

Knowledge Starts provides a supportive framework for the identification, development, birth and early growth of businesses with their origins in research based activities, from the two Sheffield universities.

## Bridges Community Ventures

Knowledge Starts' first newsletter led to a visit from an innovative venture capital firm – Bridges Community Ventures.

Bridges Community Ventures is a new and unique type of venture capital company in the UK. It has a clear mission to invest for a purpose as well as a profit and was set up specifically to provide funds to growth businesses in under-invested areas in England.

Bridges Community Ventures raised £40 million by September 2002, from sources such as Apax Partners, 3i and Tom Singh of New Look. Its newly created team has already made three investments.

Associate, Selvavinayagam 'Vires' Vireswer visited Sheffield in February to talk to the team and assess the potential of projects emerging from the two universities with a possible view to investment. Negotiations are continuing and a number of suitable prospects are being explored.

**More information on Bridges Community Ventures can be found on their website at [www.bridgesventures.com](http://www.bridgesventures.com)**



Associate,  
Selvavinayagam  
'Vires' Vireswer

## Lord Sainsbury to visit Sheffield

The Knowledge Starts Project is delighted to announce the future visit of Lord Sainsbury of Turville to Sheffield this summer.



We will be arranging a seminar at which the Minister for Science and Innovation will speak on the Government's view of University Research in Promoting Economic Regeneration. Invitations to this seminar will be extended to partnership members and their organisations.

## Sheffield - First for Innovation

The transfer of knowledge from Sheffield's universities is continuing to attract cutting-edge enterprises across the city.

High technology businesses like US company Fluent, for example, which has chosen Sheffield as the centre for their European operations, and Molecular SkinCare, a recent spin out from the University of Sheffield's Medical School.

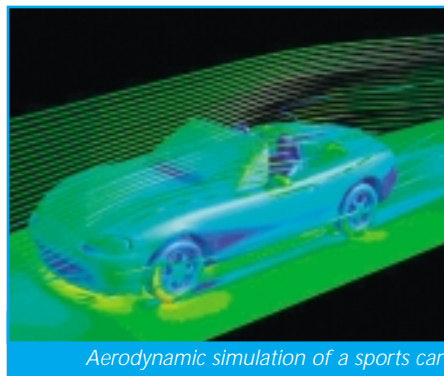
### Fluent Europe

Fluent is the world's leading Computational Fluid Dynamics (CFD) software provider, and the organisation's European headquarters is based on the Sheffield Business Park.

CFD simulations allow engineers to graphically depict fluid flows, pressure, temperature and chemical concentrations to gain a better understanding of any problem involving fluid flow. This might be optimising vehicle aerodynamics, speeding up the mixing process in a chemical reactor or improving the performance of ventilation fans.

Recent high profile and innovative applications of Fluent's software include:

- Aerodynamic simulation of Ferrari 2002 Formula One racing car
- Modelling of bending of free kicks by world class footballers such as England captain David Beckham
- Design of yachts for the 2003 America's Cup Race



Aerodynamic simulation of a sports car

### Molecular SkinCare

Since its incorporation in June 2001, Molecular SkinCare Limited, a University of Sheffield Medical School spin-out, has undergone considerable development into an early stage biotechnology/specialised pharmaceutical company. The Company is focused upon identifying and commercialising novel treatments and diagnostics to generate a step change in the management of skin diseases.

MSC emerged from the research of the Biomedical Genetics Project – established within the Division of Genomic Medicine, University of Sheffield Medical School. This project was born out of recognition that an alliance between several laboratory disciplines, including molecular biology and genomic science, combined with ideas from the clinic, could open up new avenues of treatment.

MSC is the first UK company utilising the latest advances in genomics and molecular biology to improve the management of skin diseases, including psoriasis, eczema, cancer and photoageing.

Investor interest in Sheffield is running at an all time high, and the recent announcements by US giants Boeing and Insight to invest in the City are fuelling this interest.

Sheffield's increasingly diverse economy will continue to benefit from a potent combination of major inward investment and commercialisation of the powerful knowledge base in the City's two leading universities.

**Contact David Fletcher, Director Investment and Marketing, on 0114 223 2345, e mail: [david@makeitinsheffield.com](mailto:david@makeitinsheffield.com) or visit [www.makeitinsheffield.com](http://www.makeitinsheffield.com)**



# THE UNIVERSITY OF SHEFFIELD

## SupaPlants Ltd

SupaPlants is a University of Sheffield company spin-out specialising in the development and marketing of unique gel-based products for the consumer and commercial horticultural market. Fothergill's gel2root is SupaPlants revolutionary new product for striking cuttings. Developed from the research of Professor David Lewis and Dr Bernie Jarvis from the Department of Animal and Plant Sciences, the product is the first gel for softwood cuttings that has been enriched with nutrients and a rooting hormone. It is promoted as being appealing to both novice and experienced gardeners as no watering or feeding is required.

Since its launch in December 2002, Mr. Fothergill's gel2root has been enthusiastically received by gardeners and the garden trade, and is now available nationwide in Asda, Focus, independent garden centres, and online.

**Further information**  
[www.mr-fothergills.co.uk](http://www.mr-fothergills.co.uk)  
 or Alyson Koe 01332 372196



*gel2root - SupaPlants revolutionary new product*

## Adjuvantix win White Rose Technology Seedcorn Fund award

Adjuvantix Ltd, specialising in materials to enhance immune responses generated by vaccines, has been awarded the final tranche of a total award of £400k from the White Rose Technology Seedcorn Fund (WRTSF).

The company which was incorporated in 1999 from the research of Dr Andy Heath of the Division of Genomic Medicine, plan to use the award to further develop the technology and firm up its intellectual property portfolio. Adjuvantix's future customers include large pharmaceutical organisations and vaccine companies.

In addition to the White Rose award Adjuvantix have secured £217k through a BBSRC initiative – the Small Business Research Initiative in collaboration with two UK based SMEs.

**Further information Andy Heath 0114 271 3516**

## SEAMS

SEAMS, based on Solly Street in Sheffield focuses on service delivery, providing least cost infrastructure management strategies within quality of service constraints. The WILCO software tool is tailored for each infrastructure type and client's quality of service specifications.

SEAMS has been successfully spun-out from the research of Dr Peter Skipworth of The University of Sheffield and Dr Mark Engelhardt of Exeter University. Since its incorporation in 2002 SEAMS has been successful in securing contracts from water authorities throughout the UK. Its next stage of strategic development is to capture the international market. The company now employ 14 staff, and have recently recruited an International Sales Manager. SEAMS also offer a full marketing consultancy service dealing with all aspects of multi-media design and strategic consultancy.



*The WILCO software tool*

**Contact Graeme Dodd**  
 0114 281 6090 [www.seamsltd.com](http://www.seamsltd.com)

Sheffield University Enterprises Ltd (SUEL) is the University of Sheffield's wholly owned Technology Transfer Company dealing with intellectual property and commercial exploitation.

For further information about SUEL please contact David Catton on 0114 222 1008 or visit the website [www.suel.co.uk](http://www.suel.co.uk)



Sheffield Hallam University

## Multimedia software design helps students into jobs

An interactive multimedia system to help undergraduates cope with job interviews has been developed through a collaborative research project between Sheffield Hallam University's School of Cultural Studies and Learning and Teaching Institute.

'Interviewer' stimulates real interview situations and conditions, asking users questions via their computer screen and forcing responses as though they were in a live interview situation. Responses are recorded to allow the user to watch and scrutinise their performance and answer guidelines are given to help users to understand their mistakes and determine correct responses.

Put to the test at a number of UK universities, Interviewer has proven to improve user confidence and ability to cope with interview situations with repeated use.

Due for launch this summer, Interviewer will initially be targeted at undergraduates although plans are in place for future editions for more specific applications such as outplacement and company training programmes. Currently seeking a licence or collaborative partner, Interviewer has already received great interest from Universities across the UK and as far away as Hong Kong and Canada.

**For further information, contact Robert Evans in the Enterprise Centre on 0114 225 5000**

## Ultimate ID Tag

A discovery made by Professor John Rodenburg and his team at Sheffield Hallam University's Materials Research Institute may lead to the development of an ultimately secure ID tag to compete with retinal, corneal and face recognition.

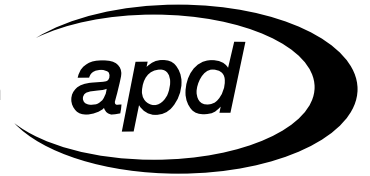
'RAMLA' (Random Micro Lens Array) consists of thousands of microscopic features formed by plasma etching. Digital conversion of a reflected light pattern would produce a binary code that cannot be replicated. RAMLA could be used to provide a unique identification marker which could be used on passports, documents and ID tags, for example.

Professor Rodenburg has patented this invention and the potential markets now open to this technology are endless. The ever-increasing need for security of identification is likely to provide many more potential applications in the future. Sheffield Hallam University is currently aiming to attract potential licenses or joint venture partners to develop this technology further.

**For further information, contact Robert Evans in the Enterprise Centre on 0114 225 5000**

## Unique product design services

Sheffield Hallam University's **advanced product development centre** started out as a joint venture between Sheffield's two universities in 1998, offering industrial design and new product research and development consultancy to local companies. Sheffield Hallam recently took full control of the venture, a move that is enabling **apdc** to operate more freely in an international commercial marketplace. To drive the repositioned business forward, a new director, Andy Toward, was recruited from the private sector.



### Unique Services

Recent market research revealed that customers appreciate the unique resource available within the **apdc** – innovative designers who can create genuine new user benefits in new products, in a discrete customer-facing business unit dedicated solely to the delivery of commercial design consultancy services, yet uniquely positioned to access resources within the highest ranked UK university for art & design research (2001 Research Assessment Exercise).



*The innovative shock-absorbing hilt recently developed by apdc*

This innovative shock-absorbing hilt was recently developed by **apdc** for Spear & Jackson, for application across a range of digging tools. An active mechanism dampens high impact jarring to the user, whilst the "oversized" handle allows various grip positions including two-handed operation to further reduce hand and wrist strain.

Industrial design is the core activity of the **apdc**. During project delivery, **apdc** has a track record of collaboration with private sector companies (for example, by commissioning rapid prototyping services) and university departments across the country to access specialist knowledge and expertise.

**For more information contact Andy Toward on 0114 225 4277 or info@apdc.co.uk, or visit: <http://www.apdc.co.uk>.**

# Harnessing our Knowledge and Research

The following is an extract from an article which appeared in the Sheffield Telegraph 14 March 2003.

Universities are full of knowledge in the widest sense of the word and are centres of high quality research. Bring together the knowledge and the research results – and the businesses of the future will emerge, flourish and create economic transformations wherever they are based.

If only it was that easy, everyone would be doing it – and some places are. Around the world there are excellent examples of businesses based on the abilities within universities being developed beyond the walls of academia and making major contributions to the communities in which they are rooted. We want to achieve the same in Sheffield.

When Sheffield First Partnership identified the ten features of successful cities one of them was "a strong economy." As the implications of how to achieve that for Sheffield were developed into the economic strategy that accompanies the overall City Strategy, one of the key challenges became "harnessing the economic strengths of the city's knowledge institutions."

There are various strands to this ambition – it is technology transfer, it is using intellectual property, it is developing the knowledge economy, or it is simply "spin outs." The potential is

huge. Already work is underway to develop an incubation park for 8 bioscience companies close to the University of Sheffield - and the bioscience area is just one of a number of potentials. However, huge amounts of work are needed before developments such as those can become reality.

'Knowledge Starts in South Yorkshire' has an initial 3½ year target to identify 90 potential projects, create 90 companies and 340 jobs. By last month there were seven companies registered, creating 30 jobs – just a third of the expected figures by that time, but early work suggests the number of potential projects could be double what was expected.

Finally one of this area's future problems could be a lack of skilled people and that could be a barrier to future economic growth. We are working with several partners, including Sheffield University, to identify and address this problem, by retaining skilled people in the area, attracting others and enhancing the skills of the existing workforce.

And, of course, when Knowledge Starts helps to bring the knowledge and the research from our universities into the local economy – then skilled people, especially those from within the universities who have worked to set up the businesses, are likely to spin out too.

## innovat1ve city

Distinctively among the Objective 1 areas of Britain, Sheffield has very strong assets in the knowledge economy upon which to build. A main thrust of the economic strategy is to unlock more of the intellectual property and expertise in its universities and to commercialise it, fuelling new technology-based firm formation and growth.

The new vision positions Sheffield as one of Europe's high tech centres, wired into the global digital web and generating new technology-based businesses from its strong research and education institutions.

The City needs to invest in providing a broad portfolio of business accommodation and support mechanisms to encourage new entrepreneurs and to improve business start up and survival rates. The Masterplan proposes a 'stepping stone' approach to providing a range of accommodation at a range of prices to help a broad spectrum of businesses to grow and stay in Sheffield.

If you require any further information  
e mail: [sheffield1@sheffield.gov.uk](mailto:sheffield1@sheffield.gov.uk)



## New Projects to Speed Innovation

Yorkshire Forward will soon begin promoting two separate but related projects under a new innovation support programme. The Network Brokers and Innovation Promoters aim to deliver maximum benefits to the region.

The Network Brokers, a team of cluster ambassadors, will work with the Yorkshire Forward cluster teams, the cluster support teams and the Innovation team. They will encourage interaction between industry and academia to develop industry networks. They will engage with businesses in the region to take advantage of strengths in science, engineering and technology.

The Innovation Promoters will provide practical strategic assistance to SME's within the region to encourage them to exploit new ideas. This will bring competitive advantage to companies when developing new products, processes and services. They will help to reduce the risks associated with the innovation process, and to stimulate innovation in SMEs within the Yorkshire and Humber region.

These projects, and others in the pipeline will ensure that innovators in the region have a visible support system that will smooth the path from research and development to viable business opportunity.



This project is partly funded by ERDF and SRB



Sheffield Hallam University

