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Adelaide Wins Asia Pacific Biotech Conference Bid



Adelaide has won the right to host the prestigious AusBiotech conference in 2011.

Science and Information Economy Minister, Michael O'Brien said the annual AusBiotech conference was expected to attract more than 1500 delegates from Asia, Europe and the United States.

"This important event will be attended by internationally renowned scientists, investors and business leaders from national and international companies," Mr O'Brien said.

"Winning the bid for this highly regarded conference is an outstanding achievement for South Australia."

"The conference will give South Australia's bioscience community the opportunity to showcase their research capabilities, products and services on an international stage."

"This is a significant achievement and recognises the continued growth and State Government support for our growing bioscience sector," Mr O'Brien said.

The successful bid was coordinated by the Adelaide Convention Tourism Authority and supported by Bio Innovation SA,

the Centre for Innovation and the Department of Further Education, Employment, Science and Technology.

The conference, the ninth to be held, will run from October 17–20 in 2011 at the Adelaide Convention Centre, returning to Adelaide for the second time since it began in 2002.

AusBiotech CEO, Dr Anna Lavelle, said Adelaide was chosen as the successful bidder because of the value the government clearly placed on the global focus on biotechnology and the pivotal part South Australia played in its development.

"South Australia has worked hard to establish its standing as a 'bioscience city' and is one of the best locations in Australia to hold such an event."

"AusBiotech congratulates and thanks the State Government and Bio Innovation SA for their continued support to the Australasian biotech industry and successfully winning the right to stage this important global event," Dr Lavelle said.

For more information contact Dr Jurgen Michaelis on +61 8 8217 6400 or 0402 892 399.

L-R: Hon. John Olsen, Special Envoy for South Australia to the United States of America and Hon. Dr Duncan McFetridge MP, South Australian Shadow Minister for Health and Aboriginal Affairs & Reconciliation.



L-R: Ms Colleen Wilson and Dr Andrew Milligan, Bio Innovation SA & Ms Susan Lee, Soniclean Pty Ltd.



Incubating Success

The BioSA Incubator marks its first birthday with an Innovation and Technology Showcase.

South Australia's bioscience community showcased world-class products and services at BioSA's 46th Networking Forum at the BioSA Incubator.

The event marked the first birthday of the \$12.9 million building that is now home to six early-stage biotechnology companies including CPR Pharma Services Pty Ltd, Jurlique R&D Pty Ltd, Pharmaceutical Packaging Professionals (PPP) Pty Ltd, Reproductive Health Sciences Pty Ltd, Signostics Limited and vivoPharm Pty Ltd. Over 170 people attended the event.

Former South Australian Premier, the Hon. John Olsen was a distinguished guest alongside Hon. Dr Duncan McFetridge MP, South Australian Shadow Minister for Health and Aboriginal Affairs & Reconciliation. Mr Olsen was Premier of South Australia when Bio Innovation SA was established in 2001 and is now Special Envoy for South Australia to the United States of America.

Jason Valentine, CEO of CPR Pharma Services, said the event was an opportunity to look back on his company's success, since it moved into the Incubator last year, and look ahead to the future.

"We have secured \$2.52 million in investment capital this year and become a fully independent entity from the University of South Australia, where we began as a research institute," he said.

"The company is expanding and we have acquired new capabilities through the purchase of two mass spectrometers.

We are well on the way to achieving our vision to become a significant contract research organisation in the Asia Pacific region."

The Networking Forum showcased more than twenty South Australian bioscience companies at the BioSA Incubator, including the multi-national corporations Oxoid Australia Pty Ltd and Novozymes BioPharma AU Ltd who both have operations based at Thebarton.

Located in the Thebarton Bioscience Precinct, the BioSA Incubator is now part of South Australia's advanced, high technology hub located in Adelaide's west. Thebarton is also home to the University of Adelaide's Research Park with more than 75 bioscience and high technology companies located on site.

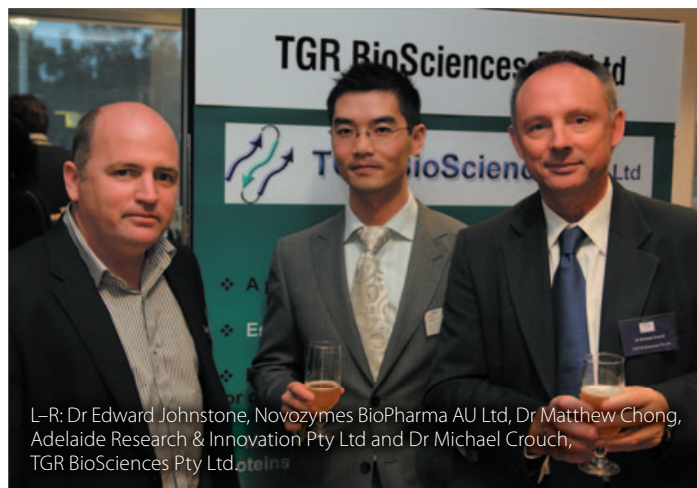
"The location of the BioSA Incubator, in South Australia's bioscience and technology hub, was one reason why we decided to move into the building," said Stewart Bartlett, the CEO of Signostics, inventors of the Signos and SpeqView hand-held ultrasound devices.

Signostics announced in July that they had raised A\$5.4 million in their latest round of financing, including new investments from both Playford Capital and Terra Rossa Capital.

"Raising A\$5.4 million in investment in the current economic climate is even more of an achievement. In the past year, the value of our products has been recognised by regulatory bodies as well as investors," said Mr Bartlett.



L-R: Dr Olgatina Bushi, AusBiotech Ltd, Dr Anne Collins, Hospira Adelaide Pty Ltd and Mr Justin Coombs, Phillips Ormonde Fitzpatrick.



L-R: Dr Edward Johnstone, Novozymes BioPharma AU Ltd, Dr Matthew Chong, Adelaide Research & Innovation Pty Ltd and Dr Michael Crouch, TGR BioSciences Pty Ltd.



L-R: Mr Mark Johnson, Outerspace Design, Ms Tamara Hunt, Signostics Limited, Mr David Mackie, Asset Partners Australia and Mr Stewart Bartlett, Signostics Limited.



L-R: Dr Fernando Felquer, Dr Ralf Brandt, Ms Fiona Khor, Ms Sabine Brandt and Dr Sarah To, vivoPharm Pty Ltd.

“We received regulatory approval from Australia’s Therapeutic Goods Administration, CE Marking in Europe and the FDA in the United States. Our products are attractive to investors because they’re affordable diagnostic tools that deliver fast results, at the point of care.”

The BioSA Incubator’s wet and dry laboratories, as well as office and conference space, have also attracted companies such as PPP and vivoPharm, who were looking for GMP (Good Manufacturing Practice) and GLP (Good Laboratory Practice) compliant facilities.

Both companies were part of the Innovation and Technology Showcase, and said the last year has provided them with new opportunities to explore new markets.

From its headquarters in Adelaide, vivoPharm has become a leading contract research company in the field of cancer research, offering fully integrated drug development and profiling services to clients worldwide.

“Our facilities at the BioSA Incubator have expanded our *in vitro* pharmacology operations, contributing significantly to vivoPharm’s growth of more than fifty percent last financial year,” said Dr Brandt.

“We’ve become an internationally recognised contract research organisation, known for fast, flexible service.”

Companies exhibited:

- | | |
|---|--|
| Acuvax Limited | Oxoid Australia Pty Ltd |
| Austofix Limited | Pharmaceutical Packaging Professionals Pty Ltd |
| BioAngels Inc | protEcol® Services |
| Cerberus Sciences | Reproductive Health Science Pty Ltd |
| Clean Futures AquaSens Pty Ltd | Signostics Limited |
| CMAX, a Division of IDT Australia Limited | Soniclean Pty Ltd |
| CPR Pharma Services Pty Ltd | TGR BioSciences Pty Ltd |
| GeneWorks Pty Ltd | The Australian Wine Research Institute |
| Mayne Pharma International Pty Ltd | Trident Clinical Research |
| Medvet Laboratories | vivoPharm Pty Ltd |
| Novozymes BioPharma AU Ltd | Ziltek Pty Ltd |

Vaxine Wins National Business Award

The Adelaide-based company wins Telstra Business Award.

Vaxine Pty Ltd won the AMP National Innovation Award at the 2009 Telstra Business Awards, recognising Vaxine's breakthroughs in vaccine development.

The company announced the world's first successful human immunisation against swine flu in July when it began clinical trials of its novel vaccine at Flinders Medical Centre (FMC).

"This represents a major breakthrough as it is the first administration to human subjects anywhere in the world of a vaccine to protect against the current swine flu pandemic," said Professor Nikolai Petrovsky, Vaxine's Research Director.

"The swine influenza vaccine we are testing, unlike old-fashioned egg-based inactivated virus vaccines, is based on state-of-the-art recombinant protein technology developed by our US partner Protein Sciences Corporation combined with our proprietary polysaccharide adjuvant system (Advax™)."

Vaxine was recognised as Australia's most innovative company for 2009 by the Telstra Business Award judges for its innovation and



L-R: Peter Nicholas (AMP), Prof. Nikolai Petrovsky (Vaxine), Sharen Pringle (Vaxine), Ted Stapinski (Vaxine), Erick Berglund (Vaxiva Biosciences – Japanese subsidiary of Vaxine), Dr Takeo Matsumoto (Vaxiva Biosciences – Japanese subsidiary of Vaxine)

entrepreneurship in progressing its vaccine development programs.

Vaxine has taken four vaccines to clinical trials in just four years, an Australian record for a private company. Vaxine's research has also been recognised by the US National Institute of Health who have awarded Vaxine several multi-million dollar contracts for its vaccine development efforts.

The swine flu trial nearing completion at FMC has immunised over 280 adults with final trial results due in late October. Global interest in Vaxine's swine flu vaccine has resulted in visits to Adelaide in recent weeks by delegations from South Korea and Malaysia, both asking Vaxine to supply much needed swine flu vaccine supplies to their countries.

For media enquiries please contact Nikolai Petrovsky on 08 8204 4572 or email nikolai.petrovsky@flinders.edu.au

Novozymes BioPharma AU Limited

Internationally recognised as a leader in growth factor research.

Two and a half years after its acquisition, the company formerly known as GroPep Ltd continues to lead the way in the research and development of protein supplements for the global biopharmaceutical market.

The South Australian company hit the headlines in December 2006, when it was acquired by Danish company, Novozymes A/S, the world's largest manufacturer of industrial enzymes.

The acquisition of GroPep was part of Novozymes' strategy to develop its biopharmaceutical business.

The team in Adelaide not only knew the biopharmaceutical industry, they were recognised as a leading supplier of recombinant alternatives to media supplements in the manufacture of biopharmaceuticals.

"We have a very strong group here in Adelaide including world-renowned scientists who work with proteins such as insulin and other insulin-like growth factors," said Dr Tony Simula, Research and Development Director.

The products developed by Novozymes in Adelaide are used in the manufacture of several FDA, EMEA and Japanese FDA approved biopharmaceuticals. Some have become household names like Herceptin, a biopharmaceutical used in the treatment of breast cancer.

Novozymes' recombinant proteins are designed to improve fermentation which means the cells producing the biopharmaceutical live longer and deliver more during the manufacturing process.

"Adelaide has a history in this research area," said Dr Simula, "With some 20 years of experience behind us, we understand the science at a fundamental level and know why our products have an advantage over our competitors."

"While some of our staff have been transferred to Novozymes' other offices in Europe, our team remains the research applications arm of the company, providing critical support for its biopharmaceutical portfolios, adds Dr Simula. "Our location in Australia makes us particularly well-placed to service China, India and the Asia Pacific region."

For more information visit www.biopharma.novozymes.com

Novozymes BioPharma AU Chief Scientist Geoffrey Francis was recognised by *PharmaVOICE* as one of the 100 most inspiring people in life science. Mr Francis' selection was based on his 30-year career in the life science and biotechnology industry.

In Profile: Professor Rob Short

When asked to describe his field of scientific expertise, Professor Rob Short is clear. "I don't separate the science into bio and non-bio," he said. "I see myself as a physical chemist, with the ability to tailor my knowledge for bioscience purposes."

Professor Short is known, internationally, for his expertise in biomaterials, tissue engineering, and plasma polymerization.

He began his career in the UK, where he studied chemistry at Durham University and went on to complete his PhD. It wasn't until he began his PhD, however, that he truly developed a passion for his field.

"At first I did not know what I wanted to study," he said. "I chose chemistry because I wanted a degree that would be seen as robust by potential employers. I wanted to be numerate and I was looking for a high degree of rigour."

His PhD took his undergraduate skills into challenging territory: his task was to solve a problem that had baffled physical chemists

for a century. He set out to discover how a particular chemical reaction took place, using advanced analytical equipment to investigate the problem for the first time. His theories not only challenged established thinking, they set him on course for an esteemed academic career.

Professor Short left Durham to take up a lectureship at the Sheffield University, also in the UK, continuing his research in the Department of Engineering Materials, where he was appointed to the first Chair



of Material and Biomaterial Chemistry in 2001. He expanded his knowledge of protein absorption, cellular attachment and wound healing in the context of biomaterial science.

In 2000, the university commercialised his findings with the development of Myskin™, a bandage that attaches and releases cells into wounds that cannot heal. The product received regulatory approval for the treatment of burns in 2004, and was given the go-ahead for use on chronic wounds in 2005.

"For me, it all comes down to basic science – how polymer films grow from plasmas. Myskin™ would not be possible without that understanding," he said. "Physical chemistry has been the foundation of my involvement in bioscience, both in academia and industry."

Myskin™ was commercialised through the spin-out company CellTran Ltd in the United Kingdom. It was there, as chairman, that Professor Short had his first taste of research and development in a non-academic environment.

"I have had feet in both camps: in academia and industry," he said. "I spent five years outside the university system developing technology in a commercial setting and the experience was invaluable. At heart, I'm an academic but I have strong leaning towards commercialisation."

In 2006, CellTran merged with a division of Innogenetics, a multinational company based in Belgium, creating a new company, which later sold on the Myskin™ technology to YorkPharma.

Professor Short also founded Plasso Technology in 2002, developing tools for bioscience research. A number of products were developed by Plasso, including Epranex – used to bind important sugar molecules used in drug development and discovery.

The opportunity to take up a Professorship, at the Mawson Institute of the University of South Australia in 2006, offered the chance to return to academia and maintain his entrepreneurial credentials.

Today, Professor Short is a Board member of Medvet Laboratories, one of Australia's largest providers of occupational health and safety testing services.

He sees the Mawson Institute as an ideal environment for the development of biosurface and biomaterial technologies that are grounded in basic science yet have strong applications.

"There's alignment between the interests of the state, the university and what I want to achieve in this field," he said. "I want to pursue basic science but translate that through to a practical pipeline. At UniSA I have that opportunity."

His focus, currently, is the new suite of GMP facilities at the Mawson for cell culture, cell therapy and clinical trials. He is also working to establish the new CRC for Wound Healing, building on the Mawson's reputation as a leader in its field.

"I'm happy with the progress we're making," he said. "Timelines can be long when it comes to patient trials. I want to see the facilities used and making a difference. I'm here to make that happen."

Prepared for Investment

It pays to be strategic when seeking capital.

People and preparation form the foundation of successful bids for venture capital funding, according to Mike Richards, from the recently merged Centre for Innovation and Venture Capital SA.

The first priority for any bioscience company seeking investment is to make sure they have the right management team in place.

"It can be a chicken and egg situation – do you pay the right people to come on board or do you need the funding first, in order to pay them," he said.

"The first step is to identify the right people and make sure they're willing to join the company. That shows that you have the right management in order to grow the business."

Mr Richards also advises bioscience companies to make sure that they have third party validation for the technology they want to commercialise. The technology must also have a strong market application.

"When pitching for funding, you should have real sense of how much you need and what you'll use the money for," he said.

"There are a number of ways to structure investment deals, so the valuation debate can be deferred once investment has been agreed in principle," said Mr Richards.

"The first port of call for any bioscience company in South Australia seeking investment is Bio Innovation SA, since they have so much expertise in this area."

The most common error, when companies seek so-called 'angel' investment is lack of preparation, according to Dr John Ballard, founding member of BioAngels Inc.

BioAngels is a not-for-profit association with a constitution not

dissimilar from a sports club: the 'rules of engagement' involve introducing new companies to investors who then decide whether or not to invest.

"The difference between a business angel and a venture capitalist is the angel is investing their own money, while the VC is managing a fund," he said.

"When you pitch for funding from a business angel, you need to put yourself in their shoes and see how they can make a return on their investment."

Dr Ballard puts companies seeking funding into two categories: in Australia, around three-quarters come from the private sector, with a quarter from the public sector. Each poses different challenges for investors.

Private sector entrepreneurs are frequently looking for money to build a lifestyle business. They may not intend to leave the business and they rarely have an exit strategy. This will be a barrier to potential investors, said Dr Ballard, since it is not clear how they can generate a return on their money.

"Inventors in the public sector usually do not want to join the company except as advisors, so a difficult challenge is attracting management," he said.

"Another problem is unrealistic valuation. So for investors, it's the potential return that counts, not how much money has been invested in discovery."

Both the Centre for Innovation and BioAngels Inc offer a range of tools and services to companies considering investment and encourage companies to do their homework before they apply.

"Some of the companies we see talk to investors too early," said Mr Richards. "They need to plan and be more strategic about how they approach people for funding."

"Nothing beats a warm introduction by a trusted advisor or associate. It comes down to planning and having the right people on board."

Australasian Association of Angel Investors is hosting its 3rd annual conference on Angel Investments in Adelaide from February 17 -19, 2010. This is the premier event in Australia for angels and others who are interested in investing in early-stage companies. To register contact Dr Corinna Steeb from BioAngels on +61 8 8354 6144.

2009 South Australian Bioscience Industry Survey

Thank you to those companies that participated in the 2009 South Australian Bioscience Industry Survey.

We are still collecting data and will inform you of the survey outcomes at our networking event on December 3, 2009.

Congratulations to The Australian Centre for Plant Functional Genomics (ACPFPG), The Pipette Company Pty Ltd and Lifeprint Australia Pty Ltd. For completing the survey, these companies won lunch for four, two and one person respectively at the *incubar* café located at the BioSA Incubator.

Celebrating Fifty Years

South Australia's leaders in reproductive medicine look back on 50 years of innovation.

The Discipline of Obstetrics and Gynaecology (O&G) at the University of Adelaide celebrated its 50th anniversary in July, bringing together world-leading scientists and clinicians in the field of reproductive and perinatal medicine.

Professor Colin Matthews, one of six speakers at the Golden Anniversary Dinner held at the National Wine Centre, said the anniversary was an opportunity to look back on 50 years of innovation.

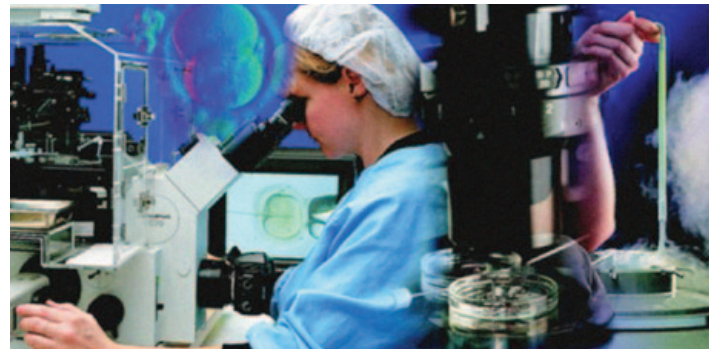
"There have been world class achievements in the department, which have led to commercial opportunities as well as wonderful scientific progress," he said.

Leading scientists in the department have included Professor Lloyd Cox who was the first to introduce cervical screening and ovulation induction to South Australia.

They also include Professor Jeffrey Robinson, who has contributed to the 'fetal origins of adult disease' concepts; Professor Robert Seamark, who researched a wide range of domestic animal reproductive programs and Professor Ossie Petrucco who introduced reproductive microsurgery.

The department established the second sperm bank in the world in 1971 for donor sperm, expanding research beyond female infertility and bringing infertile men into the clinic.

In 1983, the department introduced IVF and was the 4th unit in the world to achieve pregnancies. It extended IVF with sperm injection techniques in 1993, the third program in the world to succeed. About 70 percent of IVF pregnancies now use sperm injection techniques.



O&G clinical fertility services were successfully commercialised in 1987 with the formation of Repromed Pty Ltd. The company was university-owned until it was sold in 2005.

"An important principle had always been to plough money back into further research, creating jobs and more opportunities for research and commercialisation," said Professor Matthews.

After joining the department in 1971, Professor Matthews retired in 1999. He established The Pipette Company Pty Ltd with two other scientists, capitalising on manufacturing skills initiated at the O&G.

Professor Matthews is also a Director of Reproductive Health Sciences Pty, based at the BioSA Incubator, which is commercialising O&G technology to develop advanced prenatal screening techniques. More recently he has joined the Board of Flinders Reproductive Medicine Pty Ltd.

The department has grown from 4 to 220 staff members. It has continued to expand its world class reputation under Professor Rob Norman, advancing research into the causes of cerebral palsy. It has also made progress on modern management of the menopause under the leadership of Professor Alastair MacLennan, the current Head of Discipline.

Together with Professor Julie Owens, Head of the School of Paediatrics and Human Reproductive Health, the department is now looking ahead to further advances in stem cell research and genomics as well as human reproduction.

For more information visit <http://health.adelaide.edu.au/og/>

People on the Move

- **Health Minister John Hill** has invited **Mr Raymond Spencer** to lead the formation of the South Australian Health and Medical Research Institute and the new \$200 million 'flagship' research facility in Adelaide. Mr Spencer returns to Adelaide after 35 years of living and working in the USA, India and Europe.
- **Professor Kerin O'Dea**, Director of the Sansom Institute for Health Research at UniSA has joined as a new member of the National Health and Medical Research Council.

- **Associate Professor Rob Thomas** has been appointed the Acting Chief of SARDI Aquatic Sciences replacing **Professor Mehdi Doroudi**. Professor Doroudi has been appointed Executive Director of PIRSA Aquaculture.
- **Professor Allan Evans** has been appointed Pro Vice Chancellor and President of the Division of Health Sciences at UniSA. Professor Evans is currently non-executive Director of PharmaQest Pty Ltd and CPR Pharma Services Ltd.
- Flinders Medical Devices and Technologies at Flinders University have appointed **Ms Carmela Sergi** as Manager of Strategic Initiatives.

2010 BIOSA BIOSCIENCE ACHIEVEMENT AWARDS

BioSA invites you to apply for the 2010 Bioscience Achievement Awards. These Awards recognise individuals involved in the South Australian bioscience community who have made an important contribution to the development of South Australia's bioscience sector.

These Awards recognise individuals who have made an important contribution to the development of South Australia's bioscience sector.

The 2010 BioSA Bioscience Achievement Awards will be presented in the following categories:

- **Young Achiever** – for individuals under 35, who have made a significant contribution to his or her company / organisation
- **Industry Leader** – for individuals who have made a significant impact to the growth and development of his or her company / organisation and / or to the South Australian bioscience industry

Award guidelines, selection criteria and the official nomination form can be downloaded from www.bioinnovationsa.com.au

**Nominations close Friday,
13th November 2009 at 5pm.**

For more information contact Ms Julie Chmielowski, Marketing and Communications Manager, Bio Innovation SA, on 08 8217 6400 or email: julie.chmielowski@bioinnovationsa.com.au

