



## When Kiwis collaborate

KiwiNet's activities are being replicated in countries all over the world, but not always with the high degree of collaboration possible in New Zealand.

"New Zealand seems to be just the right size to actually take quite a national approach," says Bram Smith. And while New Zealanders might not all be as instinctively commerce-minded as many American researchers, say, our scientists outperform many international colleagues when it comes to original research. "Our science capability is really strong," says Smith. "What we try to do is harness that capability."

As a sponsor of this month's KiwiNet Research Commercialisation Awards, BNZ's Jason Lewthwaite, Director of Value Chain Agribusiness, says the bank's support recognises the importance of innovation – and the commercialisation of scientific ideas – to New Zealand's economic future. "We work with many clients who are turning great science into business opportunities," he says. "We understand the challenges involved and are committed to playing a constructive role in the commercialisation field."

Innovation, Bram Smith says, is "discovery plus application". The finalists at the awards all in their own way embody that fundamental formula.

Among the finalist projects:

- A partnership between GlycoSyn (a business unit of Callaghan Innovation) and an undisclosed partner, using a patented process to manufacture Kifunensine, a valuable pharmaceutical compound.
- A partnership between the University of Canterbury and Tait Communications, to commercialise wireless-technology research.
- A partnership between vanilla company Heilala Vanilla and Massey University's Institute of Food, Nutrition and Human Health to help develop high-value products.

KiwiNet Research Commercialisation Awards 2014, Auckland, June 11.



KiwiNet founding general manager Bram Smith.

Smith's organisation uses its networks to put them in touch with the people and departments that might help them.

Inevitably, some academics are wary of the push for commercialisation, but Smith emphasises that "blue-sky" research is still valued, along with traditional activities such as publishing findings and presenting at conferences. "One of the things we're trying to do with our training programmes is show people that it's not one or the other; it's not 'patent or publish'... it can be both."

Smith's own background is as a researcher in mechanical and biomedical engineering. He also has a history of involvement with start-up ventures including one that developed engineering software. Smith recalls learning how satisfying it could be to watch ideas being put to practical use. "I got a real kick out of meeting people just randomly who were using my software. It is exciting to do research that creates something that everyday people will use."

- The KiwiNet partners: AgResearch, University of Otago, Lincoln University, University of Canterbury, Plant & Food Research, Victoria University, the National Institute of Water and Atmospheric Research, AUT, University of Waikato, Landcare Research, Callaghan Innovation, Environmental Science and Research, the Cawthron Institute.

## A unique Kiwi consortium is helping researchers leverage their scientific discoveries into successful commercial ventures.

One of the most exciting recent developments in commercial fishing technology anywhere in the world was unveiled late last year, right here in New Zealand.

The breakthrough technology, which does away with trawling nets and instead sees fish contained in a large PVC liner to be sorted for size and species before being hauled onto a fishing boat, is the product of a partnership between scientists at Plant & Food Research and the fishing companies Aotearoa Fisheries, Sanford and Sealord.

By improving sustainability and the quality of caught fish, it is estimated that use of the new system could increase New Zealand export returns by \$100 million in the next six years.

Now in a "commercialisation" phase, the project builds on nearly a decade of research, and is being advanced through \$26 million in investment by the fishing companies – matched by the same amount in government funding – and trials on commercial vessels.

The collaboration provides a great example of what can be achieved when scientific and business worlds come together.

That's why the "precision seafood harvesting" partnership is among the finalists in this month's KiwiNet Research

Commercialisation Awards, an event that shines a light not just on projects like the new fishing technology, but also on the work of KiwiNet itself.

KiwiNet founding general manager, Bram Smith, says the seafood project is exactly the kind of venture his organisation – a consortium of universities and Crown Research institutes – wants to encourage. By acting as a focal point for coordination and collaboration, KiwiNet's mission is to

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help New Zealand become a world leader in turning scientific discoveries from the publicly funded science sector into new products and services and start-up companies.

KiwiNet had its beginnings in 2008, when a group of four universities, led by WaikatoLink at the University of Waikato, began working together to win public "Preseed" funding. Today it includes 13 partner organisations, which together represent about 6000 researchers – or 67 percent of researchers employed in New Zealand universities and Crown research organisations.

In the past five years KiwiNet has invested more than \$7m of public money into 184 projects, creating 93 jobs with strong potential to create export earnings. It achieves this by helping bridge the gap between great research ideas with commercial potential and an investable proposition. So far, the outcome has been the establishment of more than a dozen companies and more than \$5m of private investment. It is estimated that KiwiNet's investment portfolio has the potential to generate more than \$200m worth of economic benefits to the country.

KiwiNet runs an independent investment committee to assess proposals and allocate funding on a case-by-case basis. It also facilitates collaboration and networking between its partner institutions. Each of the partnering research organisations has a Tech Transfer Office representative on the committee. "Whenever one of the organisations has a project that has commercial potential, they will essentially discuss it with all the other organisations," explains Smith. "That is quite a game-changer in encouraging research organisations to collaborate and share resources."

The money distributed by KiwiNet can be spent on developing a prototype, securing some intellectual property through a patent, talking to potential customers and gathering market intelligence.

Andrew Turnbull, KiwiNet Investment

Main photograph: Terry Wreford/Hann.