

# re:think

NOVEMBER 2008

THE UNIVERSITY OF WAIKATO



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**WAIKATO**  
*Te Whare Wānanga o Waikato*

WAIKATO MANAGEMENT SCHOOL'S NEWSPAPER FOR BUSINESS

www.management.ac.nz

## Pacific policy a winner



University research confirms seasonal labour scheme off to a good start.

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## Caves conundrum

Waitomo Glowworm Caves call in the scientists to solve CO<sub>2</sub> mystery.



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## Dream team

How the WaikatoLink Hothouse is helping high-tech start-up Pingar crack global markets.



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## Sales supremos

Gen-i joins forces with Waikato Management School to boost sales training.



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# Pick up pace or lose race – tech expert

HERE'S a challenge for the new government: make innovation part of the national agenda, create a culture of innovation that is dynamic and supportive, and provide incentives for companies and entrepreneurs that push innovation.

Sound familiar? It should do. Bill Wilmot, an international consultant on technological innovation who's just made his second visit to New Zealand, says he's heard a lot of talk about innovation but so far hasn't seen much action.

But there are signs of progress compared with Wilmot's first visit to New Zealand nearly two years ago.

During his latest visit, sponsored by the University of Waikato Management School, Wilmot ran innovation workshops with the AgBio Innovators Academy, whose members include Fonterra, Gallaghers, Milfos and Innovation Waikato. He also held

separate sessions with AgResearch, ZESPRI International and other players in the kiwifruit industry.

"On my first trip people raised their eyes a little bit above the horizon. On the second trip, they were starting to build bridges leading to collaborative outcomes. Shaky bridges, but bridges nonetheless."

Wilmot's work focuses on taking ideas to market by creating a focus on the customer and building a solid value proposition through collaborative iteration. "It's not about the big idea," says Wilmot. "It's about bridging that gap between concept and customer value."

The value proposition starts with identifying a need or market opportunity, Wilmot says, and that's something which is often missing, Wilmot's acronym for this missing piece is DNA – the desire for change, new vision and action steps. "But if people don't feel the need for change then they won't take the action steps."

Traditionally content with the boat, bach and BMW, Kiwis perhaps don't see the bigger picture. "I'm struck by the fragile nature of all organisations. If one thing in the ecosystem takes a big hit and companies go belly up, then you won't be selling lamb in France. It's a very fragile world out there, and those who are agile and keep working on innovation are the ones who are going to weave their way through the changes."

On the plus side, Wilmot says New Zealand's small size and six degrees of separation gives it the edge over bigger competitors. "If you had an innovation agenda going, it could really take off throughout the country because everybody knows each other. Think of the collaboration that can be leveraged."

Globally, Wilmot is starting to see a top-level commitment to fostering innovation. "Top managers are not the innovators, it's the people in the trenches," he says. "But management – and government – must drive it strategically from the top. I was in China last February delivering this same message. Once they know it, they do it, and it's that quick. In New Zealand, things move at a more deliberate pace."

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www.sri.com/innovation

www.execed.ac.nz

Big tick for Zespri, Page 3



Photo: Chris Parker Photography

BUZZING: Toy e-tailer Shane Loomb knows how to pick them.

# Beeline for success

SHANE LOOMB has a real knack for picking toys people want. With 50,000 customers on its database in New Zealand alone, and 10,000 more in Australia, his Mt Maunganui-based company iQ Toys made it into the Deloitte/Unlimited 2007 Fast 50 with 161% growth in sales each year over three years.

And that's despite his early predilection for sea monkeys. "Sea monkeys were great, even though they never grew the regal crowns or monkey-like tails they showed on the packaging," says Loomb, his eyes lighting up at the memory of the tiny, nondescript brine

shrimps that once passed for easy care pets. But it's clear he hasn't let his soft spot for that triumph of marketing over substance affect his business judgement.

The University of Waikato Management School graduate says the customer is king for an online business like iQ Toys. "We really pride ourselves on our customer service," he says. "We try and offer a better level of service than you'll get in a traditional toyshop. With us, you're getting knowledgeable staff, prompt answers to phone and email enquiries, and a live chat online option if you're stuck for ideas."

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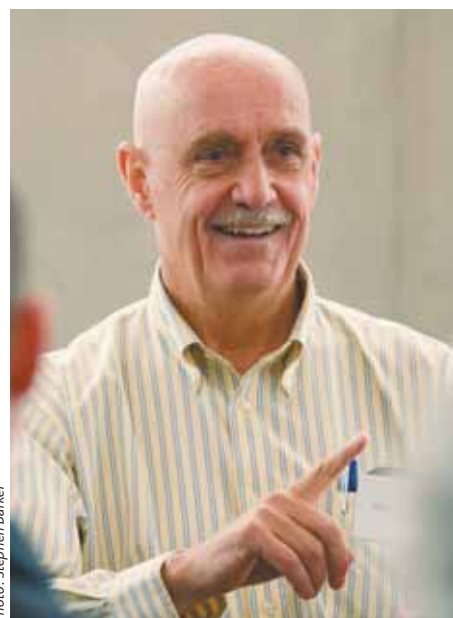


Photo: Stephen Barker

Bill Wilmot is co-author of a best-selling business book – *Innovation: The Five Disciplines for Creating What Customers Want* – and currently works on value creation with the Silicon Valley-based innovation hothouse, SRI International.

For more information on the University of Waikato's business outreach programmes, contact Scott Gemmill at [scottg@waikato.ac.nz](mailto:scottg@waikato.ac.nz) at the Centre for Corporate & Executive Education.

## EDITORIAL

## Adding value in an uncertain world

By Dean PROFESSOR FRANK SCRIMGEOUR

IT'S HARD to predict how a small country like New Zealand, dependent largely on agricultural exports and tourism, will fare in the post-financial meltdown global economy. But we can be sure that our relative geographic isolation won't shield us from the effects of the worldwide credit crunch.

It's in lean times like these that businesses reveal their true strengths. Firms that are focussed, with a clear business strategy, and the ability and flexibility to respond rapidly to changing circumstances will fare better than those companies which have gone along for the ride in good times, but neglected to lay a firm foundation for growth and development.

As an economist, I know that in a recession the key thing is to prioritise your spending.

The same is true for that other form of currency – human capital. Companies or individuals who cut costs on training and education, or on R&D, find the short-term saving has long-term consequences for performance.

In an economic downturn, the increased uncertainty favours firms and job applicants with the edge on their competitors. Creating and keeping that edge takes a certain willingness to think outside the square, and in this issue of re:think we look at some of the businesses and individuals who have done just that – with some help from us.

Take hi-tech start-up Pingar, for example, which has tapped into University of Waikato expertise to develop an innovative business software model for its new search engine. Or Gen-i, Telecom's corporate ICT subsidiary, which has joined forces with Waikato Management School to boost its award-winning in-house sales training programme.

Then there's the University research that's helping to fine-tune the Pacific migrant labour scheme, and another project that's identified key factors enabling a Matamata company to streamline its supply chain.

In all these cases, the University has been there to add value – through hands-on expertise and practice-relevant research.

Let's not forget our educational role. There's an argument that today's Gen Yers – who have never experienced an economic downturn (or known life without computers) – aren't really prepared for hunkering down in bad times. Maybe that's a good thing.

They're the generation coming out of university today, full of ambition and aspirations to make the world a better place. They've been trained to look for opportunities not obstacles, to deal with problems and not accept the status quo. So hire them! They may be just what we need in difficult times ahead.

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## Setting a course for Māori success

## COMMENT

By CHRIS KARAMEA INSLEY

TENA KOUTOU,

As a Māori business leader, I'm a kind of modern-day navigator. It's my job to chart a course and steer my 'ship' to its destination. But when you're in the uncharted waters of the globalised 21st century economy, sometimes you just have to draw your own map.

I found that out for myself when I left corporate New Zealand with my Waikato MBA and offshore experience, and went to work for a Māori business on the East Coast, where I come from. I was excited about applying what I'd learned at a practical business level in a Māori context.

But the truth is that not all corporate lessons fit perfectly with Māori ways of doing business. For Māori, business transactions have to be based on trust, that trust is built on understanding – and that understanding takes years to acquire. This was brought home to me graphically when I was inducted back into my roots in the Hinerupe marae meeting house in Te Araroa. In such a place, surrounded by your tipuna (ancestors), you're quickly reminded of who you are and who and what you represent, both now and in the future.

I found myself thinking: this is a business with a profit motive, but it's also got these other philosophies, what we refer to today as sustainability. The challenge I faced – as do business leaders universally – was how to marry the profit motive, which is as critical for long term (sustainable) Māori enterprise as it is for non-Māori enterprise, with the softer though increasingly more important environmental, social and indeed cultural drivers.

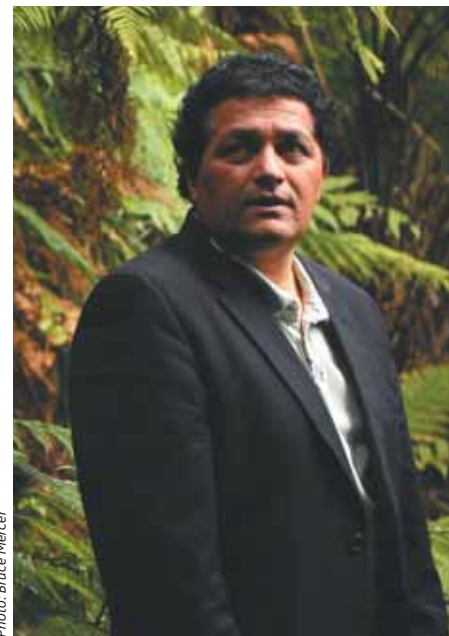
Five years later, we launched a commercial joint venture, a New Zealand first, which utilises funding from the London capital markets to create a large-scale carbon sink project on 30,000 hectares of Ngāti Porou land. Planting has begun to create perpetual forest producing carbon credits which can then be traded around the world.

The project stands to yield tens of million dollars for the landowners when it matures, and that's a conservative estimate. In addition, the project will resolve land degradation problems on the East Coast and create desperately needed local employment.

For the project's London-based financial backers, too, it's a hugely attractive project. One of the directors set up the Chicago Climate Exchange, and was drawn

by the idea of working sustainably with indigenous people.

I'm now looking to replicate this experience of setting up sophisticated commercial models in an indigenous context. The timing is perfect. With the Treaty settlements and the Treelords deal, the balance sheets for many Māori organisations have gone from zero to hundreds of millions of dollars overnight. As Māori, we will be charged with growing and managing these assets for future generations. This raises a host of opportunities – and challenges.



MAPMAKER: Chris Karamea Insley

Much of the Māori asset base is in land held collectively, which we won't put at risk. Historically, to New Zealand investors with their traditional business models, that's often been seen as risky, and they have shied away from substantive investment with Māori. But if we can get the governance side right, there are new business models out there – like the one I've described – that see it as a plus, offering security for investors. After all, there's no chance that land assets could disappear offshore like so many of our successful start-up companies have done. Therefore, growing and husbanding our assets will add substantive value to New Zealand as a whole.

On the skills side, we need people with a high degree of commercial acumen and practical expertise in managing risk and creating wealth. But we must ensure that we don't lose sight of the underpinning models of sustainable management that make us Māori who we are. I see a very real opportunity here for groundbreaking research

into governance models premised on wealth creation and social, environmental and cultural sustainable development.

As a country and indeed as Māori, we need to align the role of R&D, science and technology – key enablers to grow our land-based wealth. I've had meetings with iwi leaders from around the country who are keen to participate actively in New Zealand's science and technology endeavours to create wealth and well-being. Māori investment in R&D will take some years to yield any breakthroughs, but that sits fine with us as Māori. We're in it for the long term.

I hold a very strong view that sustainable development for Māori at the national, iwi, hapu, marae and whānau level will be premised on solid and sustainable economic development and utilisation of all our assets – land, seas, rivers and critically our people.

To achieve all this, we're going to need a new map. And to draw and interpret that map, we'll need some expert navigators (leaders) – highly educated Māori coming through our universities, equipped with skills in governance, management, science and technology, and entrepreneurship to drive and sustain our intergenerational economic development programme.

Located on Tainui land in the heart of the Waikato catchment area, the University of Waikato is uniquely situated to do just that. It has a reputation for practice-relevant research and teaching, a top-rate management school (that I can personally vouch for), and I applaud its commitment to making Māori part of its distinctive character.

The challenge ahead for the University is how to effectively reach out to Māori to enable and equip us with the tools we need for the voyage ahead to sustainable wealth and well-being. If done well, and given the growing role of Māori in the wider New Zealand economy, Māori economic achievement will substantively contribute to the well-being of all New Zealand.

There is much to do.

Noho ora mai ra.

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*Chris Karamea Insley (Ngāti Porou) is Managing Director of 37 Degrees South, a sustainable economic development consultancy with a particular focus on indigenous societies. He was previously general manager of Ngāti Porou Whanui Forests, and holds an MBA from the University of Waikato Management School.*

## High fashion and sustainable too

HIGH FASHION and sustainability don't usually go together, but top New Zealand designer Kate Sylvester has broken the mould, picking up a NZI Sustainable Business Network award this year for her company's efforts to green the industry.

Initiatives include Project Green aimed at reducing energy, waste and carbon emissions, and sourcing office supplies sustainably; the introduction of triple bottom line principles for decision-making, and a Carbon Transparency Project to monitor corporate emissions. The company is also incorporating organic cotton and eco merino fabric into its collections.

The annual SBN award for emerging small and medium business is sponsored by the

University of Waikato Management School. "It's encouraging to see a New Zealand manufacturing business successfully implementing sustainability principles in their everyday operations," says the School's dean, Professor Frank Scrimgeour.

The big challenge for Kate Sylvester is her commitment to manufacturing onshore, but she's convinced there's a market out there for quality products, backed by ethically and environmentally sustainable practice and production. "Fashion need not be transient or encourage excessive consumerism," she says. "We aim to provide leadership by example throughout the fashion industry."

www.katesylvester.com  
www.sustainable.org.nz



STYLE AND SUBSTANCE: Kate Sylvester receiving the SBN award from Professor Frank Scrimgeour.



Photo: Chris Parker Photofix

SHANE LOOMB: "Phenomenal opportunities to market across media."

## Hot tips for online retailing success

1. Be prepared for hard work, 60-80 hour weeks are not uncommon.
2. As in any business, you have to look after your customers, understand cash flow, and manage your business goals.
3. Develop an easy-to-use, attractive website and constantly brainstorm new ideas to make the online shopping experience more compelling.
4. Think about your point of difference – you can't compete on price alone.
5. Understand your target market, structure your marketing around websites potential customers will be looking at, products they're after.
6. Remember you're vulnerable to economies of scale, so unless you focus on a niche or have another competitive strength you may struggle.
7. Back up, back up and back up again.

# Toy e-tailer stays ahead of the wave

From Page 1

Loomb employs six staff, including an in-house web developer, rising to 20 in the run-up to Christmas, and carries more than 5,000 product lines in the company's giant warehouse. The focus is on quality toys with an educational slant, marketed through the iQ Toys website. A related site, Baby Universe, offers over 1,000 items of baby gear.

"The advantage in being an online business is that we can hold unique products that might be slower moving but have novelty value, like the quick chess set which speeds up the game so kids don't lose interest," he says.

"The other big advantage is that we can track our marketing so we know what's working and what isn't." iQ Toys mainly markets itself online, through affiliate programmes with other websites and pay-per-click on search engines like Google.

"The trick is to get people coming back to check our site regularly," says Loomb. "One of the ways we do that is by offering a 'deal of the day', which also helps us move stock."

Loomb has also launched Toy Secretary, an online service which reminds customers of upcoming birthdays and offers suggestions for gifts. The service is particularly popular among US customers.

In the pipeline is a push to expand further into Australia and a separate website for Kiwi-made toys. Loomb is also looking at adding customer video reviews "to add interest and excitement to our site", he says. "You've got to be innovative in design and functionality, so we're constantly trialling new things and updating our websites."

Loomb credits his Waikato University Bachelor of Management Studies with honing his business acumen. "The BMS had a lot of substance to it," he says. "It was broader than your average business degree, more like an MBA, and it was really, really good to go out and do a practical research project in the fourth year."

## Just in time for Christmas

### Shane Loomb's top toy picks

1. Lego Star Wars
2. iTeddy
3. In the Night Garden plush toys
4. Cranium WOW
5. Chatter Rings
6. Khet Laser Strategy Game
7. Logiblocs
8. Leapfrog Tag Reader
9. Zipbins
10. Hyperdash

His early business ventures included silk handkerchiefs for businessmen and handmade back massagers, and he also had a stint working at Audit NZ.

iQ Toys opened for business in 1996, virtually the second year of the internet, and initially Kiwi customers were reluctant to shop online so nine out of 10 orders were being shipped to the United States. "No-one was doing toys online at that time, and if I'd launched the business in the United States I'd be a multimillionaire by now," Loomb jokes.

But he believes online retailing has now come of age. "We're a nation of good shoppers," he says. "That coupled with improving access to broadband, our openness to new technology and entrepreneurial flair means that there are going to be phenomenal opportunities to market across media with the advent of TV shopping and video product demos."

Sea monkeys, Loomb admits, just might not have cut it in an online retailing world.

[www.iqtoys.co.nz](http://www.iqtoys.co.nz)  
[www.babyuniverse.co.nz](http://www.babyuniverse.co.nz)  
[www.toysecretary.co.nz](http://www.toysecretary.co.nz)

# Big tick for Zespri

REASSURING isn't the first word that springs to mind when describing US-based innovation consultant Bill Wilmot (see story on p1). Encouraging, yes; but Wilmot pulls no punches when it comes to turning ideas into customer value.

Yet for Bryan Parkes, new products leader for the innovation team at ZESPRI International, Wilmot's innovation workshop was proof that the New Zealand kiwifruit industry is headed in the right direction. Wilmot led the Tauranga workshop during his second visit to New Zealand sponsored by the University of Waikato Management School.

"When Bill talked about key criteria for market success – identifying need, value creation, innovation champions, innovation teams, and organisational alignment – we could say yup, yup, yup," he says. "That was reassuring."

"ZESPRI's co-operative structure – where the growers are shareholders – is great for encouraging innovation," says Wilmot.

"Everyone's on the same team, they're not competing with each other. Plus they're one of the few companies that's actually got an innovation process."

Recent innovation success at ZESPRI includes the development of new kiwifruit cultivars and better orchard management tools to improve yields, fruit taste and environmental performance. For example, ZESPRI has helped encourage growers to adopt new technology which has reduced spray drift by 90%. Deployed last year, the technology is already being used by 60% of the kiwifruit industry.

This year the team at ZESPRI have introduced a funding scheme to encourage growers to undertake robust on-orchard trials – and help generate the next 'big idea' for the industry.

Parkes says ZESPRI sees innovation as one of the keys to retaining competitive advantage. The company spends \$10 million a year on R&D and technology transfer.



Photo courtesy of ZESPRI International

INNOVATION IN MOTION: New technology has cut spray drift by 90%.

The ZESPRI eight-person innovation group reports directly to the top executive team, and also consults monthly with an advisory forum made up of ZESPRI executives, board members and industry representatives.

"Most of us in the innovation group have science backgrounds, but each project has a cross-functional steering group which then pitches a business case to the advisory forum." Parkes concurs with Wilmot that the hardest part is commercialisation. ZESPRI makes

use of customer and grower focus groups to make sure they haven't missed anything important, but Parkes says you can never have enough collaboration.

"If we can build greater engagement with the entire kiwifruit industry, then we can get better quality ideas and faster uptake. We're getting on top of costs and quality is going up, but we need to get faster at developing and implementing innovation."

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## TAKEOUTS

## Innovation and growth

Research which aims to uncover the role played by innovation in economic growth has won \$705,000 in funding from the Marsden Fund for the next three years. The Marsden Fund is a government-backed contestable fund which supports excellence in leading-edge research in New Zealand.

Waikato University's Professor Philip McCann, in collaboration with Professor Les Oxley from the University of Canterbury, will seek to develop a new theoretical model and empirical analysis regarding the role played by innovation in economic growth.

They'll be examining the relationships between the characteristics of the firm, the industry and the economic geography, and resulting links between innovation and growth as mediated by each of these sets of characteristics.

"New Zealand is a great testbed for differing theories and models," says McCann. "Geographically, it's basically a straight line with its main centre at one end, it's got a limited number of people and good data collection systems. That makes it easier to analyse the role that regions and cities play in innovation, and how changes in the urban structure contribute to changes in innovation."

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## Māori in the workplace

A kaupapa Māori research project into workplace relations has secured \$300,000 over three years from the Marsden Fund.

Associate Professor Jarrod Haar of Waikato Management School says the project will look at what influence support of Māori culture might have in all organisations employing Māori. He plans to survey 400 Māori workers and another 400 employers – split between Māori and non-Māori organisations – relying more on face-to-face meetings and hui rather than traditional mail-out questionnaires.

"I suspect companies that are more supportive of indigenous culture will have a more satisfied workforce which in turn will have positive benefits for the organisation," he says.

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# Cash injection gamble could prolong crisis expert warns

IN THE wake of the meltdown of the world's financial markets, governments have banded together to offer the most enormous insurance policy to financial institutions by guaranteeing deposits. That's certainly helped with restoring confidence – and liquidity – in the market.

But finance expert Associate Professor Stuart Locke of the University of Waikato Management School says we're now entering uncharted territory. "It's been a very unregulated environment," he says. "And the interdependence of financial institutions means no individual government has the ability to put things back on track."

He says political issues have clouded the debate on a possible way forward. "The timing of the crisis so close to elections in New Zealand and the United States makes policy discussion much more political. It is hard enough to be objective when the multiple forces at play are not clearly understood, without being caught up in how to gain political advantage out of it. Leadership is important and the restoration of confidence requires strong leadership."

The worry now is that the financial safety-net extended by governments including New Zealand could shore up over-extended financial institutions and simply prolong the crisis. And then there's the issue of fairness. "It's a bit hard for investors hit by the collapse of finance companies over the past twelve months to sit back and watch the government intervene now to bail out other savers and investors," says Locke.

"As with all good ideas, the devil is in the detail. If the policies and rules are not near perfect there are very real dangers. It was investors looking for returns, thinking there were free lunches, that caused the crash, and they will be looking for any nice little opportunities to exploit a moral hazard opportunity to claw back lost dollars."

But in reality, whatever New Zealand does will be a drop in the ocean. New Zealand, he says, is a mere minnow in financial terms. "Given the concentration of our banking is foreign-owned, if these banks get into trouble elsewhere, a country the size of Sydney is not going to be the big issue."

The bigger question is what all this will mean for our economy.



**STUART LOCKE:**  
"As with all good ideas, the devil is in the detail."

While the softening NZ dollar may help to shore up key exports, Locke says key indicators to watch will be the number of dairy conversions, rural land prices, and tourism numbers. Farmers sitting on a lot of debt, and highly geared SMEs (many of which rely on discretionary expenditure in the retail, hospitality and service sectors) could be hardest hit.

"We'd expect an upturn in investment in the hospitality industry for the 2011 Rugby World Cup, but that could be a casualty of the crisis. A lot of the tourism industry is made up of small and medium-sized businesses, and they're the most vulnerable to an economic downturn."

Locke advocates policies to help immunise SMEs against some of the difficulties they're likely to face in an economic downturn. "We want to ensure that trade finance and access to finance remains open," he says. "Falling property prices which often secure small business loans must be monitored but we need to avoid debt/equity ratio panics."

As the picture becomes clearer for New Zealand, regional issues may also become more obvious. "The resilience of the region and the initiatives of key regional organisations have not yet received much attention," says Locke. "But we need to be thinking carefully about where the recoveries might come from."

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## Job security 'at risk' in global market

A WAIKATO law lecturer wants the Employment Relations Act amended to give more protection in a global market from unjustifiable dismissal.

Jacquelin Mackinnon, a senior lecturer at the University of Waikato Law School, says New Zealand prides itself on having an easy-to-understand act, and on speedy resolution of employment problems. However, she says it needs changing to provide protection for workers in today's global market as it's not always clear which land's law employees are governed by.

Although it's assumed by many that New Zealand law covers people working here for a multi-national company, that's not always true. Mackinnon cites the case of the dismissal of an employee working in New Zealand, in a New Zealand division of an Australian company. When challenged about the dismissal, the firm argued that despite not being explicitly stated in the

contract, Australian law applied to the man's employment agreement. Eventually the Employment Court in New Zealand decided that the laws of Victoria applied.

Mackinnon says it's a perfect example of how timely and costly these cases could become. She suspects we're seeing only the tip of the iceberg – nobody knows how many cases are settled through mediation.

She wants to see three categories under New Zealand statute covering unjustifiable dismissal protection: for standard cases (employees working in New Zealand); peripatetic cases (such as airline crew or salespeople who have a base in New Zealand which is where their work begins and ends) and expats (where the New Zealand employee is overseas on the business of the New Zealand employer and is not based here but there is a strong enough connection with New Zealand for the staffer to be protected by our statute).

Mackinnon's proposal would also protect employees seconded from New Zealand to work elsewhere, but would not impact on New Zealand companies such as Telecom hiring call-centre workers offshore, where the employee's connection to New Zealand is incidental.

Mackinnon acknowledges it could be hard getting changes made. It's not an issue high on anyone's radar and it will meet resistance from some quarters, she says. "My solution is not going to be a dream outcome for everyone. But I would like it expressly stated in New Zealand statute that certain classes or categories will be covered by the ERA."

It's not as much of an issue for employees with good relationships with their employers and employers who follow proper processes for dismissal, but many firms should be addressing the issue of territorial contracts now, rather than waiting for legislation change, she says. "My advice to New Zealand



**JACQUELIN MACKINNON:** Pushing for change in Employment Relations Act.

employers in terms of sharpening up their systems and pro-forma contracts is to take legal advice because of the complexity of this. Make sure that what you are thinking of doing is what the Employment Court understands you are doing."

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# Winners all round in NZ's Pacific Island labour scheme

SIUA'S dream of buying a tractor to work his traditional gardens on the Tongan island of 'Eua may become a reality, thanks to a New Zealand seasonal worker initiative.

Siu (not his real name) is one of the first 5,000 workers from 11 eligible Pacific Forum countries selected for the Recognised Seasonal Employer (RSE) scheme.

Launched a year ago, the programme aims to relieve short-term labour shortages in the horticulture and viticulture industries while raising skill and income levels for poorer Pacific Island households.

First indications are that the scheme is succeeding on both fronts, so much so that Australia is looking to set up a similar scheme.

"It's a win-win situation," says Professor John Gibson of the University of Waikato Management School, who's collaborating with Dr David McKenzie on a World Bank-funded longitudinal study of the initiative. "The scheme allows workers to send remittances home and gain new skills without the source country losing the worker permanently."

Gibson and McKenzie's co-researcher is Hala Rohorua, who's completing her PhD at Waikato. Tongan herself, she's overseen a series of surveys of 450 households in Tonga to study the impact of the scheme; another 450 households in Vanuatu are also being separately surveyed.

The researchers are working closely with the Department of Labour, which is funding an extension of the survey to Samoa.

The household surveys cover a whole range of issues – personal details, income, health, education, church affiliation. "I'm the eyes and ears of the research team," quips Rohorua. "The information we're gathering is unique. When you spend two to three hours asking questions, you feel very humble being allowed into these people's lives."

So far she's surveyed migrants like Siua before they left home and during their stay in New Zealand, and is planning a follow-up survey once they return home.

"As a control, we also surveyed a group who registered for the RSE scheme but didn't go, and another group that didn't register," says Rohorua. "Our results confirm that the scheme is targeting poorer, rural households as expected."

"And while there have been some teething troubles, on the whole the scheme is a great opportunity, particularly for a country like Tonga where 40% of the economy is based on overseas remittances."

Bay of Plenty kiwifruit supply company Seeka employs about 3,500 seasonal workers, and this year took on 600 workers from Tonga, Vanuatu, Samoa and the Solomon Islands through the RSE scheme.

Miriam Hutchings, Seeka's seasonal HR manager, says it's been a positive experience overall, although there are some things Seeka will do differently in 2009.

"We'd definitely look at dropping numbers and making better use of our seasonal staff, particularly in quiet periods," she says. "There just wasn't the staff turnover we had expected, and morale is a lot lower when the work tails off."

Hutchings also believes there needs to be greater clarity around pay and performance. "This season we ended up having to make costly top-ups to bring pay up to the minimum wage level," she says. "But we see this year as an investment in the scheme, and next year we hope to see a return on that investment when the seasonal workers come back with some experience under their belt."

She also stresses the importance of building relationships. "We built up a good rapport with the team leaders, and found that closer supervision



Photo: Chris Parker Photographix

**CLIP ART: Pacific Island workers pruning in a Te Puke kiwifruit orchard.**

leads to better performance, a better work ethic and a more content workforce."

Researcher Hala Rohorua found the Tongan RSE workers too had concerns about levels of pay, hours (particularly Sunday working) and accommodation.

"The excitement of coming to New Zealand overrode everything else, some workers didn't even read the contract they signed," she says. "But they felt they were representing their community, so they decided to stay on."

"The big question is: what happens now? Take Siua for example. Did he manage to save enough money to buy that tractor, and will he come back for another stint of seasonal work? That's what we hope to find out in the next round of interviews."

The research can help the Department of Labour to fine-tune the scheme, and it's also useful for prospective employers. "At Seeka, we've learned a lot from our experience with the RSE this year," says Miriam Hutchings, "but for smaller employers going into the scheme, having this information available is of real benefit."

Professor Richard Bedford heads the Population Studies Centre at the University of Waikato, and with Gibson sits on the DoL advisory board for the overall evaluation of the RSE scheme. He says the research is critically important for the evaluation of a very ambitious policy initiative.

"New Zealand's seasonal migration policy is a response to a challenge from the leaders of Pacific countries to provide more opportunities for paid work for their youthful populations," he says. "Where researchers like John and his colleagues can add value is in designing robust methodologies for assessing whether the scheme is delivering on its basic objectives. The early results are quite positive in this regard."

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Photo: Chris Parker Photographix

**EARN WHILE YOU LEARN: "The RSE scheme allows workers to send remittances home and gain new skills without the source country losing the worker permanently."**

## Research key to cheaper transfers

A RESEARCH team led by the University of Waikato Management School Professor John Gibson has found remittance fees for sending money back to the Pacific Islands are among the highest in the world.

Between 15% and 25% of money sent from New Zealand is eaten up in transaction fees and unfavourable exchange rates. The findings have prompted one New Zealand-based funds transfer company to go back to the drawing board.

In consultation with the World Bank and Pacific Island communities, Pan Pacific Transfers Ltd has collaborated with independent retailer DTR and mobile phone company Digicel to create a reliable, low-cost funds transfer system which has cut the cost of remittances by more than half.

It now costs just \$5 for an RSE worker to transfer money back to family in Vanuatu, down from about \$30, says PanPac's general manager, Nick Lisette. "We've set up a unique scheme designed for the RSE market which so far we've rolled out in Vanuatu, Samoa, Tonga and the Cook Islands. In the next six months we expect to be everywhere in the Pacific."

The RSE scheme works like a direct debit, allowing workers to remit a percentage or fixed amount from their pay each week directly to a bank account in the Islands.

Alternatively, people can opt to transfer money through one of 30 branches of DTR across New Zealand. At the other end, PanPac has launched weekly van runs to make sure the remittances get to even the most remote villages.

"Professor Gibson's research has been core to our system redesign," says Lisette. "We've already smashed the target set by the government of 5-7% fee per send by 2009, and we aim to be the first choice for Pacific people sending money home."

[www.panpactransfers.com](http://www.panpactransfers.com)

## The right chemistry

IT MAY look like an old-fashioned mainframe computer coupled to a chemistry set, but the University of Waikato's inductively coupled plasma mass spectrometer is making a significant contribution to the regional economy.

Since it was made available to industry in 2006, the ICP-MS, as it's known, has been the key to solving a multimillion-dollar waste water contamination problem for the goldmining industry, and it's also providing vital data which could allow more visitors the chance to experience the Waitomo Glowworm Caves (see separate stories).

Housed in a special lab, the ICP-MS equipment is in high demand from researchers, but commercial clients also have access to this top of the line \$800,000 facility. It's one of only three mass spectrometers in New Zealand with a laser ablation attachment capable of handling both liquid and solid samples for trace element analysis. A second ICP-MS has just been installed.



"Most of our clients are looking to identify trace elements in water and sediments and we can supply them with data to ppb (parts per billion) levels," explains specialist ICP-MS technician Steve Cameron (pictured). "Our clients also include Hort Research and Lincoln Ventures Ltd, and the arrival of the new instrument has opened up capacity for a lot more commercial work."

Just down the corridor from the mass spectrometer lab is the chromatography lab, part of the University's commercial ChemServices operation, run by Associate Professor Marilyn Manley-Harris, who's also chair of the Chemistry Department.

Some of the commercial work is contracted, in other cases companies can work with an undergraduate or masters student through a government-funded Technology Internship, formerly known as TIF.

"We carry out analytical services for a number of biotechnology and agribusiness companies and organisations," says Manley-Harris.

Working with industry is a win-win situation, she says. "It's a great way for undergraduates to get hands-on experience in the lab, analysing everything from plant probiotics and fertilisers to lanolin and honey. It gives them an excellent grounding in analytical chemistry, which is what employers want."

"And for us, it's an excellent way to recruit graduate students. I've never had anyone work for me in the lab who didn't go on to do graduate studies."

To find out more about using the ICP-MS contact Steve Cameron at [stevecam@waikato.ac.nz](mailto:stevecam@waikato.ac.nz) or visit [www.mass-spec.co.nz](http://www.mass-spec.co.nz)

## Scientists tackle caves conundrum

TOURIST attractions can become their own worst enemy, particularly when they're located in a fragile underground environment like the Waitomo Glowworm Caves. The delicate limestone architecture is vulnerable to high levels of carbon dioxide in the atmosphere, and just breathing can put stalactites and stalagmites at risk.

Tourism Holdings Ltd's Shelley Katae heads the team that manages the Waitomo caves, and with up to 2,000 visitors a day, it's her job to get the balance right between tourism and environmental protection. "We monitor the cave atmosphere continually, and that means occasionally we have to close the caves briefly to visitors," she says.

Visitor numbers are strictly controlled to ensure CO<sub>2</sub> levels in the caves remain below 2,400 parts per million (ppm). Normal atmospheric levels are around 350 to 380 ppm.

But from time to time CO<sub>2</sub> levels in the caves peak even when there haven't been any visitors. "Looking back over 10 years' worth of data from the caves, we can see that about 15-20% of the variation is unexplained," says Waikato University earth sciences student Natalie Miedema, who's being funded by THL to study the cave atmosphere for her MSc.

Together with her supervisor Associate Professor Chris Hendy, Miedema is working on a theory that rainfall events may push large amounts of carbon dioxide into the cave. "So we've been monitoring the carbon dioxide levels and the chemical composition of the cave streams and stalactite drip waters to compare with the cave air."

Miedema is also analysing water samples collected daily by cave guides using

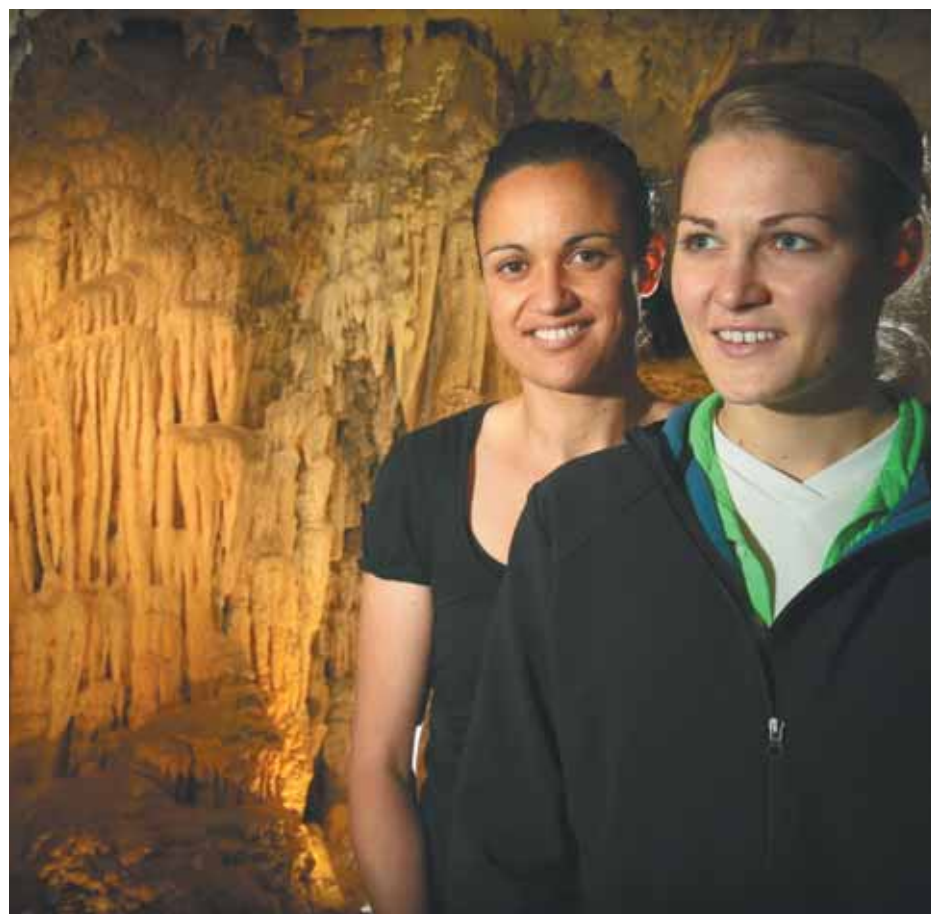


Photo: Bruce Mercer

CO<sub>2</sub> SLEUTHS: Shelley Katae and Natalie Miedema.

the University's new inductively coupled plasma mass spectrometer (ICP-MS). "This instrument can analyse hundreds of samples per day at precisions of better than one part per billion, unheard of a decade ago," explains Hendy.

By accounting for naturally occurring variation, Miedema's research could provide the data needed for a reassessment of the limit on CO<sub>2</sub> levels in the caves.

Cracking the carbon dioxide puzzle, says Katae, would be a big step forward. "Ideally, we'd like a better understanding of the factors affecting the cave environment so that we can make better operational decisions. We don't want to disappoint visitors who've travelled a long way to see the glowworms, but ultimately we have to protect this unique resource for future generations."

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## There's gold in them thar tests

WHEN mining company Newmont Waihi Gold was faced with a costly shutdown of its new underground goldmine because of problems with waste water, the mine's plant metallurgist Jacob Croall knew just where to turn.

He'd heard Waikato University's School of Science and Engineering had purchased an inductively coupled plasma mass spectrometer (ICP-MS) – just the right piece of kit to detect minute concentrations of heavy metal contaminants in the waste water stream coming from the mine's processing mill.

"We'd already identified that a particular heavy metal, antimony, would be a problem but we didn't realise just how fast it could build up," says Croall, who has a MSc in chemistry from Waikato.

"To operate the mine we needed to guarantee that the antimony levels in our waste water were below Newmont's discharge consent conditions. We couldn't wait three weeks for test results, we needed that guarantee fast."

Thanks to some speedy lab work using the University's ICP-MS, Croall was able to show that the antimony levels could be controlled by upgrading the water treatment plant.



Photo courtesy of Newmont Waihi Gold

CLEAN MACHINE: A reverse osmosis plant has brought Newmont's discharge water back into spec.

The upgrade cost Newmont \$350,000; a snip compared to the \$1 million a day cost of shutting down production at the mine – plus it meant the company could deliver on its environmental commitments to the community.

But to maintain discharge consent compliance and production over the long term, Croall knew Newmont needed to investigate much higher tech water treatment options.

"We were able to accommodate Newmont's needs in providing instant turnaround and advice on antimony chemistry," says Associate Professor Chris Hendy, who supervised Croall's Masters research. "Jacob was able to show after extensive modelling of climate and chemistry

that the conventional water treatment plant required the addition of a reverse osmosis plant to guarantee discharge water quality, now and in the future."

The \$11 million reverse osmosis plant has proved successful in controlling antimony levels, and Croall says without such flexible access to the University's facilities the cost would have been a whole lot higher.

"The future of goldmining within the wider Hauraki Goldfields region will depend crucially on our ability to effectively manage environmental issues and community concerns," says Croall. "The link with the University of Waikato will be an important relationship in achieving this."

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# Hothouse aids entry into global market

BUSINESSES looking for unique solutions to unique problems might do well to follow the example of Pingar, a high-technology start-up company with offices in Tauranga and London, and tap into the University of Waikato's expertise through the WaikatoLink Hothouse.

Pingar has developed a breakthrough internet search engine, due to be launched shortly, which aims to take the frustration out of web browsing by using natural language search to extract the relevant information. Then it compiles a customised dynamic PDF document, with references back to the source material – all within seconds.

"The difference between Pingar and conventional search engines is that you can ask a question rather than searching on keywords," says Pingar's managing director Peter Wren-Hilton. "It's almost like having a research assistant to do the browsing for you, except it's free to users."

To make the platform commercially viable, Pingar needed to develop software for the business model. The company found the perfect mix of expertise in business analysis, networks, algorithm implementation and operations management at the Hothouse, which is part of WaikatoLink, the commercialisation company of the University of Waikato.

"I regard the Hothouse as a virtual technology development team," says Wren-Hilton. "They work on the clever bits, and they're there when we want to make use of them."

Wren-Hilton gave the Hothouse team of four the job of writing the technical specification for the business end of the Pingar platform. They had to develop algorithms which gather general, demographic profile information on subscribers, and allow advertisers to bid for the right to target their advertising at specific demographic groups.

"Every time a subscriber logs on to request a free report, the advertiser can place a banner on top of the report," explains Wren-Hilton. "That will cost them say 50c. We take a proportion of that revenue, and the algorithm then divvies up the rest between the information content owners."

It's the scale of the operation that makes the model commercially viable, he says. "If we're generating 10 reports a second, then the content owner ends up with a fairly sizeable cheque."

The unique challenge for the Hothouse team has been to tackle the whole process from both the



Photo: Bruce Mercer

business and software perspectives. "We started off by doing some process design work to understand and model the behaviour of the system," says Nick Waterhouse, who has a MSc in computing from Waikato. "We had to ensure the design was robust, secure and scalable, as potentially thousands of people could be using it at one time."

Carl Ebberts is completing a Master of Management Studies at Waikato Management School, and one of his jobs was to research consumer behaviour in the bidding process. "It was important to create a fair process where any player, big or small, has the opportunity to win advertising rights," he says.

Initial development is nearing completion, and the Pingar platform will first go live in the UK, with entry into the US market scheduled for 2009.

"The WaikatoLink Hothouse allows businesses like Pingar to tap into the specialist knowledge and multidisciplinary skills we have here at the University," says WaikatoLink's Bram Smith, who oversees Hothouse projects.

Pingar's Wren-Hilton says the Hothouse collaboration funded in part by the Foundation for Research, Science and Technology, has helped prompt the company's decision to retain its R&D in New Zealand.

"The next step will be to identify a longer-term roadmap for technical development around the Pingar platform," he says. "We'll be looking to the WaikatoLink Hothouse and the University for further potential collaboration."

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**DREAM TEAM:**  
(from left) Nick Waterhouse, Carl Ebberts, Luke McGregor and Peter Wren-Hilton.

## TAKEOUTS

### NZIER Economist of the Year

Professor John Gibson of the University of Waikato Management School has been named Economist of the Year by independent research group NZIER for his outstanding contribution, of lasting importance to New Zealand, to the field of economics.

A prolific researcher, Gibson is a frequent – and often critical – commentator on controversial issues such as KiwiSaver and NZ Superannuation and the growing gap between public sector and private sector pay.

Gibson's joint research projects include one with Stanford University in the United States and the Chinese Academy of Sciences to map poverty and environmental change in China, and one with the World Bank, Motu and the Department of Labour to study migration from the Pacific Islands to New Zealand (see story on p5).

He was recently awarded \$410,000 over two years to continue his Marsden-funded research into the wealth and health effects of migration.

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### Fieldays boosts economy

A study by the Management Research Centre at the University of Waikato shows that the National Fieldays 2008 benefitted New Zealand as a whole by \$865 million. The economic impact on the Waikato region was \$265 million, and record attendance figures led to sales activity worth \$285 million. The study was overseen by Professor Frank Scrimgeour and Associate Professor Stuart Locke.

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### Partnership planned to meet region's needs

The University of Waikato and Bay of Plenty Polytechnic have increased the number of joint programmes they will offer in Tauranga.

Programmes in health management, computer science, marine studies, agribusiness and graphic design will join those in accounting, marketing, tourism, management, finance, law and teacher training that are already offered.

The programmes are designed so students can move seamlessly between the two institutions, from entry level papers to degrees. The idea is to address skill shortages in the region by offering a portfolio of tertiary programmes that are matched to the region's needs and strengths. The partnership should also ensure that there's a solid research base to assist with the development of new business opportunities as well as addressing the needs of existing business.

*www.uwt.waikato.ac.nz*

### Doing our tourism better

Regional tourism in New Zealand needs help. The Waikato, for example, doesn't have a Regional Tourism Organisation, most RTOs are underfunded, and only some work in cooperation with their local authorities and relevant organisations and operators. In a new book, *Regional Tourism Organisations*, Waikato University tourism management lecturer Dr Anne Zahra has taken an in-depth look at RTOs and how they function within government policy, local and national authorities and public and private tourism organisations. Zahra's main focus is destination management and its alignment with destination marketing which she says would work better if it were less fragmented and more synchronised.

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## From the Olympics to Hamilton's V8s

PLANS to ensure regional businesses in the UK get their fair share of business opportunities at the 2012 London Olympic Games could benefit Hamilton businesses at the next V8s, says Sandra Perry, CEO of Hamilton City Council's Business Development Centre.

"Small businesses in the Frankton area just didn't have the scale to bid for V8 supply contracts this time round," she says. "But if we use some of the practical help strategies they've come up with in the UK for the next Olympics, then next time round we can make sure local small businesses have an opportunity to benefit from the V8s."

Her idea was sparked by a recent Waikato Management School seminar given by small business expert Professor David Smallbone of Kingston University in the UK, who consults internationally on enterprise development strategies.

Smallbone explained how the English regional development authorities had created an online



**PROFESSOR DAVID SMALLBONE:**  
Opening up Olympic opportunities for SMEs.

database to match suppliers with buyers of goods and services for the 2012 Olympics. About 80,000 businesses are in the process of registering.

"We recognise that SMEs are not going to be first tier suppliers for the Olympics, but opportunities can exist throughout a supply chain," he says. "We can also offer free assistance with the inevitable paperwork, and encourage SMEs to pool resources to meet any contractual requirements which will help them get onto accredited lists of suppliers."

Waikato Management School's Associate Professor Stuart Locke, who's also on the board of the Waikato Chamber of Commerce and the Small Enterprise Association of Australia and New Zealand (SEANZ), says seminars like this are an ideal way for local councils in New Zealand to find out what works and what doesn't in regional development elsewhere in the world.

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## Gen-i going green

WHEN Telecom subsidiary Gen-i decided to develop ways to reduce its carbon footprint, it called in Waikato Management School students to get some creative thinking around sustainability.

Given raw data and Gen-i company documents, third year strategic management students worked in teams to complete written sustainable innovative business plans for Gen-i to a standard that could be presented to the Telecom board. They then pitched their plans to Bart Brichau, Hamilton-based regional manager, design & delivery.

"The competition provided students with a great 'real life' opportunity to test the viability of their ideas," says lecturer Dr Jenny Gibb, who designed the competition.

The winning strategy recommended Gen-i become a completely sustainable, carbon neutral company and also suggested it offer products and services to customers to assist them to become more sustainable. It proposed redesigning Gen-i's data centres into 'green' data centres, enforcing a 'green employee' policy, developing and marketing emissions control software, implementing an IT recycling scheme, offering and implementing state of the art video conferencing technology, and changing all company cars to eco-friendly vehicles.

Brichau says Gen-i's intention is to be carbon neutral. "We're a pretty green industry anyway with the majority of our footprint being electricity use. The winning team's strategy was well developed and 'do-able'. They understood the global view and then drilled down to specific examples including time frames and financials.

"Since working with the students, I'm happy to report that we've reduced our travel budget by 10% and are preparing to deploy video conferencing."

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## Sales skills boost for Gen-i

BEING a good sales person requires a lot more than product knowledge and the ability to talk up features and benefits. Sales are key to business survival yet selling is not regarded as a prestige occupation and rarely is it taught at tertiary level.

That's about to change with a new collaboration between Telecom's corporate ICT subsidiary, Gen-i, and the University of Waikato Management School. From 2009, Gen-i staff will be able to study for a Postgraduate Certificate in Management Studies, specialising in sales management.

Gen-i already has its own Sales Academy and graduates from its in-house programme will be able to enrol in the new qualification that'll be delivered by faculty from the University's Centre for Corporate and Executive Education.

"Too often sales is seen as a subset of marketing," says John Woodyard, sales and service academy manager at Gen-i. "But it's a stand-alone discipline far removed from the silver tongued sales person or product hustler of old. Today's sales people have to have leadership skills and need to understand business and the wider world they're operating in. They have to be able to move easily in any sector of business and be able to map technical solutions to business pressures. To do that, they require a depth of business understanding and education."

Woodyard says Gen-i chose Waikato Management School to deliver the postgraduate sales qualification for a number of reasons. The School has successfully led Telecom's Leadership

Development Programme for a number of years, it's ranked the number one business school in New Zealand, and Woodyard says he liked the people he was dealing with from Corporate & Executive Education. "They talked through what we wanted in a constructive way, they weren't overbearing and didn't come loaded with theory and preconceptions."

Associate Professor Roger Brooksbank has already worked with Gen-i on its salesperson assessment panel and he's impressed by what Gen-i has already achieved in its academy. "It's probably the best in-house training that I've come across by a country mile," he says.

Fifty Gen-i staff have graduated since 2005 and it was Gen-i graduates who asked to extend their education still further.

"It's about providing our people with more tools to enhance their revenue generating capability," says Woodyard. "ICT is a tough market, and the better service we can provide for our clients, the more successful we will be. Doing this qualification with Waikato Management School will enable us to take client relationship skills to an advanced level."

The four postgraduate papers that make up the PGCert may count towards the Waikato MBA if Gen-i staff wish to continue with tertiary study. The papers will cover relationship management, strategic marketing, global marketing and action learning - where students apply an area of their study to their daily work. Gen-i staff will fit their study round their jobs and use case studies relevant to ICT.



Photo courtesy of Gen-i

**JOHN WOODYARD: Providing sales staff with more tools.**

Waikato Management School dean Professor Frank Scrimgeour thinks it's a win-win for both organisations. "The qualification will give Gen-i access to some leading researchers in sales and marketing, while for us, we can use aspects of Gen-i's best practice models in our research and teaching."

Brooksbank, who's the author of *Hot Marketing, Cool Profits* and *How to Close More Sales*, says it's probably time New Zealand followed the US lead and placed sales as a stand-alone subject in tertiary education. "You could say that sales has been a bit of a late developer in academia, but perhaps that's changing now."

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THE UNIVERSITY OF  
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 Te Whare Wānanga o Waikato



Photo courtesy of Metso Minerals  
**TEAM METSO:** Managing change from within has allowed Metso to increase output and business efficiency.

## Supply chain savvy boosts output

ANY business can listen to good advice but acting on it is another story. A couple of years ago Metso Minerals in Matamata was going through huge expansion, so quickly it was in danger of 'growing itself to death'.

The business approached Waikato Management School's supply chain expert Dr Paul Childerhouse for help and agreed to a Quick Scan – a company audit that basically dissects the business, digs into internal and external systems and processes and talks to staff about how things are done. The Quick Scan team analysed all the information they'd gathered and returned to Metso with a raft of recommendations all geared towards increasing its business efficiency.

Two years on there've been major changes to the way things are done at Metso and they're not finished yet.

Metso Minerals makes rock crushers – huge machines that are exported all over the world. In 2005 Metso made 80 Barmac crushers, in 2006 they made 106, they built 161 last year and this year the business will produce more than 220. That's rapid expansion, and when the Quick Scan team went in during 2006 Metso was experiencing speed wobbles. "They were struggling in four major areas – communication, planning, training and process control," says PhD student Tillmann Boehme, part of the Quick Scan team. "We thought Metso would be better to address the problems from within rather than bringing in a team of consultants to make sweeping changes and go away again. We advised taking on staff who could manage change."

Metso employed Carl Herbst, a manufacturing manager who'd introduced and overseen change in a large South African organisation and who'd had extensive lean manufacturing and Toyota Production System (TPS) experience.

"I read the Quick Scan report, did some study and observations of my own and set about implementing new systems," says Herbst. "We started in the profile shop and had some nice wins early on, which helped me in my new role. A lot of things were being done

because they'd been done that way for the last 30 years. It didn't please everybody but we had to change that old way of thinking if we were going to remain competitive located in Matamata and operating in a global market."

Herbst set up mission-directed work teams throughout the plant, making staff at all levels in all areas responsible for their own morale, quality, output, problem solving, health and safety, and training and skill upgrades.

Jane Belton has been promoted from inventory co-ordinator to production planner since Herbst arrived and sees the success of the

new culture about the place. "People have been forced to analyse why they're doing things and they're speaking out in a way they never did before," says Belton. "We used to live and breathe by the shipping schedules – something out of our control was setting our deadlines. That's all changed now – we know our capacity and fit shipping around production. It might sound small but it's made a big difference."

After the Quick Scan audit, Belton began studying for a Graduate Diploma in Supply Chain Management at Waikato Management School. "It's been great, I've been able to take what I've learnt in lectures straight back to work. I've just done a knowledge management paper and realise that's a key area that we need to address. We've got people here with 30 years worth of information – most of it in their heads."

Belton says Metso is definitely a 'work in progress' – they've taken on about 20 new staff and lost some along the way, while production continues to increase.

Waikato's Dr Paul Childerhouse says New Zealand lags behind the rest of the world, particularly Europe when developing integrated supply chains. "Typically New Zealand supply chains are dogged by functional silos and hierarchical organisational

structures and this results in a lack of co-operation and lots of waste. Yet with globalisation it's imperative we become more efficient and customer focussed to compete."

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### Streamlining the supply chain

- > Only make products that can be quickly despatched and invoiced to customers.
- > In one time-bucket, only make components needed for assembly in next period.
- > Streamline material flow and minimise throughput time.
- > Use the shortest planning period/smallest run quantity that can be managed.
- > Only take deliveries from suppliers in small batches as needed for processing.
- > Synchronise time-buckets throughout the supply chain.
- > Form natural clusters of products and design processes for each value stream.
- > Eliminate all uncertainties in all processes.
- > Understand, document, simplify and only then optimise the supply chain.
- > Streamline and make highly visible all information flows throughout the chain.
- > Use only proven, simple but robust decision support systems.
- > The operational target is to enable the seamless supply chain.

## Lean and mean: Fine-tuning production practices

CARL Herbst from Metso Minerals in Matamata was one of about 55 participants at a lean manufacturing meeting held in Hamilton recently. It was run by NZTE who've been working with Waikato aviation companies to streamline their production practices. Peter Smyth, sector manager with NZTE, says lean manufacturing is something his organisation's been pushing for a while now. "We think it's needed in New Zealand manufacturing, and the amount of interest being shown in the Waikato is encouraging."

"We started working with one particular company in April and since then they've taken 25% of labour out of one assembly

area and almost 40% out of another. Think what that does for productivity."

Smyth says any manufacturer should be able to reduce labour by 10%. "If you can't, then you're not committed; 20% or even 30% is not unheard of."

He says implementation costs mean payback is likely to be neutral in the first year, but after that a firm should expect substantially more production.

"Say a business makes 100 units a year. If labour hours can be cut by 33% then those 100 units should only take eight months to build, and if in the remaining four months you build another 50, then productivity has gone up 50% in a year."

Waikato Management School's Dr Paul Childerhouse says leanness is an excellent approach to removing waste and increasing functional supply chain efficiency. "War stories can be a powerful learning approach. Meeting and discussing examples of good practice and how to overcome difficult obstacles is arguably the best way for practitioners to translate theoretical concepts into meaningful plans of action."

Childerhouse is currently setting up a supply chain innovation network to build beyond lean production to the broader concept of seamless supply chains.

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## TAKEOUTS

### Top website ranking for School

A leading Spanish research institute has ranked the University of Waikato Management School as the top Australasian university business school for its web presence – based on the number of external links to its site, the number of web pages on its site, and the number of documents and publications cited by the Google Scholar database.

Waikato Management School ranks 55 out of 300 worldwide, ahead of all other New Zealand and Australian business schools. Cybermetrics Ltd, a public research body, says the aim of the ranking is to support open access initiatives. The web indicators measure the global visibility and impact of the scientific repositories.

[http://business-schools.webometrics.info/top300\\_mba.asp](http://business-schools.webometrics.info/top300_mba.asp)  
[www.management.ac.nz](http://www.management.ac.nz)

### Top line marketers head conference

Marketers – practitioners and academics – will have the opportunity to hear experts in their profession at a conference being hosted by Waikato University in the new year.

The conference will feature the latest research on how marketing actions influence firm value and the effects of advertising, promotions and new products. "There will also be presentations about online shopping behaviour and online consumer communities; sessions on the value of customers to firms and what happens when competitors enter a market, and much, much more," says conference organiser Professor Harald van Heerde. "It's an opportunity to witness firsthand world-class research in marketing that may very well influence how businesses plan and execute their marketing activities in the next decade."

Among the speakers will be Gerard Tellis from the University of Southern California who's an expert on new product success and advertising, Russ Winer from the Stern School of Business at New York University and Executive Director of the Marketing Science Institute, and from UCLA Mike Hanssens, an expert on long-term effects of marketing actions.

[www.management.ac.nz/marketingdynamics2009](http://www.management.ac.nz/marketingdynamics2009)  
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### Don't do it – don't slash your room rate

In the current competitive market it's tempting for hotels and motels to slash their room rates but Waikato Management School tourism academic Associate Professor Tim Lockyer says 'don't do it'.

"Operators think that so long as the lower room rate covers fixed costs in the short term then a discount can be given – and you can see why it's tempting," says Lockyer, "but the effects are damaging in the long term."

Lockyer says international research indicates that prices for accommodation drop quickly but take a very long time to recover and many hotels and motels are actually charging less today than they were five years ago in real terms. "The problem is that once a guest receives a discount it becomes hard to raise the price again."

Lockyer says once one property starts discounting it's hard for others not to follow suit and this often results a price war and reduced profitability across the whole market.

Rather than discount, Lockyer recommends keeping the room rate constant but adding value to the product, say offering a meal or a bottle of wine in the price.

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## TAKEOUTS

## Waikato MBA grad wins Microsoft endorsement

A Hamilton-based software development company, founded by Waikato MBA graduate Graham Gaylard, has been selected by Microsoft as one of only about 400 'high-potential managed independent software vendors' worldwide. NetValue offers webhosting functions, cutting-edge search technologies, and integrated database and software systems for web and PDA delivery. The link-up with Microsoft will give NetValue access to its own personal Microsoft 'architect evangelist' and support with global marketing of its products.

[www.netvalue.net.nz](http://www.netvalue.net.nz)

## Settling down in Godzone

Research by Waikato University doctoral student Charis Brown shows that New Zealand isn't always an easy place for Pacific Islanders to settle.

Brown has been awarded a \$10,000 BRCS (Building Research Capability in the Social Sciences) award to complete her doctoral studies into understanding the dynamics of Pacific consumption. She's used visual diaries to study how people change as consumers when they arrive in New Zealand. People from Samoa, Tonga, Fiji and the Cook Islands recorded up to 50 hours of footage that captured their reflections on increased product choice, fast food outlets, cheaper prices, higher wages, changes in technology and being away from family.

"But the biggest change for participants was the change in value systems – the switch from collective to individual," says Brown. "Some people felt isolated and displaced and found family members in New Zealand no longer held the same cultural values that they had in the islands, and that contributed to feelings of sadness and loss. People in New Zealand focussed on themselves, immediate family and on personal ownership rather than the extended family and community."

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## The ultimate PR challenge

Convincing the world that NATO needed to intervene in Kosovo was deemed the 'ultimate public relations challenge', and how and why the North Atlantic Treaty Organisation communicated its strategy for military intervention in the region has been scrutinised by Waikato Management School's Dr Michele Schoenberger-Orgad.

In her new book, *Communicating Strategically: Public Relations, Organisational Legitimacy and NATO's bid for Kosovo*, Schoenberger-Orgad claims that NATO needed Kosovo more than Kosovo needed NATO.

"With the Cold War over, NATO was becoming a bit irrelevant," says Schoenberger-Orgad, "so what better way to keep it going but to get busy somewhere else? It undertook a major public relations and information effort to persuade people of the legitimacy of the military intervention and the relevance of the organisation."

Schoenberger-Orgad hopes her examination of the Kosovo Campaign will enliven the debates about public relations versus propaganda and also the legitimacy of using military intervention for humanitarian purposes. "Kosovo provided a hinge in history," she says. "NATO's intervention changed the way people thought about war and how wars were fought."

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# Business skills bear new fruit for award-winning orchardist

HORTICULTURE is big business in Northland and poised to get bigger, particularly with increasing corporate investment in citrus and avocados.

And despite not having a "single green finger", Waikato University graduate Duane Wells is keen to play a leading role in the region's horticultural growth, not just on the family's persimmon and lemon orchard, but also in attracting, training and retaining workers in the sector.

The family business is known as NTL Horticulture and 30 year-old-Duane Wells is its managing director. Recently, NTL bought a one-third share of a private tertiary training company called Ruraltec that trains workers from foundation to management in horticulture and agriculture. Wells manages the horticulture side of Ruraltec. He's also chair of the Northland Horticulture Forum, established to promote horticulture in the region and to attract secondary students to stay in the area and work in a growth industry, and provide a vehicle to develop and support commercial horticulture.

Wells is one of those people who had to go away to learn that home ain't such a bad place after all. He left Whangarei and studied a Bachelor of Management Studies at the University of Waikato, majoring in marketing and management communication. After graduating he did a couple of sales jobs and then moved into marketing for New Plymouth's Western Institute of Technology. Four years ago, he returned home to help out in the packhouse during the busy persimmon season and ended up staying.

"I liked university better than school - the self directed learning suited me, and I know after graduating the degree helped open doors for me. Coming home, my business skills helped me see how NTL Horticulture could expand and add to existing areas of the business."

Most recently the business has expanded its post harvest production. "If you want to keep your staff you've got to have something for them to do most of the time, and that's hard in a seasonal business. So we've bought an avocado packing business which means we'll be using our packhouse nearly all year round and we're developing skilled contracting groups that can move within our business ventures and to other horticulture ventures in our region – providing more efficiencies and profitability to our business structure."

Wells says they're always looking to develop the business but not for developing's sake. "We've identified gaps in the national and global horticultural markets which I believe warrant serious research to take full advantage of. It's about taking control of the supply chain. Again, my BMS has been useful because it's set me up with knowledge of all areas of business practice. It was relevant."

On the marketing side, NTL Horticulture exports about 80% of its persimmon crop, to Australia and South East Asia and Wells says he's chasing more Australian markets because of the market potential and lower freight associated costs in comparison to Asian and European markets. Japan is the favoured target market for Yen Ben lemons.

NTL is a true family business. Dad Lindsay Wells manages the orchard and has been quite an inventor by necessity, mother Terrie is the major administrator and Duane's sister Bronwyn has also returned to assist on the property. "We have some lively planning sessions and I tend to be the calming influence," says Wells. "Must be my management communication training. The strengths of family business are the informal sessions. We've had some of our best ideas with a beer in one hand and a fishing rod in the other. You do have to separate the dinner table from the board table, but once done the unit becomes very



**DUANE WELLS:**  
"I look at things from a business point of view, but in everything we do we consider the environment. We have to. You can't be in this business without keeping a solid eye on the environmental impact your business is having."

tight knit and efficient as we're all in complete understanding and agreement as to the goals and direction of the business."

At the 2008 Ballance Farm Environment Awards NTL entered for the first time and picked up four of the eight awards; for nutrient management, innovation, coastal community and life, and joint winner of the harvest award. The Northland awards, now in their third year, are to promote sustainable and profitable farming in the region.

"I look at things from a business economic point of view, but in everything we do we consider the environment. We have to. You can't be in this business without keeping a solid eye on the environmental impact your business is having." Wells says NTL Horticulture probably uses less fertiliser than most orchards because they have six different soil types, have spent 15 years getting the base levels right and continue to fine tune. Waterways are fenced and they use soft chemicals and integrated pest management for pest control wherever possible.

Wells is positive about Northland's future. "Despite an unreasonable number of weather bombs, people still remain optimistic. I think the future is bright and buoyant." And keen to continue a leadership role in the family business and the industry in general, Wells has recently completed the New Zealand Horticulture Leadership programme and is currently taking part in MAF's Inspired Futures Programme. His mentor is former Heinz Watties' CEO Peter Lucas.

"Peter's been great for me in developing a more a corporate mentality and in developing strategy to achieve that with NTL. And I think that horticulture is going to get more corporate. There will still always be niche markets for the boutique grower but with the rising production and compliance I fear that only the large will survive in commercial horticulture, which is why NTL Horticulture is exploring all avenues to ensure the business continues operating and developing well into the future."

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# Want to study in an environment that's already thinking sustainably? There's no stopping you.



At the University of Waikato sustainability is more than just a load of hot air. It's a major focus in our research, helps shape the way we think and act, and underpins the development of our teaching programmes and practices.

It's not just about saving power (though we do that too) but understanding that intergenerational equity applies to our economy, society and culture as well as the environment. What's more, our Management School is a leader in sustainable business, a gold foundation member of the Sustainable Business Network and a strategic partner of the New Zealand Business Council for Sustainable Development.

Leading the way to a sustainable future.



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For more information or an enrolment pack freephone 0800 WAIKATO or visit [www.waikato.ac.nz](http://www.waikato.ac.nz)

# How green is your tippie?

THE number of wineries in New Zealand keeps growing – 600 at last count. And despite tales of world-wide surpluses, demand for New Zealand wine continues and new less-traditional markets are out there to be secured.

But competition between wine producing countries is huge and for the New Zealand brand to be wine of choice is a big challenge. What could distinguish the brand is our clean green image, only the environmental practices of wineries don't always stack up clean and green (with the exception of carbon neutral Grove Mill).

Associate Professor Michele Akoorie and Dr Paresha Sinha from the University of Waikato, with colleagues in the US and South Africa have been studying environmental practices in 'new world' wineries. New Zealand winegrowers have developed a draft sustainability policy that aims to have all New Zealand grapes and wines produced under independently-audited sustainability schemes by vintage 2012, and the US and South Africa are also developing sustainability programmes.

What the New Zealand-based researchers found is that the main drivers for improving a winery's environmental habits come from internal rather than external influences. "Sixty per cent of New Zealand wine is exported and so we were curious to know whether exporting was one of the main drivers for wineries becoming more environmentally conscious," says Sinha. "It is a driver, but not the most important one, and regulations aren't a key driver either. In New Zealand, far and away the biggest driver was internal stakeholders – winery employees."

The researchers surveyed the environmental practices and attitudes of 127 New Zealand wineries,

looking at their use of energy, water, waste, chemicals and recycling efforts. "New Zealanders – far more than the Americans and South Africans – were more likely to want to be good stewards of the land. Irrespective of external pressures and regulations, they were adopting good practice. We got the impression that it's values that make the difference; a cultural, professional and lifestyle connection to the environment."

Sinha says this is different from most other business environments where it's usual for regulations to be put in place, then new practices become the norm and gradually people's values change.

"We also asked if it was the attitude of managers or owners that led the charge to good practice, and again found that that wasn't the case, and again that was unexpected given the predominance of small and medium enterprises, where managers have relatively direct influence on decisions and operations." In South Africa, managerial influence was stronger than in New Zealand for sustainable pick-up.

But don't expect wineries to be rushing off and becoming organic, says Sinha. Fewer than 4% of wineries surveyed were going down that path because respondents felt going organic meant a decreased yield and no improvement in wine quality. Sinha says of the environmental practices surveyed, energy efficiency was the only one that had clear and direct impact on cost savings.

"I think it is fair to say that the wine industry, long perceived as having benign impacts on the environment, is beginning to experience the environmental pressures that managers in heavy industry have known for decades, but what's good is that some are taking it on themselves to be environmentally responsible." But Sinha says there remains a gap between attitudes and actual practice and the research will continue to find out what the barriers to implementation are.

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**DR PARESHA SINHA:** Winery employees are the biggest driver for environmental awareness.



Photo copyright: New Zealand Winegrowers

# Honey to star in an even sweeter role

MANY of us reach for the honey to soothe a sore throat. But we could soon be choosing honey for its ability to reduce scar tissue, battle stomach bugs and fight free radicals.

The University of Waikato's world-renowned Honey Research Unit has made a breakthrough in both discovering that some honey has anti-inflammatory activity, and devising a way to measure it.

Professor Peter Molan, who directs the Honey Research Unit, says honey with proven levels of anti-inflammatory activity will be able to reduce inflammation caused by some radiation treatments, and for helping heal wounds. It's inflammation in wounds which stops them from healing and causes ugly scars. Treatment with anti-inflammatory honey will heal them quickly, with little scar tissue, he says.

Molan says this anti-inflammatory discovery is critical; he predicts the ability to measure level of activity will eventually be more important for selling honey than the antibacterial activity manuka honey is already known for. Researchers are seeking

a patent for the system of measuring the anti-inflammatory activity.

In 1998 Molan devised the Unique Manuka Factor test, which shows the level of the unique type of antibacterial activity in manuka honey. The UMF rating is the accepted methodology worldwide for testing each batch of manuka honey to show its antibacterial properties. The domestic and export market for UMF honey sales is worth about \$100 million a year.

Although manuka honey has made a name for itself around the world as an antibacterial agent, Molan says all honey is thought to have therapeutic benefits. Ancient Greeks and Egyptians were big fans of honey's medicinal purposes, he says.

However, because honey is so variable, it's not easy to scientifically establish what causes which health benefits. "Bees collect what is essentially a herbal medicine," Molan says. "And, as we know, different plants have different effects, so every batch of honey varies."

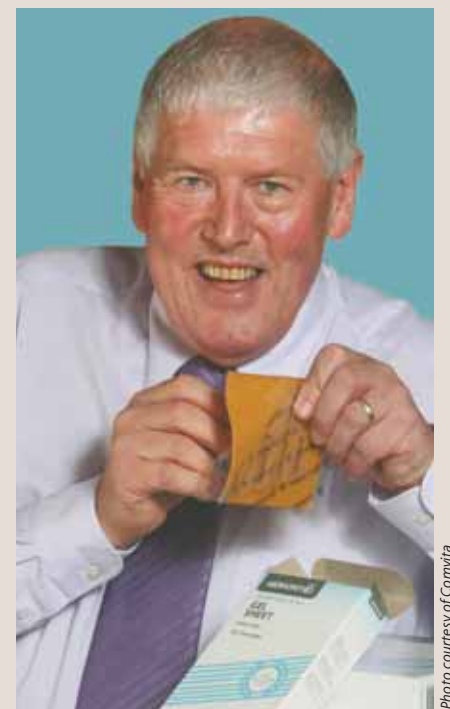
The Honey Research Unit has about 15 staff working full-time to discover what honey

can do – then explain it scientifically. Recently they've seen results that show that even in a diluted form, honey has an impact on boosting the white blood cells needed for immunity, and on combating gut-infecting bacteria such as campylobacter.

"If we can show scientifically how honey works, it makes it much easier to convince the medical fraternity to use honey, which doesn't have the side effects of drugs."

The Waikato researchers have also recently identified an exceptionally protective type of antioxidant activity which can fight free radicals in the body. It works by stopping free radicals forming in the first place, rather than trying to make them inactive, which Molan says is a hit-and-miss affair. The researchers have developed a test to measure the levels of this activity and a Dunedin company, NZ Honey Co, is now selling honey with a proven high level of this valuable type of antioxidant activity into health food chains in the UK and Hong Kong.

*www.honey.bio.waikato.ac.nz*



**PROFESSOR PETER MOLAN:** Honey dressings can reduce scar tissue.

Photo courtesy of Comvita

## The University of Waikato

### Waikato Management School

Te Raupapa

Waikato Management School's purpose is to inspire the world with fresh understandings of sustainable success. The School's corporate and executive education programmes are a vital resource for the business community in developing learning programmes that strengthen business.

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