having earlier in his career practiced as a veterinary surgeon in Auckland, Havelock North and the United Kingdom before heading overseas to work for medical device and pharmaceutical companies. He had found out about an emerging field of regenerative medicine that focused on the extracellular matrix: a type of scaffold into which cells could migrate and lay down new tissue, thus aiding the healing process.



01

The extracellular matrix that makes healing possible in seemingly unhealable wounds can't be replicated synthetically; it has to come from a biological source.

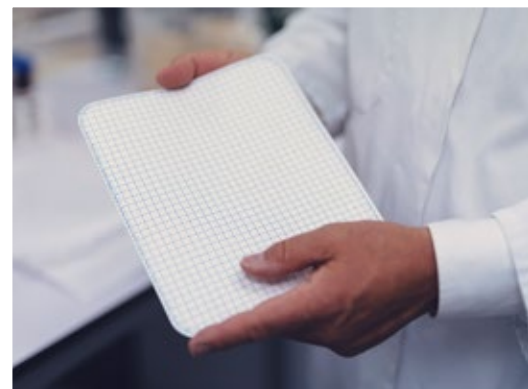
*Opposite page / Brian Ward, the founder and CEO of Aroa Biosurgery
01 / A 3D printed image of the magnified structure of the Endoform® extracellular matrix
02 / Large format Endoform® that recently launched in North America*

Brian found out that companies around the world had started developing this technology using cadaver-based tissue – that is, tissue from humans. That's when he, with his veterinary background, had a eureka moment.

“The product is a specific layer of tissue with some really particular properties,” he explains, “and there are large amounts of this tissue layer within the forestomach, or rumen, of sheep or cattle.”

The rumen was ideal because of the porosity of the tissue and the high density of vascular channels through it, which provide existing plumbing that blood vessels can connect to, thus speeding up the healing process.

And so the idea for Aroa was born. The animal tissue is purified and processed, with the cells removed in a way that preserves the structure of that all-important extracellular matrix scaffold.



02

The resulting Endoform scaffolds are used on complex, hard-to-heal wounds. The extracellular matrix that makes healing possible in seemingly unhealable wounds can't be replicated synthetically; it has to come from a biological source. And while there are sources besides sheep rumen, Brian says nothing matches the rate of healing achieved with Endoform® products.

The patient's own cells migrate on to the scaffold, forming new tissue and eventually replacing the animal material

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altogether. In effect, the scaffolds make it possible to heal wounds that would never be able to heal had the human body been left to its own devices.

It's hard to overstate how significant this is for patients. Some, before they gained access to Aroa's products, had spent years going into hospital every few days to have their seemingly unhealable wounds treated. Some had been told they would have to have their limbs amputated because their wounds were becoming worse. Because of Aroa, they've made a full recovery.

"It's fantastic to hear patients talk about the impact it's made on their lives and how thankful they are that they've been able to be treated," Brian says.

Medical practitioners around the world have been impacted too. Aroa has a strong market for its products in the United States and has recently expanded to Europe, the Middle East, Canada and Asia, with South America not far away. In late 2019,



04

it finally employed its first salesperson here in New Zealand.

"That's a great milestone for us," Brian says. "Having been a New Zealand company and not selling here for quite some time, it's really nice to be in a situation where we can."

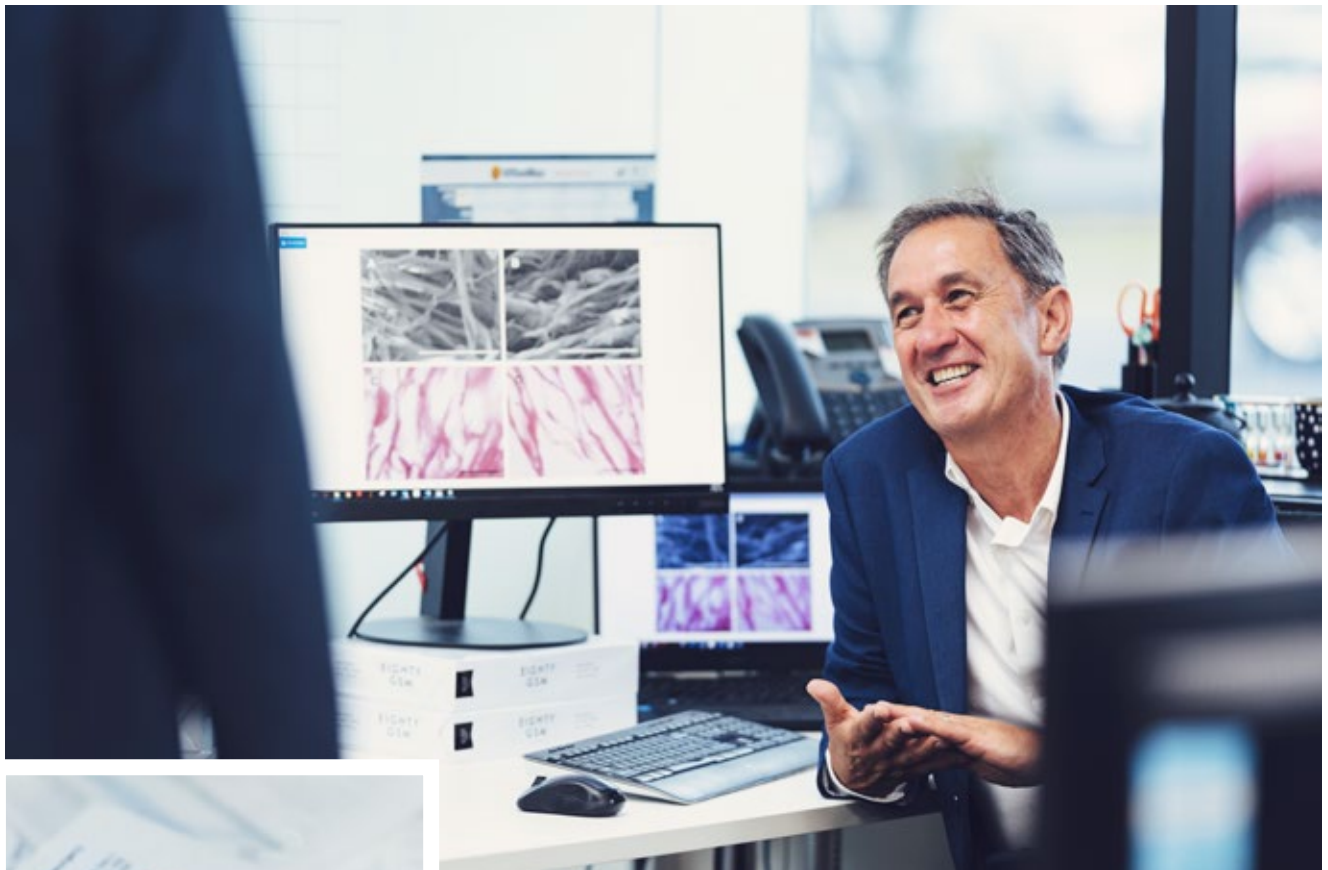
There have been many triumphant moments in Aroa's story thus far. Kiwi investors such as Movac, Sparkbox, K1W1 and Cure Kids Ventures put their faith in the company right from the start, when all Brian had was an idea without a product. Scoring its first regulatory approval from the US Food and Drug Administration, which allowed Aroa to sell its first product in the US, was another high point.

We're providing exciting, interesting jobs for well-trained young people who haven't had these sorts of opportunities in New Zealand before.

Brian Ward



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But there have been challenges, too, most notably the advent of the Global Financial Crisis during Aroa's vulnerable early days.

"That was a really tough period for us because we didn't have any revenue for the first three and a half years of operating the business," Brian says. "We were solely reliant on investors."

The saving grace was a partnership with ostomy and wound-care company Hollister, which sold Aroa's products, first in the US and then globally. This partnership continued until 2018, when Hollister left the wound-care business and Aroa bought back its global rights, retaining Hollister's sales force.

Aroa expanded its range beyond wound care, launching two products, Ovitex, its first surgically implanted product for

Hernia in 2016 and Restella for breast reconstruction at the end of 2019.

At present, Aroa's products vary in price from about \$10 for a wound scaffold to roughly \$20,000 for the largest surgical implant. As part of a deliberate strategy to make this technology more widely accessible to patients Aroa has priced its products to be much more affordable than has previously been the case.

"There are many patients who would benefit from having this type of technology earlier. We have an opportunity to avoid some of the complications that come from these wounds not healing."

In the meantime, he is excited to see the growing impact of his company on New Zealand's workforce.

"We're providing exciting, interesting jobs for well-trained young people who haven't had these sorts of opportunities in New Zealand before. We employ a lot of people who have gone overseas, worked in great jobs and potentially would have stayed

overseas had there not been opportunities like this to come back to."

About 120 people are now employed at Aroa's headquarters in Mangere, near Auckland Airport, with about 30 different nationalities represented.

"That's something I'm really proud of. Not only do we have the ability to offer these exciting jobs to young people, but they're working globally, developing products that are used in other parts of the world and working with people from throughout the world. It's good to be part of a new wave of companies who are doing that." ♥

03 / A manufacturing clean room at Aroa's Auckland production facility

04 / Aroa's Endoform® packed up and ready for export

05 / Matt Smith, one of Aroa Biosurgery's development engineers

06 / Endoform® produced by Aroa Biosurgery

07 / Brian Ward at Aroa Biosurgery's Auckland headquarters



Jennifer Gill ONZM

With more than 35 years' experience in New Zealand philanthropy, Jennifer Gill was made an Officer of the New Zealand Order of Merit for services to philanthropy and was the inaugural winner of the Perpetual Guardian Lifetime Achievement in Philanthropy Award.

"The chance to be on the board of a new foundation and be a part of shaping it from the ground up is a very unique and exciting opportunity.

"It's so encouraging to see an organisation like MAS saying, 'Listen, we can add value here and take care of the wider New Zealand public as well as our Members.'

"I started working in philanthropy in 1984 and have been part of funding numerous initiatives into the health sector, so I'll be able to provide a counterbalance to my fellow trustees with medical experience. I'll be dependent on them for their sector knowledge, and they can draw on my extensive philanthropy knowledge."

Meet your MAS Foundation trustees

MAS has been here for the good of our Members for almost a hundred years. But we are always looking for ways to do more for the communities in which our Members live and work, which is why we launched the MAS Foundation.

The Foundation will invest in health initiatives in New Zealand, and its success will depend on getting it off to the best possible start. After an extensive search last year, we appointed five trustees who will help us do just that.

Sharon Shea MNZM

Ngāti Ranginui, Ngāti Haua, Ngāti Hine and Ngāti Hako

Recently awarded an MNZM for services to Māori health and development, Sharon Shea chairs the Māori Expert Advisory Group for the Health and Disability System Review and is currently Deputy Chair of the Bay of Plenty District Health Board.

"What intrigued me about the MAS Foundation was the intent to make a noticeable difference for our communities – whānau, hapū and iwi.

"We have the opportunity to be a game-changer in our philanthropic approach to investing in concepts like advancing Treaty of Waitangi relationships in this country.

"New Zealand has always been a nation that prides itself on its values around equity and respect – MAS is acting proactively on those values.

"With the board's ethnic diversity and experience combined, we have the chance to invest really strategically and create long-term sustainable change."





Dr Carrie Bryers

Dr Carrie Bryers is the youngest of the trustees, yet has an impressive, diverse background in Māori health, nursing and medicine. She recently completed a Master of Public Health (First Class Honours), with a dissertation focusing on Māori health inequities.

"I'm excited to create an overall vision for the MAS Foundation together with my fellow trustees and hopefully bring some valuable public health experience with me.

"For me, it's about critiquing the bigger picture. My background is in medicine, working with patients, but I've always wanted to work in a broader sense, sparking systemic change and looking at the impacts at a community and population level.

"I'm very passionate about paying attention to equity too, ensuring what we do is inclusive of the commitments we have to the Tiriti o Waitangi and doing that with integrity."

Professor Boyd Swinburn

Currently a Professor of Population Nutrition and Global Health at the University of Auckland, Professor Boyd Swinburn is an internationally recognised public health physician and has more than 30 years' experience in health research.

"I've been a MAS Member for all of my career, and when this idea came up, I thought it was a stroke of genius. MAS wants to be different and find a niche that other funding agencies are not fulfilling yet.

"A lot of businesses want to be good corporate citizens, but most are tied up in the existing systems where they need profit for shareholders. MAS has always operated on a different formula. This isn't just a single page in a company report – this is serious.

"The government hasn't been strong enough on prevention research and evaluation, so there's an opportunity to be a catalyst with strategic research programmes."



Folasaitu Dr Julia Ioane

Folasaitu Dr Julia Ioane is a bilingual New Zealand-born Samoan with a Matai title from the village of Fasitoota, Samoa. A senior lecturer in psychology at AUT and a registered clinical psychologist, Julia works to promote research that has a meaningful impact on all the diverse communities in Aotearoa.

"This foundation will provide another funding avenue for research that promotes health and has the potential to impact and influence our diverse communities in Aotearoa.

"My background as a clinical psychologist working directly with our children and their families is something I will bring to the table. I work with our most high-need Māori and Pasifika communities where I know there isn't enough research nor genuine opportunity to promote health that is clearly understood by all.

"More importantly, my background as a Samoan is something I will draw on. I can bring in that voice of our Pasifika community, which often doesn't get representation.

"It's about early intervention, education and thinking about the 'so what?' behind everything we do to ensure we have a plan for sustaining any positive change we make."



MAS Members honoured

From transforming care for transgender people to improving access to mental health services across New Zealand, the achievements of the MAS Members named in the 2020 New Year Honours list are nothing less than remarkable. Congratulations to the Honours recipients and thank you for all you have done for our communities.

Rachael Le Mesurier (01)
Companion of the New Zealand Order of Merit for services to governance, the community and health

Executive Director of Oxfam NZ, Rachael Le Mesurier comes from a long line of community leaders and social activists committed to challenging inequality and injustice. She has spent almost three decades of her career working for non-government organisations promoting health, human rights (including disability, gender equality, LGBTIQ) and progressive community-led development, including in the Pacific. Adding to her work in advocacy and community service, Rachael has held leadership roles at Muscular Dystrophy Association, Citizens Advice Bureau New Zealand, Family Planning and the New Zealand AIDS Foundation.

Edward Ward (02)
Companion of the New Zealand Order of Merit for services to intensive care practice

Dr Edward Ward is known as a pioneer in the establishment and provision of intensive care services to the Hawke's Bay region. Taking up the role of director of anaesthesia and intensive care in Hawke's Bay in 1974 after seven years specialising, he then became a consultant in intensive care in 1997 and led the establishment and provision of intensive care services to the region. Known as Ted to his peers, he was also involved in establishing a newborn intensive care unit in the region and instigated patient-retrieval services by road and air linked to other regional hospitals.

2020 NEW YEAR HONOURS RECIPIENTS



01

Annette Milligan (03)
Officer of the New Zealand Order of Merit for services to health, particularly nursing

To name all of Annette Milligan's achievements would be a hard task. A teacher, registered nurse and business owner, Annette has received the ONZM for the difference she has made to the Nelson health sector. In 1989, Annette founded Nelson's INP Medical Clinic, a nurse-led and women-focused sexual and reproductive health centre offering advice and checks for women's health issues. It is at this clinic that Annette also coordinates the local sexual assault and treatment service as well as chairing the Member and Accreditation Committee of MEDSAC, where she has been helping nurse practitioners become registered sexual assault examiners.



02



03

Dr John Delahunt (04)
Officer of the New Zealand Order of Merit for services to endocrinology and the transgender community

Dr John Delahunt has played a significant role in bettering transgender healthcare in New Zealand. An endocrinologist in Wellington for more than 30 years, John was among the first New Zealand specialists to use gender-affirming hormonal therapy at a time when transphobia was at its peak and there was limited experience with the appropriate medications and dosage. Over the years, he coordinated



04

with his fellow endocrinologists and sexual health physicians in developing case experience and recommendations for management. He also supported the work of Agender NZ, a Wellington-based group that provides practical help for people seeking therapy or in transition.

David Codyre (05)
Member of the New Zealand Order of Merit for services to mental health

Bettering mental health care in New Zealand is something David Codyre has been unwaveringly passionate about throughout his 30-year career as a psychiatrist. David has led the development of primary mental health programmes, campaigning for better support for primary care from secondary mental health services and strengthening capacity for mental health care at a regional and national level. Now working with Tamaki Healthcare, David has led the introduction of a comprehensive programme integrating mental health and long-term conditions support into GP clinics, which has now been funded for national rollout as part of the Government Wellbeing Budget.

Donald MacCormick (Murray) (06)
Companion of the New Zealand Order of Merit for services to health, particularly surgery

A specialist in breast cancer and vascular surgery, Murray has been a respected surgeon for 45 years. A tutor, consultation surgeon and

clinical director of General Surgery at Auckland Hospital, Murray's impact has been felt across Aotearoa. He founded the first multidisciplinary service for the management of breast cancer in Auckland in both the public and private spheres and was the leading figure in the establishment of breast screening in Northland. Murray has been significantly involved with the Cancer Society and now works as an Honorary Senior Lecturer in the Department of Surgery at the University of Auckland.

Janine Ewan (07)
Member of the New Zealand Order of Merit for services to palliative care

Working with patients as they near the end of their life is a difficult reality for health practitioners, but Janine Ewan's career has revolved around what she calls this humbling and rewarding experience. Starting out as a registered nurse, Janine worked in Community Palliative Care for St Joseph's Mercy Hospice in the 1990s before becoming the CEO of Dove House's clinical services. This 'new' model of a community hospice provides holistic care from the outpatient facility and inpatient unit to more than 200 people each month. Janine has dedicated the last 20 years to leading her team in the development of this comprehensive service to meet the needs of people and families/whānau who face life-threatening illness.



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Ngaire Kerse (08)
Member of the New Zealand Order of Merit for services to seniors and health

Dr Ngaire Kerse has received the MNZM for her dedication to bettering senior health. Working as a GP at Auckland City Mission, Ngaire is also a full professor and Joyce Cook Chair in Ageing Well at the University of Auckland, where she has built a programme of research looking into better wellbeing later in life. Ngaire wants to promote physical activity and activity for depression and prevent falls and injury in older people. She is a member of expert steering and advisory groups for the Health and Quality Safety Commission and the Ministry of Health. As if that wasn't enough, she also leads the community theme for Brain Research NZ.

Alison Gaston (09)
The Queen's Service Medal for services to health and health education

Alison has worked in the health and health education sectors for more than 40 years, and her 'first' retirement sees her continuing to work as a GP and mentoring new GPs. While working as an SMO in the emergency department for 10 years, Alison pioneered maternity leave, before retraining in general practice and purchasing her practice in the south of Dunedin. She also undertook obstetrics training, delivering thousands of babies, worked as a lecturer in women's health and established the Amazons women's wellbeing programme. She was also one of the founding directors of the Dunedin Urgent Doctors. ♥



01

Rolling into the future

In 2019, MAS sponsored Engineering New Zealand's Young Engineer of the Year award. We were stunned by the achievements of 29-year-old engineer and MAS Member Terry Miller, who won the award thanks to a little something called the NOVA.

It started, like so many things, with a beer.

Wellington engineers Terry Miller and George Heather-Smith were having a quiet pint and laughing about the saying that engineers are made to solve problems – and if they can't find any, they'll create their own.

"We weren't really thinking about a start-up, but were talking about how we wanted to build cool stuff and find an interesting project to pass the time," says Terry of that fateful drink in the winter of 2015.

But create a start-up they did – Eight360 (named after a pool table's black eight-ball). Their initial idea was to create a helicopter simulator, but after two years of refinement,

the pair had engineered something slightly different: a fully untethered, world-first VR simulator that can rotate 360 degrees, giving users a "more realistic experience through rotation, acceleration and gravitational effects".

Called NOVA, their prototype takes virtual reality to another level. "You can jump inside and have an experience that looks and feels like you're actually flying through space or tearing up a race track," Terry says.

Fast forward another two years and the pair have just signed their first deal, a project with the New Zealand Defence Force to explore ways in which Eight360's leading-edge technology can enhance training and simulation outcomes.

"It's the first time I've been paid in two and a half years," laughs Terry, who's been living

*01 / Terry Miller takes a spin in the NOVA
02 / The inner workings of the NOVA, which claims to take virtual reality to another level
03 / Terry Miller proudly showcases the NOVA, a world-first VR simulator that can rotate 360 degrees*

at his parents' Petone house for five years with wife Olivia, who is expecting their first child in April.

"Start-ups keep you poor. But NOVA is something we really believe in, and it's pretty cool that slogging away in a series of leaky, abandoned buildings across the Wellington region has paid off."

It has paid off in other ways too. In November 2019, Terry was named the Young Engineer of the Year – an Engineering New Zealand award sponsored by MAS. He admits it was a surprise, but in his typically understated way, he's pleased to be recognised for "giving this VR thing a go".

"This VR thing" has a number of global applications, including for entertainment and local attractions, such as in shopping malls, cruise ships and VR arcades. "Or for tourist attractions such as at the top of the Skyline in Queenstown, where

users can fly around the town in a virtual helicopter".

Another possible use is for promotional and outreach purposes, for example, with aviation or car manufacturers, as well as for simulation and training. "So, for example, it could have applications in businesses such as flight schools, trucking firms and forestry operators. Truck drivers could use it to learn how to drive off-road, with forestry workers using it to learn how to operate expensive and dangerous forestry machinery in a safe but realistic environment."

Because NOVA is compact and weighs under 500kg, it can be transported on the back of a truck to events or shipped overseas.

That's good news because, despite not doing any advertising, Eight360 has already

You can jump inside and have an experience that looks and feels like you're actually flying through space.

02



had interest from as far afield as Hungary, Poland, India and the United States. "It's all been word of mouth or through our website and Facebook page. But the general response has been 'that's so cool, we've never seen anything like it', so we'll be looking to scale up to global sales this year."

It's a long way from Reading in the south of England where Terry was born to Kiwi parents on their OE. They moved back to New Zealand when Terry was two, and he and his younger sister grew up in the Petone house he's still living in.

He was always fascinated with how things worked, pulling apart household items such as computers, stereos and mobile phones to better understand their internal workings. Later, that included buying broken iPods on TradeMe and 'Frankensteining' them into working units to resell.

"I wouldn't say I knew what I was doing, I was just slightly less hopeless at Googling things than other people."

A desire to "build cool stuff" led Terry to an engineering degree at Victoria University of Wellington and eventually to his first job in the R&D team at a horticulture equipment manufacturer in Tauranga. He followed that two years later with another R&D role in dairy automation systems in Wellington.

For a few years, Eight360 had to be fitted in around his day job, but in 2017, Terry went full-time, and NOVA segued from a novelty project into something more serious.

"Now we're excited to take this technology to the world and see where we can go with it." ♥



03





Weaving the way to safety

The wahakura is credited with reducing infant mortality by 29 percent in recent years. But what is it exactly? Here its inventor and MAS Member Dr David Tipene-Leach tells us how he developed a woven flax bassinet that enables parents to safely bed-share with their little ones.

Dr David Tipene-Leach's CV makes for some impressive reading.

These include his many roles in Māori primary public health, working with indigenous communities in Australia, training doctors in Micronesia, founding GP clinics in rural, often isolated communities, a role as chair of a Hawke's Bay Treaty of Waitangi claim, ground-breaking work to reduce type 2 diabetes and his role in Te Ora – the Māori Medical Practitioners Association he helped start in 1996, which will be partnering with MAS this year (more about this later).

And that's before we even get to the many babies the 63-year-old has helped save with the revolutionary wahakura 'safe sleep' flax bassinet he created in 2005.

Not bad for someone who, in his own words, "didn't really want to be a doctor".

"I can't remember having a burning passion for medicine growing up, but I was good at science and had a sense of social justice, so in my application for med school, I wrote about wanting to help make a change," says David from Napier, where he's been Professor of Māori and Indigenous Research at the Eastern Institute of Technology since 2017.

The change David had in mind was improving things for Māori. "The 1960s and 70s, when I was growing up, was a significant time for Māori in this country. We realised we weren't getting a fair deal and that something had to be done about it."

David's contribution was to join land marches and get involved in broader movements protesting the treatment of Māori by the rest of New Zealand society.



01

This is about communities making and distributing wahakura to mothers.

Dr David Tipene-Leach



02

David became so involved in these protests, in fact, that he failed the third year of his medical degree. “I was spending more time protesting than studying, so I had to repeat the third year.” He didn’t let a lack of funds put him off, though, asking the school’s Dean himself to sponsor David’s repeat year of study in return for Māori carvings that David completed one summer and that still hang in the university.

After graduating, David took over a clinic in Whakatāne, a one-doctor practice serving around 4,000 patients. It didn’t go well. “I had all these great ideas about

providing free care and doing things for the community, but I couldn’t figure out how to pay the bills so eventually I shut it.”

He then moved between public health, academia and general practice, including a 10-year stint when he worked in two of those areas at the same time: three days a week at a free clinic he established in Ruatoki, a town of around 1,000 in the Ureweras, and two days a week teaching Māori health at Auckland Medical School.

It was in Ruatoki that David – of Ngāti Kere and Ngāti Manuhiri descent – learned te reo Māori. “I didn’t grow

up speaking Māori, but it was the first language in Ruatoki, so I became a fluent speaker by listening to my patients.”

David also spent two years in Hawaii – “not the flash bit, way out in the middle of nowhere” – training residents of the Federated States of Micronesia to become doctors.

In the early 1990s, the high mortality rates of infants due to sudden unexplained death in infancy (SUDI) – or SIDS as it was known then – hit the headlines with research that suggested prone sleeping,

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smoking during pregnancy and bed-sharing were the modifiable causes and that Māori mortality was particularly high. That research led David to establish the Māori SIDS prevention programme.

He and his partner, health researcher Dr Sally Abel, developed the wahakura, a flax bassinet that enables parents to safely bed-share. The wahakura and its plastic iteration, the Peepi-Pod, have been credited with reducing infant mortality by a staggering 29 percent between 2009 and 2015.¹

Last year, David reached out to MAS to build a relationship with Te Ora, which provides professional and pastoral support to Māori doctors. “We’re still working on what that will look like, but both organisations share an interest in equitable outcomes so that’s a good place to start. We’ve also got all these young Māori doctors coming through who need to establish things like insurance policies so there are definite synergies.

“This is about communities making and distributing wahakura to mothers. It’s also at the heart of a pilot we’re about to run in Hastings where weavers will engage with a group of mums to make a wahakura, helping connect these mums to things Māori and keeping their baby safe.”

David was made a Member of the New Zealand Order of Merit for services to Māori Health in 2018, but he’s not resting on his laurels.

“I think I’ve got another five or so years before retirement and there’s still a lot to do before then. But one day, Sally and I will move up to my grandfather’s land in Porangahau, where we’ve parked a house-bus we visit every six weeks.

“It’s a simple life but one where I can plant trees, enjoy the nature around me and perhaps learn to weave.” ♥



03

From previous pages:
 01 / The wahakura, a woven bassinet allowing mothers and babies to sleep safely together
 02 / MAS Member and inventor of the wahakura Dr David Tipene-Leach

This page:
 03 / David demonstrates how the wahakura is made and works
 04 / Where it all starts, weaving harakeke (flax) together by hand



04

¹ The recent fall in postperinatal mortality in New Zealand and the Safe Sleep programme, Acta Paediatrica (Nov 2016), 105(11): 1312-1320.

Natural cleaning

Why buy harmful cleaning products when you have all the natural ingredients waiting for you in your kitchen pantry? That's the question that's prompted many Kiwis to make the switch from nasty chemicals to homemade, eco-friendly alternatives that don't cost the earth. Here are five great recipes made from a few simple ingredients to help you keep your home clean and healthy.

Ingredients checklist

- ☐ Baking soda
- ☐ Water
- ☐ White vinegar
- ☐ Rosemary
- ☐ Lemon
- ☐ Rubbing alcohol
- ☐ Essential oil – whatever scent you like

Scented all-purpose spray

For a homemade, all-purpose spray, combine one part white vinegar, one part water, a touch of lemon rind and a few sprigs of rosemary. Pour the ingredients into a spray bottle, shake and let it infuse for a week before using. Once it's ready, you can use the solution to clean rubbish bins, tile walls, countertops and anything else you'd normally use cleaning sprays on.

Get your oven sparkling naturally

Products used to clean the grime off the inside of your oven are mainly chemical-based. But a combination of baking soda and vinegar makes a great alternative. Mix half a cup of baking soda, $\frac{3}{4}$ tablespoon of water and white vinegar as needed, and you've got all you need for a sparkling oven. Spread the paste over the inside of the oven and let it sit overnight. In the morning, all you need to do is spray a little vinegar and wipe the paste away.

Easy window cleaning

The next time you need to wash your windows, add two cups of water to a spray bottle and combine with $\frac{1}{2}$ cup of white vinegar, $\frac{1}{4}$ cup of rubbing alcohol and an optional drop or two of orange essential oil for a fresh scent. **Hint:** Avoid cleaning your windows on a hot, sunny day as the natural solution will dry too quickly and leave streaks.

Tackling toilet cleaning

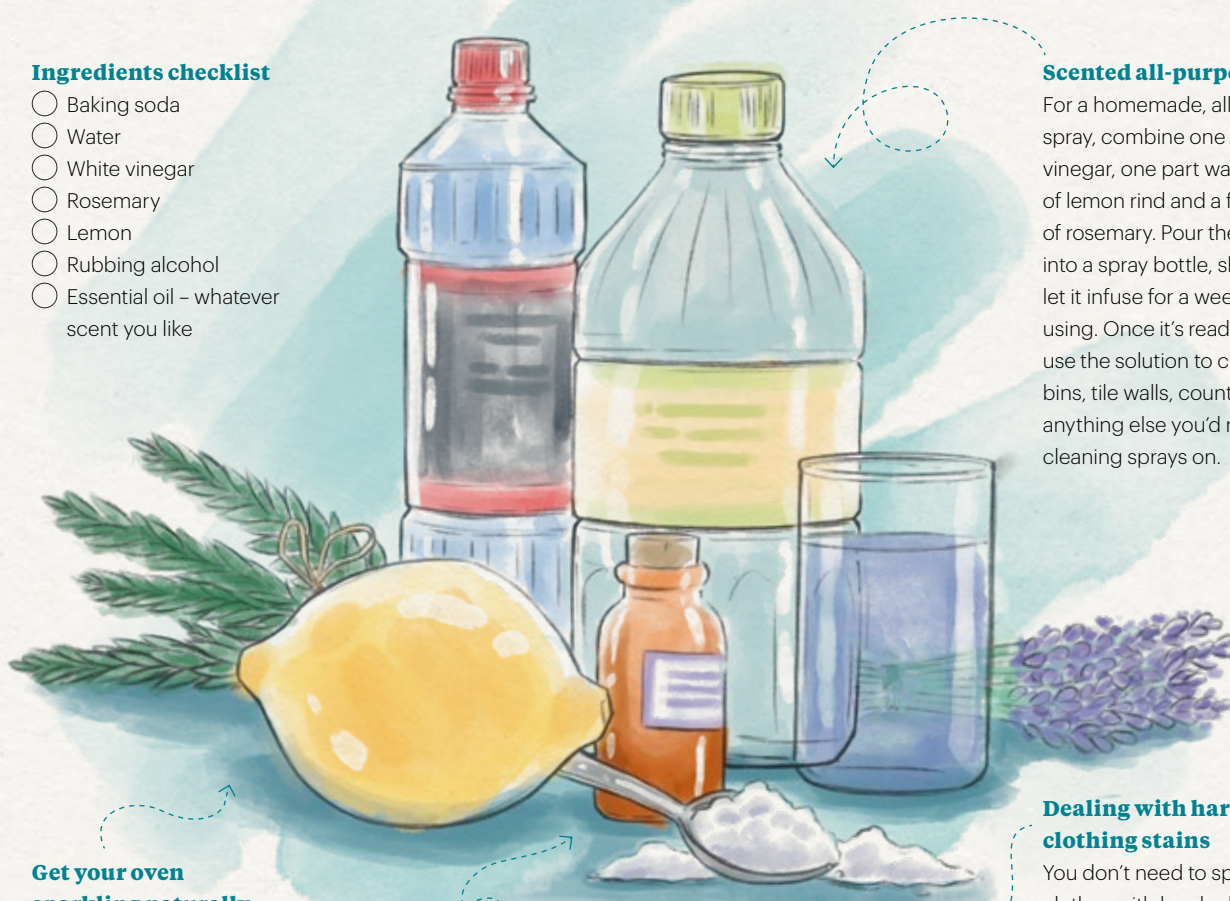
It's never an enjoyable job, but you can make it a little more bearable if you can avoid the strong smell of bleach. Pour half a cup of baking soda, a cup of white vinegar and half a teaspoon of essential oil, and you've got the secret to tackling toilet cleaning. Baking soda deodorises smells, penetrates grease and is gently abrasive.

Dealing with hard-to-shift clothing stains

You don't need to spray your clothes with harsh chemicals if you've got some of this natural stain remover ready to go. Make a paste of $\frac{1}{2}$ teaspoon of baking soda, half a glass of water and a squeeze of lemon. Rub the solution over the affected areas and watch the stains dissolve.

One last tip for more sustainable cleaning

Reuse old T-shirts and towels by cutting them up and using them as cleaning wipes. Save money while you help the environment.



The doctor breaking through the bias

Northland GP and MAS Member Kyle Eggleton was shocked when he realised he was unconsciously treating patients differently depending on their ethnicity. After realising his actions, Kyle did what many wouldn't by admitting his faults and embarking on a journey of self-discovery and improvement.

It's something none of us wants to admit about ourselves – that we might harbour unconscious biases that affect how we think about other people and even how well we do our jobs.

When Northland GP Kyle Eggleton was faced with evidence of these biases during a routine self-audit, he could easily have ignored or denied it. Instead, he used the evidence as motivation to change his own behaviour and initiate what he says is a much-needed public conversation.

"Everyone has got biases of some description. When those biases are unconscious, we aren't thinking about our actions, and that is a problem. If we can become aware of them, we have the ability to reflect on our actions and attempt to change them."

Kyle's own journey of self-reflection began in 2008 when he was working in private practice. He had carried out a simple audit looking at the medication he was prescribing and breaking those numbers down by ethnicity. To his surprise, he found he was giving cholesterol-lowering medication to Pākehā patients more often than Māori patients. As uncomfortable as it was to admit, he knew this was based on an unfair belief that the former would be more likely to take the medication.

"It was very confronting. I realised that I was treating people based on assumptions that were incorrect. That was the start of my thinking about who I was as a person and where I was heading in my overall life journey and professional journey."

His first step was setting aside time to reflect on each of his consultations, asking himself a series of questions (see sidebar) and being brutally honest about the answers.

Despite his best intentions, he still saw evidence of bias creeping in. For example, he remembers telling one patient who needed to see a specialist that they could expect to wait about six to eight months for their appointment.

The impact of unconscious bias is that we don't treat people as they should be treated. We make assumptions about them, and that impacts on the quality of care they get.

Kyle Eggleton

HEALTH INEQUITY IN NEW ZEALAND

A report released in May 2019 found that, compared to non-Māori, Māori:

- die on average seven years earlier
- are two-and-a-half times more likely to die from potentially preventable diseases
- get diseases commonly associated with older age earlier
- have higher rates of disability and multiple disability
- have less access to maternity services, oral health services and hospital appointments
- wait longer for specialist appointments.

Source: Health Quality & Safety Commission. (2019). *A window on the quality of Aotearoa New Zealand's health care 2019 – a view on Māori health equity.*

"They said, 'Well, what happens if I have medical insurance?' And I hadn't even thought about this particular person having medical insurance, so I'd never asked, whereas I might have asked if they were a middle-class white person."

As well as carrying out this private reflection, Kyle began speaking publicly about his experiences, both in the media and within his field. He says he has always been met with positive responses, in part because he doesn't take an accusatory stance.



ADDRESSING YOUR OWN UNCONSCIOUS BIAS

If you're a GP, begin by looking at any audit you'd normally do, breaking that audit down by ethnicity and looking at the differences. Then, start treating each consultation as a reflective process. "You become more vigilant when you start challenging yourself more," Kyle explains.

Ask yourself:

- What went on in the consultation?
- What were you thinking? Why?
- Did you prescribe anything? Why?
- Did you send the patient off for investigations? Why?

"If you confront someone, there's automatically a resistance there. So my approach has just been to say, 'Hey, look, this happened to me,' and not to say, 'You've got bias.' It's more about being a bit vulnerable and opening it up as a conversation starter."

Kyle has come to believe that interacting with a wide range of people is a crucial part of combating unconscious bias.

"If we engage with other people in a multicultural society, that will challenge our thinking, because we start seeing the person for a person rather than as part of a stereotypical group."

That's one reason why he left private practice in 2009 for a new environment

with a different model of care. He joined Māori health provider Ki A Ora Ngātiwai, which is governed by members of the Ngātiwai iwi and draws its values from tikanga Māori. Kyle is the sole GP, working alongside a varied team of nurses, community support workers, Whānau Ora workers and a rheumatic fever prevention team.

Over the years, he has also thrown himself into governance roles. In 2019, he was elected to the Board of the Northland DHB, basing his campaign in part on addressing bias and inequity.

Since the start of his medical career, he has seen awareness of institutional racism grow, but there's still a long way to go.

"There's a lot of talk about inequity, but the changes that are required have been very slow."

He believes work needs to be done at every level – by individual practitioners, PHOs, DHBs and national policy makers. As an example of the latter, he points to the government's bowel cancer screening programme, which is being rolled out for people aged 60 and over. The problem, Kyle says, is that bowel cancer tends to occur earlier for Māori and Pasifika people: "So that's a policy that is going to perpetuate inequity."

Meanwhile, he continues to examine his own day-to-day behaviour, believing bias is something we can never completely eradicate in ourselves.

"There are still times when I catch myself out. It's an ongoing process to constantly challenge yourself and think about where those thoughts came from. You might have a fleeting thought, just a thing that comes out of nowhere, when you glance at someone and make assumptions about the way they look or about their weight or whatever it is about them. You have to grab that thought and analyse it and say, 'That's not right.'" ♥

It's all in the genes

What if you were told that the friends you have, who you choose as a partner, whether you lean towards introversion or extroversion and even what you choose to eat was partly predetermined before you were born?

Women sniffing out Mr Right through body odour and our predisposition to overeating are just a couple of the topics leading UK-based neuroscientist Dr Hannah Critchlow covers in her book *The Science of Fate: Why Your Future Is More Predictable Than You Think*.

Making her New Zealand debut to discuss her book at the NZ Festival of the Arts in March, we picked up the phone to Hannah to talk about her findings and the nuts and bolts of how we make simple everyday choices.



We ain't nothin' but mammals

While we like to believe we are a highly evolved species who left behind our cavemen origins long ago, our brains still respond to some basic, primal instincts.

In her book, Hannah references a study where women were presented with shirts worn by men for multiple days where their natural smell remained – they weren't allowed to wash the shirts, use deodorant, or eat or drink anything 'offensive'.

Most women preferred the body odour of men whose immune systems were very different to their own. The theory goes they are instinctively predisposed towards potential partners with different genetics as this will produce stronger immune systems for their future offspring.

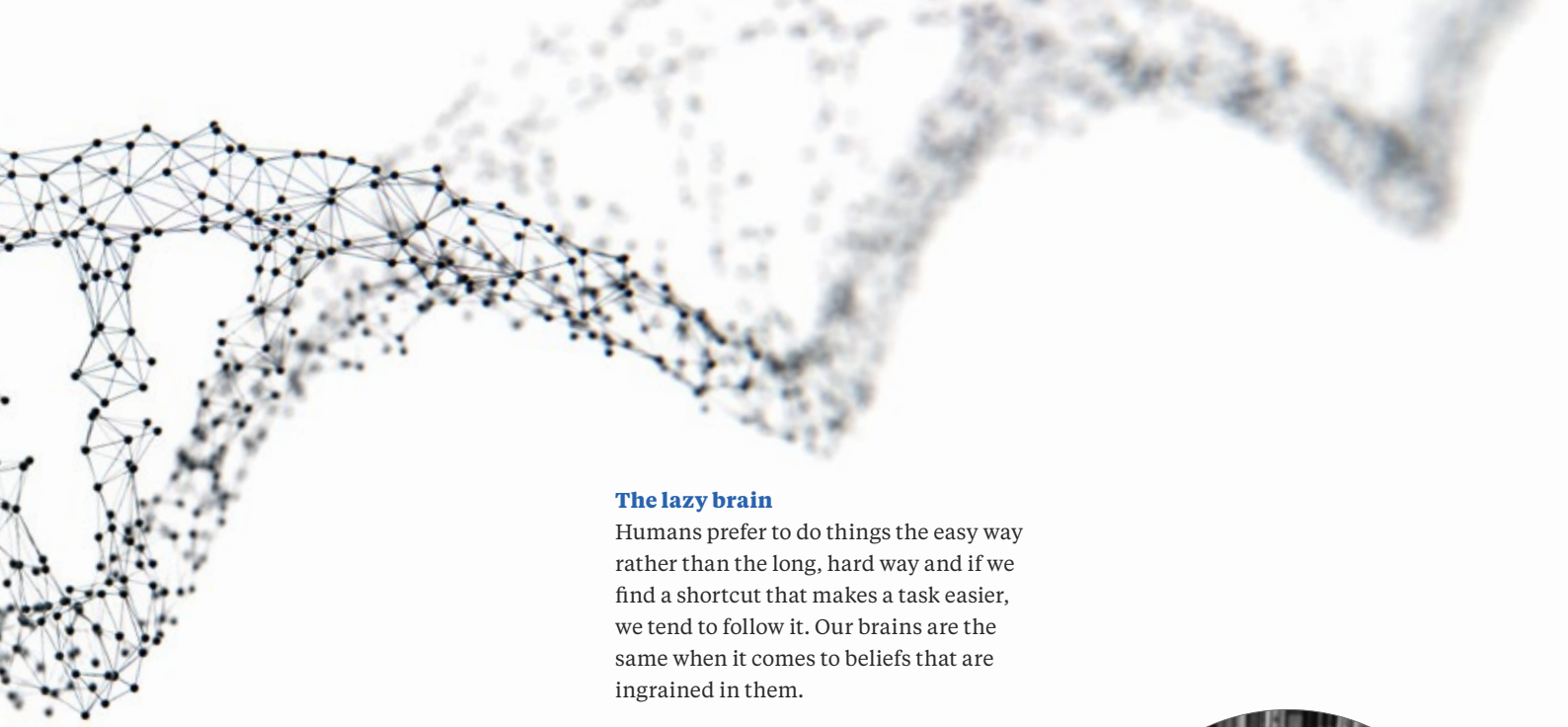
"Women are literally sniffing out Mr Right without realising it," says Hannah.

Food, glorious food

Our primal instincts are also at work when it comes to eating as though we won't see another square meal in days. Hannah explains that, even though we don't need to eat like we are in survival mode, it's a hardwired natural biological response.

"Mammals basically evolved, over roughly 250 million years, to carry on eating no matter what. Anything that enhanced our individual ability to seek out food, consume it quickly, carry on eating even when we were full, store fat more efficiently or hold on to our fat stores for as long as possible gave us an advantage."

The problem is that, while most of us in the developed world have plenty of food on hand at all times, our instincts are



The lazy brain

Humans prefer to do things the easy way rather than the long, hard way and if we find a shortcut that makes a task easier, we tend to follow it. Our brains are the same when it comes to beliefs that are ingrained in them.

telling us to eat as if we won't get another meal for days, she says.

"Our appetite is largely determined at birth, written into our genes and pre-wired into our brain circuitry. It is shaped by biological traits that have evolved over millennia to drive us to find certain foods delicious," she says.

On top of this, there are up to 150 different genes that affect your weight. These genes determine how hungry you feel, how many calories you need to stimulate your 'reward pathways' and how many nutrients you require. "This is why some people will always find it harder to cut back or reduce the amount of certain foods they crave."



"Once the brain has constructed a belief about something, however partial or flawed, it prefers not to have to revise it. The brain becomes invested in these beliefs, reinforcing them by looking for supporting evidence while ignoring contradictory information," Hannah says. This is why it can feel like talking to a wall when discussing topics like



religion or politics with people who have opposing beliefs. Our brains are trying to find ways to justify our beliefs and to ignore counter-arguments.

"The brain takes lots of shortcuts and uses your past experiences in order to create those shortcuts – this is what gives us our biases. If these have been ingrained with different experiences across the course of your life, you've got to do some extensive demolishing and reconstruction work in your brain if you want to think about things afresh," she says. 💙



Dr Hannah Critchlow is speaking about her book with science communicator Damian Christie at the New Zealand Festival of the Arts on Friday 13 March in Wellington. Book your tickets at festival.nz





*Nats Levi, Auckland teacher
and fitness-enthusiast*

Slow and steady wins the race

High-intensity interval training (HIIT) styles have been on the rise for many years now, but how much do we really know about the effects this vigorous exercise regime is having on our bodies?

HIIT classes are growing in popularity, with all sorts of claims made about their health benefits.

Popular chain Les Mills offers a range of HIIT classes, while other gyms including Crossfit and F45 have popped up around the country, specialising in these intense, fast-paced workouts.

Les Mills backs up their classes by pointing to a study they carried out with US university Penn State, which recommended 30-40 minutes of high-intensity interval training per week – “high intensity” being defined as exercise where the heart rate is maintained at 90 percent of its maximum.

Compared with these sorts of training regimes, you’d be forgiven for thinking that a simple brisk walk with a friend wouldn’t have the same benefits as a workout that leaves you dripping in sweat and unable to walk the next day.

But more and more people are realising the value of slowing down and taking a different approach to their daily workout, engaging in less-strenuous exercise that limits the risk of injury.

Addicted to the burn

Nats Levi could not stop exercising. The Auckland teacher and fitness enthusiast was once so obsessed with physical activity that she couldn’t go a day without working out.

“It was an addiction. I didn’t realise that I was in the grips of addiction at the time. I could never just do one session a day if I felt fine, I would push myself to do two. Taking a day off was really, really hard, and even on that day off, I’d be itching to move,” says Nats.

Nats found exercise empowering and fulfilling, but when she was diagnosed with what is known as the female athlete triad – where her hormonal system crashed due to exercise overload and she lost her menstrual cycle – she realised she had to make some changes.

After her diagnosis, Nats began slowly pulling back from her intense workout regime and incorporating more controlled forms of exercise.

“We have this crazy notion that you need to be really sweaty and your body needs to be really sore for exercise to count, but it’s not the case.

“I really love mixing up my training now, whether it’s barre, Pilates, breathwork. You’re still working really hard, but it’s hard in a different way. You’re gaining control and working on your technique. It was hard to shift my mindset – I wouldn’t have counted this stuff as exercise before.”

It wasn't an easy transition for a fitness fanatic like Nats, but she said patience was key to changing her mindset and accepting that low-intensity exercise was just as beneficial as the hardcore workouts she was used to doing.

"I've realised you need to be patient with it. The first couple of times I tried low-intensity workouts, I would think to myself 'this is rubbish and a waste of my time'.

"But I'd gradually start to see the benefits for my body. For example, I would notice that my lower back felt a little bit freer or my neck didn't feel as tight."

Quality over quantity

"Sitting down nine hours a day hunched over a computer is unnatural, but some people end up doing this every day for 50 years," says personal trainer Michael Lahood.

The Wellington-based movement specialist spends time thinking about the ways human behaviours have changed and worries about the unnatural way many people now use their bodies.

"How many people have back pain? Knee pain? Age plays a very small role in most people's pain. It's the sedentary lifestyle

that causes pain and then your body starts fighting back," he says.

Michael believes that low-impact training is the way to build up fitness and resistance, so people can participate in HIIT without the risk of injury.

"I'm all for low-impact, low-intensity training, and learning to use your body first. Whether that's through yoga, a personal trainer or Pilates, it's all about learning how your body operates before you move towards high-intensity workouts," he says.

Michael believes the emphasis should be on the quality of your workout, not the intensity, when it comes to judging the benefits for your overall health.

"You don't need to completely smash your workout, and you don't need to be dripping in sweat. The quality of movement and quality of your mental state is much more important."

Slow then fast

"My opinion is that you shouldn't do something fast unless you can do it slow," says Anna Cochrane, owner of Wellington's Thrive Pilates Studio.

Anna got hooked on Pilates after having major abdominal surgery in her early 20s. While she initially loved it for rehabilitation purposes, she continued Pilates for general fitness and injury prevention.

"A lot of people go into HIIT without much body awareness. If you're doing something really fast and haven't thought about how to engage the right muscles in the right part of your body, it's only a matter of time before you start getting niggles and injuries."

A lot of Anna's clients are office workers who are struggling with poor posture, tight hip flexors and lower back pain. She also works with cyclists, runners and triathletes who use Pilates as a way to prevent the injuries they can pick up from their usual training.

"Pilates is a conditioning tool to make faster, more-intense exercise safer. I can understand the lure of HIIT: it's dramatic, it's sweaty, you burn a lot of calories, but I would move cautiously if you haven't done any sort of prep work."

Core strength is one of the main benefits of Pilates, and Anna likens the importance of core strength to the foundation of a house. You can't build a strong house without getting the foundations right first, and the same logic applies when it comes to building a strong body.

"Building core strength requires focus and attention; it's not something easily achieved in a HIIT environment with pounding music. The potential to produce power, speed and efficiency of movement is greater with such a foundation, and you simply can't learn this properly in a fast-paced environment." ♥

01 / Michael Lahood talks his client through quality movement

02 / Anna Cochrane takes a break from teaching with some Pilates of her own



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Making a difference

Each MAS staff member is given a day a year they can use to volunteer for a charity or not-for-profit of their choice. They put their Here for Good Days to good use in 2019, helping out with everything from planting trees and cleaning up beaches to preparing much-needed 2019 Christmas present boxes.



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I really wanted to do something special for the kids in need.

Marcella Ron

01 – 04 / The Executive team got their hands dirty planting trees to help Wellington City Council (WCC) achieve their target of planting 2 million trees in Wellington by 2025. The team got wet and muddy as they cleared weeds, dug holes and planted young native trees (picking up plenty of litter along the way). WCC is replanting native trees to encourage native fauna to flourish, including protected bird species. To date, WCC has planted just under 1.8 million trees with the help of community groups, corporate volunteers and schools.

05 / Marcella from the Digital Marketing team volunteered for the Wellington City Mission before Christmas, sorting out present boxes for children who would otherwise go without during the festive season. The City Mission collects donations and allocates them to less-privileged kids with the help of agencies such as Women's Refuge. Marcella said she volunteered for one simple reason – imagining the faces of these kids receiving their presents when they thought they weren't getting anything.

06 – 07 / Colin Thomson spent his Here For Good Day at his local beach in Petone, clearing away weeds and rubbish at what he calls his icon of the Hutt Valley. Colin spent a hard day with his shovel and rubbish bags, joining other dedicated volunteers devoted to the betterment of the Petone foreshore and their local environment.

08 / Allie and Priya were just two of a number of MAS staff members who grabbed their buckets and hit the streets of Wellington collecting donations for Wellington City Mission and Wellington Multiple Sclerosis Society. The causes are close to the hearts of the duo, and they were stunned by the generosity of their fellow Wellingtonians to the charities.

The future of managing our money

New technology is changing the way we handle our finances but are we ready for this digital transformation?



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The world of personal finance is changing rapidly with new trends, apps and other financial products promising financial simplicity and success. We have more choice than ever before about how to manage our money, but it's also becoming harder to work out what's in our best interests – now, and well into the future.

Jason Leong, CEO and co-founder of PocketSmith, an online money management app, set up his Dunedin business 11 years ago and says he has witnessed first-hand what he calls the biggest period of change in money management in recent history.

Money management trends

While some people are getting left behind with this personal finance evolution, Jason believes others are thriving with tribes of finance-savvy people congregating across the internet.

"People are becoming more curious about their money journey – looking for new ways



PocketSmith CEO and co-founder, Jason Leong, chats budgeting with his colleague

to manage their money and constantly tweaking their finances so they can be more productive."

But this increased financial productivity isn't fuelled by traditional financial goals.

"The traditional dream of homeownership is not only increasingly out of reach amongst Gen Zs and Millennials, their priorities have also shifted – travel and community engagement may outweigh owning a home and starting a family, for example.

"We're seeing many different definitions of what it means to live a 'good' life. That is exactly why we built a tool that helps people manage their money for their own unique situations."

The tool in question is PocketSmith's software that offers a calendar that accounts for upcoming income and expenses, allowing customers to forecast for the future. Jason says the goal was to steer away from a one-size-fits-all approach to personal finance, particularly because the way New Zealanders are earning is changing dramatically.

"The growing variety of ways to earn money has disrupted the traditional view of how income is generated. Take digital nomads for example, who can work from anywhere, and people generating multiple income streams from so-called 'side hustles'."

Usually associated with Millennial workers, Jason says different generations have different versions of the 'side hustle', from

retirees renting properties on Airbnb to younger generations freelancing as they travel the world. We're earning in diverse ways, so Jason argues we need flexible, personalised and automated ways to manage our finances, which is where platforms like PocketSmith come in.

But this innovation brings with it new challenges, with a recent study by PocketSmith finding that users in New Zealand seem less digitally engaged with their finances than their counterparts in Australia, the US and the UK.

In fact, users in Australia, the US and UK spend between 5.8% and 9.7% more than Kiwi users on PocketSmith's digital tools. Kiwi users are also the least likely to ask for help about their personal finances out of the four countries tracked.

Fewer humans, more AI

Despite the apparent hesitance to go digital, Massey University's Professor of Banking David Tripe expects to see a continuing reduction in New Zealand's bank networks and human interaction as artificial intelligence becomes more widely used for personal finance management.

"I'd be surprised if, in 20 years, banks have anything like the networks they have now. They are already steadily and discreetly scaling them down because people are no longer keen on waiting at the bank.

"We no longer want that face-to-face contact, and we don't need it either because much of our business can be transacted in other ways."

PocketSmith's Jason agrees: "Our finances are always going to be complex enough to warrant a little human interaction, but there's going to be a lot less than we're currently used to.

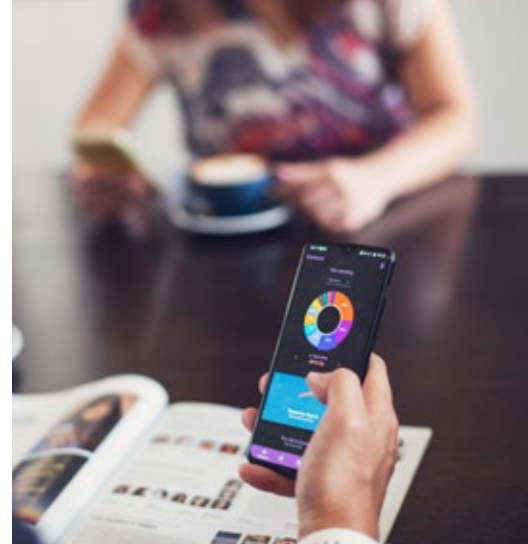
01 / The PocketSmith software that offers users a calendar to track income and expenses
02 / PocketSmith's budgeting software is also available on a handy app

"In the old days you'd walk into a bank and it would be a one-stop shop. But as technology enables companies to offer different financial services, like loans and investments, we're going to see a lot less of traditional banks."

Upgrading our thinking, not just our apps

In the face of all this change, Jason says the future of successful personal finance management will require education and understanding in the digital space.

"The problem is that education in financial management just hasn't kept up with technology, especially in New Zealand. We've built this ability to pay without physical money, but we haven't kept people up to



02

date in actually understanding how digital payments work. And with today's speed of commerce, a lack of clarity can result in consumers being taken advantage of."

The recent PocketSmith study revealed we're seeing less change and innovation in personal finance in this country than in Australia and the UK, but this needs to change.

"We can now earn and spend faster than ever before, so we need to upgrade our ways of thinking about our finances, and that starts with education, which I think is lacking in most countries.

"In this day and age, prescriptive, cookie-cutter solutions are increasingly less relevant to a person's individual situation. We need to realise this and take an interest in learning how to take control."

The future

So where does that leave us? How can we here in New Zealand keep up with the changes?

It's a big question but the answer is simple in Jason's mind – educating ourselves. We need to demand more information from the banks and brands we work with and take time to understand what our financial situation looks like now and what it could look like in the future.

And according to Jason, with even more innovations like open banking and the prospect of a cashless society looming on the horizon, there's no time like the present to start learning. ❤️

TOP TIPS



01

Set yourself up with a money management tool or meet with a financial advisor and take a long, hard look at your financial situation together. Efficient money management starts with getting full clarity of your financial situation, however confronting it might be.

02

Create a forecast for the future, especially if there are likely to be major changes to your finances – for example, if you're planning on buying a house, starting a family or retiring.

03

Sit down with your bank and ask them to take you through their online banking systems and apps. This will make the transition to digital a little less confronting or reveal handy features you didn't know were available.

Students on innovation

Our new student association presidents talk about how they're finding their new roles and their thoughts on the most exciting innovations they've witnessed in their industry.

01 Ellie Baxter

President / New Zealand Medical Students' Association

Are there any new developments in medicine that are getting those in your field excited at the moment? Modern medicine is constantly changing, which is one of the most interesting things about working in this field. Whether it is innovation in genetics, pharmacology, technology, I think there is something in every aspect of the field that is getting people excited. Just a few weeks ago, I had a conversation with some house officers who were talking about portable ultrasounds that you can access from your phone for instant imaging. This one small device has endless possibilities, including greatly improving the efficiency of diagnosis and medical management.

What is the most exciting innovation you've witnessed in your sector or faculty so far?

One innovation that has really intrigued me is Lance O'Sullivan's iMoko programme. It is an innovative approach that uses smart software technology to create community-based virtual health services, aiming to deliver basic health services to high-need communities with vulnerable children. Whilst I'm not sure of the logistics and the effect that implementing this programme could have on our health system, what I really appreciate is the equity-focused design. New expensive technology could easily be implemented in a way that widens the gap in New Zealand's health outcomes, but this programme is designed to mitigate that.

How important do you think it is to encourage innovative and new ways of thinking in your line of work? It's very important. The current demand on healthcare services and resources is huge and it's growing. I believe that the only solution to this problem is innovative, outside-of-the-box thinking.

02 Maithreyi Sundaresan

President / Massey University Veterinary Students' Association

Congratulations on your new role as student president. What do you hope to achieve while you're in this new role? Thank you! A huge area of focus for me is mental health support for students and encouraging healthy practices to take forward into our careers.

Are there any new developments in the veterinary industry that are getting those in your field excited at the moment? I think the greater shift towards strengthening the relationship between human medicine and animal medicine is going to be important in the future, particularly with respect to addressing the global antimicrobial resistance crisis as well as techniques well established in human medicine that are being adopted in veterinary medicine.

What is the most exciting innovation you've witnessed in your profession? The massive amount of research and development coming out about pet nutrition is amazing. Seeing the far-reaching importance that this field has is very interesting. It's extremely important to encourage novel and innovative ideas as our field and our understanding of the science is constantly evolving.

03 Ruby Wills

President / New Zealand Dental Students' Association

What do you hope to achieve while you're in this new role as student president? The NZDSA has some exciting goals for 2020, including an emphasis on increasing welfare and educational support. Dental school is tough, but so is the big wide world for all professions. Therefore, we are hoping to give dental students opportunities to develop and foster skills to



01

enable us to overcome the difficulties and barriers that come with life and our future careers. We will also continue to provide lots of fun, social and sporting events throughout the year, allowing students to keep the necessary work-life balance.

Are there any new developments in dentistry that are getting those in your field excited at the moment? One of the big things we have witnessed is the more widespread use of what were once uncommon tools such as laser surgeries, milling and 3D printing of crowns, digital smile designing and accurate, 3D radiographs for surgery and implant planning. New innovations continue to sprout, so it's important we continue learning so we can properly integrate these new technologies into the workflow.

How important do you think it is to encourage innovative and new ways of thinking in your line of work? Incredibly important. If we aren't looking towards finding new ways to do things, then we might as well be taking steps back. It is exciting to think that, as we move forward, we become more efficient and safer clinicians, providing more durable and better treatment options for our patients. I am super excited to see where else we can go and excited for the lifetime of learning ahead of me after dental school. ❤️



02



03

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All aboard the Eastern Express

Turkey by rail

The Doğu Ekspresi, stopped at a provincial station



Rediscovering the adventure of rail on one of Turkey's oldest and most remarkable train journeys.

Turkey's Doğu Ekspresi, or Eastern Express, is a train that should probably no longer exist.

From the capital of Ankara, it winds its way slowly across Anatolia and the Armenian highlands for 1,300km before reaching Kars, a former Russian outpost in the far east of the country, around 30 hours later.

It's a journey that takes in some of the most beautiful but least-visited parts of Turkey. Once the only way to travel across the country, the Express gradually fell out of favour as low-cost airlines made the same trip possible in less than an hour. By 2016, passenger numbers were so low that the future of the line was uncertain.

Then something happened. Young Turks armed with smartphones and Instagram accounts began taking the journey and sharing images of the scenery online. With almost 40 million active Instagrammers in Turkey, the posts became hugely popular, and within months, the Eastern Express had become a social media phenomenon.

Demand for the trip is now so high that trains sell out weeks in advance and hotels in Kars, which used to be quiet, operate at full capacity. After reading about the remarkable turnaround, we decided to reserve two spots on the Express to see what all the fuss was about.

We were far from disappointed. Over a day and a half, we saw parts of the country that most visitors, let alone Turks, never get to see. Compared to tourist hotspots like Ephesus, Cappadocia and Pamukkale, the experience was cheaper, less crowded and much more interesting.

View of a valley near the Dark Canyon

Inset / Peter Graczer and partner Richie Thornton strike a pose





01

The train left Ankara in the late afternoon, so we spent the evening settling in and getting to know our fellow travellers. Most were European or British, so language wasn't a barrier. After a solid night's sleep, we woke at the Euphrates River, which flows from Turkey through Iraq and Syria, all the way to the Persian Gulf.

With the trip, you get a boat ride on the Euphrates through the Dark Canyon, the second largest in the world after the Grand Canyon, past near-vertical cliffs so high the canyon only gets an hour of sunlight a day. From there, you explore mountain villages on the old Silk Road, drinking mineral water direct from springs and eating lokhane, a sugarless dessert made of yoghurt, cardamom and pistachio.

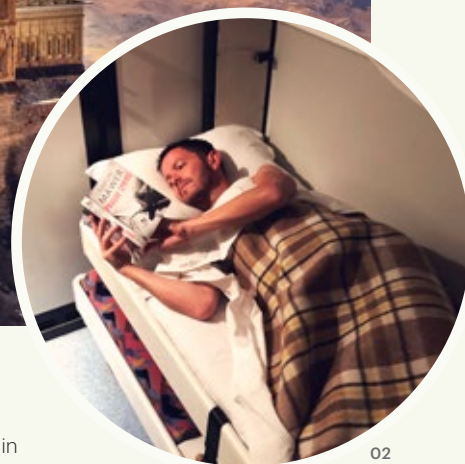
On day two, the train makes further stops at provincial capitals where you visit mosques, waterfalls, churches and markets. Despite a stronger military presence as you head further east, the entire region is safe and tourism is growing rapidly.

One word of warning though – the Eastern Express is one of Turkey's slowest trains. It stops frequently, sometimes at a station and sometimes in the middle of nowhere. The restaurant car opens and closes on a whim, and no alcohol is served on board. This may be one of the hottest rail tickets in Turkey right now, but it's certainly no Orient Express.

As well as stocking up on beer or wine beforehand, I'd recommend packing some good snacks to anyone taking this journey. The food on the train, while decent, was clearly of the microwaved variety, and the restaurants we were taken to offered kebabs, kebabs or kebabs.

At one town we were told the kebabs were unlike any other in Turkey. Nope, they were just kebabs.

Living in a 3x3 metre compartment for 30 hours also has its challenges. You get a handbasin, two single bunks, a small fridge, and a table. Once we packed our suitcases in, there was very little room left to move. There are no showers, and toilets are shared on every wagon. It doesn't take too long to realise there's no one on board to clean them either.



02

Over a day and a half, we saw parts of the country that most visitors, let alone Turks, never get to see.

There's also no mobile coverage for most of the journey. Apart from a minute or two at larger towns, you're cut off from the outside world. It's a great opportunity to enjoy a book or 12, and it does force you to be completely present in the moment. While some people enjoy the peace and quiet, I found the novelty wore off pretty quickly.

Once you finally get to Kars, you can explore the ancient medieval Armenian city of Ani. You can then fly back to Istanbul or carry on by land to Mount Ararat – the supposed resting place of Noah's Ark – or travel further south to Van, home of Turkey's largest lake.

The Eastern Express is one of Turkey's best-kept secrets in my opinion and should be considered one of the great rail journeys of the world. At just 200 lira (NZ\$56) per passenger, it might also be one of the cheapest ways to see the vast region of East Anatolia.

Get on board before the rest of Instagram – and the world – finds out about this undiscovered gem. Tickets can be purchased directly in English from Turkish Rail at tcdd.gov.tr.



ANKARA AND KARS

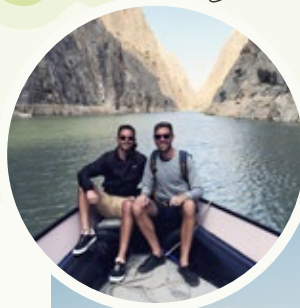
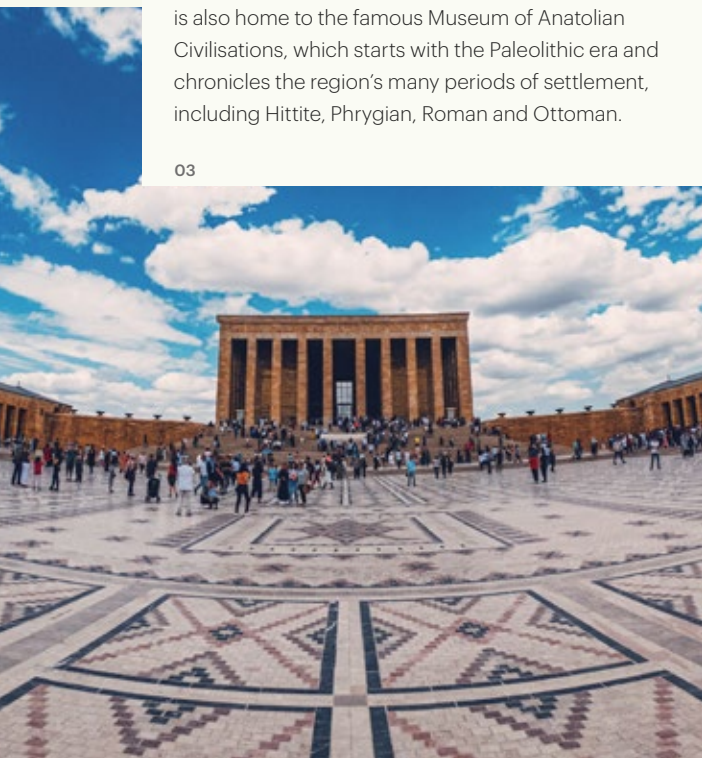
The Eastern Express gives you the opportunity to spend time in Ankara and Kars, both of which offer fascinating experiences for history, architecture and nature buffs.

Ankara

Despite being Turkey's second-largest city and the capital of the Turkish Republic, Ankara is not known as a tourist destination. For New Zealanders, however, Ankara offers the chance to visit Anitkabir, the mausoleum of Mustafa Kemal Atatürk, founder of modern Turkey. Atatürk became a well-known name in New Zealand following the Anzac campaign, with the famous line 'no difference between the Johnnies and the Mehments' inscribed on monuments in Wellington.

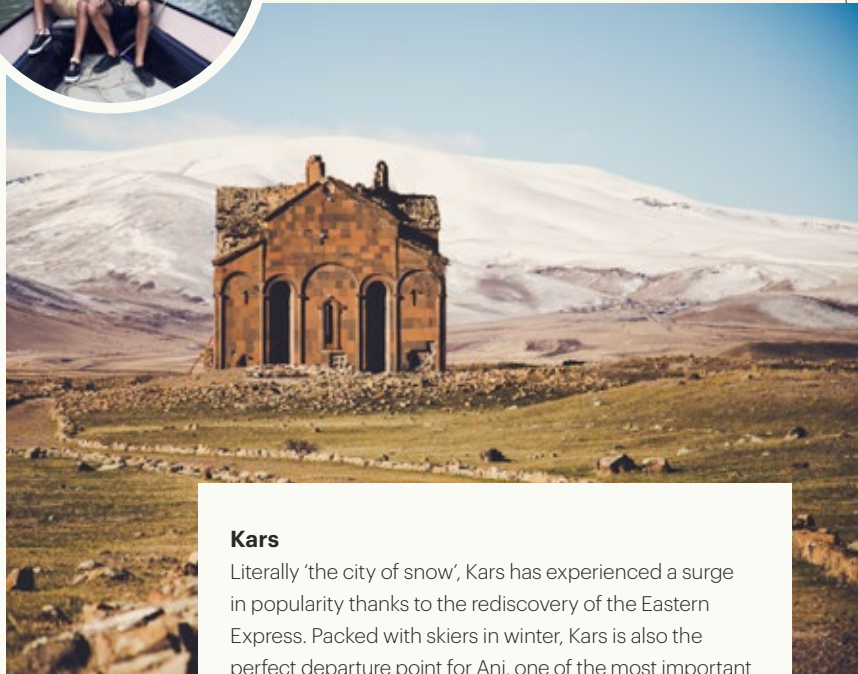
Open every day, Anitkabir features Turkish military on full display, the tomb of Atatürk himself, as well as his cars and a museum of his life. The gift shop will sell you anything from Atatürk ties to ashtrays. Ankara is also home to the famous Museum of Anatolian Civilisations, which starts with the Paleolithic era and chronicles the region's many periods of settlement, including Hittite, Phrygian, Roman and Ottoman.

03



04

- 01 / The Ishak Pasha Palace is one of Turkey's few surviving historical palaces
- 02 / Getting comfy with a book in the cosy train cabin
- 03 / The mausoleum of Mustafa Kemal Atatürk in Ankara
- 04 / Ani ruins on the historical Silk Road near Kars



Kars

Literally 'the city of snow', Kars has experienced a surge in popularity thanks to the rediscovery of the Eastern Express. Packed with skiers in winter, Kars is also the perfect departure point for Ani, one of the most important yet underrated tourism sites in Turkey.

Ani is a UNESCO-recognised ruined medieval Armenian city dating back to the 5th century AD and one of the biggest ancient sites in the country. Visitors can explore 21 structures with the traces of 21 different civilisations. These include the Church of the Redeemer, constructed in the year 1035 to hold alleged fragments of the true cross of Christ. Ani also forms the border between Turkey and Armenia, so you can look across the river to Armenian watchtowers, a reminder of the historically hostile relationship between the two countries.

A four-hour minivan trip south of Kars will bring you to Mount Ararat, the legendary resting place of Noah's Ark. The nearby town of Doğubeyazıt has stunning views of the mountain and is also home to the spectacular Ishak Pasha Palace with its middle-eastern arches, domes and minarets – a rare example of Ottoman architecture with strong Iranian influences. ♥



Andrew Lesperance has no problem ordering a non-alcoholic cocktail

Losing the pooze

From sleeping soundly to saving money, there are many advantages to living a life without alcohol.

Drinking in Kiwi culture is deeply embedded: we celebrate with alcohol, we grieve with alcohol and we can find it hard to understand when a person says no to alcohol. Our social occasions are built around drinking, we are often rewarded with a bottle of wine and are sold on the idea that everything is better with a chilled glass of beer in hand on a summer's day.

The sobering reality is that almost 20 percent of New Zealanders aged 15 and above are classified as hazardous drinkers according to a 2018 NZ Health survey, putting into perspective how dangerous

our relationship with alcohol may have become. And that's not all – the Ministry of Health's recent alcohol factsheet stated NZ Police estimates that approximately one-third of all Police apprehensions involve alcohol and half of all serious violent crimes are related to alcohol too.

Fortunately, things are shifting. It appears our society is increasingly aware of the harmful effects of alcohol, and more people are looking to reduce their alcohol intake or stop drinking altogether.

Eighteen months ago, MAS Member Andrew Lesperance – formerly an avid wine club member – decided to swap the red wine for sparkling soft drinks and hasn't looked back since.

"I wake up and have clarity of mind every morning. But I do miss out on a few social parts of life, like going to the occasional wine tasting evening, which I used to really enjoy."

Despite this, Andrew says it's been an easier transition than he thought it

would be with more options for non-drinkers cropping up across New Zealand. But he thinks his age may have something to do with it.

"I'm in my 50s so I don't feel this peer pressure that I know many young people do. I understand the binge-drinking culture in New Zealand is prevalent, especially with the younger generation due to the pressure they face."

Luckily, there are many organisations out there now providing support to those who are struggling with alcohol consumption or who would simply like to be better educated on the effects of drinking.

New Zealand-founded organisation Cheers is an example of this. Managed by The Tomorrow Project, Cheers is an industry-funded organisation led by Executive Director Matt Claridge.

Calling itself a social change initiative, Cheers is on a mission to create a healthier, safer and more responsible drinking culture in this country.

Be confident and comfortable in yourself and your lifestyle choices, and no one will question you. *Matt Claridge*

“Even though young adults can be exposed to heavy peer pressure during their teenage years, parents are the number one role models when it comes to influencing their children’s drinking habits,” Matt says.

According to Matt, most children copy their parents’ behaviours so it is vital to introduce healthy alcohol consumption within a safe and informative environment.

He also urges New Zealanders to better understand what is meant by a standard drink. Many people are surprised to learn that a glass of wine is actually two standard drinks, but once they realise this, they become aware just how easy it is to go over the recommended daily intake.

One of the hardest parts of being teetotal can be tackling social situations where alcohol is being served. People are often reluctant to deal with the questions that come with being the odd one out, but one way to deal with this, Matt suggests, is to simply choose a soft drink or a zero-percent alcohol drink.

“The difficulty can be when you are continually being challenged at a social event as to why you aren’t drinking. Try arriving at a party in the first few hours and have those conversations with people early on.”

Andrew Lesperance suggests one way hosts can make things easier for non-drinkers in social scenarios is to serve

special non-alcoholic drinks with the same care you would a cocktail.

Matt says that, at the end of the day, it all comes down to being clear about your own motivation for giving up alcohol: “Be confident and comfortable in yourself and your lifestyle choices, and no one will question you.”

Andrew adds it’s also about understanding that alcohol doesn’t automatically equal having a good time – that comes down to the people you are with.

“We used to go to Martinborough quite a bit and spend the day visiting wineries. I went there recently with my family, and we had a lovely lunch in the sun. We didn’t go to any wineries but we had just as good a time as ever.”

If you’re considering reducing your alcohol intake or just improving your knowledge around the drinking culture here in New Zealand, you can visit cheers.org.nz. ♥

Autumn eating

The long, hot summer days filled with backyard barbecues, quick salads and breakfast bowls overflowing with a rainbow of fruit and berries are sadly behind us. But the turn to autumn means it’s harvest season, which brings a raft of new menu options. There’s late stone fruit, apples, figs and new-season citrus aplenty and the tastiest tomatoes, corn, zucchinis, pumpkin, fennel and parsnip.

1 Shop seasonal

Seasonal food always tastes better as it’s often locally sourced, meaning the food has less travel time and more opportunity to ripen naturally, which also brings down the cost. Buying in-season also helps support small New Zealand businesses, which is always a win-win. The 5-a-Day website has a great guide to what’s in season if you’re looking for new ideas:

5aday.co.nz/whats-in-season

2 Don’t ditch salads

Swap lighter summer salads for ones loaded with roasted root vegetables and grains. Try combining spiced roast

pumpkin with goat’s cheese and roast almonds, and mix in handfuls of rocket and Italian parsley with a simple balsamic vinaigrette. Or mix cooked quinoa with roast kumara and bitter greens combined with a dressing of Dijon mustard and maple syrup.

3 Cool nights, warm puddings

The classic Kiwi crumble is a great way to use up any fruit that’s seen better days. Stone fruit or berries work well mixed with apples and adding a flaky, butter crumble topping will mean no-one is the wiser that the fruit’s skin is past its best.



In review

Book reviews by India Lopez



MOVIE — THE SECRET GARDEN

Directed by Marc Munden
In cinemas from 6 April

Based on the 1911 novel by Frances Hodgson Burnett, this fantasy drama follows a young girl who discovers a magical garden at her uncle's house. In the company of a local boy, her sick cousin and a stray dog, she explores this magnificent wonderland, unlocking secrets from the past that reveal a whole new life of hope and friendship. *The Secret Garden* co-stars Julie Walters and Colin Firth.



PODCASTS — INTERCEPTED

Intercepted is a thought-provoking podcast from investigative news publication *The Intercept*. New 60-minute episodes are released every Wednesday, delving into topics that often fly under the radar. The podcast offers in-depth analysis of issues such as the 2019 coup in Bolivia, the prosecution of Julian Assange and the cover-up of CIA torture.

IN

EAT SLEEP WORK REPEAT

EAT SLEEP WORK REPEAT

Hosted by Bruce Daisley, Twitter's European Vice-President, *Eat Sleep Work Repeat* focuses on how individuals and businesses can improve workplace culture. In each episode, Daisley interviews a different guest to get their insight on various aspects of life at work. Topics covered have included gender inequality in the workplace, evidence-based management and lots more.

TV SERIES — SELF MADE: INSPIRED BY THE LIFE OF MADAM C.J. WALKER

Directed by Kasi Lemmons and DeMane Davis / On Netflix from 20 March

A new four-part biographic series about Madam C.J. Walker, an African-American woman played by Octavia Spencer, who revolutionised the haircare industry and became America's first female self-made millionaire. The series portrays Walker overcoming post-slavery racial and gender biases, personal betrayals and more to build a ground-breaking brand as she simultaneously fought for social change.





BOOKS — THE TOPEKA SCHOOL

by Ben Lerner
Granta / RRP \$33

Ben Lerner's third novel graced many a top-10 fiction list at the end of 2019, although "fiction" is only partly accurate: like his protagonist Adam Gordon, the author was a high-school debate champion who grew up in Topeka, Kansas, the child of two psychologists. This is ostensibly a coming-of-age novel, although Lerner is less concerned with plot and more with exploring weighty ideas around masculinity and language. Jonathan Franzen fans will enjoy the virtuosic writing and uber-braininess. But if the thought of a teen character who ponders the "banal but supernumerary sublime of exchangeability" makes you roll your eyes, you might want to skip this one.

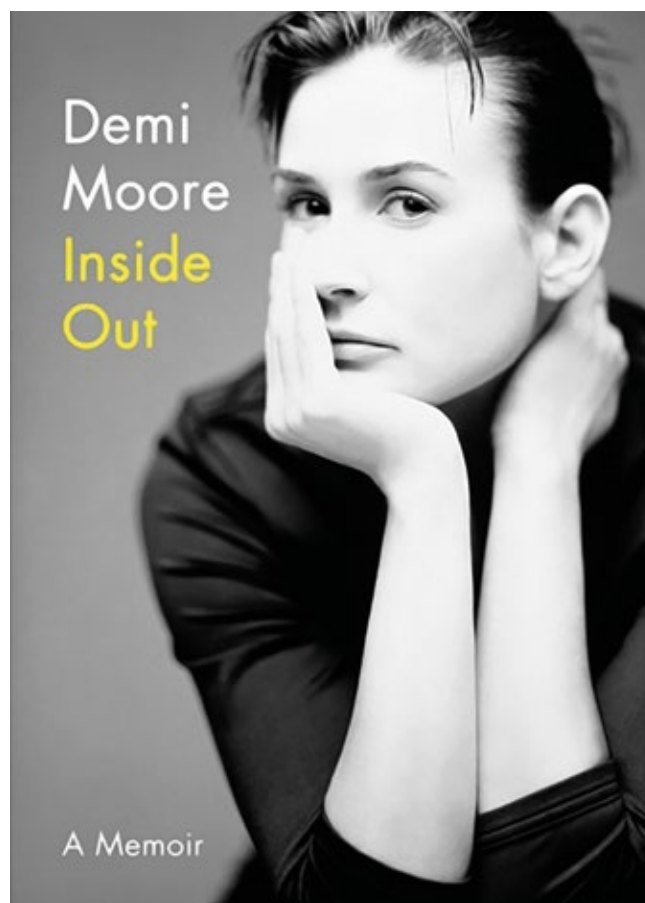
MAKE IT SCREAM, MAKE IT BURN

by Leslie Jamison
Granta / RRP \$37

"I found myself increasingly addicted to writing about lives or beliefs that others might have scoffed at," Leslie Jamison writes towards the beginning of *Make It Scream, Make It Burn*, her second essay collection. And she goes on to do just that, masterfully blending long-form journalism, criticism and memoir across an array of topics: children who claim to remember past lives, tourism in post-war Sri Lanka, devotees of the online virtual world Second Life, her own experiences as a stepmother. The subject matter couldn't be more varied, yet each essay wrestles with the same question: how much can we truly understand other humans' lives?



You don't need to be particularly interested in Demi Moore to enjoy it for what it is: a fascinating story, expertly told.



INSIDE OUT

by Demi Moore
4th Estate / RRP \$37

This is one of those rare celebrity memoirs that transcends fandom. You don't need to be particularly interested in Demi Moore to enjoy it for what it is: a fascinating story, expertly told.

It opens with Moore's rock-bottom moment in 2012, when she was recently divorced from Ashton Kutcher, depressed, scarily thin and estranged from her three daughters. A bad reaction to party drugs saw her rushed to hospital. Now the tabloids had even more reason to crow about the 49-year-old's downward spiral. "How did I get here?" Moore wonders, and then she tells us exactly how. A dysfunctional childhood, a first marriage at 18, fame, rehab, relationships with Emilio Estevez, Bruce Willis and Kutcher, public criticism, years of destructive dieting and exercising, motherhood, the loss of a pregnancy at almost six months – it's all here, in remarkably frank detail.

Inside Out was ghostwritten by journalist and author Ariel Levy, who deserves the highest praise for telling Moore's story with intelligence and sensitivity in what feels very much like the actress's authentic voice.

"I'm with the insurer that's started a foundation to fund health initiatives."

Kristine Gonzalez
Videographer and MAS Member

MAS has been busy doing good lately. We've established a foundation to fund health initiatives in our communities, we've been awarded Consumer NZ People's Choice across four categories* for four years running and we've continued to deliver outstanding service to Members like Kristine – especially at claims time.

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