

Knowledge Starts in South Yorkshire

This is the final newsletter of the current Knowledge Starts programme. As such, I felt it an appropriate time to briefly reflect on what has been achieved to date and, more importantly, to look ahead to what can be achieved in the future.

Knowledge Starts began in 2002, with the help of Sheffield's two universities, the City Council, the European Objective 1 programme and Yorkshire Forward. Since then, the project has achieved significant economic benefit to the sub region of South Yorkshire - assisting over 350 potential business ideas emerging from the universities' research base, creating 31 high value companies and over 100 new jobs and registering 87 patents and commercial licences. My thanks to everyone involved.

I would draw attention to the successful flotation of Biofusion plc on the Alternative Investment Market in February this year as a particular highlight. This raised £8.2 million of external investment, with the company valued at £28 million. Besides generating significant investment into the local economy, Biofusion represents an exciting model of funding future commercialisation activity and demonstrates that the outside world takes what we are achieving in South Yorkshire

very seriously indeed. Success is set against a period of real economic growth for South Yorkshire. One cannot fail to see the transformation already underway and the advent of Creative Sheffield - the next generation City Regeneration Company - promises to provide renewed vigour and dynamism to the development of the 'knowledge economy.' I remain convinced that knowledge transfer is a crucial ingredient to continued success.

Discussions are underway to secure funds for a second phase of Knowledge Starts - it's too early to give precise details at this stage other than to say 'watch this space.'

Through Knowledge Starts, South Yorkshire has embarked upon a 10-15 year journey towards commercialisation success: Sustaining the momentum built up during the first phase is critical. As knowledge transfer processes become embedded in the two universities we now look to broaden the range of knowledge institutions involved and strengthen links with South Yorkshire's industries.

Dr Tim Cook, Chair of Knowledge Starts

BOOST FOR CITY BUSINESS INCUBATION

Developing more high-growth business start-ups in Sheffield will be vital to the city's growing economy, according to a city leader. Sir Robert Kerslake, Chief Executive of Sheffield City Council, made the statement at the UK Business Incubation (UKBI) conference at the City Hall in front of more than 350 delegates from around the world.

UKBI is the body representing organisations which help fledgling companies develop and grow.

Sheffield Technology Parks, South Yorkshire's leading provider in high quality support to new and fast growing technology businesses, were the hosts and headline sponsors, alongside Renaissance South Yorkshire, at the conference, which was being staged

outside of a UK capital for the first time. Sir Robert said: "Our ambition is to have an economy that matches the best in Europe and we recognise that the challenge to achieve this is at least as great as the one we have already tackled".

"Business incubation is critical to the future success of Sheffield. We have enormous assets in the research strengths of our universities and the creative and digital sector. We have many creative minds that want to put their ideas to good commercial use".

"We are fortunate to already have a strong resource in Sheffield Technology Parks (STP), who are leading the way in raising the standard and profile of incubation in the city. They have helped

start over 60 businesses in the last 2 years. 32 in the last 12 months, of which 24 have combined sales forecasts of over £25 million by 2008".

"Beyond STP, we have some other exciting opportunities such as the Bio-Incubator and Nanotech incubation facility at the University of Sheffield and the Life-IC project, as well as new facilities elsewhere in the city region".

"Our challenge for the future is to build on this strong foundation and create the conditions in which we can attract, retain and support creative talent. This will require excellent business support, high quality networking and a good lifestyle".



EASY-ON Gets Tough on Graffiti

URBAN HYGIENE AND MARS CIC CLEAN UP WITH NEW EASY-ON

Vandals who deface public property may no longer be able to leave their mark, thanks to a new anti-graffiti coating that aims to wipe out unsightly graffiti and hefty cleaning costs.

The EASY-ON coating has been developed by Doncaster-based Urban Hygiene Ltd, and tested by the experts at MARS CIC (Materials Analysis and Research Services, Centre for Industrial Collaboration.) The coating, made from a range of speciality polymers and resins can be applied to any surface and is claimed to reduce the need for costly cleaning and redecoration costs.

Urban Hygiene's Roy Johnson said, *"Traditional anti-graffiti coatings can be problematic. Most are only semi-permanent and the removal of graffiti not only involves hazardous chemicals but may also damage the coating in the process. EASY-ON is a safe, biodegradable graffiti and stain remover. It can lead to savings of up to 90% on graffiti cleaning bills if the surface is treated with the coating"*.

The coating was tested by Sheffield Hallam University's Materials Analysis and Research Service, Centre of Industrial Collaboration (MARS CIC), who conducted the first test of its kind in determining its permanence.

MARS CIC's Dr David Greenfield said, *"We were approached by product developers at Urban Hygiene, who were looking for scientific proof to support their claims of the effectiveness of EASY-ON. We applied the coating, graffitied over it, and then repeatedly cleaned the surface to simulate long-term cleaning. The film does not degrade during cleaning and tests suggest that EASY-ON can protect surfaces for up to 22 years. It is also more environmentally friendly as it does not require harsh cleaning methods."*

EASY-ON has already been adopted by Streetforce, Sheffield City Council's graffiti removal service and locally by councils in Sheffield, Doncaster, Chesterfield, Barnsley, Nottingham, Bradford, Harrogate, York and Hull. It is sold throughout the UK and is also available to private home owners.

To find out more about Urban Hygiene, go to:
www.urbanhygiene.co.uk <<http://www.urbanhygiene.co.uk>>
For more information about MARS CIC, go to:
www.marscic.co.uk <<http://www.marscic.co.uk>>

A Shining Example?

A business-savvy student from Sheffield Hallam University competed for a national award this year after his dazzling designs won him the title of 'Most Enterprising Student in Yorkshire and the Humber'.

Jonny Douglas, a 2nd Year product design student, was awarded top marks for a sizzling set of solar-powered inventions to encourage children to ditch the batteries and 'plug into the sun' for Sheffield-based company Recovery Insulation.

As part of the firm's Schools and Homes Education Project, Jonny developed ways to make existing solar-powered products more useable. His ideas were so successful, he has been offered part-time work at the company, exploring new alternative energy-driven projects.

As a result of his innovative work Jonny managed to win through to the national final for 'Most Enterprising Student UK', alongside just 12 other students, whittled down from more than 1,000 participants.

The competition is part of Shell STEP (Shell Technology Enterprise Programme), a dynamic work experience programme. It gives companies the opportunity to develop their potential by utilising the high level skills of the UK's brightest undergraduates. Shell STEP helps small to medium size businesses to kick start or manage development projects giving them fast and affordable 'Access to Knowledge'.

It is run in Sheffield and Rotherham by Sheffield Hallam University's Enterprise Centre who recently received the national award for Best New STEP Agency 2005.

David Garlovsky Director of Recovery Insulation said *'Jonny has been very creative in the design of new prototypes and the collection of primary research on the existing products...his work has given us the ability to increase the number of products and services we provide'*

BIOFUSION EXPANDS TEAM

Dr Morgan joined Biofusion plc on 2 November 2005. She is an experienced knowledge transfer professional having previously managed the commercialisation of intellectual property for NHS Innovations and The University of Nottingham. This role involved the commercialisation of medical devices, biotechnology, chemistry, information technology and consumer goods, the licensing of technology in and out of organisations, the formation of a number of spin-out companies and the negotiation of complex intellectual property contracts.

Dr Morgan is a member of AURIL, Europe's largest knowledge transfer association, and has a PhD in Life Sciences.



BIOFUSION LAUNCHES FIRST NEW SPIN-OUT COMPANY

LIFESTYLE CHOICES TO FOCUS ON FEMALE FERTILITY AND MENOPAUSE



In October Biofusion announced the creation of its first new spin-out company from its University of Sheffield pipeline agreement. Lifestyle Choices, a company which will offer a range of products in the female fertility and menopause markets, expects to launch its first product at the end of January, 2006.

Lifestyle Choices draws on the research of Professor Bill Ledger, one of the UK's leading fertility experts. David Baynes, CEO of Biofusion, said: *"There is a huge amount of public interest in the area of female fertility and specifically around the decisions women make about when to have a family. Professor Ledger is a leading scientist in this field and has developed our first product that will help women to make more informed choices about their fertility."*

"With a product launch expected in January, Lifestyle Choices will be immediately revenue generating and thus is an excellent complement to our existing portfolio of medium and long term investment propositions. We see this as the first of a number of new companies that we will be spinning out this financial year."

AXORDIA ANNOUNCES AGREEMENT WITH CHEMICON FOR EXCLUSIVE CO-DEVELOPMENT OF HUMAN EMBRYONIC STEM CELL ANTIBODY MARKERS



In September Axordia, one of Biofusion's portfolio companies and one of the UK's leading stem cell research companies, announced that it had signed an exclusive agreement with Serological's wholly-owned subsidiary Chemicon International to co-develop new antibody markers from Axordia's proprietary human embryonic stem ("hES") cell lines. Under the terms of this agreement, Axordia will contribute proprietary expertise and materials for antibody generation and antibody characterisation and Chemicon will commercialise the new antibody research tools arising from this collaboration. Through this agreement, Chemicon will be able to supply new antibody markers to the worldwide hES cell research community. Chemicon is recognised as a worldwide leader in providing antibodies

and other reagents, kits, and cell culture supplements to the academic, pharmaceutical, and bio-technology markets.

Based in Sheffield, Axordia has two of the world's leading scientists in this field in Professors Peter Andrews and Harry Moore. Professor Andrews was one of the first researchers in Britain to study the hES cell lines and his work follows pioneering work in the study of human Embryonal Carcinoma cells, a malignant equivalent of hES cells, which defined many tools that now underpin the study of these cells. Professor Moore is a leader in hES cell derivation and recently announced work showing that hES cells can form the precursors of sperm and eggs in the laboratory.

"Axordia believes that antibodies along with other key discovery technologies will be crucial in enabling stem cells to deliver their full potential to palliate and cure some of the most debilitating diseases."

"Our partnership with a market leader in research and drug discovery tools represents a powerful step in bringing this potential forward and is recognition of our world class expertise in developing the tools needed to make the promise of stem cell technology a reality." said Dr. V. Paul Gerskowitch, CEO of Axordia.



CELLTRAN RAISES £2.7 MILLION IN FUNDING ROUND

In August CellTran, a Sheffield based wound-care company and part of the Biofusion portfolio, announced that it had raised £2.7 million in a private funding round. The syndicate was led by new investor the YFM Group and included existing investors Biofusion and White Rose Seedcorn Fund, along with new investor, Partnerships UK plc.

The proceeds of the funding round will be used by CellTran in three areas: to continue development of its innovative surface chemistry and tissue-engineering technologies with a focus on wound-care products; to progress its lead product Myskin™ through clinical trials in which it is being evaluated as a potential treatment for diabetic foot ulcers; and to expand its sales and marketing efforts of Myskin™ as a treatment for chronic wounds and burns.

Commenting on the fundraising, Mal Jarmolowicz, CEO of CellTran, said: "We believe our revolutionary product, which uses a patient's own cells to treat their difficult-to-heal skin wounds, can become an extremely effective part of long-term wound management leading to wound healing. This represents an attractive market opportunity and one where we believe we can create significant value for our shareholders."

David Baynes, CEO of Biofusion, said: "CellTran is a company with a very promising future and we are delighted that it has been able to raise these development funds and broaden its investor base. This is the first fundraising by one of our portfolio companies since Biofusion's listing and is an excellent example of how Biofusion commercialises university IP by providing support to companies with great technology and clear business objectives."



FINANCIAL SECRETARY TO THE TREASURY VISITS BIOFUSION AND CELLTRAN



Left to right: Mal Jarmolowicz, CEO of CellTran; John Healey, MP and Doug Liversidge CBE, Chairman of Biofusion.

John Healey MP, the Financial Secretary to the Treasury, visited Biofusion and the University of Sheffield on 19th September.

Mr Healey held discussions with David Baynes, CEO of Biofusion, Doug Liversidge CBE, Chairman of Biofusion, David Catton, Managing Director of SUEL and Professor Tony Crook, Pro-Vice-Chancellor of the University, about the current university technology transfer market, Biofusion's approach to bridging the university funding gap and its successful floatation on Aim.

He also toured the laboratories of Celltran Ltd a Biofusion portfolio company which is developing revolutionary treatments for difficult-to-heal wounds using a patient's own cells. Celltran recently raised £2.7m funding to further develop its work.

Mr Healey said: "Biofusion and Celltran are both great examples of how universities can harness their research to promote enterprise and develop skills which in turn encourage regional growth. Celltran has a unique product that will help many people and it is encouraging to see how this has developed, with the support of Biofusion, from initial research at Sheffield University to the company as it is today."



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Sheffield Hallam University



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