FLINDERS UNIVERSITY CONTRIBUTING TO

South Australia
The place where people and business thrive
Introduction

The Premier’s vision for South Australia sets out 10 economic priorities. He talks about us all taking bold actions and seizing opportunities as well as an enhanced partnership between business, government and the community. We need to find new ways of doing business across the State and that includes improving the links between our universities and our businesses to capitalise on our talent, build businesses and generate jobs.

Flinders’ current strategic plan, Flinders Future Focus 2012-2016, is unapologetically about change and transformation – 50 years old in 2016, we continue to ‘experiment and experiment bravely’ in the words of our original Vice Chancellor. Our vision is to be a University that engages to transform the lives of individuals and communities; and to find innovative solutions to make a positive difference to our society. Flinders wishes to be recognised as one of the most innovative and effective members of Australia’s higher education system - flexible, responsive, efficient and highly collaborative both internally and externally.

Flinders has a range of academic strengths which can contribute to the realisation of the Premier’s vision. It is by supporting multi-disciplinary approaches in international partnership with business and industry that the State can harness the talents in our universities for wider social, economic and cultural development.

Here we outline 6 innovative “big ideas”: Ideas that with modest investment not only advance the Premier’s economic priorities but also have the potential to genuinely transform South Australia. Several are focussed on fulfilling the vision of Tonsley as a world-class ‘innovation precinct’. With further investment, Tonsley can become – indeed must become - a tangible symbol of the economic transformation of South Australia.

The 6 “big ideas” are:

> the **Tonsley Technology Alliance** – a health, aged care and technology alliance
> the **Blue Economy** – South Australia – Shandong Partnership
> the **John Chalmers Centre for Transforming Healthcare**
> **Studio SA** – South Australia’s creative hub
> **Jembatan** – building a bridge between Indonesia and SA’s cultural strengths
> **uniPartners** joint Universities’ commercialisation venture
The **Tonsley Technology Alliance** - a health, aged care and technology alliance

The focus of the Tonsley Technology Alliance is to bring world leading health and aged care innovators and researchers, aged care providers, technology providers, medical device manufacturers and small to medium businesses and innovative start-ups together to develop scalable innovative health solutions and business models for keeping elderly people well and living at home for longer. It is planned that these technology-based health solutions and new business models will be developed specifically for the health and aged care markets, not only in Australia, but also, and in particular, for the very large Asian aged care markets of China, Japan, Singapore and Indonesia.

The Tonsley Technology Alliance is an alliance based on the already established health, research, innovation and aged care infrastructure, expertise, facilities and resources across the Tonsley Innovation District. The Alliance will draw on Flinders University’s Schools of Medicine, Health Sciences and Computer Science, Engineering and Mathematics, and its innovation arms—the New Venture Institute and Flinders Partners—generating new businesses in health care technology.

Flinders has had initial discussions with Global Technology Corporates, Telecommunications Providers, Health Care Technology Manufacturers and SMEs, Aged Care / Assisted Living Providers such as Southern Cross Homes, ACH Group/VITA at the Repatriation General Hospital—Entrepreneurs and Alumni, State and Local Government. The initial response to the Tonsley Technology Alliance has been excellent with major organisations such as Hills Industries having agreed to co-locate at Tonsley and with other Global Technology and Telecommunications organisations close to finalising arrangements to join.

Current major initiatives in health, aged care and technology (and digital health more broadly) build on Flinders’ world-leading R&D in medical devices, assisted living technologies, nanoscale science and digital health technologies. These include the Medical Device Research Institute (MDRI), Flinders Tele-health (Home Health), Flinders University International Centre for Point-of-Care Testing, and retrofitted aids for assisted living. Flinders University’s new $120 million building at the centre of the Tonsley precinct will be the focal point of the initiative.

Flinders will establish a chair in digital health technologies to augment current capabilities and seeks further funding to build on this investment and accelerate the Alliance.

The Medical Device Research Institute is working closely with the peak industry body (Medical Technology Association of Australia) and other stakeholders to establish an Industry Growth Centre as part of the Federal Government’s Industry Innovation and Competitiveness agenda with a view to it being based at Tonsley. Other opportunities being pursued include the Australian Research Council Industrial Transformation Research Program which has identified medical technology as an area of focus.

Recognition of the Tonsley Technology Alliance as a critical plank to deliver economic priority 3: A globally recognised leader in health research, ageing and related services and products.

Next Steps
The Blue Economy - South Australia - Shandong Partnership

Flinders is rapidly expanding our international partnerships, particularly in Shandong region where our research is starting to generate commercial outcomes. We have considerable academic strengths which can support the "Blue Economy" and Flinders staff are already engaged in designing joint research programs with a view to funding seed projects in the first instance, particularly in marine biodiversity, bioproducts and sustainable aquaculture.

The Shandong and Qingdao Governments are investing heavily in new technologies, based around the IT industry, medical biotechnology and what has been designated "The Blue Economy" - the sustainable development of marine resources (algae, invertebrates such as sponges, aquaculture, fisheries) for economic gain. There are opportunities to bring Chinese investment into SA, as shown already by the investment being made by the Qingdao Gather Great Ocean Seaweed Company in Beachport.

The company, together with Professor Wei Zhang from Flinders, has been successful in securing grant funding from the Shandong Government for further research and development in this field. A major focus of this new grant is to take the Company’s industry into the high-technology sector to develop new pharmaceuticals. Flinders and the GGOG have established (April 2013) joint laboratories at both Qingdao and Flinders to facilitate research exchanges and progress GGOG’s development in South Australia.

The next step is for Flinders to link with CSIRO and the State Government to develop a Marine Biotechnology Institute in Qingdao’s high tech park. This will provide opportunities for the State to link with Chinese companies to commercialise our expertise in marine and other biotechnologies and to have them invest in initiatives in SA. Government assistance would be needed to set up a mirror institute in Adelaide (preferably at Tonsley) so that SA can capitalise on the opportunities that will be generated.
The John Chalmers Centre for Transforming Healthcare - “Innovation for Sustainability”

The partnership of unique talents in Flinders University and SAHMRI will facilitate the transformation of health care in the context of an ageing society through the John Chalmers Centre for Transforming Healthcare. Through integration with research and training, the critical societal issues of health and wellbeing throughout life will be the strong focus with the aim to develop and maintain a sustainable health care system that meets the future demands of our ageing society.

The John Chalmers Centre will be located on the North Terrace health precinct and house innovations in design and technology to enable superior research to be conducted by the best researchers in the nation and attract internationally renowned scientists to do their research in Australia:

- First proton therapy unit in Australia and Southern Hemisphere to establish research and clinical program using protons
- A clinical research unit with flexible clinic spaces and integrated laboratory and analytics support for rapid results and efficient processing
- Sophisticated imaging technologies for better identification of disease, monitoring treatment effects and targeted therapies
- High security and technologically advanced facilities for housing “big data” and managing clinical registries
- Research spaces that encourage and enhance collaboration and innovation between clinicians, researchers, economists, policy makers and the community.

The building will also house modern teaching facilities focussed on the increased number of PhD students it aims to create. Many of these PhD students will be clinicians looking to advance their research skills and knowledge. The new Centre will also have public forum space and facilities to facilitate an active engagement of all members of the biomedical precinct as well as the wider community into its innovative work.

**Next Steps**

- With a Flinders contribution of $60m, SAHMRI requires funding of $220m from the Commonwealth Government to construct the John Chalmers Centre for Transforming Healthcare and establish Australia’s first proton therapy service.
Studio SA – South Australia’s creative hub

The State Government’s vision for an advanced economy built on the backbone of a creative and innovative workforce requires a nationally recognised creative education institution that both attracts world-class talent and radiates out to the nation and the world through the achievements of its students and alumni.

This new creative centre can be brought into being in the heart of Adelaide without a massive building project, huge new investment or even radical overhaul. Studio SA, a creative hub that will innovate arts practice, support new creative business ventures and constantly refresh Adelaide’s cultural vibrancy can be established by combining the resources, facilities and reputations of Flinders University’s Creative Arts program and Adelaide College of the Arts.

Flinders has built a unique academic partnership with TAFE SA through creative arts programs that enable students to gain a vocational and a University qualification simultaneously. This partnership has enhanced existing courses and is developing new programs for the creative arts industry. Integration into Studio SA will expand the range of programs available, increase the effective use of existing infrastructure and provide the State with the nationally acclaimed training and education facility it deserves.

Working closely with Adelaide’s arts industries and communities, and in formal collaboration with the Adelaide Festival Centre, Studio SA will act as a magnet for South Australia’s cultural connections with Asia. It will house Flinders’ Indonesian cultural centre Rumah Budaya, contribute to Indofest and the OzAsia Festival, actively engage with Asia’s rapidly growing arts, entertainment and media industries and attract international students planning careers in those industries. Hosting Flinders University’s Indigenous art collection, Studio SA will develop a unique, practice-based centre for excellence in Aboriginal and Torres Strait Islander art.

Next Steps

The infrastructure, resources and will to achieve this vision already exist; they simply need rearranging into a new structure. Achieving this vision requires:

> Cooperation in the development of a business case for the integration of creative arts courses from Flinders University and TAFE SA, utilising the purpose-built Adelaide College of the Arts facility to create Studio SA

> A commitment to dual sector training through a service agreement for funding the delivery of specified VET programs for a minimum of 5 years.

Photo: Shane Reid
**Jembatan – Building a bridge between Indonesia and South Australia’s cultural strengths**

Flinders University has, since its establishment in 1966, strong Indonesian links and community engagement through its Pendopo on campus and research and teaching in Indonesian language and culture. Building on this and linking directly to the South Australian Government’s South East Asian engagement strategy, we will build a *Jembatan* (Indonesian for bridge) to brand and coordinate key Flinders community activities with Indonesia commencing in 2015 and rolling out more fully as a distinctive part of the University’s 50th Anniversary celebrations in 2016. The *Jembatan* program will provide a vehicle for working with the Indonesian Ministry of Education and Culture to establish a *Rumah Budaya* (Indonesian Cultural House) for South Australia in 2017 – the first in Australia. The proposal is for *Jembatan* to be co-located within Studio SA to provide a central, visible, public venue for a *Rumah Budaya*, as well as creating significant synergies in this creative and culturally relevant space.

This initiative will involve a wide range of Indonesian and South Australian stakeholders including the Indonesian Ministry of Education and Culture and Embassy; Gadjah Mada University (UGM) in Yogyakarta; the Australian Indonesian associations; Schools that teach Indonesian (73 SA Government schools); the Departments of Premier and Cabinet, Education and Child Development and State Development as well as related agencies engaging in activities in Indonesia.

Principal activities will include:

- Indonesian Language Outreach Program in Schools: Professional development for teachers and industry
- Public lecture series and community events
- Industry and government activities
- INDOfest and the 2015 *Oz Asia Festival* focussed on Indonesia.

**Next Steps**

- Government support for South Australia to partner with the Indonesian Government to establish a strategic link with Yogyakarta and build towards establishing a *Rumah Budaya* in Adelaide
- Cooperation in the development of a business case for the integration of creative arts courses from Flinders University and TAFE SA, utilising the purpose-built Adelaide College of the Arts facility to create *Studio SA* and include *Jembatan* activities.
unIPartners - joint Universities’ commercialisation venture

Universities in South Australia and Australia need to find a radically different path to create spin off companies and create new high value jobs that sets the region and its higher education providers apart from their traditional processes of approval and development. They also need to find new ways of funding those spin off companies and be able to qualify for Federal Grants.

Flinders’ concept of unIPartners represents an innovative Australian model drawing on international experience to create new growth companies from university research in South Australia. It is designed to be a publicly-owned company listed on the ASX, that develops spin off companies from Universities. The option of co-development of new companies with a group like unIPartners fast tracks the development and the existing companies’ involvement with innovation. By having exclusive arrangements with its member universities unIPartners has the capacity to create companies at an early stage. Its role is to increase the value of these projects through adding entrepreneurs and employees, customers and local partners.

It is proposed unIPartners be an initiative of the State of SA and the three South Australian Universities to enhance commercial outcomes from local research and be a catalyst for a national expansion, based in South Australia. This concept has gained considerable momentum from the University sector, the commercial sector and the investment sector. By being listed, the product has appeal to Superannuation Funds and gives local companies a way of securely investing in the group or individual companies. Being listed on the ASX it enables a different model of funding which offers certainty around value and liquidity, and provides a portfolio approach to investors. It also provides an effective remuneration mechanism to Universities through growth in share value. Importantly, it represents a much more patient capital model that is focussed on growth, rather than the previous venture capital models which rely on quick sales of the investee companies.

Next Steps

unIPartners needs to sign up the South Australian Universities and then plans to raise an initial seed round of $2m and then move to a public offering of around $20m. Prominent market brokers have expressed interest in participating in the $20m raise. Key local institutional and individual investors have expressed interest in the $2m round. It is proposed that a partnership between the Government and the SA universities fast track this process.
South Australia – the place where people and business thrive

6 innovative “big ideas” from Flinders University, contributing to the achievement of the Premier’s economic priorities:

**Economic priorities for South Australia**

**PRIORITY 3**
A globally recognised leader in health research, ageing and related services and products

**PRIORITY 4**
The knowledge state – attracting a diverse student body and commercialising our research

**PRIORITY 6**
Growth through innovation

**PRIORITY 8**
Adelaide, the heart of the vibrant state

**PRIORITY 9**
Promoting South Australia’s international connections and engagement

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Flinders’ “Big Ideas”

| The Tonsley Technology Alliance - a health, aged care and technology alliance | PRIORITY 3 | PRIORITY 4 | PRIORITY 6 | PRIORITY 8 | PRIORITY 9 |
| the Blue Economy - South Australia - Shandong Partnership | ✓ | ✓ | ✓ | ✓ | ✓ |
| the John Chalmers Centre for Transforming Healthcare | ✓ | ✓ | ✓ | ✓ | ✓ |
| Studio SA – South Australia’s creative hub | ✓ | ✓ | ✓ | ✓ | ✓ |
| Jembatan – building a bridge between Indonesia and SA’s cultural strengths | ✓ | ✓ | ✓ | ✓ | ✓ |
| uniPartners joint Universities’ commercialisation venture | ✓ | ✓ | ✓ | ✓ | ✓ |