

---

ASX Code: "PVL"

powerHouse

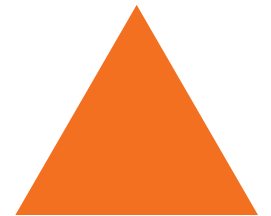
# Powerhouse Ventures Limited

---

## FY17 Results

**"Our vision is to become Australasia's leading IP commercialisation company"**

30 September 2017



# Important Notice and Disclaimer

The material in this presentation contains summary background information about the business of Powerhouse Ventures Limited (PVL) as at the date of the presentation.

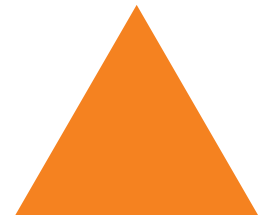
The information contained in the presentation is in summary form and is not, and does not purport to be, complete.

This presentation contains certain forward-looking statements including statements regarding PVL's current belief, intent or expectations with respect to the financial condition and performance, results of operations, business plans and objectives of management, capital adequacy and risk management practices. Forward looking-statements may be identified by words such as "should", "expect", "estimate", "likely", "believe", "anticipate", "planned" and similar expressions. All such forward-looking statements involve known and unknown risks, significant uncertainties, assumptions, contingencies and other factors, many of which are outside the control of PVL which may cause the results or actual performance to be materially different from the future results or performance expressed or implied by such forward-looking statements. Investors are cautioned not to pay undue reliance on such forward-looking statements, which speak only as of the date of the presentation.

No presentation or warranty is or will be made by any legal or natural persons in relation to the accuracy or completeness of all or part of this document, or any constituent or associated presentation, information or material (collectively, the Information), or the accuracy, likelihood of achievement or reasonableness of any forecasts, prospects or returns contained in, or implied by, the information or any part of it. The information includes information derived from third party sources that has not been independently verified.

To the full extent permitted by law, PVL disclaims any obligation or undertaking to release any updates or revisions to the information to reflect any change in expectations or assumptions, any events occurring after the date of the presentation or any unexpected events or circumstances.

Nothing contained in the presentation constitutes investment, legal, tax or other advice. You should make your own assessment and take independent advice in relation to the information and any action on the basis of the information. In particular, this presentation is not intended to be relied upon as advice to any person and does not take into account the financial situation, objectives or needs of any person. These matters should be considered and appropriate financial advice obtained, before making any investment decision in relation to PVL.



# Powerhouse — at a glance

## Corporate

ASX Code	PVL
Ordinary Shares*	28,986,363
Market Capitalisation*	A\$9,855,363

\*as at 30 September 2017

## Key Board and Management Contacts

Russell Yardley	Chairman
Paul Viney	Chief Executive Officer
Andy Matheson	Chief Investment Officer
Stuart Whitham	Chief Financial Officer

**Share Price A\$0.34** as at 30 September 2017

## Powerhouse Ventures (ASX:PVL) Daily Share Price, NTA per share

— NTA / share  
— Share Price



# Summary Overview

**2016/17 has been a year of significant change for Powerhouse**

- **12 October 2016 IPO raising A\$10.2 million**
- **Board changes**
  - Mr Kerry McDonald resigned as Chairman on 27 January 2017
  - Interim Chairman appointments
  - Mr Russell Yardley appointed a Director on 28 February 2017 and as Chairman on 14 June 2017
  - Dr Stephen Hampson resigned as Managing Director on 25 August 2017
  - Mr Paul Viney appointed CEO on 25 August 2017
- **Hydroworks failure under strain from significant Australian contracts**
  - Melbourne Water completed
  - SEQW unable to complete
- **Significant focus on “off-model” realisations - targeting circa \$3 million in proceeds**
- **First Australian investment made - Ferronova out of UniSA**
- **Investee Croplogic proves “IP to IPO” pathway**
- **Invert Robotics expands into Europe and launches significant capital raise**
- **Many Powerhouse companies named a Finalist at NZ Innovation Awards**

# Commercialisation landscape

## New Zealand

### **The New Zealand Government is strongly supportive of innovation**

- Powerhouse enjoys unparalleled access to NZ universities
- Powerhouse is by far the largest of 3 accredited, government-approved technology incubators in NZ
- We have Investment Managers assigned to each NZ university hub
- The modus operandi of Powerhouse Investment Managers is to search for transformative, breakthrough technologies

## Australia

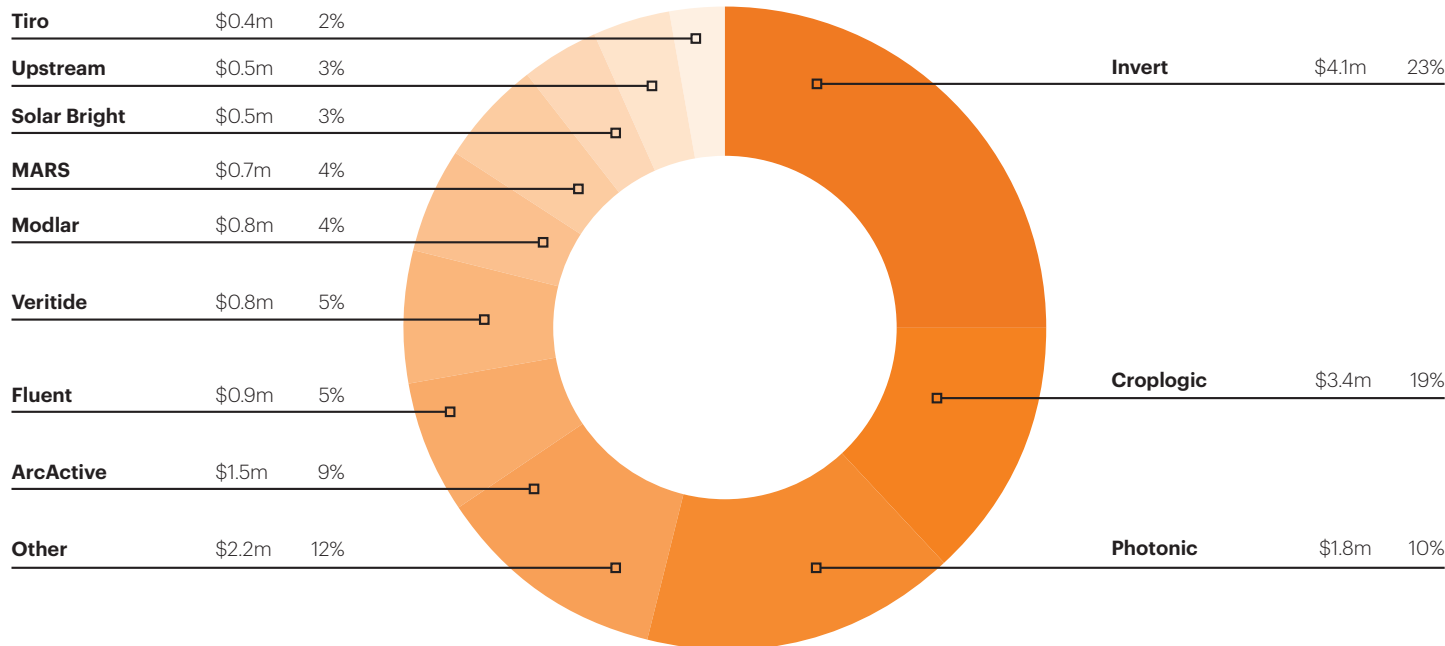
### **In Australia, the Government is pursuing an innovation and 'ideas' boom**

- There is strong interest from Australian universities in the Powerhouse model
- IP from Australian universities currently under review
- Australian office established in Melbourne
- Australian Chairman appointed
- Targeting innovation management mandates over 4 innovation funds and substantial grant funding

# An actively managed, diversified portfolio

(as at 30 June 2017)

## Investment Portfolio Total Value \$17.5 million

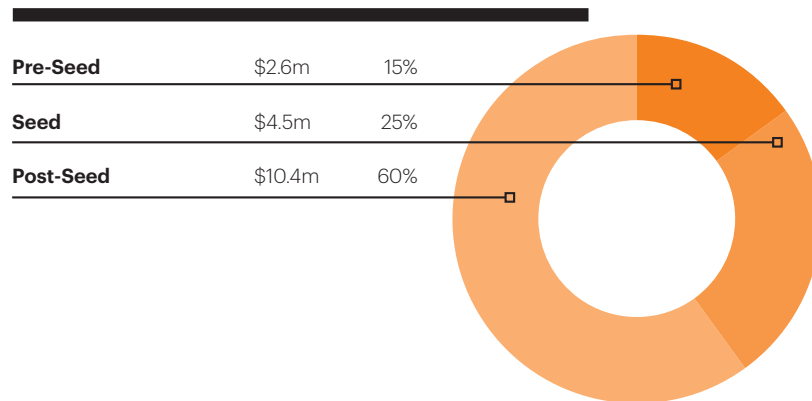


- Valuations have been externally reviewed
- Independent review of valuation methodologies completed
- Valuations are at cost, price of recent third party investment, or written down value

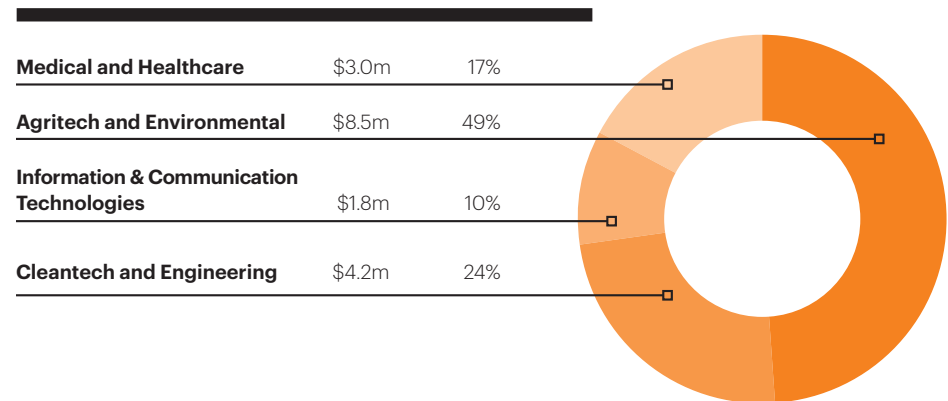
# An actively managed, diversified portfolio

(as at 30 June 2017)

## By Stage of Growth



## By Sector



Powerhouse mitigates risk by spreading its investments across a variety of sectors and stages of business development.

# FY17 Results Summary

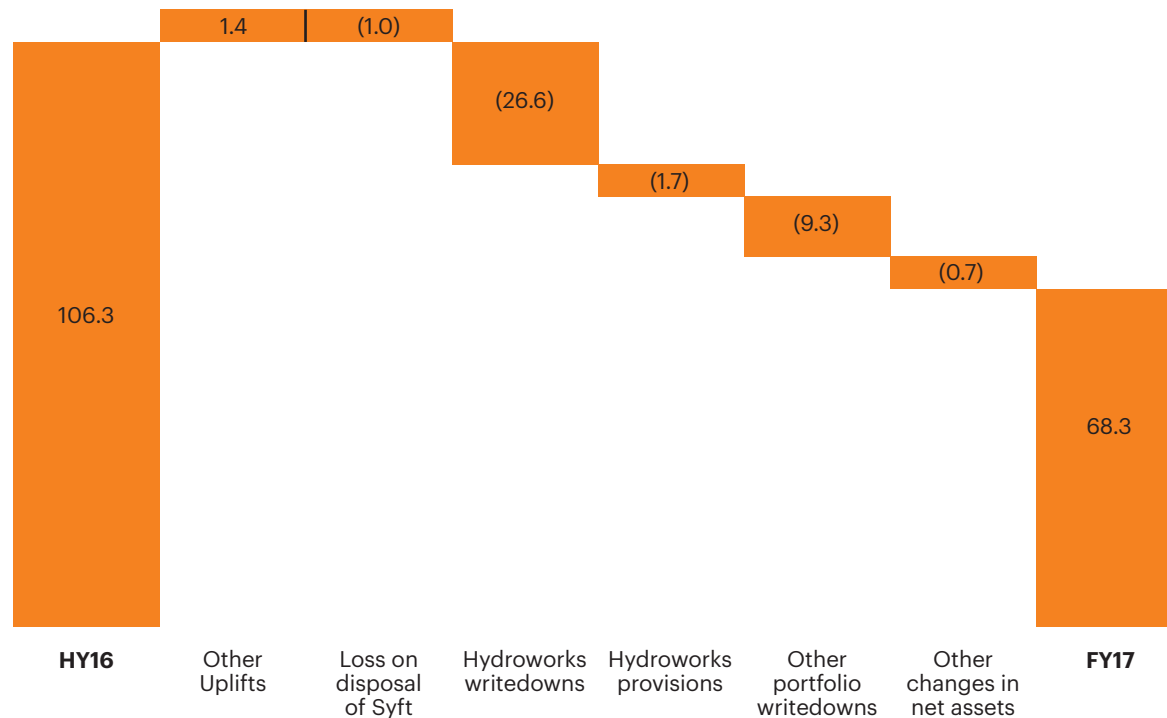
- Statutory loss after tax of NZ\$(11.2)m primarily due to Hydroworks write down NZ\$7.7m and provision of NZ\$0.5m
- Revenues fall by \$8.9m to NZ\$(0.9)m against previous corresponding period (PCP) primarily due to Hydroworks write down
- Other prudent write downs of NZ\$2.7m
- Fair value uplifts of \$2.5m
- Current share price represents a 50%\* discount to 30 June NTA of NZ\$0.68/share
- Sale of “off model” holding in Syft for \$1m resulting in a 10x return

\* A\$0.34/share as at 30 September 2017



# Value movements FY17

## Net Assets Waterfall Analysis



NZ\$m  
NZc/share

# Reconciliation of underlying earnings with statutory profit

	<b>FY17 Actual \$m</b>
Statutory net profit/(loss)	<b>(11.2)</b>
Adjustments to net profit	
— Hydroworks writedown	7.7
— Other portfolio writedowns	2.7
— Provision for potential claim	0.5
— Direct IPO costs (per audited accounts)	0.9
— Indirect IPO costs	0.9
— Deferred tax reversal	(1.4)
— Write-off trademark and other one off items	0.7
<b>Underlying profit/(loss)</b>	<b>\$0.8m</b>
<b>Earnings per share*</b>	
Earnings per share (NZ\$)	(0.43)
Underlying earnings per share (NZ\$)	0.03

\*based on shares on issue as of 30 June 2017

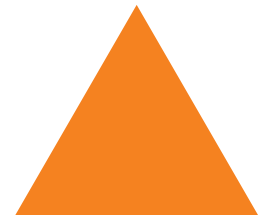
# Movements in FY17

## Statement of Financial Position (all figures \$'000)

	30 June 16	30 June 17	Movement
Cash	465	1,320	855
Receivables	1,689	1,974	285
Portfolio assets	20,663	17,772	(2,891)
Intangibles	186	13	(173)
Other	224	28	(196)
<b>Total Assets</b>	<b>23,227</b>	<b>21,107</b>	<b>(2,120)</b>
Trade and other payables	2,001	790	1,211
Deferred tax liability	1,571	-	1,571
Provisions	-	493	(493)
<b>Total Liabilities</b>	<b>3,572</b>	<b>1,283</b>	<b>2,289</b>
<b>Net Assets</b>	<b>19,655</b>	<b>19,824</b>	<b>169</b>
<b>Net Assets per share (NZD)</b>	<b>\$1.10</b>	<b>\$0.68</b>	<b>(\$0.42)</b>
<b>NTA per share (NZD)</b>	<b>\$1.17</b>	<b>\$0.68</b>	<b>(\$0.49)</b>

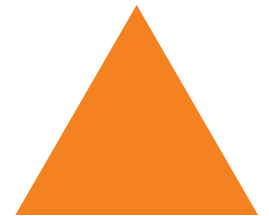
# Pathway to Restoring Shareholder Value

- Executive team restructured and reduced
- Operating costs reduced
- Board reduced in size from 7 Directors to 5
- Further refinements in operating model underway
- Partial sale of Invert Robotics stake at 58% IRR and 5x return
- Strong focus on 'off model' investment realisations going forward



# Outlook

- **Strong return to profitability in 1HFY18**
- **NZ\$0.25m profit from partial sale of Invert Robotics at 58% IRR, yielding NZ\$0.8m cash**
- **Anticipate 'off model' investment realisations**
- **Anticipate NTA per share uplift in 1HFY18**
- **Significant cost control focus**
- **No plans to raise additional capital at current depressed share price**
- **Increased focus on Australian investment opportunities and on-campus relationships**
- **Australian grant funding opportunities**



# Thank you

---

## Contact details:

### **Russell Yardley**

**Chairman**

+61 418 586 364

+64 27 573 5144

[russell.yardley@powerhouse-ventures.co.nz](mailto:russell.yardley@powerhouse-ventures.co.nz)

### **Paul Viney**

**Chief Executive Officer**

+64 21 084 72029

[paul.viney@powerhouse-ventures.co.nz](mailto:paul.viney@powerhouse-ventures.co.nz)

### **Greg Slade**

**Investor Relations**

[greg@sladeir.com](mailto:greg@sladeir.com)

+61 48 891 7882



---

# Powerhouse Ventures Limited

---

## Appendix



# Board of Directors



**Russell Yardley**  
**Chairman**  
**Non-Executive**  
**Independent Director**

Russell is Chairman of ASX listed Tesseract Limited. He founded his first company Decision Engineers that was merged with ASI and listed on the ASX in 1993.

Appointed to the Board on 28/2/2017.



**Rick Christie**  
**Non-Executive**  
**Independent Director**

Rick is a professional Director and Chairman with experience in both the public and private sectors. His appointments include Chairman of AgResearch Ltd and Director of the Foundation for Research, Science and Technology. Rick is past Chairman of a Top 300 ASX Listed company.



**Dianne McCarthy**  
**Non-Executive**  
**Independent Director**

Dianne has 20 years experience in various management and governance roles in the tertiary education, science and health sectors. She is the immediate past Chief Executive of the Royal Society of New Zealand.



**John Hunter**  
**Non-Executive**  
**Independent Director**

John has extensive CFO, COO and general management experience including HR, IT and legal responsibilities. He has extensive board level experience.



**John Walley**  
**Non-Executive**  
**Non-Independent Director**

John has international experience in research, development, manufacturing and distribution companies in the marine, electronics and software industries. He is a director or chair of several companies and has a number of investments in early-stage companies.



# Management



**Paul Viney**  
Chief Executive Officer

As a career finance and governance professional, Paul has worked in Australian industrial and financial services organisations for over 20 years. Paul has specialised in financial and management accounting, value creation, mergers and acquisitions and corporate governance. Prior to joining Powerhouse Ventures, Paul was Chief Financial Officer/Company Secretary at a diversified ASX-listed banking group, which had a market capitalisation of over A\$400 million and an asset footprint of over A\$5.3 billion. Paul joined Powerhouse in May 2014 as CFO and Company Secretary, was a Director from April 2016 to August 2017 and became CEO in August 2017.



**Andy Matheson**  
Chief Investment Officer

Andy has held senior executive roles in energy, infrastructure and clean-tech companies. He has worked as CEO, MD and Board Director in start-up businesses through the pre-seed to exit stages over 10 years. Before this Andy held international marketing and business development roles targeting the global industrial and utilities sector for 10 years. Prior to joining Powerhouse Ventures, Andy worked at a significant New Zealand investment company; a substantial shareholder of an NZX company with a market capitalisation of NZ\$1.7 billion. Andy joined Powerhouse as a contractor in February 2016 and was appointed as CIO in November 2016.



**Stuart Whitham**  
Chief Financial Officer and  
Joint Company Secretary

Stuart brings to Powerhouse his international experience working with young growth companies on modelling, audits, valuation, fund management and financial control. Stuart qualified as a Chartered Accountant at Coopers & Lybrand (now PwC) in London, specialising in the valuation of derivatives with Credit Suisse First Boston, Commerzbank and the Royal Bank of Scotland. After making a permanent move to Christchurch in 2004, Stuart took up a role with a global fund of funds, before later becoming Financial Controller at TSE listed Allied Telesis. Stuart joined Powerhouse in July 2011.



**Rachel Triplow**  
General Counsel and  
Joint Company Secretary

Rachel's experience includes more than 20 years in intellectual property and commercial law. Her roles have included: acting as the sole in-house counsel for the UK branch of an international company; providing specialised legal and strategic advice within leading IP firms in New Zealand and the UK; preparing legal opinions and policies at what is now the MBIE; and drafting legal decisions and practice guidelines as the Assistant Commissioner of Trade Marks at IPONZ. Since joining Powerhouse in 2015, Rachel has played a key part in listing on the ASX and as Company Secretary is now responsible for supporting the Board on governance matters.

## Post-seed companies



ArcActive is developing a carbon fibre negative electrode for lead acid batteries to improve fuel economy in Start-Stop/Micro-Hybrid vehicles (MHV). The MHV is expected to be the mass-market car for at least 20 years with demand estimated to grow from 3m batteries in 2010 to 100m in 2020 – a US\$12b market.

ArcActive has one of only a handful of technologies that have real prospects of addressing the market's cost and recharge rate performance requirements. The electrodes are based on research pioneered at the University of Canterbury into continuous production of carbon nanotubes. The carbon fibre material may be used in a number of potential products, but ArcActive's initial focus is on the battery electrode.

### Engineering and Cleantech\*

Stage: Post-seed

Revenue: <\$1m

Indicative market capitalisation: \$20m-\$30m

Employees: 15

PVL shareholding: 5.9%

PVL invested: \$468k



Within the food-processing industry, food-safety is driven by eliminating bacterial contamination which can be harboured by cracks in industrial vessels such as tanks, dryers, silos. Historically these vessels have been serviced by scaffold or rope-based inspections, a hazardous process which is prone to errors.

Invert Robotics provides remote inspection services to global blue chip customers using its proprietary robotics technology. The mobile climbing robot system allows identification, recording and reporting of cracks in mission critical infrastructure.

Invert is currently expanding geographically into Europe, following success with inspection of milk silos and dryers in Australasia.

### Agritech and Environmental\*

Stage: Post-seed

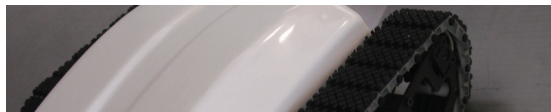
Revenue: <\$1m

Indicative market capitalisation: \$10m-\$15m

Employees: 7

PVL shareholding: 34.7%

PVL invested: \$834k



Pharmaceutical companies currently spend ~US\$1.5b developing each new drug. It can take 12–24 months for the pre-clinical trials of ~250 prospective drugs, with only 5 proceeding to clinical trials. These companies have a strong need for tools that will speed up this elimination process and aid getting drugs onto the market quicker.

MARS Bioimaging has developed a small animal x-ray molecular imaging system that has spectral resolution, using CERN-developed detector technology. This additional “colour” information provides new imaging capabilities.

Having initially targeted key opinion leaders, MBI has launched its first commercial release system and is now building a human scanner.

### Medical and Healthcare\*

Stage: Post-seed

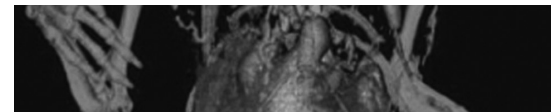
Revenue: <1m

Indicative market capitalisation: \$5m-\$10m

Employees: 7

PVL shareholding: 8.5%

PVL invested: \$726k



## Post-seed companies



The architecture and construction industry is going through a rapid shift from 2D CAD (Computer Aided Design) to modelling buildings in full 3D BIM (Building Information Modeling).

Modlar's core product is a network which connects architects to building products manufacturers. This allows architects to more easily discover, discuss and specify real world products into their projects in full 3D. This in turn speeds up the design process and reduces errors on site.

Having raised ~\$3M of NZ Venture Capital, the company is now rapidly expanding into the North American market. Modlar is currently used by 130,000+ professionals globally including 80% of the world's top 100 firms.

### Digital and ICT\*

Stage: Post-seed

Revenue: <\$1m

Indicative market capitalisation: \$5m-\$10m

Employees: 7

PVL shareholding: 11.5%

PVL invested: \$570k



High-volume crop growers and processors have significant challenges ahead in order to meet rising food-demand. Growers need to optimise resources and processors need to plan to ensure efficient processing.

CropLogic delivers specialist agronomy services to growers using technology developed over 30 years at The New Zealand Institute for Plant & Food Research. CropLogic brings together crop science, environmental data and agronomic expertise to offer input for daily decision making that improves on typical "rule of thumb" recommendations. In addition to its expert system, CropLogic provides the telemetry required to gather field data.

Croplogic listed on the ASX in September 2017 (CLI).

### Agritech and Environmental\*

Stage: Post-seed

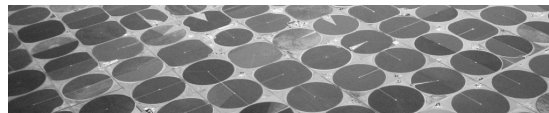
Revenue: <\$1m

Indicative market capitalisation: \$10m-\$15m

Employees: 20

PVL shareholding: 31.2%

PVL invested: \$1.57m



## Seed companies



The global mobile marketing sector is a high-growth area that is seeing innovation as technology and marketing mix, with consumers becoming increasingly 'connected' and smartphone technology becoming almost ubiquitous in the modern world.

Motim Technologies has developed a range of mobile interaction technologies, based on expertise in computer vision, augmented reality, image-recognition and mobile-software development alongside deep creative experience and expertise.

Securing direct relationships with major global brands is validation that Motim has a special proposition and the ability to execute and deliver on a global stage.

### Digital and ICT\*

Stage: Seed

Revenue: <\$1m

Indicative market capitalisation: <\$1m

Employees: 3

PVL shareholding: 41.8%

PVL invested: \$719k



SolarBright is positioned to capitalise on the LED and Solar LED lighting phenomena that are changing the way the world is illuminated.

SolarBright is taking its innovation and manufacturing excellence to the international market with customers in over 20 countries, including the World Bank, Government Agencies, Local Authorities and blue-chip companies.

SolarBright's approach of innovation and collaboration has led to use of its patented products in a wide range of applications and markets - from the supply and installation of solar street lighting in Pacific islands to development and manufacture of PATeye, the world's first commercially-available solar-powered ice-detection road stud.

### Engineering and Cleantech\*

Stage: Seed

Revenue: <\$1m

Indicative market capitalisation: \$1m-\$5m

Employees: 3

PVL shareholding: 33.8%

PVL invested: \$1.04m



## VERITIDE

The food industry is driven by food-safety. Detection of harmful microorganisms through improved process control leads to higher-quality food, with better shelf-life and fewer product-recalls. Annually in the US, one in six people become ill and there are 200,000 hospitalisations and 4,000 deaths, all attributable to food poisoning.

Veritide is the creator of disruptive technology for real-time detection of faecal contamination on meat within meat processing plants. Providing both portable hand-held devices and fixed full carcass scanner technology Veritide scanners can be integrated throughout each stage of the food processing line.

Veritide's platform technology has many other applications in food, health and bio-safety areas.

### Agritech and Environmental\*

Stage: Seed

Revenue: <\$1m

Indicative market capitalisation: \$1m-\$4m

Employees: 4

PVL shareholding: 19.8%

PVL invested: \$980k



## Seed companies



Many industrial and commercial operations manage controlled environments, where variables such as temperature, humidity and air quality need to be maintained within specific limits and dangerous substances such as toxic gases need to be contained.

Photonic Innovations uses a combination of ultra reliable, connected sensors combined with cloud based data management to address these challenges with minimal human intervention. Under a recurring revenue business model, PIL will monitor environmental variables, take corrective action and use the data to provide added value services such as predictive maintenance and energy management. The first target market is cold stores where patented highly reliable laser-based detection of gas leaks forms the platform for an Internet of Things business.

### Engineering and Cleantech\*

Stage: Seed

Revenue: <\$1m

Indicative market capitalisation: \$5m-\$10m

Employees: 6

PVL shareholding: 33.3%

PVL invested: \$630k



Over 2 Billion people use English to communicate on a regular basis every day. The negative impact of substandard English proficiency is significant and felt worldwide on both an economic and social level.

Fluent is combining new linguistic science with “big data” and machine learning to build an artificial intelligence platform that can provide improved and faster analysis of verbal communication skills and placement against real-world expectations.

This technology applies to a range of applications and industries. As a first step to market Fluent is initially applying it to language learning through a tool that will guide English language learners around the world towards real-world fluency.

### Digital and ICT\*

Stage: Seed

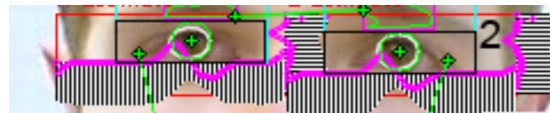
Revenue: <\$1m

Indicative market capitalisation: \$1m-\$5m

Employees: 10

PVL shareholding: 20.5%

PVL invested: \$410k



## Tiromedical

Mammography is the dominant method of breast cancer screening in New Zealand. However, mammograms are much less effective with radio-dense tissue (affecting 40% of the screened population).

The University of Canterbury has developed a painless, zero-radiation screening technology unaffected by radio-dense tissue.

Tiro Medical will develop technologies to enable more accurate diagnoses and treatments across a range of medical areas, improving care whilst reducing expenditure. Tiro's initial focus will be on the breast screening market, developing the University's technology for use as a supplementary scan to mammography of radio-dense tissue.

### Medical and Healthcare\*

Stage: Seed

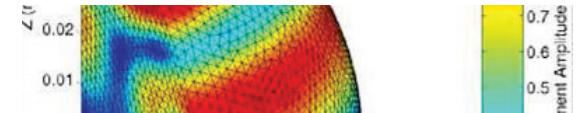
Revenue: <\$1m

Indicative market capitalisation: \$1m-\$5m

Employees: 2

PVL shareholding: 32.4%

PVL invested: \$285k



## Pre-seed companies



AuramerBio is a custom sensor development company. Its novel technologies allow accurate measurement of biologically relevant molecules at the point-of-testing. AuramerBio's technologies are being developed for application in drug and fertility testing.

The technology can be rapidly adapted to measure a wide range of targets in liquid samples (saliva, urine, blood, environmental water) providing access to a large number of future market opportunities. AuramerBio is developing both simple economic 'qualitative' dipstick tests and also more complex 'quantitative' digital devices with its industry partners.

### Medical and Healthcare\*

Stage: Pre-seed

Revenue: <\$1m

Indicative market capitalisation: \$1m-\$5m

Employees: 3

PVL shareholding: 23.5%

PVL invested: \$200k



Avalia Immunotherapies' first vaccine product is a cancer vaccine to treat patients suffering from HPV associated cancers. Its vaccine approach has the potential to induce patient responses against HPV cancers that are not currently responsive to checkpoint immunotherapy.

Every day in the US, about 12,000 people ages 15 to 24 are infected with the human papillomavirus (HPV). Of those, 2,600 are infected with the HPV16 strain, which is responsible for 50% of human cervical cancers and more than 85% of HPV-positive head & neck, anal and anal-genital cancers. Preventative vaccines cannot cure established HPV infections and standard of care treatments cannot eliminate HPV outside the treated area. This unmet need will be satisfied with Avalia's vaccine.

### Medical and Healthcare\*

Stage: Pre-seed

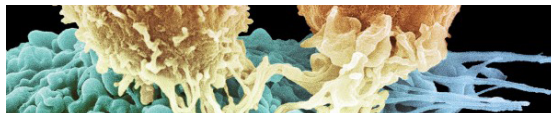
Revenue: <\$1m

Indicative market capitalisation: \$1m-\$5m

Employees: 3

PVL shareholding: 11.8%

PVL invested: \$300k



## CertusBio

Increased industrial efficiency and tighter environmental regulations are driving the global process analytical instrumentation market, currently worth US\$2.8b and projected to grow exponentially.

CertusBio's flagship biosensor technologies combined with process control systems will have the ability to make real-world efficiency gains in the primary industries across New Zealand and overseas. Analysis and shaping has revealed an opportunity from multiple research projects.

Detecting lactose in dairy processing plants is a customer need, and rapid detection of biological oxygen demand (BOD) is another. Both can be solved using hi-tech biosensor solutions emerging from the region's research organisations.

### Agritech and Environmental\*

Stage: Pre-seed

Revenue: <\$1m

Indicative market capitalisation: <\$1m

Employees: 2

PVL shareholding: 32.8%

PVL invested: \$272k





## Pre-seed companies



Cirrus is an easily adopted process technology that significantly improves the mechanical properties of plated coatings in electronics, aerospace, and hi-tech manufacturing, without degrading the conductivity, corrosion resistance or appearance of the coating material. Cirrus technology has been developed and patented at The University of Auckland and is currently in early evaluation with some of the world's largest manufacturers, manufacturing process and chemistry suppliers.

### Engineering and Cleantech\*

Stage: Pre-seed

Revenue: <\$1m

Indicative market capitalisation: \$1m-\$5m

Employees: 4

PVL shareholding: 5.2%

PVL invested: \$75k



Hi-Aspect provides topical formulations using its proprietary natural protein scaffolds to deliver active ingredients for skin and wound care. The skincare and medical markets have an increasing need to use natural materials with sophisticated functional properties instead of synthetic nanomaterials and polymers, which can be costly, toxic and persist in the environment.

The fibrils form strong gels that bind and release active ingredients in a controllable way, while holding them close to the site of action. With dimensions of 9–50 nanometres across and up to 1000 nanometres long, the fibrils have a high surface area to act as a scaffold. They can be made from a number of proteins and tailored to different applications.

### Medical and Healthcare\*

Stage: Pre-seed

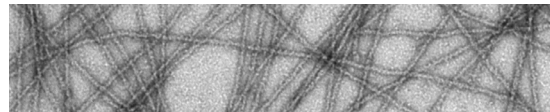
Revenue: <\$1m

Indicative market capitalisation: <\$1m

Employees: 3

PVL shareholding: 75.0%

PVL invested: \$150k



Coatings that self clean, destroy bacteria and viruses as well as pollutants in air and water, simply by being exposed to light.

Koti Technologies produces highly active, photo-catalytic coatings via several novel application methods which produce coatings with exceptional performance characteristics. Potential applications include antimicrobial healthcare and food production surfaces, air and water treatment and industrial catalysis applications.

Koti Technologies (translation from Maori is “to cloak or cover”) is a University of Canterbury spin-out commercialising ceramic coating technology developed by Professor Krumdieck and her research team.

### Engineering and Cleantech\*

Stage: Pre-seed

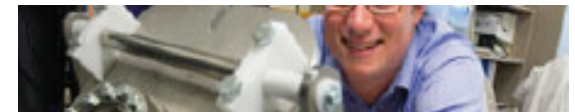
Revenue: <\$1m

Indicative market capitalisation: <\$1m

Employees: 2

PVL shareholding: 56.7%

PVL invested: \$250k



## Pre-seed companies



Orbis Diagnostics provides a platform technology for the analysis of fluids in agricultural and industrial processes using centrifugal microfluidics. The first market is dairy farming, where the company will offer a single device for measuring all of the key variables in milk. This will allow a farmer to make timely decisions around the yield, health and reproductive status of each cow.

### Agritech and Environmental\*

Stage: Pre-seed

Revenue: <\$1m

Indicative market capitalisation: <\$1m

Employees: 1

PVL shareholding: nil as at 30 June 2017

PVL invested: \$nil as at 30 June 2017



A large number of patients present in Emergency Departments (ED) each year with chest pain. One in eight has a life-threatening disease. Causes for this pain are many; heart, lung, bone and nerve problems. ED physicians require rapid and accurate methods to determine which patients require immediate life saving medical treatment.

Upstream Medical Technologies (UMT) has a novel technology platform built on many years of research. This provides a new class of diagnostic tests designed for ED use. These tests detect life threatening heart and associated diseases. The lead assay can detect imminent heart attack BEFORE tissue damage occurs. UMT is building a pipeline of tests that enable earlier diagnosis for improved patient recovery.

### Medical and Healthcare\*

Stage: Pre-seed

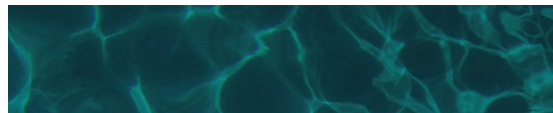
Revenue: <\$1m

Indicative market capitalisation: \$1m-\$5m

Employees: 2

PVL shareholding: 20.1%

PVL invested: \$450k



Objective Acuity is a breakthrough digital health company that achieves early detection of vision and related disorders leading to changing lifelong healthcare and learning outcomes. There are many approaches to the measurement of vision and development disorders but all rely on a co-operative subject and are intrinsically subjective.

Objective Acuity's first product is an objective measurement device that stimulates optokinetic nystagmus (OKN), an indicator of an intact vision pathway to determine poor vision. Clinical trials are about to get underway in children (200) and adults (120) to complete market validation, with a first market launch forecast for 2018.

### Medical and Healthcare\*

Stage: Pre-seed

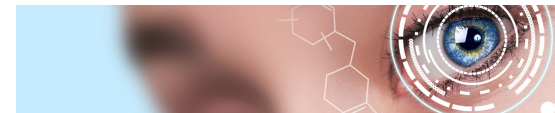
Revenue: <\$1m

Indicative market capitalisation: \$1m-\$5m

Employees: 2

PVL shareholding: 21.6%

PVL invested: \$250k





## Pre-seed companies

### edpotential

EdPotential delivers software-as-a-service products based on advanced algorithms and data analysis capability, enabling schools to make more informed decisions, enhance teaching practice, saving teachers time and improving student outcomes. EdPotential is cloud based and designed specifically for analysis of school assessment results, allowing teachers to query assessment data, analyse the data to identify gaps and strengths and act to develop solutions to target student achievement.

Many of New Zealand's leading schools are now utilising EdPotential software, delivering better student outcomes and saving schools and teachers significant time compared to manually entering and processing data.

#### Digital and ICT\*

Stage: Pre-seed

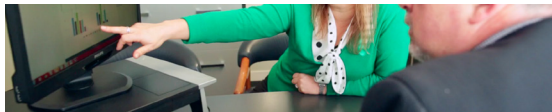
Revenue: <\$1m

Indicative market capitalisation: <\$1m

Employees: 4

PVL shareholding: 20.7%

PVL invested: \$150k



### ferronova

Ferronova is a medical device company, bringing together patented magnetic probe technology from University of South Australia and magnetic nanoparticle technology from Victoria University of Wellington.

Current cancer staging technology uses gamma probes with radioactive tracers; these have significant logistical issues and, due to their low resolution, are not suitable for more complex cancers.

The Ferronova magnetic probe and tracer system is being developed to allow staging of complex cancers, initially targeting oral cavity and other head and neck cancers. Improved staging of these complex cancers is anticipated to allow better treatment, lower patient morbidity and reduced healthcare system costs.

#### Medical and Healthcare\*

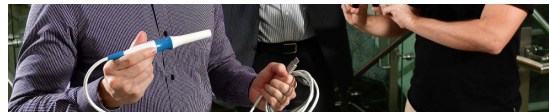
Revenue: <\$1m

Indicative market capitalisation: \$1m-\$5m

Employees: 4

PVL shareholding: 24.2%

PVL invested: \$342k



### Inhibit Coatings

The marine and aquaculture industries face significant fouling issues, resulting in decreased yield, increased corrosion and operating costs.

Antifouling coatings are utilised extensively but remain expensive, ineffective or pose significant risks to the environment.

Inhibit Coating's surface coatings display strong antimicrobial activity against E.coli and prevent the settlement of microscopic algae. Preliminary tests show very good static resistance to biofouling in the New Zealand marine environment.

Inhibit Coatings novel coatings utilise very low biocide concentrations and exhibit very low leaching rates, providing robust coatings with a long antifouling lifetime and minimal environmental impact.

#### Engineering and Cleantech\*

Stage: Pre-seed

Revenue: <\$1m

Indicative market capitalisation: <\$1m

Employees: 2

PVL shareholding: 11.9%

PVL invested: \$50k

