

2015 Science Investment Round Successful Proposals

Smart Ideas Phase 1

Short Title	Organisation	Term (yr)	Total funding (excl GST)
Modular solids and nutrient extraction: A low capital cost solution for upgrading one the world's most common environmental protection systems.	Massey University	2	\$693,275
Simple, automated nucleic acid extraction for point-of-care diagnostics	University of Otago	2	\$999,999
Parasite strippas: Tricking infective parasite larvae to exsheath on pasture.	AgResearch Limited	2	\$978,662
Chemical camouflage to protect vulnerable native prey from introduced predators	Landcare Research New Zealand Ltd	2	\$984,300
Anti-Foul Marine Paints	The Research Trust of Victoria University of Wellington	2	\$1,000,000
Treating polyglutamine diseases with synthetic dendrimers - PEEs and Qs in the mind	The Research Trust of Victoria University of Wellington	2	\$1,000,000
Agricultural plastic mulch film with nitrogen-fixing capability	Lincoln Agritech Limited	2	\$1,000,000
Developing sustainable fish aquaculture foods from seaweed	University of Auckland	2	\$990,500
Hyper-loupe: A snapshot on food micro-structure	AgResearch Limited	2	\$1,000,000
Biofilm resistant materials for use in medical implants	The Research Trust of Victoria University of Wellington	2	\$1,000,000
Portable NMR sensor technology for brain oxygenation monitoring	University of Otago	2	\$1,000,000

Short Title	Organisation	Term (yr)	Total funding (excl GST)
Modulating pathogen-host communication - new targets for antimicrobials	University of Auckland	2	\$999,346
Evanescent Sensor for Improved Quality Control of Fruit, Vegetable and Pasture Crops	Lincoln Agritech Limited	2	\$1,000,000
A device for assessment of visual function for use with young children	University of Auckland	2	\$999,986
Total over 2 years			\$13,646,068

Smart Ideas Phase 2

Short Title	Organisation	Term (yr)	Total funding (excl GST)
Selective Insecticides - Phase 2	University of Otago	2	\$1,000,000
Engineering high value enzymes using forward and reverse evolution	University of Waikato	2	\$1,000,000
3D printed adsorptive media	University of Canterbury	2	\$1,000,000
Mitigating livestock methane emissions using methanogen secondary metabolites	University of Auckland	2	\$836,000
Total over 2 years			\$3,836,000

Targeted Research: Biological Industries Research Fund

Short title	Organisation	Term (yr)	Total funding (excl GST)
Protecting New Zealand's primary sector from plant pests; a toolkit for the urban battlefield	Scion	3	\$3,750,000
Accelerating sustainable productivity gains for high value export: Dairy Goat infant formula	University of Auckland	3	\$3,639,423
Innovative New Zealand Hybrid UHT Food Products	AgResearch Limited	3	\$3,750,000
New Zealand Red Meat Super-Premium Petfoods for Export	AgResearch Limited	3	\$1,754,001
Total over 3 years			\$12,893,424

Targeted Research: Energy and Minerals Research Fund

Short title	Organisation	Term (yr)	Total funding (excl GST)
Understanding petroleum source rocks, fluids, and plumbing systems in New Zealand basins: a critical basis for future oil and gas discoveries.	GNS Science	4	\$9,600,000
Cretaceous tectonic transition from convergence to extension in New Zealand: Implications for basin development, paleogeography and hydrocarbon plays.	University of Waikato	4	\$2,409,172
Total over 4 years			\$12,009,172

Targeted Research: Environment Research Fund

Short title	Organisation	Term (yr)	Total funding (excl GST)
Coastal acidification: rate, impacts and management	National Institute of Water and Atmospheric Research Ltd	4	\$4,900,000
What's at stake? - Enabling decision-making through better measurement, forecasting and evaluation of the impacts of non-native organisms in NZ's changing ocean	National Institute of Water and Atmospheric Research Ltd	4	\$3,033,760
Smart models for aquifer management	Institute of Geological & Nuclear Sciences Limited - Trading as GNS Science	3	\$3,000,000
Understanding the groundwater conduits between land and receiving waters - the key to effective aquifer management.	Lincoln Agritech Limited	3	\$3,000,000
Enhancing the health and resilience of New Zealand lakes	University of Waikato	4	\$5,136,708
Oranga Taiao, Oranga Tangāta - Knowledge and toolsets to support co-management of estuaries	Massey University	4	\$4,400,000
Making SENZS: richer decisions for engaged communities	AgResearch Limited	3	\$2,400,000
Remote sensing, classification and management guidelines for surf breaks of national and regional significance	University of Waikato	3	\$1,206,390
Weaving the korowai of Papatūānuku - adaptive governance and supported environmental decision making	New Zealand Forest Research Institute Ltd Trading as Scion	3	\$2,391,408
Total over 3-4 years			\$29,468,266

Targeted Research: Hazards and Infrastructure Research Fund

Short Title	Organisation	Term	Total funding (excl GST)
Waterproof Roads- Improved Methods for the Provision of an Affordable Optimised and Future-Proof Transportation Infrastructure	Opus International Consultants Limited	4	\$3,000,000
Local Demand Control of Electricity Supply	University of Auckland	4	\$2,390,181
Healthy Future Mobility Solutions	Mackie Research & Consulting Limited	4	\$2,172,000
Solar Tsunamis: Mitigating Emerging Risks to New Zealand's Electrical Network	University of Otago	3	\$1,467,000
Emerging anthropogenic slope hazards: Establishing risk assessment methods and remediation approaches for infrastructure-critical slopes	Institute of Geological & Nuclear Sciences Limited - Trading as GNS Science	3	\$1,500,000
Total over 3-4 years			\$10,529,181

Targeted Research: Health and Society Research Fund

Short title	Organisation	Term (yr)	Total funding (excl GST)
Developing an evidence based platform for family violence prevention in New Zealand	University of Auckland	4	\$2,880,059
Violence prevention: promotion of healthy relationships amongst high school students using a smartphone App	Auckland University of Technology	4	\$2,398,637
Total over 4 years			\$5,278,696

Targeted Research: High-Value Manufacturing and Services Research Fund

Short Title	Organisation	Term	Total funding (excl GST)
Bessel beam sensors - new generation agritech exports	Lincoln Ventures	3	\$1,200,000
Quantitative Benchtop NMR using Bayesian Analysis	University of Canterbury	3	\$863,149
Repurposed drugs for multiple sclerosis: confirming suitability, regulatory process and mode of action	Victoria University of Wellington	3	\$1,200,000
UltraD3: Ultrasonic Dental Diagnostic Device	University of Otago	3	\$1,199,869
Production of an improved anti-cancer antibody using NZ goats as an efficient, economical and safe production platform	AgResearch	3	\$1,200,000
Precision Acoustic Sensors for Pastoral and Arable Farming	University of Auckland	3	\$1,200,000
Race to the Finish: Processing and Properties Optimization of self-cleaning, antimicrobial ceramic coatings for buttons, knobs, handles and rails in hospitals.	University of Canterbury	3	\$1,142,424
Enabling faster communication with 1 GHz quartz oscillators	Victoria University of Wellington	3	\$800,000
Total over 3 years			\$8,805,442