

## THE CENTRE FOR NANOSCALE SCIENCE AND TECHNOLOGY

**“The Tonsley precinct will provide enormous opportunities for NanoCentre members to engage with industry, enriching our research and enabling our researchers to apply nanotechnology to new products.”**

**- Professor David Lewis, Director**

### WHO

The Centre for Nanoscale Science and Technology (Nano) applies world-class research and know-how to find novel and robust solutions to challenges facing Australia in areas such as water, energy, health and security.

### WHAT

A research focused centre, we work on a variety of socially beneficial developments including new methods for harnessing energy, DNA genotyping for cancer diagnostics, environmentally-friendly corrosion and fingerprinting using quantum dots.



Centre for NanoScale  
Science & Technology



## WHY

Our expansion to Tonsley further facilitates the success of NanoConnect, a collaborative research program managed by Flinders University with support from the Department of State Development.

NanoConnect grants local companies access to analytical equipment and a vast knowledge base. Students will have the opportunity to work with scientists and explore their ideas under expert guidance.

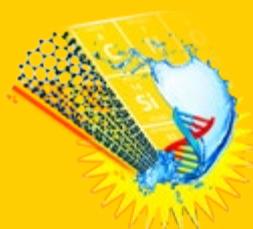
Although nanotechnology may be applied to develop new high-tech products, it can also be applied to improve performance of a range of other products, such as batteries, bio-sensors, chemical sensors, clean technologies, electronics, solar cells and for water purification.

## FAST FACTS

- Nano consists of 10 research leaders working together to increase the visibility, scope and impact of research in Nanotechnology.
- The Centre has more than 100 researchers from Postdoctoral fellows to Honours students.
- Nano has an outstanding record of 60 patent families and more than 100 publications per year.
- Nano works collaboratively with one of the world's leading nanotechnology research centre, the National Institute for Materials Science (NIMS) in Japan.
- Nanotechnology at Flinders University was awarded an ERA ranking of 5, describing the research as "well above world standard"
- The NanoConnect program implements the latest nanotechnologies into industry.



Flinders  
UNIVERSITY



Level 5  
1284 South Road  
Clovelly Park SA 5042  
(08) 7421 9555  
[nano@flinders.edu.au](mailto:nano@flinders.edu.au)  
[www.flinders.edu.au/nano\\_research](http://www.flinders.edu.au/nano_research)



## FLINDERS PARTNERS

**“Our approach starts with an innovation that could be useful... together with our commercial partner and the researchers we make it valuable.”**  
- Anthony Francis, CEO Flinders Partners

### WHO

Flinders Partners is the commercialisation agent for Flinders University, creating Spin-Out companies, managing the licensing of the University’s intellectual property and connecting researchers with industry.

We also help our researchers and partner companies in becoming innovative and truly managing innovation.

### WHAT

Flinders Partners’ Spin-Out companies include:

- Clevertar
- Re-Timer
- InRemedy
- YourAmigo
- Strategiize
- Flinders Creations
- Thereitis

### WHY

Flinders Partners adopts an “open” approach to managing the University’s commercial interests and places a strong emphasis on the importance of forming commercial partnerships early. To us, it isn’t just about making a deal; it is about investing in people and forming long-term relationships to make innovation work.

Our vision is to create and deliver relevant and valuable ways of extending the University’s value to the commercial environment, leading to Flinders University being recognised as a frontrunner and a leader in partnering with industry.

## SPIN-OUT COMPANIES

Flinders Partners has been involved in the development of a number of successful Spin-Out companies:

- YourAmigo - an award-winning search engine technology service, whose customers include Sony, Dell, Reebok, The Home Shopping Network, and General Motors.
- Re-Timer - worn like a pair of glasses, Re-Timer is a light therapy device designed to re-time your body clock. It is used for insomnia, jet lag and to combat the winter blues.
- Strategiize - an online platform for universities and enterprises to capture, develop and deliver innovation opportunities.
- Clevertar - Clevertar and its software Anna Cares was created thanks to research at the University via the 'Thinking Head' project which focused on the relationship between people and relational agents. Anna Cares is a friendly personal assistant for iPad, designed especially to help clients with day-to-day activities. She is a talking, interactive assistant with a serious job – supporting clients and helping them maintain their independence.
- FlinCare - The FlinCare software package is a web based tool which contains the components of the Flinders Program in an electronic online platform which allows both patient and health professional access. Web based delivery provides wide (and remote) access, efficiency, rapid implementation and high scalability without compromising the integrity of the Flinders Program: use of FlinCare produces client centred and client driven targets, goal setting and collaborative planning with a health professional while employing cognitive behaviour therapy and motivational interviewing techniques.
- Flinders Creations - Flinders Creations is a video production company operated by Flinders University. We offer a wide range of video solutions, including Promotional Videos, Short Documentaries, Motion Graphics and Television Commercials. Flinders Creations serves Flinders University and its partner organisations, as well as the not-for-profit and government sectors in South Australia.
- Thereitis - a novel digital technology that takes existing 2D images for internet retailers and displays them in an interactive 3D space. Based on 10 years of research at Flinders into how people search and find items, Thereitis creates a unique visual experience for online shoppers and provides immediate uplift in customer engagement and sales for online retailers.



**strategiize**  
let's innovate



Level 2  
1284 South Road  
Clovelly Park SA 5042  
(08) 8201 7788  
[info@flinderspartners.com](mailto:info@flinderspartners.com)  
[www.flinderspartners.com](http://www.flinderspartners.com)



## **MEDICAL DEVICE RESEARCH INSTITUTE**

**“Flinders at Tonsley offers enormous scope to continue to expand our collaborative networks with industry partners to develop, harness and direct technologies, connect with the community, focus research in areas of priority and create smart, high-tech industries that will provide the jobs of the future.”**

**- Professor Karen Reynolds, Institute Director**

The Medical Device Research Institute (MDRI) has the expertise and capabilities to deliver innovative solutions to the medical and allied health sectors.

With dedicated programs such as the Medical Device Partnering Program (MDPP), the Institute has formal avenues and successful models for collaborating with industry partners. Now co-located with industry at Tonsley, we are able to expand our collaborative networks to further focus our research in areas of priority.

**Our vision is to be the Australian leader in medical device research and development.**

Capability within the Institute is multi-disciplinary, covering areas such as engineering, computer science, mathematics, chemistry, psychology, nursing, occupational therapy, aged care, medical and surgical expertise amongst others.

Located in close proximity to Flinders Medical Centre and Flinders Private Hospital, we have close ties with our clinical community.



## AREAS OF RESEARCH EXPERTISE

- Assistive technology and rehabilitation engineering
- Biomechanics and implants
- Computational biomechanics
- Devices, sensors and signals
- Health informatics
- Medical image analysis
- Medical simulation

## INDUSTRY-DRIVEN RESEARCH

The Institute is home to the nationally recognised Medical Device Partnering Program (MDPP), a unique model for collaboration between researchers, clinicians, end-users and industry. The Program responds to industry-driven research problems and connects ideas to develop innovative medical devices and assistive technologies.

**“The MDPP has proven expertise and networks to take projects through various stages of innovation, from concept through to design, development, trials and manufacture.”**

**“Capability within the Institute is varied and cross-disciplinary and our close connections to the clinical community ensure our research is relevant and accessible.”**

**- Professor Karen Reynolds,  
Institute Director**

## FAST FACTS

- The MDRI recently received a significant collaborative grant from the State Government to work with industry and health groups to design and develop new drug delivery systems to improve the State's Hospital in the Home service. This services provides home-based treatments (chemotherapy, antibiotics, chronic pain relief) to patients who would otherwise require hospital care.
- A team of cross-institutional researchers and designers led by David Hobbs (MDRI PhD Candidate) have developed an award-winning accessible gaming system and novel controller named 'Orby' to assist people with limited hand function, such as children with cerebral palsy.
- The Institute's Six Degree of Freedom Hexapod Robot (developed to enhance understanding of the 3D performance of normal and diseased joints by simulating complex joint motion) won the highest accolade at the 2012 SA Engineering Excellence Awards.

For further information visit [www.flinders.edu.au/mdri](http://www.flinders.edu.au/mdri) or email Institute Manager, [carmela.sergi@flinders.edu.au](mailto:carmela.sergi@flinders.edu.au)



**Flinders University**  
The Medical Device  
Research Institute

Level 5  
1284 South Road  
Clovelly Park SA 5042  
+61 8 8201 2901  
[mdri@flinders.edu.au](mailto:mdri@flinders.edu.au)  
[www.flinders.edu.au/mdri](http://www.flinders.edu.au/mdri)



## **NEW VENTURE INSTITUTE**

**“The New Venture Institute (NVI) is the home of innovation and entrepreneurship at Flinders and the front door for business engagement with all the University has to offer.” - Director Matt Salier**

### **WHO**

The New Venture Institute (NVI) inspires, educates and connects innovators and entrepreneurs. Whilst growing and supporting established enterprises, new ventures and start-ups, NVI drives unique student programs to ensure an unrivalled University experience.

Established in 2013, the NVI works as a connection platform, linking universities, businesses, organisations and entrepreneurs to staff, students and resources with the aim of nurturing an entrepreneurial community in Adelaide.



## WHAT

NVI offers entrepreneurial, innovation and business growth programs to help South Australian companies grow and succeed. Programs include the highly successful Venture Dorm, Flinders Enterprise Consulting and Business/Researcher Speed Dating.

- Venture Dorm – provides an educational environment for people who want to learn how entrepreneurs build new ventures whilst creating one themselves.
- Flinders Enterprise Consulting – students work in teams with the support and guidance of industry mentors on live business cases learning invaluable enterprise skills.
- Business/Researcher Speed Dating – Ideas, rather than love, are at the heart of this concept, where researchers “speed-date” with executives to share research, skills and ideas bringing business closer to the innovations that will drive their businesses forward.

## WHY

NVI's new location at Tonsley embeds education with business and innovation, providing a catalyst to address business challenges through experiential education. By inspiring, educating and providing invaluable industry links, NVI endeavours to create an ambitious, industry savvy community at Tonsley.

## FAST FACTS

- NVI's newest program eNVision Incubator Space, provides a co-working environment where teams of start-ups can meet and work on their ideas.
- NVI holds inspiring business engagement and speaking events such as Entrepreneurs in Conversation - to nurture the entrepreneur within.
- NVI has been featured in Smart Company, BRW, Start-up Smart and Australian Anthill.
- NVI's Venture Dorm is the largest pre-accelerator program in Australia and has been awarded the Business/Higher Education Round Table Award for the Best Entrepreneurial Education of the Year 2013.



## **SCHOOL OF COMPUTER SCIENCE, ENGINEERING AND MATHEMATICS**

**“Tonsley will be a major contributor to both technological innovation and economic growth in South Australia in the decades to come. The presence of the University’s engineering, computing and mathematics activities at Tonsley places it where the action will be and enables it to contribute and grow as the innovation precinct develops.”**

**- Professor John Roddick, Dean of the School of Computer Science,  
Engineering and Mathematics**

### **WHO**

The School of Computer Science, Engineering and Mathematics (CSEM) offers accredited degrees and world-class research in Engineering, ICT and Mathematics. The School is one of the fastest growing in Australia, and has more than 90 staff and 1,200 students.

### **WHAT**

The School offers a wide-range of disciplines, including:

- Biomedical engineering
- Civil engineering
- Electrical and electronic engineering
- Information technology and software engineering
- Mathematics and statistics
- Mechanical engineering
- Design and innovation
- Engineering science and technology

The interconnectivity between disciplines is a major advantage for learning, teaching and research outcomes.



## WHY

The cross-disciplinary nature of the School ensures emphasis is placed on relevant industry dilemmas, providing students with the skills and abilities required to succeed in the modern workforce.

The School has identified the importance of workplace experience and offers undergraduate students the opportunity to undertake the industry-based work placement.

## FAST FACTS

- Flinders University biomedical engineer Professor John Arkwright and Flinders Medical Centre Senior Medical Scientist Associate Professor Phil Dinning led a multi-disciplinary team to win the Sir William Hudson Award for Engineering Excellence for the development of a novel pressure-sensing catheter at the 2014 Australian Engineering Excellence Awards.
- November 2013, CSEM staff attract \$1.4 million worth of Australian Research Council grants.
- October 2013, Flinders wins Institute of Engineering and Technology Prize for the 13th time in 18 years.



**Flinders**  
UNIVERSITY

Level 3  
1284 South Road  
Clovelly Park SA 5042  
(08) 8201 2675  
[enquiries@csem.flinders.edu.au](mailto:enquiries@csem.flinders.edu.au)  
[www.flinders.edu.au/csem](http://www.flinders.edu.au/csem)

The information contained in this document is correct at time of printing:  
February 2015. CRICOS No: 00114A



**HILLS.**

**“The Tonsley site co-locates us with our key strategic growth partners in Flinders University and houses the Hills Innovation Centre. The state-of-the-art building signifies an exciting future for Hills’ innovation agenda as it facilitates end-to-end design and development in the one location.”**

**- Colin Taylor, Head of Operations**

#### **WHO**

Iconic South Australian communications and technology company, Hills was established in 1945. Our innovations have evolved from home and broadcast services to a wide portfolio of security, trusted technology solutions in communications, satellite, health, CCTV and IT.

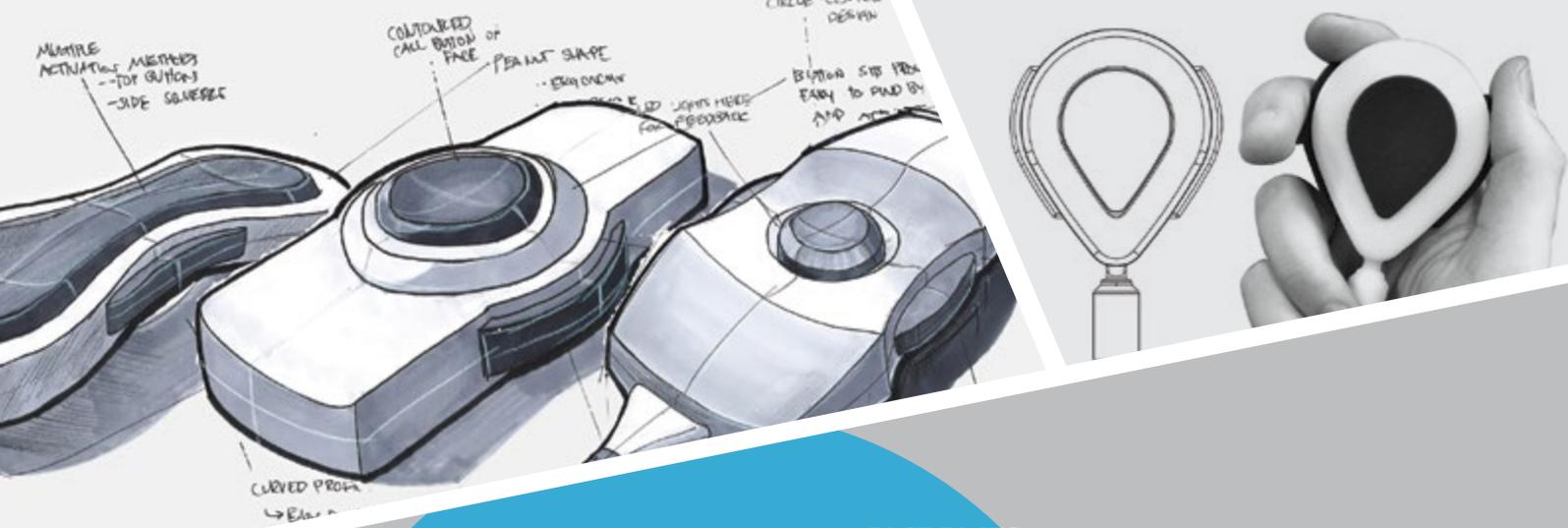
#### **WHAT**

Our mission is to deliver trusted technology solutions into homes, hospitals and aged care facilities, educational institutions, enterprises and governments.

#### **WHY**

Hills’ move to Tonsley represents a shift to a more collaborative space that will foster new ideas, job creation and further revenue. The move reconfirms our commitment to sustained growth and the development of South Australia as a “smart state”.

Our co-location with Flinders University – with an open door policy for students and staff - will give them a unique opportunity to interact with business, gain exposure and make a contribution to creating tomorrow’s solutions for today’s problems.



## HILLS INNOVATION CENTRE

Australian innovators and entrepreneurs are invited to submit their proposals for ideas, projects and start-ups that can be funded, developed and commercialised in the Hills Innovation Centre, now based at Tonsley.

Hills is already supporting two major projects in the Innovation Centre. The first is a collaborative project with UniSA to develop an innovative aged care handset to aid residents who suffer from arthritis and find it difficult to activate the current nurse call request button on the handset.

The second is the Edisse Guardian System wearable technology designed for the aged care space to give the elderly back their independence. Designed with a customisable array of smart rules the product gives the family freedom in their monitoring levels.

## FAST FACTS

- Hills' first invention in 1945 was the iconic Hills Hoist.
- Our vision is to install an innovation in every business, enterprise, government and home.
- Hills has installed 1,200 satellite dishes in Australian schools.
- Hills is Australia's number one provider of interactive patient care solutions in healthcare.
- Hills has partnered with Good Design Australia to sponsor the Hills Young Australian Design Awards, aimed at inspiring and unearthing the best design and innovation talent.
- Hills also sponsors the Australian Information Industry Association Hills Young Innovator of the Year Award to foster technology innovation.



Level 2  
1284 South Road  
Clovelly Park SA 5042  
(08) 8301 3200  
[info@hills.com.au](mailto:info@hills.com.au)  
[www.hills.com.au](http://www.hills.com.au)

**HILLS**

The information contained in this document is correct at time of printing:  
February 2015. CRICOS No: 00114A