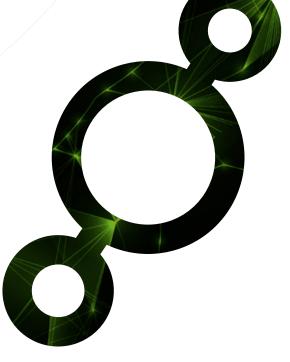


DRIVINGPROSPERITY
FROM SCIENCE
AND INNOVATION





ANNUAL REPORT /18









ABOUT KIWINET

Since its inception, KiwiNet and the wider Commercialisation Partner Network have demonstrated the power of bringing together diverse players across the science & innovation ecosystem to work towards a collective vision for New Zealand. Together they are driving us towards a globally-competitive technology sector that delivers significant economic growth and prosperity. The foremost ingredient for success is collaboration.

KiwiNet is the combined power of New Zealand's Universities, Crown Research Institutes and other research organisations who receive public funding. They are dedicated to taking a collaborative approach to research commercialisation. Together these research organisations represent a total combined research expenditure of over \$500 million and represent 75% of the publicly funded researchers in New Zealand.

FUNDING

KiwiNet is funded from the shareholder research organisations, corporate partners and the Ministry of Business, Innovation and Employment.



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KIWINET IS THE DRIVING FORCE BEHIND CREATING A HIGH VALUE EXPORT ECONOMY FROM PUBLICLY FUNDED RESEARCH.

CHAIRMAN'S REPORT

KiwiNet and the Commercialisation Partner Network are now recognised as the champions of the collaborative effort to make all manner of discoveries in our public research organisations investor ready.

What was once a maverick play has now become mainstream, as we demonstrate our collective ability to lift the impact of our Universities, Crown Research Institutes, entities and the growing number of independent research organisations.

Impact is a word that resonates with KiwiNet.

We gathered to shape the KiwiNet Shareholders' Agreement in the Innovation Centre at the University of Canterbury when the devastating earthquake struck in 2011. A seismic shift, literally and figuratively, as we sought to disrupt the sub-optimum siloed approach and substitute a collaborative culture.

Then we reckoned success would be measured by economic impact and how well our new way of working would accelerate ideas to investment ready propositions. We have much to show for our collective efforts, but there is so much more to come.

The Treasury then reported against economic milestones as well.

These days New Zealand is pioneering a living standards framework. Wellbeing is measured by reference to four capitals: natural, social, human and financial/physical.

In my time Chairing KiwiNet since its inception, I have seen discoveries and proposals that advance all four capitals. As always it is science to the forefront as we search for radically better outcomes.

Much should be demanded and expected from the \$1.5 billion of public investment in science, and KiwiNet can claim to have played an active part in unlocking the promise of discoveries.

There have been two keys to our effectiveness.

The power of the collective wisdom and enthusiasm from science leaders who are ambitious for the ideas. These are the people who serve on our Board, who persuaded their institutions to become shareholders, who contribute as members of the Investment Committee, who front the proposals and form part of the KiwiNet team. All combine to generate new momentum for science impact.

The second player has been the state. With the funding of the Commercialisation Partner Network and the PreSeed Accelerator Fund, the state has chosen to be an investor of first resort to ensure that the commercialisation possibilities are powered up where otherwise they would linger in the lab.

The payoff has been palpable. Not content with the well documented early impact, KiwiNet has a strategic ambition to quadruple the quantity and value of new ventures and high-value licence deals emerging from our pipeline by 2023.

It is clear NZ will not meet its economic, environmental and health challenges in particular, without our science playing a prominent part. The disruptive forces are evident and New Zealand needs to make sure we keep driving for new and innovative edges.

Given our beginning, as the earthquake took its toll it was fitting to conclude our last board meeting with a tour of the Ernest Rutherford science tower at the University of Canterbury, celebrating a giant of NZ science and moulding a new generation to come.

I sign off in awe of what I have witnessed; fine New Zealanders who believe in the cause, fertile and clever minds who test their ideas and commit to advance them, dedicated professionals who coach and coax often shy scientists to commit to commercialisation.

I particularly want to pay a tribute to those who have held positions of responsibility on the Board, served on the Investment Committee, and been part of the small but skilled KiwiNet team.

We would never have persuaded Ministers to fund the cause, new shareholders to commit, philanthropists to back, and scientists to put their hand up without those KiwiNet activists.

I am confident that just as our cohort of Emerging Innovators will go on to make a splash, so too the new Chairman Ngaio Merrick, backed by her Board and management team so ably lead by Dr James Hutchinson, will ensure that KiwiNet is the leading light for advancing research impact.

Hon Ruth Richardson / June 2018 Chairman, KiwiNet

KiwiNet's
overriding
mission is to get
publicly-funded
discoveries
private-sector-ready.

CEO'S REPORT

Albert Einstein once said that "we cannot solve our problems with the same thinking we used when we created them".

It's clear that we need to set ourselves and the innovation community some bold ambitions if we are serious about changing the game for New Zealand. We need to leverage our cutting-edge research discoveries to create the new products and services that will diversify our economy and drive our future prosperity. That's why we've put our peg in the sand by committing to increase the quantity and value of new ventures and high-value licence deals emerging from the KiwiNet pipeline within five years. And from talking with thought leaders and colleagues from around the innovation ecosystem, there is a growing collective sense-of-purpose that this is a critical ambition for the future of New Zealand and that the timing is right.

We have seen significant momentum build within the research commercialisation space in recent times. Not only are KiwiNet PreSeed Accelerator Fund investments generating a greater than five-fold return on investment for NZ in terms of business revenue and job creation, there is a real sense of energy across the ecosystem as universities are recognising the critical role that commercialisation and a well-resourced Technology Transfer Office (TTO) plays in delivering impact from research discoveries, that in turn fosters an entrepreneurial culture across campuses and builds reputation. Our Crown Research Institutes are recognising that a strong commercial group provides the critical capability to build entrepreneurship across their research base while providing important opportunities to develop new business models, products and services that will diversify revenue streams, creating future sustainability and enabling their science to have a maximum benefit on New Zealand.

The past 12 months have seen some significant successes and milestones. The Emerging Innovator programme, generously supported by the Norman Barry Foundation, continues to grow and strengthen, with 3 new ventures formed and our first graduation ceremony attended by science minister Hon Dr Megan Woods in November. A new KiwiNet Commercialisation Internship programme has attracted the best and brightest entrepreneurship graduates from around the country, placing them within our TTOs and commercial groups, providing vital capability and supporting new talent to enter this important career space. In collaboration with Return On Science, we hosted the Knowledge Commercialisation Australasia Annual Conference in Wellington in September. This attracted over 100 delegates including a record number from New Zealand and brought together the two commercialisation communities for the first significant cross-ditch collaboration. And a new Advisory Panel initiative

has brought together our Corporate Partners BNZ, MinterEllisonRuddWatts, Baldwins and PwC to bring their deep knowledge and networks to bear on early stage commercialisation projects.

This is the tip of the iceberg and yet there is so much more to do. We know that the first step towards quadrupling our outcomes is to also scale the number of researchers choosing and valuing our commercialisation channel as the best pathway-toimpact for their science. And this must be accompanied by a parallel increase in the quality and quantity of commercialisation capability within our research organisation TTOs and Commercial Groups. These areas form our primary focus for the year ahead. An increase in demand at the front of our pipeline will require more investment. That is why we are working with our colleagues in Government to articulate a future for the Commercialisation Partner Network (CPN) and PreSeed Accelerator Fund when this mandate is refreshed from July 2019. This is an exciting opportunity for Government and all those active in the research commercialisation ecosystem to further energise what is a critical intervention for the future prosperity of New Zealand and what will ultimately provide the products, services, entrepreneurs and businesses that will deliver the solutions to the sizeable challenges we face.

As KiwiNet moves into the next bold and exciting phase of our existence, I thank the energy, wisdom and spirit of our devoted founding Chairman Hon Ruth Richardson. It is through her efforts and leadership that KiwiNet has been able to deliver tangible impact and she leaves us with a bold ambition to move from great to even greater.

Dr James Hutchinson / June 2018 CEO, KiwiNet



We're excited about the growing collective sense of purpose and high level of ambition which is critical to creating the best future for New Zealand.

HIGHLIGHTS

KiwiNet Investment Committee

The Investment Committee met 8 times across New Zealand and reviewed a record 70 commercialisation projects. KiwiNet PreSeed Accelerator Fund investments are generating a greater than five-fold ROI for NZ in terms of business revenue and job creation.

KiwiNet Awards

The fifth KiwiNet Research Commercialisation Awards brought together the innovation community to celebrate successes and inspire others. 293 people attended the evening reception where the 12 finalists and winners were showcased in style. The event reinforces the value of research commercialisation in the innovation community, the value of the Commercialisation Partner Network and the importance of KiwiNet as a champion of this space.

Knowledge Commercialisation Australasia (KCA) Annual Conference

KiwiNet worked with Knowledge Commercialisation Australasia (KCA) to bring their annual conference to Wellington on 7-8 September. This proved a valuable opportunity to bring together technology transfer professionals from across New Zealand and Australia to learn from each other and drive best practice. 56 of the 97 attendees were NZ tech transfer professionals. The conference was opened by the Minster for Research, Science & Innovation, Hon Paul Goldsmith.

KiwiNet's Corporate Partners

KiwiNet's Corporate Partners provide expert support to projects and Emerging Innovators. They play a key role in nurturing new talent and driving projects forward to achieve their full potential. MinterEllisonRuddWatts, Baldwins and PwC have supported 17 projects. PwC has developed and delivered a bespoke business writing course for KiwiNet's Emerging Innovators and other stakeholders.

Operational Funding

The Ministry of Business Innovation and Employment (MBIE) has provided Commercialisation Partner Network (CPN) funding through to June 2019 for KiwiNet, Return On Science and ChristchurchNZ. This investment is a strong signal of confidence in our success and the value that we deliver from publicly funded research. It provides a solid platform for KiwiNet to target strategic initiatives and ramp-up its investment to strengthen the research commercialisation eco-system.



New Shareholder

Cawthron Institute became the fourteenth shareholder of KiwiNet, confirming their support for KiwiNet's ethos and building a science-led economy.



KiwiNet Emerging Innovator Programme

The Emerging Innovator programme has gone from strength to strength with an additional \$75,000 provided by the Norman Barry Foundation and a total of 28 innovators progressing through the programme to date. In November 2017 KiwiNet held its first Emerging Innovator Alumni event where 11 innovators graduated.

KiwiNet Internship Programme

KiwiNet's new Commercialisation Intern Programme sees interns placed within a KiwiNet partner organisations for six months where they work on real technology commercialisation projects, gaining important early experience to pave a way into careers in commercialisation.

Building Commercial Capability

382 researchers and 93 tech transfer professionals took part in KiwiNet commercialisation training initiatives last year as well as events led by our partners. Events included GetFUNDED, GetINVESTED, Pitching 101, LESANZ licensing training, PwC's business case writing course, Smarten Up Your Ideas workshops, plus the KCA conference and workshop.

CORPORATE PARTNERSHIPS

KiwiNet is delighted to have ongoing sponsorship from valued corporate partners:

- Strategic Partner, Bank of New Zealand substantial support around events and promotion in 2017, helping us raise the profile of research commercialisation
- Major Partner, Norman Barry Foundation confirmed support for 3 more Emerging Innovators with a further \$75,000 of funding in December 2017.
- Major Partner, Baldwins provides in-kind IP advice to our Emerging Innovators and research commercialisation events and projects.
- Major Partner, MinterEllisonRuddWatts provides in-kind legal advice to research commercialisation projects from across the country to ensure early stage projects get off on the right foot.
- Major Partner, PwC provides in-kind consultancy for each project and provides lead support in the development of the KiwiNet Advisory Panel and Deep Tech Leaders programme.
- Photography Partner, Sciencelens provides excellent photographic services for our flagship Awards events.

It's exciting to work alongside these leading businesses, who generously offer their expertise and support to drive prosperity from science & innovation in New Zealand.



STRATEGY

OUR PURPOSE

KiwiNet exists to drive prosperity from science and innovation.





STRATEGY

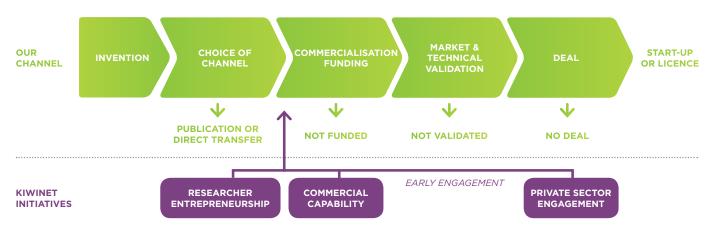
OUR VISION

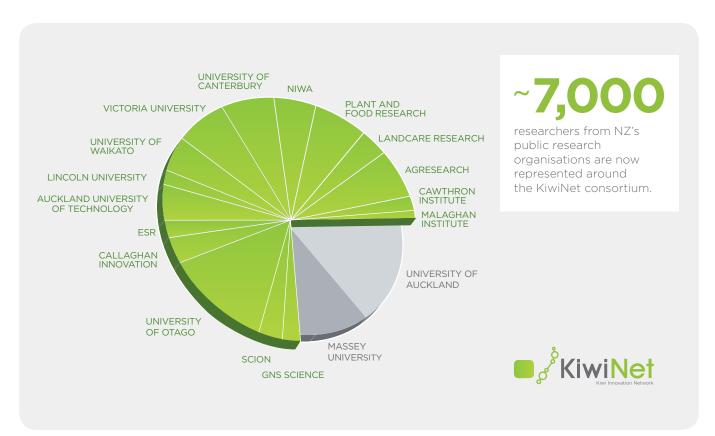
A globally competitive technology sector, driving a high-value economy for New Zealand.

OUR PASSION

Creating the best environment for public research organisations to transform scientific discoveries into new business.

FROM RESEARCH DISCOVERY TO PRIVATE-SECTOR-READY





KIWINET'S BOLD AMBITION



Our goal is to **QUADRUPLE** the quantity and value of new ventures and high-value licence deals emerging from the KiwiNet pipeline by 2023.

IMPACT - An avalanche of new deep-tech ventures driving a new high-tech revolution for New Zealand, diversifying our economy and driving prosperity.

The first step towards quadrupling our outcomes is to scale the number of researchers choosing and valuing our commercialisation channel as a pathway-to-impact for their science. This must be paralleled by an increase in the quality and quantity of commercialisation capability within the Technology Transfer Offices (TTOs) and Commercial Groups of our research organisations. These areas form our primary focus for the year ahead.

Researcher Entrepreneurship

Inspiring, incentivising and empowering researchers to pursue commercialisation of their discoveries to create new business, alongside more traditional academic or tech-transfer routes.



We aim to QUADRUPLE the number of researchers choosing the KiwiNet commercialisation channel by 2023.

IMPACT – a thriving culture of entrepreneurial researchers, empowered to commercialise their discoveries and generate real-world impact for the benefit of New Zealand.

Commercial Capability

Increasing the quality and quantity of commercialisation activity at research organisations aimed at creating new business, by strengthening commercial capability and expertise.



We will continue to raise the quality and quantity of commercial capability across the system to support the increase in commercial opportunities entering the KiwiNet pipeline and to drive their commercial success.

IMPACT - a community of capable and driven commercialisation professionals that are delivering a robust pipeline of new investable propositions from our publicly funded research.

Private Sector Engagement

Engaging early and often with the private sector to build the best possible expertise around technologies to maximise chances of success.



Regular and early engagement with the private sector will be maintained to ensure both technologies and entrepreneurs receive the best possible support both within and after exiting the KiwiNet channel.

IMPACT – an engaged and supportive business community that is working alongside research organisations to create new, successful, deep-tech ventures and high-value licensing opportunities from Kiwi science.

KIWINET INVESTMENT COMMITTEE HIGHLIGHTS

PRESEED INVESTMENT

In July 2016 KiwiNet began a new three-year PreSeed Accelerator Fund (PreSeed) contract with the Ministry of Business Innovation and Employment (MBIE). KiwiNet's PreSeed pool services 13 research organisations operating a combined investment of \$10.3 million through KiwiNet

INVESTMENT COMMITTEE PARTNERSHIPS

With 16 research organisations collaborating through the KiwiNet Investment Committee, it now represents approximately 75% of researchers in public research organisations in New Zealand. Over the 12 months to March 2018, 70 projects have been presented to the Investment Committee from 13 different research organisations.



"KiwiNet is an immensely collaborative, productive and positive organisation to be a part of. A significant amount of our commercialisation success is under-pinned by the shared expertise and networks that KiwiNet provides. PreSeed funding is crucial to our ability to maintain momentum in very challenging early stage technology development, without which many opportunities would not reach their full potential for New Zealand."

ANNE BARNETT, CEO, VICLINK LTD

OUR CORE VALUES

People and their connections

Innovation is first and foremost about people and their connections.

Collaboration not duplication

KiwiNet is a facilitator, working with complementary organisations to achieve outcomes through collaboration.

Trusted neutral party

KiwiNet must be recognised as an independent organisation that is trusted to be fair and balanced.

New and innovative approaches

KiwiNet must have a maverick spirit, striving to take new approaches, to create new conversations between new people and to encourage new talent that underpins future innovation.

Speed and efficiency

KiwiNet must be nimble and dynamic, acting as a catalyst for new opportunities and ensuring ideas become self-sustaining quickly.





"Cawthron Institute is pleased to lift our engagement with KiwiNet by becoming a shareholder. We see this as another pillar supporting our focus of being a bridge between science and industry by aiding our rapidly growing research and commercialisation activities."

PROFESSOR CHARLES EASON, CHIEF EXECUTIVE, CAWTHRON INSTITUTE







70

Proposals, project previews and Emerging Innovators presented to the Investment Committee*.

*IN THE YEAR TO MARCH 2017.

13

Public organisations pooling PreSeed investment.

17

Different research organisations presented projects to the KiwiNet Investment Committee*.
*IN THE YEAR TO MARCH 2017.





ACTIVITIES

INVESTMENT COMMITTEE PARTNERSHIPS

With 16 research organisations collaborating through the KiwiNet Investment Committee, it now represents approximately 75% of researchers in public research organisations in New Zealand.

PIPELINE COMMITTEE

A joint committee of commercialisation professionals from research organisations, who assess new projects, provide input into KiwiNet initiatives and design initiatives to support commercialisation.

OUTCOMES

Over the 12 months to March 2018, a record 70 projects have been presented to the Investment Committee from 13 different research organisation.

Over the 12 months to March 2018 three Pipeline meetings were held with an average of 11 attendees to each. Projects were discussed among the research organisation representatives, combining expertise and connections to help accelerate commercialisation.

"I'm more confident than ever that KiwiNet is well placed to provide an enduring and substantial return from our public research investment."

"It has been another great year for KiwiNet with more projects than ever before providing firm evidence of the commercialisation momentum that is building within our research organisations. It is particularly pleasing to see the entrepreneurial spirit and drive to do more within the ranks of the new representatives around the Investment Committee table.

Our Emerging Innovator programme has gone strength to strength with increasing numbers of young aspiring researchers excited to see their research make a tangible difference in peoples lives, while capturing value for New Zealand."

ANDREW TURNBULL - CHAIRMAN, KIWINET INVESTMENT COMMITTEE



SUCCESS STORIES



START-UP: Hot Lime Labs to help feed the world

Dr Vlatko Materić, Callaghan Innovation

After an immersive commercialisation experience in KiwiNet's Emerging Innovator programme, Dr Vlatko Materić is now Founder and CEO of Hot Lime Labs. His technology is designed to clean CO₂ from the burning of waste organic material and then allow this clean and concentrated CO₂ to be released into the greenhouse to improve crop yields by around 20%. This will help greenhouse growers to operate at optimal yields, and increase food production while simultaneously cutting environmental harm by using a renewable source of clean CO2.

Dr Materić says the technology has the potential to increase grower's revenues by \$40-80k per annum per hectare compared to using other sources such as natural gas or liquid CO₂. The global market opportunity for the technology is estimated at over \$800M per annum and is growing rapidly.

Vlatko has successfully raised the start-up's first round of early stage investment to develop its new greenhouse CO₂ capture technology for the global market. The investment round led by Powerhouse, with nearly a dozen co-investors including the Flying Kiwi Angels, will allow the completion of technical development and then a pilot Hot Lime system to be built inside a commercial greenhouse to prove the technology at scale.

According to Dr Materić, the KiwiNet Emerging Innovator Programme was the critical step to move his research project from the academic arena to a value creating business.

"Without the KiwiNet programme I wouldn't have been able to turn my research idea into a commercial venture. The initial funding, guidance and credibility the award gave me

was critical. It's always hardest to find the first person to step up and stand by you. I now have an experienced group of people wrapped around the venture along with

the funding required to ensure the best chance of success."

Vlatko's success really demonstrates how the commercialisation ecosystem can work together to give Kiwi technology the best chance of success through small levels of funding in a highly focused and supported way. The initial support for Vlatko through the Emerging Innovator programme, led to a further \$95,000 of funding from the KiwiNet PreSeed Accelerator Fund. This, alongside the ongoing development, mentoring by Will Barker and connections that KiwiNet and its investment committee provided has led to this investment round. Financial support through Callaghan Innovation's Technology-focused Incubator programme provided important co-investment to enable private investors to commit early.

Rudi Bublitz. Co-Founder and "Chief Cat Herder" of Flying Kiwi Angels says, "This investment is an exciting first for Flying Kiwi Angels in that it is much earlier stage than we would typically invest in technology of this kind. The commercialisation network helped de-risk the early development and our diligence team gave a strong positive investment recommendation after weighing up the overall risks and returns of this proposition. The enthusiasm of KiwiNet was also infectious. We are founder-focused in all our investments, and Vlatko's commercial acumen and people skills, along with the strong board he has assembled, gave us confidence that this business has a good chance of success."

MRI-SAFE human-implantable electrodes

WaikatoLink - University of Waikato



waikatolink 🔷

Professor Jonathan Scott and his graduate student, from the School of Engineering at University of Waikato, have invented exciting new designs that enable electrodes implanted in people to operate safely in MRI machines.

Professor Scott's MRI-SAFE human-implantable electrode designs received \$75,000 PreSeed funding to aid commercialisation. These have the potential to generate significant royalty streams and make a significant market impact.

This MRI-SAFE Electrodes device was invented in response to needs of Australian start-up, Saluda Medical, whose products automate in-body electrode-driven technology for management of chronic pain. Their inventions address neurostimulation applications such as deep-brain stimulation and spinal-cord stimulation. Saluda Medical raised Series D finance of AUD53 million following successful human trials to support commercialisation of its technology. The Saluda solution offers a significant improvement in quality of outcomes for recipient patients and has the technology to make a significant impact in its market over a short period of time.

Around 70,000 neurostimulators are installed around the world each year at a cost of around USD15-17k each, including implantation. The manufacturer distribution market is estimated to be worth around USD\$375 million annually. The University of Waikato and Saluda Medical aim to leverage this experience to commercialise other medical device projects.





Amarasate® extract - 100% plant-based, world-first weight management extract

calocurb[™], the 100% plant-based supplement that helps you manage food cravings is set to take international weight management market by storm

Scientists at Plant & Food Research have developed a 100% plant-based supplement that helps you manage food cravings and is set to take the international weight management market by storm. The Amaraste project was presented to the KiwiNet Investment Committee in March 2017 and received \$122,000 PreSeed investment to find the best market entry through a global commercial partner and ensure the commercialisation strategy maximised value to NZ.

Amarasate® extract was found to be the most effective compound (out of more than 900 plants screened) to trigger the Bitter Brake™ – an evolutionary response whereby bitter compounds trigger a 'stop eating' signal in the brain. When coupled with patented capsule technology, the Amarasate® extract progressed through clinical trials and demonstrated that bitter compounds support a feeling of fullness or satiety. Plant & Food Research was able to create a Generally Recognized As Safe (GRAS) self-determination dossier showing historical use of the extract in the US with support from PreSeed funding through KiwiNet.

Plant & Food Research contracted with the world's leading company for production of capsules to manufacture a trial run of capsules as well as completing US market validation and a provisional patent. Ultimately Plant & Food Research licensed the technology to Lifestream International, a New Zealand private equity owned company who has financed the product launch direct to consumers in the US, bypassing historical retailers, maintaining margin for the commercial partner and developing direct consumer relationships through an online only initial launch. The product was launched in New Zealand in April 2018 and the US in May 2018.



Heparan sulphates combatting Alzheimers disease

Viclink - Victoria University of Wellington

A research project to advance a potential treatment for Alzheimer's disease led by scientists from Victoria University of Wellington was awarded \$392,000 from KiwiNet's PreSeed Accelerator Fund. KiwiNet provided valuable commercialisation support alongside the investment.

In addition to having the potential for major global health impact, this technology could help generate millions of dollars in returns to the New Zealand economy, both through export earnings and driving job creation in New Zealand's biotech sector.

Professor Peter Tyler and Drs Olga Zubkova and Ralf Schwörer from Victoria's Ferrier Research Institute, and long-time collaborator Professor Jerry Turnbull at the University of Liverpool, have also been awarded an Alzheimer's Society UK grant worth over \$450,000 (£260,000 GBP). A research grant of \$15,000 for Dr Zubkova from the New Zealand Federation of Women's Institute, brings the total funding awarded for the research project to \$850,000.

The funding was used to develop drug candidates discovered from research the team has been working on since 2008.

Alzheimer's disease affects over 10 million people in the developed economies and is increasing in prevalence due to aging populations. New drugs that can effectively halt or delay the progression of the disease are urgently needed and this funding is invaluable to progressing this work. The compounds that have been discovered have the potential to slow or stop progression of the disease.

The drug candidates being developed at Victoria University of Wellington,

in collaboration with the University of Liverpool, are a novel class of inhibitors that target the biological machinery that causes damaging plaques to form in the brain, leading to the progressive memory loss that is characteristic of Alzheimer's disease.

The scientists have discovered how to make small complex sugars called heparan sulfates

chemically in the lab. These can control the degradation of proteins in the brain that cause memory loss. This home-grown technology promises to provide a muchneeded breakthrough for the millions of people affected by Alzheimer's disease world-wide, with the potential to reach a US\$6.8 billion global market.





viclink

SUCCESS STORIES

Malaghan Institute and Hunan Zhaotai Group partner to form Wellington Zhaotai Therapies





In November 2016, the Malaghan Institute of Medical Research sought funding and advice from the KiwiNet Investment Committee on the formation of a joint venture with a Chinese biotech, Hunan Zhaotai Medical Group, to trial breakthrough CAR-T cell technologies and give New Zealanders early access to this cutting-edge cancer therapy.

The joint venture was formed to trial and commercialise the treatment outside of China. The Institute's expertise and capabilities in trial management and GMP manufacture of cell therapies offered a critical contribution to the commercialisation of this novel therapy, which has the potential for considerable economic benefit to New Zealand.

Along with connections and advice, the Investment Committee allocated \$25,000 PreSeed investment to the project, which was matched by the Malaghan Institute to cover legal fees (including technical diligence on the intellectual property and legal agreements around the incorporation of the joint venture), consultancy regarding trial design and regulatory alignment, and the costs involved in establishing the company. These steps allowed the partnership to work towards a phase lb clinical trial, with a view to then obtaining FDA/EMA approval.

Through the formation of this company, the Malaghan Institute aims to:

- leverage its capability and reputation internationally to attract foreign direct investment
- establish a substantial biotech company, attracting further investment
- open up an opportunity for commercial cell therapy manufacturing
- generate wealth through capital returns on the intellectual property the New Zealand-based company has international commercialisation rights to a clinically validated CAR-T cell therapy
- · create jobs and opportunities for the trial monitors and other organisations needed for the running of clinical trials
- provide cutting-edge immunotherapies to New Zealand patients.

In October 2017, the Malaghan Institute welcomed a mayoral delegation from Changsha, China, to unveil a commemorative plaque, officially opening Wellington Zhaotai Therapies. The event symbolised the continued development of research collaboration and innovation between New Zealand and China.

ADVOCACY

Collaborating with the research community, research organisations, Government stakeholders, Callaghan Innovation, our CPN partners and stakeholders from the private sector, including investors to create the best supportive environment for commercialisation of publicly-funded research.



ADVOCACY

ACTIVITIES

GOVERNMENT AGENCY ENGAGEMENT

KiwiNet engages with government departments and agencies who are working in similar and complementary areas.

OUTCOMES

KiwiNet has been working closely with the Ministry of Business Innovation and Employment (MBIE) to provide a clear picture of research commercialisation activities in New Zealand. Reports provided to MBIE include:

- An annual report on KiwiNet's PreSeed portfolio.
- An annual report of Commercialisation Partner Network outcomes.

MBIE has provided Commercialisation Partner Network (CPN) funding through to June 2019 for KiwiNet, Return On Science and ChristchurchNZ. This investment is a strong signal of confidence in our success and the value that we bring in delivering value from publicly funded research. It provides a solid platform for KiwiNet to target strategic initiatives and ramp-up its investment to strengthen the research commercialisation ecosystem.

COMMERCIALISATION PARTNER NETWORK ENGAGEMENT

KiwiNet is working with our fellow Commercialisation Partner Network (CPN) organisations Return On Science and ChristchurchNZ to accelerate our common goal of achieving better economic outcomes from the commercialisation of publicly funded research in New Zealand.

- KiwiNet and Return On Science worked with Knowledge Commercialisation Australasia to bring the KCA conference to New Zealand in September 2017.
- Return On Science is supporting KiwiNet in celebrating the 2018 KiwiNet Research Commercialisation Awards.

INSPIRING AND INFLUENCING RESEARCH COMMERCIALISATION STAKEHOLDERS

KiwiNet inspires the next generation of entrepreneurial professionals through our own events and by supporting partner led initiatives. Together we create awareness of the value of research commercialisation.



KiwiNet has participated in a range of partner led initiatives. With 897 registrations a record number of people have attended our events. We have shared our wisdom and championed our cause across the ecosystem through several initiatives:

- KiwiNet CEO, James Hutchinson, was panelist at the 'Changing Face of Science - Celebrating Women's Inspiring Contributions to the Life Sciences' - run by NZBio on 29 March, Auckland.
- James spoke about KiwiNet research commercialisation successes at TEDx Ruakura Salon on 25 May 2018
- May Low, KiwiNet's Operations Manager, mentored a team
 of year 9 and 10 students from Rototuna Junior High School
 to commercialise their colour changing thermochromic
 hats. They pitched their idea to the Return On Science
 Momentum Investment Committee
- KiwiNet has mentored teams at the Innes 48 Start-up competition for the last 3 years
- James Hutchinson spoke at the KCA conference and KiwiNet lead the Technology Transfer Directors session at the event.

PROMOTION & EXTERNAL ENGAGEMENT

Building awareness around the activities of KiwiNet, commercialisation professionals and the research organisations to encourage people and make it easier for them to engage.

KiwiNet produced a range of press releases including stories about the KiwiNet Emerging Innovators. Each Emerging Innovator receives media training to enable them to effectively share their stories and raise the profile of their great work.

KIWINET STAFF ACTIVITY

KiwiNet's team works in partnership with research organisations and commercialisation professionals across New Zealand to deliver KiwiNet's strategic objectives.

KiwiNet has a core staff of five who are supplemented with contracted professionals and student interns. Our staff run the investment committee, work with our partners to prepare business plans for PreSeed investment and run events and initiatives to support research commercialisation.

KNOWLEDGE COMMERCIALISATION AUSTRALASIA

KiwiNet worked with Knowledge Commercialisation Australasia (KCA) to bring their annual conference to Wellington on 7-8 September. This proved a valuable opportunity to bring together commercialisation professionals from across New Zealand and Australia to learn from each other and drive best practice. 56 of the 97 attendees were NZ commercialisation professionals. KiwiNet lead the Technology Transfer Directors session at the event.

























RESEARCH COMMERCIALISATION AWARDS

In 2017 KiwiNet delivered the fifth New Zealand Research Commercialisation Awards. The KiwiNet Awards celebrate the ability for science to drive our prosperity, putting the spotlight on those who successfully commercialise clever Kiwi ideas. This PREMIER EVENT is highly anticipated on New Zealand's innovation calendar, raising the profile of research commercialisation nationwide.





Where:

Auckland, Viaduct Events Centre

When:

Thursday 13th July, 2017













2017 KIWINET AWARD WINNERS

Winner of the BNZ Supreme Award and the Baldwins Researcher Entrepreneur Award



Professor Richard FurneauxVictoria University of Wellington

Carbohydrate chemistry delivers sweet success to NZ

The successful combination of Professor Richard Furneaux's scientific nous and entrepreneurial spirit has generated tens of millions of dollars of economic activity for New Zealand over the past 25 years—a direct result of his own, and his team's, research endeavours.

Starting out as a synthetic chemist, today Richard leads a team of 40 world-class scientists as Institute Director of the Ferrier Research Institute at Victoria University of Wellington. Innovations from this team include the first New Zealand-developed drug to gain registration since the 1980s and a breakthrough synthetic vaccine to treat cancer, allergies and autoimmune diseases.

Richard's passion for New Zealand means that he is always looking for ways in which science can add value to the country—whether it's starting up a new business (Avalia Immunotherapies and GlycoSyn), or collaborating with world-renowned scientists such as Professor Vern Schramm at Albert Einstein College of Medicine in New York, to deliver a significant portfolio of licensed pharmaceutical candidates which could potentially generate millions for the New Zealand economy. Richard was involved in the synthesis of forodesine hydrochloride, the active ingredient in anti-lymphoma drug Mundesine®, licensed by BioCryst Pharmaceuticals Inc. Mundesine® has just been approved in Japan, making it only the second New Zealand invented drug compound to become a registered drug product.

A mentor to many, Richard's work is well recognised and highly respected by his peers and the business community; he has inspired many to take up the challenge of commercialising scientific discoveries during his own career.





Winner of the Norman Barry Foundation Emerging Innovator Award



Dr Geoff RodgersUniversity of Canterbury

Seismic damping solutions for buildings and joint implant diagnostics

Dr Geoff Rodgers has a strong track record of working closely with industry to develop research outcomes with significant benefit to society. His research has applications in fields from seismic protection system for structures through to medical devices.

Geoff completed his PhD in seismic energy dissipation at the University of Canterbury in 2009, and then undertook a postdoctoral fellowship in medical device development at the University of Otago. In 2012 he returned to the University of Canterbury to take up an academic role, and is now an Associate Professor in the Mechanical Engineering Department.

Mechanical seismic dampers he developed to dissipate kinetic energy of seismic waves penetrating a building structure are in use in a low-damage Hospital complex in Christchurch. He is also working on other devices and deployment opportunities locally and internationally.

Geoff is also developing a new method for early detection of wear and tear of hip joint implants that monitors the sound vibrations transmitted from a patient's hip replacement implants. The acoustic emission monitoring system is a non-invasive sensing technique that records low-level vibrations emitted from the implant during patient motion that make it through tissue to the skin's surface.

By listening to the ultrasonic vibrations of the implant, it is possible to relate them to the condition of the implant, to help Orthopaedic surgeons predict impending failures and manage revision surgery. Early detection of wear and tear may provide opportunities for proactive intervention, reducing the severity of surgery and providing improved patient outcomes.

Geoff's approach to technical development, across a range of industry fields, is always pragmatic and realistic, with uptake by industry being a major goal.



2017 KIWINET AWARD WINNERS

abla

Winners of the MinterEllisonRuddWatts Research & Business Partnership Award



University of Auckland, Orion Health and Waitemata District Health Board:

Precision Driven Health

Empowering data-driven healthcare solutions through a public-private research partnership

Precision Driven Health (PDH) is a seven-year NZ\$38m research partnership which improves health outcomes through data science. It brings together Orion Health, Waitemata District Health Board and the University of Auckland with support from the Ministry of Business, Innovation and Employment. More commercial partners, healthcare providers and academic institutions will join as the partnership continues.

PDH positions New Zealand at the forefront of the global transformation in healthcare known as precision medicine, enabled when all information about an individual – including his or her genetic and social profile – is available as part of an electronic health record, accessible by clinicians in real time.

PDH's research programme harnesses New Zealand's unique combination of existing electronic healthcare data and world-class research capability to enable the development of data-driven healthcare solutions that can be applied globally. These findings are already a key contributor to the development of the product roadmaps of its commercial partners. In the case of Orion Health, PDH's research programme feeds directly into enabling its Amadeus precision medicine platform to manage and analyse large volumes of data from a variety of sources, and then present those insights back to healthcare professionals and consumers in real time.









Winner of the PwC Commercial Deal Award



University of Auckland and UniServices:Soul Machines

Soul Machines: Humanising the interface between man and machines

In 2011, UniServices and The University of Auckland used the Vice Chancellor's Strategic Hiring Fund to provide Auckland and MIT Alumnus Dr Mark Sagar, a two-time Academy Award winner, with the opportunity to leave his role at Weta Digital and return to the University.

Dr Sagar joined the Laboratory for Animate Technologies based in the Auckland Bioengineering Institute (ABI), University of Auckland. With his engineering and research team he developed two technologies: Facemaker designed to rapidly and reliably create avatar faces based on real human anatomy and physiology, and Baby X, the first avatar created by Dr. Mark Sagar. Baby X technology provides an emotional and social reasoning platform to existing and developing intelligence in the Artificial Intelligence industry.

In 2012 the first long term research contract was secured and UniServices invested in the technology. UniServices also managed research contracts, the patent portfolio and market validation. This enabled the lab to grow and develop both technologies.

In 2016, Hong Kong based Horizons Ventures was introduced to the technology on a tour of the University and was so impressed the team made the decision to invest almost immediately. A \$7.5 million USD Series financing round led by Horizons Ventures with Iconiq Capital, the University's biggest Series A fund raising deal to date, launched Soul Machines, built on the technology behind Baby X.

As a result of the investment, Dr. Sagar became the CEO of Soul Machines and his research team now make up the newly formed Soul Machines brand. Auckland UniServices reassigned ownership of all Intellectual Property and associated research contracts to Soul Machines in return for a shareholding in the new company. Dr Sagar continues to head the Bioengineering Institute's Lab for Animate Technologies.

The investment will allow Soul Machines to deliver on its vision of humanizing technology to create intelligent and emotionally responsive, human-like avatars that augment and enrich the user experience for customers and markets adopting Artificial Intelligence-based platforms.





RESEARCHER ENTREPRENEURSHIP

Inspiring, incentivising and empowering researchers to pursue commercialisation of their discoveries as the best pathway-to-impact, alongside more traditional academic routes.

ACTIVITIES

OUTCOMES

COMMERCIALISATION TRAINING

Training programmes ranging from practical commercialisation workshops for researchers through to advanced professional development for commercialisation staff.

201 researchers from 27 organisations and 59 tech transfer professionals from 16 organisations took part in KiwiNet commercialisation training initiatives. KiwiNet ran several GetFUNDED and GetINVESTED workshops in Auckland, Wellington and Christchurch. Smarten Up Your Ideas workshops were also run in Christchurch and Lincoln.

KiwiNet Commercialisation staff presented to University of Waikato Engineering PhD students on Pitching 101 and to MacDiarmid Institute students as part of their Future Leaders Conference in Wellington.

EMERGING INNOVATOR PROGRAMME

The KiwiNet Emerging Innovator programme aims to discover, inspire and nurture Kiwi scientists with entrepreneurial DNA and fast-track them to commercial success.

The Programme has been generously supported by the Norman Barry Foundation with an additional \$75,000 this year, taking their total support to \$450,000 to date. To date, 28 Emerging Innovators have participated in the programme, with some now attracting private investment.

Inaugural KiwiNet Emerging Innovator Graduation event

Quality Hotel Parnell, November 2017











GETFUNDED IMPACT



"I came away with loads of good ideas and strategies, practical advice about what to focus on when pitching ideas."

DR CHRISTINE STARK (right)
RESEARCHER, LINCOLN UNIVERSITY



GETFUNDED CASE STUDY:

Jasmine Chan-Hymans - Fishhook Science Studios Ltd

Jasmine Chan-Hymans a PhD student in biotechnology at Victoria University of Wellington, is also co-founder of Fishhook Science Studios Ltd - an entrepreneurial endeavour prompted by attending KiwiNet's GetFunded workshop. Jasmine comments, "GetFunded gave me amazing help to improve my pitch. It grew my confidence and my ability to rethink the design and market position of my product. I developed valuable leadership skills, including delegation. The industry feedback on my product was also invaluable." The confidence Jasmine gained at GetFunded spurred her to attend Viclink's Entrepreneurs' Bootcamp - a 14-week program over summer. With Viclink's support Jasmine co-founded and registered the company Fishhook Science Studios Ltd.

The company's vision is that everyone should have the opportunity to learn more about the world around them – especially adults! They specialise in science communication to adults and young adults by combining practical challenges with digital technology and theatrics to create immersive science experiments. As the principal biological science advisor, Jasmine designs and delivers hands-on biology themed workshops. She ensures the science is accurate and informative, collating scientific material and translating it into, high quality, palatable science bites for public consumption. Based on an on-going validation process, Jasmine's business strategy positions the company in the niche of adult science education. She was introduced to market validation at the GetFunded workshop and enthusiastically implemented it during the Viclink program.

Fishhook has been contracted by Te Papa for a series of science events 'DNA cocktail bar' was a smash hit with an adult audience at "Laters to Nature" – a Te Papa event targeting an adult audience. They served more than 120 people. Fishhook Science Studios' Evolution Bootcamp is a life-sized board game that explores the evolution of our most beloved native birds. It was also a winner with families. On the back of this success, the company is developing a corporate package for its DNA cocktail night. They have been engaged by a team of managers at Callaghan Innovation to host an event. In their current development pipeline are ecology themed events in collaboration Zealandia and a workshop on the physics of sailing in the Pacific at Te Papa. They also intend to apply for a four-



EMERGING INNOVATOR PROGRAMME

The KiwiNet Emerging Innovator Programme was launched to strengthen entrepreneurship and nurture commercial aspiration in our scientists. This is essential in order to transform scientific discoveries into new business that will drive prosperity for New Zealand. The Emerging Innovator Programme aims to inspire and empower Kiwi scientists with entrepreneurial DNA, fast-tracking them to commercial success. The programme provides a wide range of initiatives and resources to support recipients on their commercial journey. These include a commercial mentor, coaching in media engagement, and training courses in pitching for investment and commercialisation.

Several Emerging Innovators have progressed along the KiwiNet commercialisation channel securing PreSeed Accelerator Funding with three forming new start-up companies. We have already seen a direct impact on deal flow from the programme as well as a recruitment effect. Emerging Innovators can powerfully influence colleagues, growing an entrepreneurial culture across among researchers.



"On of our goals at the Foundation is to invest in areas that will have a long-term impact for the benefit of New Zealand, so we're very pleased to support the KiwiNet Emerging Innovators."

John Smith, Chairman of the Norman Barry Foundation. which owns the Quality Hotel Parnell Limited.

\$450,000 from

NORMAN BARRY **FOUNDATION**

GRADUATES

START UP COMPANIES

In-kind support from





To be eligible, scientists must be working within a public research organisation in New Zealand. Recipients receive \$25,000 of funding, a commercial mentor, media training, publicity, and access to in-kind expert legal support from MinterEllisonRuddWatts and Baldwins.

MEET THE EMERGING INNOVATORS



DR MATT MILLER

Developing e-bike safety sensors

Dr. Miller, a lecturer at Massey University's School of Sport, Exercise and Nutrition, received the award from the KiwiNet Emerging Innovator Programme which helps early career scientists develop clever new ideas to take to market.

"As the cycling community becomes more connected to technology the demands for feedback systems are increasing," says Dr. Miller, a former elite mountain biker and part of a Massey University research team investigating performance in mountain bike competition.

He also sees an opportunity for the data to be used by brake manufacturers to address safety concerns. "E-bikes have the ability to travel very quickly and often have a less-experienced user. Manufacturers are looking for innovations which improve safety," he says.

While the e-bike market is evolving quickly braking technology hasn't progressed at the same rate as other areas. Currently e-bikes and mountain bikes largely use the same brakes, but the industry is moving towards integration of electronics and e-bike specific brakes. Matthew's sensor technology could be incorporated into new braking technology to both improve control and safety and collect valuable feedback data to improve efficiency.

Through the KiwiNet Emerging Innovator programme Dr. Miller has already met with over a dozen big players within the cycling industry

to determine the best applications for his IP for the fast growing e-bike market, which is forecast by some analysts to hit \$24.3 billion in revenue by 2025.

The programme has allowed Matthew to be immersed in the world of commercialisation to allow him to develop a solid platform of skills, experience and contacts that will enable him to progress his proof-of-concept e-bike brake sensor towards an investor-ready stage.

Dr. Miller started the e-bike meter project based on earlier research that demonstrated the link between changing braking patterns and improved performance. Together with Dr. Philip W Fink, Dr. Miller has already developed a brake power meter (BPM) for mountain bikes, which automatically measures braking power and time spent braking while you ride – a world first.

"Riders want to gather performance and skills data, rather than just fitness data previously available, so the BPM is the next logical step – as it measures the braking power of a bicycle and transmits the data to a mobile device with performance analysis software", he says.

Dr. Miller is also receiving support from Massey Ventures, a fully owned subsidiary of Massey University, to protect the IP and to license the technology to target e-bike manufacturers.

DR IVAN KURTOVIC

Specialised lipids for nutraceuticals and functional food manufacture



Plant & Food Research scientist Dr Ivan Kurtovic says his biggest takeaway from the Emerging Innovator Programme is being able to appreciate the transition from pure research to scale up, and then to commercialisation. "It's been invaluable learning how to simplify and present my story, how to engage with IP experts, to understand how research can be commercialised and what the steps are. I now have the confidence to attempt further scale ups and further applications of my research."

Dr Kurtovic was accepted into the Emerging Innovator Programme to explore the commercialisation of a green chemistry project to create specialised lipids for use in nutraceutical and functional food manufacture.

Dr Kurtovic, an enzymologist in the Marine Industrial Biotechnology Team at Plant & Food Research, is working on enzyme technology that transforms lipids to have higher levels of desirable fatty acids for nutritive and therapeutic applications.

The demand for sustainable green chemistry in industrial processes is increasing. Lipid transformation is often carried out using solvents or other techniques that are not environmentally-friendly. Dr Kurtovic is exploring methods for enzymatic interesterification that can be used as an alternative, to achieve lipid transformations and produce highly bioavailable lipids enriched with Omega-3 fatty acids.

The Emerging Innovator funding has also allowed Dr Kurtovic to purchase several custom-built immobilised enzyme (lipase) reactors for transfer of the technology from the laboratory to prototype pilot scale. This has helped achieve the proof of principle needed to validate the new technology and attract further investment.

"Thanks to KiwiNet, this is the first time I've been able to scale up my enzyme research and to test improvements in a more industry-relevant way," says Dr Kurtovic. "I'm continuing to test different enzyme systems and optimise the scale up process to improve conversion and enrichment of the final product."

One of New Zealand's fastest-growing food export categories is nutraceuticals. Consumers are increasingly interested in sustainable, natural and environmentally friendly products. Ivan and his team at Plant & Food Research are developing valuable enzymatic methods for creating lipids for the therapeutic market. This research represents a great commercial opportunity for industry, in New Zealand and farther afield, to develop IP that can be used in their processes.

essents valon IP

Sue Muggleston, Intellectual Property Manager and Business Manager at Plant & Food Research, says: "It's been fantastic working with Ivan, KiwiNet and partners to progress the commercial application of this research. In conjunction with an industry partner, we're keen to further develop the commercial potential of this technology and make the most of opportunities in the nutraceuticals market."



"It's been invaluable learning how to simplify and present my story, how to engage with IP experts, to understand how research can be commercialised and what the steps are. I now have the confidence to attempt further scale ups and further applications of my research."

Dr Ivan Kurtovic



COMMERCIAL CAPABILITY

Increasing the quality and quantity of commercialisation activity at New Zealand's public research organisations.

ACTIVITIES

TITIES OUTCOMES

KNOWLEDGE COMMERCIALISATION AUSTRALASIA

KiwiNet worked with Knowledge Commercialisation Australasia (KCA) to bring their annual conference to Wellington on 7-8 September. This proved a valuable opportunity to bring together technology transfer professionals from across New Zealand and Australia to learn from each other and drive best practice. 56 of the 97 attendees were NZ tech transfer professionals.

KIWINET INTERNSHIP PROGRAMME

KiwiNet's new Commercialisation Intern Programme sees interns placed within a KiwiNet partner organisation for six months where they work on real technology commercialisation projects, gaining important early experience to pave a way into a career in commercialisation. Interns work alongside the local commercialisation team to develop business plans and cases to support the development of new technologies, undertake impact analysis of emerging technologies and science. KiwiNet provides a programme of professional development support, including training courses and a short secondment with the KiwiNet team in Hamilton.

Seven interns have been placed to date, across six organisations. The internship programme is proving a tangible and effective route towards building commercial capacity within resource-stretched Technology Transfer Offices and Commercial Groups.

CORPORATE PARTNERS

KiwiNet's corporate partners are very keen to get behind KiwiNet Partner projects, commercialisation staff and Emerging Innovators by providing in-kind advice and expertise, mentoring, plus additional funding. KiwiNet has sponsorship partnerships with BNZ, Norman Barry Foundation, MinterEllisonRuddWatts (MERW), PwC, Baldwins, and Sciencelens to provide funding and in-kind support to KiwiNet activities and projects.

MinterEllisonRuddWatts and Baldwins have provided significant in-kind expertise having supported 14 projects and provided training for a number of others.

PwC provides consultancy for KiwiNet partner projects and lead support for the newly formed KiwiNet Advisory Panel.

TRAINING PARTNERSHIPS

KiwiNet has worked with PwC to deliver training programmes and workshops for partner organisations.

Partner training has included business writing courses and valuation workshops for AUT.

COMMERCIAL MENTORS

KiwiNet commercial mentors support researchers and organisations with everything from identifying new commercial opportunities to mentoring high potential projects. Commercial mentors are driving significant pipeline growth while helping research organisations overcome limited tech transfer resources.

KiwiNet has created over 40 connections between commercial mentors and Emerging Innovators and projects over the last 12 months.

PRIVATE SECTOR ENGAGEMENT

Engaging early and often with the private sector to build the best possible expertise around technologies to maximise chances of success.

ACTIVITIES

OUTCOMES

INTERNATIONAL ENGAGEMENT

Connecting with similar organisations overseas to identify opportunities for collaboration and leverage their connections into foreign markets.

Three projects have progressed through the China New Zealand Industrial Centre in Suzhou Industrial Park: Chronoptics and Ligar Polymers, both spinouts from the University of Waikato and ZealaFoam™, from BPN.

INCUBATOR ENGAGEMENT

KiwiNet works closely with each of the technology incubators as a key provider and facilitator of potential deal flow.

The incubators have reviewed a number of PreSeed funded projects and two are about to commence pre-incubation due diligence.

EXPERT ADVICE & ENTREPRENEUR CONNECTIONS

Delivering the best possible advice and guidance for researchers and commercialisation staff.

Expert advice provided has included customer validation based design to ensure a product is market ready. This has been critical in getting an AUT's spinout company (Avice Ltd) investment ready with their revolutionary wearable technology.

KiwiNet continues to facilitate Advisory Panels for projects to present to and receive generous services from our corporate partners.

INVESTOR CONNECTIONS

KiwiNet engages with the investor community to help transform scientific discoveries into investor ready opportunities. KiwiNet actively engages with the Angel and High Net Worth community. This includes sponsorship of the Angel Summit.

KiwiNet engages with NZVIF, Callaghan Innovation and NZTE through the Investor Heartbeat team. This initiative is a cross agency forum developed to accelerate capital raising activities.

Financial Statements

For the year ended 31 March 2018.

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Company Particulars

For the year ended 31 March 2018.

State of Affairs The Company was incorporated on the 25 January 2011

and commenced trading in August 2011.

Company Number 3245229

Authorised Capital 234 Ordinary shares

Registered Office B Block, University of Waikato

Gate 5, Hillcrest Road

Hamilton

Shareholders WaikatoLink Limited

Victoria Link Limited
AgResearch Limited
Callaghan Innovation
University of Canterbury

Lincoln University
AUT Ventures Limited
Otago Innovation Limited

New Zealand Institute for Plant and Food Research Limited

Landcare Research New Zealand Limited

Institute of Environmental Science and Research Limited

New Zealand Forest Research Institute Limited

Institute of Geological and Nuclear Sciences Limited

Directors David Hughes

Geoffrey Arthur Todd

Ruth Margaret Richardson

Ngaio Merrick Andrew Turnbull

Auditor Audit New Zealand, on behalf of the Auditor General.

Directors' Report

For the year ended 31 March 2018.

The Board of Directors present their annual report.

As required by section 211 of the Companies Act 1993, we disclose the following information:

- + Kiwi Innovation Network (KiwiNet) is a consortium of Universities and Crown Research Institutes working together to increase the scale and impact of scientific and technology based innovation in New Zealand.
- + There are no Directors' interests to declare.
- + The shareholders have agreed that the Annual Report need not disclose employees remuneration over \$100,000 in accordance with section 211(1) of the Companies Act 1993.
- + No donations were made by the Company during the year.
- + The following Directors held office as directors in the Company at the end of the year:

Ruth Margaret Richardson David Hughes Geoffrey Arthur Todd Ngaio Merrick Andrew Turnbull

Statement of Management Responsibility

For the year ended 31 March 2018.

The Board of Directors of Kiwi Innovation Network Limited (the Company) accept responsibility for the preparation of the financial statements and the judgements used in these statements.

The Board is responsible for any end-of-year performance information provided by the Company under section 19A of the Public Finance Act 1989.

The Board accept responsibility for establishing and maintaining a system of internal control designed to provide reasonable assurance as to the integrity and reliability of the Company's financial reporting.

In the opinion of the Board, the annual financial statements fairly reflect the financial position and operations of the Company for the year ended 31 March 2018.

Director Ruth Richardson 8 June 2018

Date

Director Andrew Turnbull 8 June 2018

Date

Statement of Comprehensive Revenue and **Expense**

For the year ended 31 March 2018.	Note	2018	2017
		\$	\$
Revenue			
Funding from the Crown	1	4,307,378	3,505,083
Interest		262	1,296
Other Revenue	2	158,777	297,963
Total Revenue		4,466,416	3,804,342
Expenditure			
Contractor Costs	3	1,133,997	1,085,890
Other Expenses	4	3,325,011	2,689,656
Depreciation	9	885	694
Total Expenditure		4,459,893	3,776,240
Surplus/(Deficit) before Tax		6,524	28,102
		•	,
Income Tax Expense	5	-	-
Surplus/(Deficit) after Tax		6,524	28,102
Other Comprehensive Revenue and Expense		-	-
Total Comprehensive Revenue and Expense		6,524	28,102

Statement of Financial Position

As at 31 March 2018.		Note	2018	2017
			\$	\$
Assets				
Current Assets Cash and Cash Equivalents			575,472	729,261
Receivables	7		841,859	887,677
Prepayments			58,265	21,459
Total Current Assets			1,475,597	1,638,397
Non-Current Assets				
Property, Plant and Equipment	9		2,632	3,517
Total Non-Current Assets			2,632	3,517
Total Assets			1,478,229	1,641,914
Iotal Assets			1,4/0,229	1,041,914
Liabilities				
Current Liabilities				
Income in Advance	0		175,000	280,193
Payables Total Current Liabilities	8		965,562 1,140,562	1,030,577 1,310,770
iotal carrent Liabilities			1,140,302	1,010,770
Non-Current Liabilities			-	-
Total Liabilities			1,140,562	1,310,770
Net Assets			337,667	331,144
Equity				
Accumulated Surplus/(Deficit)			(67,708)	(74,231)
Share Capital	6		405,375	405,375
Total Equity			337,667	331,144

Statement of Changes in Equity

Balance at 31 March 2018	405,375	(67,707)	337,667
Shares Issued Shares Repurchased	-	-	- -
Transactions with Owners Recorded Directly in Equity			
Total Comprehensive Revenue and Expense for the Year	-	6,524	6,524
Surplus/(Deficit) after Tax Other Comprehensive Revenue and Expense	-	6,524	6,524
Total Comprehensive Revenue and Expense for the Year			
Balance at 31 March 2017	405,375	(74,231)	331,144
Share Issued Shares Repurchased	-	-	-
Transactions with Owners Recorded Directly in Equity			
Total Comprehensive Revenue and Expense for the Year	-	28,102	28,102
Surplus/(Deficit) after Tax Other Comprehensive Revenue and Expense	-	28,102	28,102
Total Comprehensive Revenue and Expense for the Year			
Balance at 1 April 2016	405,375	(102,333)	303,042
	\$	\$	\$
For the year ended 31 March 2018.	Share Capital	Accumulated Surplus/(Deficit)	Total

Statement of Cash Flows

For the year ended 31 March 2018.	2018	2017
	\$	\$
Cashflow from Operating Activities		
Receipts from the Crown	4,353,196	3,836,269
Receipts from Other Revenue	53,584	296,252
Interest Received	262	1,296
Payments to Suppliers	(534,435)	(467,792)
PreSeed Payments	(2,851,829)	(2,309,114)
Payments to Contractors	(1,154,917)	
GST (net)	(19,650)	64,459
Net cash flow from Operating Activities	(153,789)	349,530
Cashflow from Investing Activities		
Purchase of Property, Plant and Equipment	-	(2,292)
Net cash flow from Investing Activities	-	(2,292)
Cashflow from Financing Activities		
Capital Contribution	-	-
Net cash flow from Financing Activities	-	-
Net (decrease)/increase in cash and cash equivalents	(153,789)	347,239
Cash and cash equivalents at beginning of the year	729,261	382,022
cash and cash equivalents at segmining of the year	, 23,201	302,022
Cash and cash equivalents at end of the year	575. <i>4</i> 72	720 261
Cash and cash equivalents at end of the year	575,472	729,261

Statement of Accounting Policies

For the year ended 31 March 2018.

Reporting entity

Kiwi Innovation Network Limited (the "Company" is a consortium of Universities and Crown Research Institutes who are dedicated to taking a collaborative approach to research commercialisation. The Company's role is to empower people who are involved in research commercialisation by helping them to access the tools, connections, investment and support they

The Company has designated itself as a public benefit entity (PBE) for financial reporting purposes.

The financial statements of the Company are for the year ended 31 March 2018. The financial statements have been approved for issue by the Board of Directors on 8 June 2018

Basis of preparation

The financial statements have been prepared on a going concern basis and the accounting policies have been applied consistently throughout the

Statement of Compliance

These financial statements have been prepared in accordance with the Crown Entities Act 2004 which includes the requirement to comply with Generally Accepted Accounting Practice in New Zealand (NZ

The financial statements have been prepared in accordance with Tier 2 PBE Standards. The Company qualifies as a Tier 2 reporting entity as for the two most recent reporting periods it has had between \$2m and \$30m in operating expenditure.

The financial statements comply with PBE Standards.

Presentation currency and rounding

The financial statements are presented in New Zealand dollars (\$) and all values are rounded to the nearest dollar. There has been no change in the functional currency of the Company during the

Summary of significant accounting policies

The accounting policies set out below have been applied consistently to all periods presented in these financial statements.

Revenue

Funding from the Crown

The Company is primarily funded from the Crown. This funding is restricted in its use for the purpose of the Company meeting its objectives. Funding that is receivable as compensation for expenses or losses already incurred are recognised in surplus or deficit in the period in which they become receivable. The Company considers there are no further conditions attached to the funding and it is recognised as revenue at the point of entitlement.

The fair value of revenue from the Crown has been determined to be equivalent to the amount due in the funding arrangements.

PreSeed Accelerator Funds Received
PreSeed Accelerator Funds Received are not recognised as revenue until there is reasonable assurance that the Company will comply with the conditions attached to them and that the funds will

PreSeed Accelerator Funds are recognised as revenue over the periods necessary to match them with the costs for which they are intended to compensate, on a systematic basis.

Grants Received

Grants are recognised as revenue when they become receivable unless there is an obligation in substance to return the funds if conditions of the grant are not met. If there is such an obligation, the grants are initially recorded as grants received in advance and recognised as revenue when conditions of the grant are satisfied.

Interest Revenue

Interest revenue is recognised using the effective interest method.

Provision of Services

Services provided to third parties on commerical terms are exchange transactions. Revenue from these services is recognised in proportion to the stage of completion at balance date.

Expenditure

PreSeed Accelerator Funds Expenditure

The Company has no obligation to award payment of PreSeed Accelerator Funds on receipt of a project application. PreSeed Accelerator Fund expenditure is only recognised when approval by the Investment Committee has been obtained and specific expenditure criteria has been met.

Foreign Currency Transactions

Foreign currency transactions (including those for which forward foreign exchange contracts are held) are translated into NZ\$ (the functional currency) using the spot exchange rates at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the surplus or deficit.

The income tax expense recognised for the period is calculated using the taxes payable method and is determined using tax rules. Under the taxes payable method, income tax expense in respect of the current period is equal to the income tax payable for the same period adjusted for any differences between the estimated and actual income tax payable in prior periods.

Receivables

Short term receivables are recorded at the amount due less any provision for uncollectability.

A receivable is considered uncollectable when there is evidence that the Company will not be able to collect the amount due. The amount that is uncollectable is the difference between the amount due and the present value of the amounts expected to be collected.

Payables

Short term payables are recorded at the amount

Equity is measured as the difference between total assets and total liabilities. Equity is disaggregated and classified into the following components:

-Share Capital -Accumulated Surplus/(Deficit)

Ordinary shares are classified as equity, transaction costs arising on the issue of equity instruments are recognised directly in equity as a reduction of the proceeds of the equity instrument. Transaction costs are the costs arising on the issue of equity instruments, incurred directly in connection with

the issue of those equity instruments and which would not have been incurred had those instruments not been issued.

Goods and Services Tax

All items in the financial statements are presented exclusive of GST, except for receivables and payables, which are presented on a GST inclusive basis. Where GST is not recoverable as input tax, it is recognised as part of the related asset or expense.

The net amount of GST recoverable from, or payable to, the IRD is included as part of receivables or payables in the Statement of Financial Position.

The net GST paid to, or received from, the IRD including the GST relating to investing and financing activities, is classified as a net operating cash flow in the Statement of Cash Flows.

Commitments and contingencies are disclosed exclusive of GST.

Property, Plant and Equipment

Property, plant and equipment consists of office equipment. This is measured at cost, less accumlated depreciation and impairment losses.

The cost of an item of property, plant and equipment is recognised as an asset only when it is probable that future economic benefits or service potential associated with the item will flow to the Company and the cost of the item can be measured reliably.

Depreciation

Depreciation is provided on a straight-line basis on all property, plant and equipment at rates that will write off the cost of the assets to their estimated residual values over their useful lives. The useful lives and associated depreciation rates of major classes of property, plant and equipment have been estimated as follows:

Office Equipment 20% 5 years

Critical Judgements in Applying Accounting Policies

Management has exercised the following critical judgements in applying accounting policies:

Grant Expenditure

The Company must exercise judgement when recognising grant expenditure to determine if conditions of the grant have been satisfied by subcontractors.

For th	e year ended 31 March 2018.	2018	2017
1	Funding from the Crown (Non Exchange)		
	Service Fee Pre-Seed Accelerator Fund	1,456,401 2,850,977	658,091 2,846,992
	Total Funding from the Crown	4,307,378	3,505,083
	There are no unfulfilled conditions and other contingencies attached to I recognised.	Pre-Seed Accele	erator funds
2	Other Revenue		
	Other Revenue (Exchange) Other Revenue (Non Exchange)	99,081 59,696	150,731 147,006
	Foreign exchange profit	_	226
	Total Other Revenue	158,777	297,963
3	Contractor Costs		
	Directors' Fees Investment Committee Independent Fees Management service fee	67,500 86,249 980,249	67,500 90,416 927,972
	Total Contractor Costs	1,133,997	1,085,888
4	Other Expenses		
	Auditor's Remuneration Travel expenses Pre-seed Accelerator Fund Foreign change loss Other Total Other Expenses	10,792 135,949 2,727,637 1,305 449,327	10,530 103,526 2,243,269 - 332,332
	Total Other Expenses	3,325,011	2,689,657
5	Taxation		
	Reconciliation of effective tax rate Profit/(loss) before income tax Income tax using the Company tax rate Non-deductible expenses Gross up interest for RWT Tax losses utilised Tax Expense	6,524 1,827 - - (1,827)	28,102 7,869 - 428 (7,988)
	Unused Tax Losses and Credits	62,082	68,606

2018 2017

6 Share Capital

Fully paid ordinary shares

	Number of	Share
	shares	Capital
Balance as at 1 April 2016	234	405,375
Issue of shares	0	-
Balance as at 31 March 2017	234	405,375
Issue of shares	0	_
Balance as at 31 March 2018	234	405,375

Fully paid ordinary shares carry one vote per share, carry a right to dividends and a pro rata share of net assets on wind up. All ordinary shares have no par value.

7 Receivables

	Receivables (Non Exchange)	841,303	846,000
	Receivables (Exchange)	556	41,678
		841,859	887,677
8	Payables		
	Trade Payables (Exchange)	151,583	113,044
	GST Payable	34,007	53,657
	Other Accruals (Exchange)	10,792	53,403
	Other Accruals (Non Exchange)	72,000	-
	Payables to Shareholders - PreSeed (Non Exchange)	670,364	794,555
	Payables to Directors	26,816	15,917
		965,562	1,030,576

9 Property, Plant and Equipment

Cost	Office Equipment \$
	'
Balance at 1 April 2016 Additions Disposals	2,132 2,292 -
Balance at 31 March 2017	4,424
Balance at 1 April 2017 Additions	4,424
Disposals	-
Balance at 31 March 2018	4,424
Accumulated Depreciation	
Balance at 1 April 2016 Depreciation Expense	213 694
Balance at 31 March 2017	907
Balance at 1 April 2017 Depreciation Expense Balance at 31 March 2018	907 885 1,792
Carrying amounts	
At 1 April 2016 At 31 March 2017 and 1 April 2017 At 31 March 2018	1,919 3,517 2,632

No property, plant and equipment is pledged as security for liabilities and no assets have restricted titles.

10 Related Party Transactions

Related party disclosures have not been made for transactions with related parties that are within a normal supplier or client/recipient relationship on terms and condition no more or less favourable than those that it is reasonable to expect the Company would have adopted in dealing with the party at arm's length in the same circumstances. Further, transactions with other government agencies (for example, Government departments and Crown entities) are not disclosed as related party transactions when they are consistent with the normal operating arrangements between government agencies and undertaken on the normal terms and conditions for such transactions.

10.1 Related Party Transactions Required to be Disclosed

Directors fees of \$67,500 were incurred during the 2018 year (2017: \$67,500).

Two of the Directors were also independent members of the Investment Committee and received \$42,500 (2017: \$42,500) as remuneration.

At year end the following amounts were owing to the directors:

- Directors Fees	\$14,302	(2017: \$15,917)
- Investment Committee Fees	\$14,614	(2017: \$27,761)
- Travel Reimbursement	\$509	(2017: \$307)
- Phone Costs	Nil	(2017: Nil)

11 Commitments

The Company has no commitments at 31 March 2018 (2017: Nil).

12 Contingent Liabilities and Assets

The Company has no contingent liabilities at 31 March 2018 (2017: Nil). The Company has no contingent assets at 31 March 2018 (2017: Nil).

13 Subsequent Events

No significant events have occurred subsequent to balance date.

14 Financial instruments classification

		2018	
	Loans and receivables	Other amortised cost	Total carrying amount
Assets			
Cash and cash equivalents	575,472	-	575,472
Receivables	841,859	-	841,859
Total Assets	1,417,331	-	1,417,331
Liabilities			
Payables	-	162,375	162,375
Due to related party	-	769,180	769,180
Total Liabilities		931,555	931,555

		2017	
	Loans and	Other amortised	Total carrying
	receivables	cost	amount
Assets			
Cash and cash equivalents	729,261	-	729,261
Receivables	887,677	-	887,677
Total Assets	1,616,938	-	1,616,938
Liabilities			
Liabilities Payables	-	166,447	166,447
	- -	166,447 810,472	166,447 810,472

15 Future Funding

The Ministry of Business, Innovation and Employment extended the terms and funding of the agreement dated 18 May 2012, resulting in the Company securing additional funding of \$5,232,896 (GST inclusive) up to 30 June 2019. It is the Company's intention to obtain a new service agreement with the Ministry of Business, Innovation and Employment for the following year.

16 Accountability Requirements

Kiwi Innovation Network Limited is a multi-parent subsidiary as defined in the Crown Entities Act 2004 (the Act).

Independent Auditor's Report

To the readers of Kiwi Innovation Network Limited's financial statements for the year ended 31 March 2018.

The Auditor-General is the auditor of Kiwi Innovation Network Limited (the company). The Auditor-General has appointed me, B H Halford, using the staff and resources of Audit New Zealand, to carry out the audit of the financial statements of the company on his behalf.

Opinion

We have audited the financial statements of the company on pages 36 to 46, that comprise the statement of financial position as at 31 March 2018, the statement of comprehensive revenue and expense, statement of changes in equity and statement of cash flows for the year ended on that date and the notes to the financial statements that include accounting policies and other explanatory information.

In our opinion the financial statements of the company on pages 36 to 46:

- present fairly, in all material respects:
 - its financial position as at 31 March 2018; and
 - o its financial performance and cash flows for the year then ended; and
- comply with generally accepted accounting practice in New Zealand in accordance with the Public Benefit Entity Accounting Standards Reduced Disclosure Regime.

Our audit was completed on 8 June 2018. This is the date at which our opinion is expressed.

The basis for our opinion is explained below. In addition, we outline the responsibilities of the Board of Directors and our responsibilities relating to the financial statements, we comment on other information, and we explain our independence.

Basis for our opinion

We carried out our audit in accordance with the Auditor-General's Auditing Standards, which incorporate the Professional and Ethical Standards and the International Standards on Auditing (New Zealand) issued by the New Zealand Auditing and Assurance Standards Board. Our responsibilities under those standards are further described in the Responsibilities of the auditor section of our report.

We have fulfilled our responsibilities in accordance with the Auditor-General's Auditing Standards.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of the Board of Directors for the financial statements

The Board of Directors is responsible on behalf of the company for preparing financial statements that are fairly presented and that comply with generally accepted accounting practice in New Zealand.

The Board of Directors is responsible for such internal control as it determines is necessary to enable it to prepare financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Board of Directors is responsible on behalf of the company for assessing the company's ability to continue as a going concern. The Board of Directors is also responsible for disclosing, as applicable, matters related to going concern and using the going concern basis of accounting, unless the Board of Directors intends to liquidate the company or to cease operations, or has no realistic alternative but to do so.

Responsibilities of the auditor for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements, as a whole, are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit carried out in accordance with the Auditor-General's Auditing Standards will always detect a material misstatement when it exists. Misstatements are differences or omissions of amounts or disclosures, and can arise from fraud or error. Misstatements are considered material if, individually or in the aggregate, they could reasonably be expected to influence the decisions of readers taken on the basis of these financial statements.

We did not evaluate the security and controls over the electronic publication of the financial statements.

As part of an audit in accordance with the Auditor-General's Auditing Standards, we exercise professional judgement and maintain professional scepticism throughout the audit. Also:

- We identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- We obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the company's internal control.
- We evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Board of Directors.
- We conclude on the appropriateness of the use of the going concern basis of accounting by the Board of Directors and, based on the audit evidence obtained, whether a material

uncertainty exists related to events or conditions that may cast significant doubt on the company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the company to cease to continue as a going concern.

 We evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with the Board of Directors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Our responsibilities arise from the Public Audit Act 2001.

Other information

The Board of Directors is responsible for the other information. The other information comprises the information included on pages 1 to 35, but does not include the financial statements, and our auditor's report thereon.

Our opinion on the financial statements does not cover the other information and we do not express any form of audit opinion or assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information. In doing so, we consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If, based on our work, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Independence

We are independent of the company in accordance with the independence requirements of the Auditor-General's Auditing Standards, which incorporate the independence requirements of Professional and Ethical Standard 1 (Revised): Code of Ethics for Assurance Practitioners issued by the New Zealand Auditing and Assurance Standards Board.

Other than the audit, we have no relationship with or interests in the company.

B H Halford

Audit New Zealand

On behalf of the Auditor-General

Tauranga, New Zealand





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