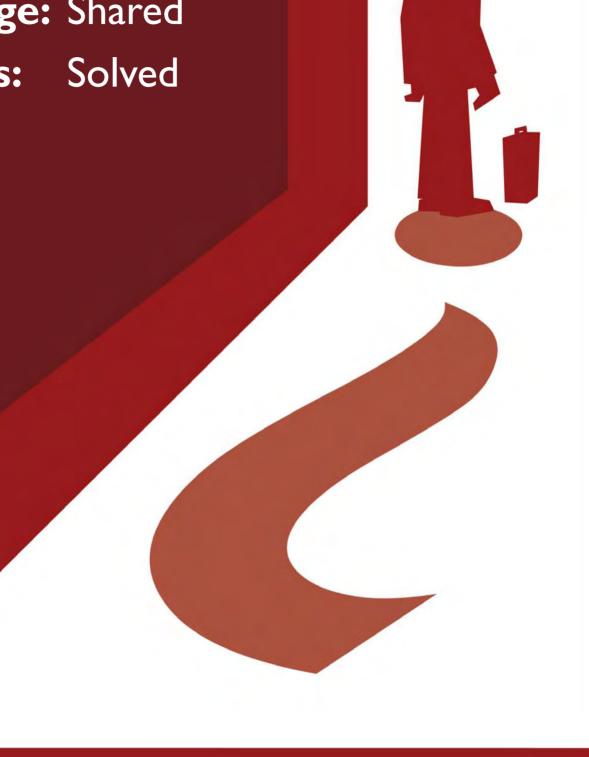




Questions: Answered

Knowledge: Shared

Problems: Solved



Centre for Enterprise

Gateway to Business Support at the University of Teesside





CONTENTS

We've made a small but significant name change to this edition of our magazine, to reflect the close relationship between enterprise and research here at Teesside.

For us research is important not only in its own right in pushing back the boundaries of knowledge, but also in providing the expertise and innovative ideas that characterise an enterprise culture. Hence the new title.

Just how research and enterprise work together is illustrated by some of the stories inside. Clive Fencott, for instance, has launched his own spin-out company on the back of his unique research into virtual reality environments and computer games. There are more like him among University staff and graduates.

To support them and encourage others, we have put in place a major research investment plan, providing financial and other support to key areas of research activity.

In spring 2005, we officially opened our business incubation centre for new and growing companies whose commercial future is founded on research and innovation.

And in July, Vice-Chancellor Professor Graham Henderson and Alan Clarke, Chief Executive of One NorthEast, jointly announced the construction of an £11m Institute of Digital Innovation. This will be the engine for the new digital media and technology cluster based on University research and development.

The Institute is the culmination of several years of hard work, dating back to the first edition of this magazine in 2002, when we looked at the groundwork being laid for the DigitalCity project.

This major initiative illustrates why the teaching, research and enterprise continuum is so critical, and why partnerships are so important.

Research generates the ideas that not only underpin excellent teaching but also encourage entrepreneurs and wealth generation. It's a relationship we need to custoin

And for us, regeneration isn't just about economic prosperity. Health, social and community development are just as important. That's why we also place a strong focus on research and enterprise work with the public and voluntary sectors to help improve opportunity and quality of life.

I hope a flavour of this symbiosis between research and enterprise comes across in this magazine. If you're interested in what you see, we'd like to hear from you. Please get in touch through our Centre for Enterprise (details on the inside front cover). Who knows where it could lead?.

Professor Mike Smith

Deputy Vice-Chancellor (Research & Enterprise) University of Teesside

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RESEARCH AND ENTERPRISE was produced by the University of Teesside's Corporate Communications Unit for the Department of Academic Enterprise.

Editor NIC MITCHELL Photography JUDY HUME Design CHRIS LOFTHOUSE

To find out more about the stories featured email pr@tees.ac.uk or telephone 01642 342018. If you want to discover how your business organisation can work with the University, contact the Centre for Enterprise on 01642 384577 or email cfe@tees.ac.uk.

This publication is available in alternative formats or request. Please call Catherine Kearney on 01642 384577, email cfe@tees.ac.uk

WHAT TO DO ABOUT

DBESITY?

The North East now has the highest level of obesity in England according to alarming new figures from the Department of Health. While well over half of us are overweight, some 20% of Britons are clinically obese.

This is three times more than 20 years ago and the shift is in line with a global trend that the World Health Organisation now describes as a worldwide epidemic. Have we become a nation of greedy sloths or are other factors at work on our waistlines? ALISON UTLEY investigates.



There is no straightforward answer according to Dr Beckie Lang, a research fellow who takes a special interest in obesity and nutrition.

The main cause is clearly overeating and too little activity - but the key to prevention is eluding experts across much of the alobe.

"It's a hugely complicated equation," says Dr Lang. "There is no magic bullet and it is not always possible to identify a single reason why some individuals become obese while others do not."

However, one recurring theme of the modern-day problem is poverty, says Dr Lang, a member of the Food and Nutrition Group in the University of Teesside's School of Health & Social Care, pictured opposite.

Historically, obesity has been associated with affluence, and this is still the case in developing countries such as India, Africa and South America, where being overweight is seen as a sign of prosperity. However in the western world far more people in the lower social classes are obese. In Britain the prevalence of serious obesity in women increases from 15% in social class 1, to 27% in social class 5.

Teesside is fast becoming a centre of excellence in the study of obesity and the University's Food and Nutrition Group is currently piloting a number of research-led initiatives designed to broaden our understanding of the problem.

"We very much believe in research influencing practice, we are not an ivory tower here," says Dr Lang. "What we aim to do is to discover what is actually going on with eating and activity patterns within different groups of people. Then we try to find ways of sharing what really works in obesity prevention.

The fact that there is an urgent problem here in the North East makes the work all the more important."

Dr Lang, says that the key to preventing obesity over the longer term rests on influencing the diet and lifestyle of children, as television chef Jamie Oliver sought to do through his recent campaign for healthier school dinners.

Department of Health figures show that increasing numbers of boys and girls under the age of 11 are now obese, with 8 to 10 year olds in the poorest areas of the country the worst affected.

Obesity levels are now lowest in Yorkshire, the Humber and the South East, and highest in the North East and London.

The Teesside group is taking a particular interest in children's health and is working on a number of projects aiming to prevent youngsters becoming obese adults. For example around a hundred nine to ten year olds are currently taking part in the Family Food and Attitude Study. Working with a University psychologist, researchers are carrying out surveys to examine family norms and to unravel how parental choice affects children's eating habits. They will discover which foods are restricted on a day to day basis, which ones are offered as treats, and which are regularly bought as snack foods.

The researchers want to find out how family eating habits affect children's behaviour outside the home and so they will be investigating what children eat at school and what they buy with spending money - and if they think their parents would approve!

"We know that obesity tends to run in families", explained Dr Lang. Children with two obese parents have a 70% risk of becoming obese compared to less than 20% for children with two lean parents. This could be explained by environmental factors since families usually share the same diet, lifestyle and cultural influences, and habits tend to persist into later life.





"THERE IS NO MAGIC BULLET AND IT IS NOT ALWAYS POSSIBLE TO IDENTIFY A SINGLE REASON WHY SOME INDIVIDUALS BECOME OBESE WHILE OTHERS DO NOT" But the picture is not straightforward since studies of adopted children have revealed that their weight patterns tend to be in-line with natural rather than adopted parents. This suggests obesity has some genetic basis although we are a long way from fully understanding the link, said Dr Lang.

IF OBESITY turns out to be inherited, are healthy eating programmes a waste of time? Another Teesside study, funded by the World Cancer Research Fund, is to examine the effectiveness of health promotion programmes amongst 9 and 10 year old children.

Two schools in deprived districts of Middlesbrough have been selected to take part in the research, which will begin in September with about 60 children.

The aim is to discover whether the introduction of a health promotion programme in one of the schools has any longer-term impact on the eating habits, lifestyle and weight of the children. The results will be compared to the control group who will not go through the health programme.

Researcher Claire O'Malley, a University nutritionist carrying out the study, said the links between cancer and obesity were just beginning to be understood. "We expect around one in five of the children in our study will be overweight and at risk of a number of health problems later in life including certain gastric cancers and cancers of the intestine," she said.

"We need to find a programme which helps them manage their eating and lifestyle in a healthier way one that actually works."

Another approach to understanding obesity is to focus on mothers and babies - even before they are born. Dr Lang said that many vulnerable groups faced risks associated with obesity but to date pregnant women had received little attention from medical experts.

In a bid to understand more about their particular risks, the Food and Nutrition Group is beginning a pilot study examining the impact of maternal obesity on mothers and babies. The project is being carried out with the Regional Maternity Survey Office and the North East Public Health Observatory. Researchers hope this will lead to a much larger study. "Until we can thoroughly research all these questions we won't be in a position to come up with the answers we so badly need," Dr Lang said.

CLIVE LAUNCHES A

STRANGE STRANGE

How did an experimental poet who once scratched a living as a cleaner for Hollywood star Ava Gardner come to be Managing Director of a research-led digital company? NIC MITCHELL finds out.

Clive Fencott still vividly remembers those days when he chatted about Frank Sinatra with movie-actress Ava Gardner, star of *Mogambo*, *The Barefoot Contessa* and other Hollywood classics from the 40s and 50s.

Clive was a part-time cleaner for the screen goddess and other wealthy clients around Mayfair at the time, and recalls walking with Ava Gardner and her little dogs in Hyde Park in the 1980s, just a few years before she died.

"She was very lively and very talkative, and the conversation was often about Frank Sinatra whom she married in 1951, and divorced five years later. She also had plenty of stories about other film people."

Clive was struggling to earn a living as a 'sound poet' at the time, experimenting with poetry that used images and sounds, not just words. He was doing everything from poetry reading and performances with improvising musicians, to creative writing workshops for London schoolchildren. To keep the wolf from the door, he also did gardening, cleaning and decorating odd jobs.

His wife, Anne, had completed her psychology degree at Birkbeck College, and Clive enrolled on a course by Independent Study at North East London Poly, where he was able to design his own degree. "I focused on the philosophy of science and computer science and my BA got me a place on a Masters in Foundations of Advanced Information Technology (FAIT) at Imperial College, concentrating on new areas such as artificial intelligence and logic programming.

"I was supported by a research award and remember I was the only Poly person on the course that year and probably one of the few to get to Imperial with a BA. This was in the late 80s before the digital revolution, when there was a big push to understand the complexities of computers.

"I wanted to be part of this, and decided to try to work in the academic world. I applied for a post at what was then Teesside Polytechnic and came up and got the job.

"Until then I didn't even know where Middlesbrough was. It was the night of Mrs Thatcher's second victory, and I remember they let me go early so I could vote.

"As the train left Middlesbrough station, I had a feeling that I didn't want to leave. I knew this was the right move for me. Even back then Teesside had a very good reputation in computer science. There was a lot going on here and I just felt at home."

He soon got involved with research in software engineering and supervised a number of PhDs in the subject. Some years later, during a sabbatical in 1994, he discovered the internet and started doing research into the potential of computer graphics and virtual environments. This sent his research career off in a whole new direction.

Clive recalls: "A student said to me 'How do you know what's a good virtual environment?' It was a very good question because an awful lot of virtual environments don't work very well. Even getting through a virtual door can be a real problem, for instance, and it's difficult to believe in them when things are so unreal.

"It started me thinking and I began my own research work on how to evaluate virtual reality environments and computer games in particular. That eventually led to establishing Strange Agency as a spin out company with colleagues from the University."

Clive is the Managing Director, and his co-directors are games designer and consultant Oliver Davies and Multimedia Masters graduate Jo Clay. Together they provide specialist 'proof of content' services to the computer games industry.

Clive explains: "By drawing on our experience in the games industry and the cutting edge research carried out by our interactive digital environment research group, 'SPIDERS', we can offer rigorous, in depth analyses of computer games very early in the development lifecycle - before they are playable - and reduce both the cost and risk of developing computer games.





"AS THE TRAIN LEFT
MIDDLESBROUGH STATION, I
HAD A FEELING THAT I DIDN'T
WANT TO LEAVE. I KNEW THIS
WAS THE RIGHT MOVE FOR ME"

"To the best of our knowledge Strange Agency is the only company offering this kind of objective evaluation of games so early in the lifecycle," says Clive, pictured with his company logo, above.

Strange Agency is based in the Victoria Building, the business incubation greenhouse on the campus, where many University company start-ups are located.

It was given a major boost this year when the technology finance company, NStar, pledged a £90,000 grant to support the fledgling enterprise. NStar was originally set up by One NorthEast to create a new climate for technology investment in the region. Strange Agency also won the general category award in the Teesside heat of the North East Universities Business Plan competition this year.

• The Semiosphere Interactive Digital Environment Research Studio (SPIDERS) from which Strange Agency developed was recently asked by Codeworks Nitro to undertake a research project investigating computer games for older people.

The idea is to explore using computer games technology to help older people exercise and to investigate the medical application of games.

"We have built a virtual environment connected to an exercise bike in which the world that people see changes as they pedal through a virtual journey," explained to Clive.

"We have transposed people's everyday environment to the seabed and as they cycle they can see different creatures and plants under the water. As they pedal faster they rise up from the seabed. The project is looking at whether this could be a way to help keep people fit and active in their 60s by using computer games to stimulate cognitive activity."



Just a few years ago, the idea of a thriving digital technologies sector in Middlesbrough was just a dream. An exciting dream - but a dream nevertheless. Today, though, with the latest

announcement of a multimillion pound investment in a new Institute of Digital Innovation at the University of Teesside, it is fast turning into reality.

Over the next six pages, NIC MITCHELL and JOHN DEAN find out what's in store and how the University's plans are helping DigitalCity to take shape in the Tees Valley.

An ambitious project to give the Tees Valley a future largely based on digital technology took a major step forward over the summer when the University of Teesside and Regional Development Agency, One NorthEast, jointly announced the go-ahead for an £11m Institute of Digital Innovation.

The Institute, or IDI as it is being affectionately called, will house high-tech facilities for research and innovations in digital media and digital technology that will be brought to the market through new or existing companies.

It will be a hub of activity for digital innovation and play a key role in giving Middlesbrough and the wider region a new future direction - building on the University's excellent reputation in areas as diverse as computer games development, animation and virtual reality environments.

The four floors of the showpiece development will incorporate business accommodation, commercialisation space, concept testing and shared development facilities for research between business and academia.

Construction is due to start on a site next to the University's Innovation and Virtual Reality Centre early in the New Year.

When it opens in the summer of 2007, the project's partners envisage that it will create nearly 300 new jobs and 130 new companies within three years and put the Tees Valley at the forefront of digital technologies.

Alan Clarke, Chief Executive of One NorthEast, is one of the project's most enthusiastic supporters, and the Regional Development Agency is contributing up to £6 million through the Tees Valley Partnership towards the £11m Institute. Additional funding will come from the University.

Mr Clarke said: "The University of Teesside has a growing reputation in the digital media and technology sector and this exciting programme will ensure that its academic excellence is converted into business creation and growth.

"Jobs in digital technology are already replacing jobs lost in more traditional industries and are widely recognised as being a strong part of the future economy of the Tees Valley."

It is a view that is fully shared by Professor Graham Henderson, Vice-Chancellor of the University of Teesside, who is delighted by One NorthEast's backing and the support of other important partners like Middlesbrough Council and the Tees Valley Partnership.

He said: "We are constructing the Institute of Digital Innovation as the first phase of our plans to build on the University's pre-eminence in the area of digital media and digital technology and to support the wider DigitalCity initiative.

"The digital area is a great strength for us and the DigitalCity initiative is hugely important because we can use our expertise to help the Tees Valley by encouraging new business growth."

Professor Henderson says other digital developments are planned, revealing that a second new development - the Centre for Creative Technologies (CCT) - is to be built nearby. The CCT will help consolidate and develop the University's digital strength in terms of undergraduate education. Around £7m is being invested in the new facility to make sure Teesside students are able to benefit from one of the country's best environments for teaching and learning in all digital aspects of design and media, and computing. The CCT will have a special focus on areas where creativity and technology is combined

"Together with the IDI, we will create a digital quarter on the campus," said the Vice-Chancellor.

Janice Webster is managing the DigitalCity project. She says: "By 2010 our goal is to create an economic regeneration project that is striving to create a vibrant, successful and self-sustaining digital media and digital technology cluster in the Tees Valley.





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"We want to have a world reputation for creativity, innovation and excellence, and the Institute of Digital Innovation is a major step towards achieving that vision."

Among the many key players involved is Middlesbrough Council's Executive Member of Regeneration, Councillor David Budd. He says: "DigitalCity is one of the most exciting projects being developed for the Tees Valley. It will contribute to the

transformation of the area and establish it at the core of the emerging digital media and technology sectors. The opportunities for business development and job creation, which will help retain the brightest and best talent in the area, are immense."

Tees Valley Partnership Chief Executive John Lowther is another passionate supporter. He said: "The tremendous expertise built up by the University of Teesside in the digital and multimedia fields provides a superb foundation for the DigitalCity project. At the heart of the partnership's blueprint for our future is the need to widen and diversify our economic base and that will only be achieved if we are able to maximise our opportunities in this and other 21st Century business sectors."

Codeworks, the regional centre of excellence in digital media, is yet another partner. It already has a hot-desk at the University and is supporting three digital technology projects on the campus.

Helen Gresty, Head of Nations and Regions at the National Endowment for Science, Technology and the Arts (NESTA) is also getting involved. She says: "The combination of support provided by DigitalCity is retaining talented, enterprising digital animators, digital artists and designers in the region. It's a great model."

And to demonstrate its commitment, NESTA is recruiting a Regional Development Manager, who will have a base in the DigitalCity office, and sponsoring a Science Animation Prize as part of the DigitalCity 2006 Fellowship exhibition.

The Fellowships are playing a key role in halting the brain-drain of talented digital graduates from Teesside, according to DigitalCity's Creative Director, Gareth Edwards, with most Fellows either finding jobs or starting their own companies here in the North East.

Middlesbrough Town Centre Company is already planning the next phase with ambitious plans for a creative industries quarter to accommodate commercial activity spinning out of the Institute of Digital Innovation and it is looking to redevelop the old Victorian quarter around Middlesbrough's train station.

University Deputy Vice-Chancellor for Research and Enterprise, Professor Mike Smith, explains: "We recognised early on that it was important to have two components to the DigitalCity project: one to create an environment to support innovation and innovative people and the other to support businesses that may come out of the Institute of Digital Innovation."

"We want to see graduates and staff starting businesses which can grow. But we also want to attract existing companies to rent space in our new IDI building because they want to be surrounded by innovative people and use the specialist development equipment. And we want to encourage more companies like Nisai to relocate to the Tees Valley because of the expertise and the availability of highly trained young graduates to support their business."

SCARY TEES TALE GOES TO

HOLLYWOOD

An animated dark modern fairytale produced by a team of Teesside film-makers has taken European film festivals by storm over the summer and led to an invitation to take part in the world's largest short film festival in Hollywood.

The Los Angeles International Short Film Festival (LA Shorts Fest) has featured 20 films that went on to be Oscar nominees. The last six taking home the coveted award.

The invitation came after the stunning nine-minute 3D computer-animated screenplay *Emily and the Baba Yaga* wowed audiences after being shortlisted for the McClaren Award for Best British Animation at the Edinburgh Film Festival.

Earlier it had toured seven major German cities including Frankfurt, Munich and Berlin as part of Germany's Fantasy Film Fest. It was one of ten new films, and one of only two animations picked out of 300 entered for the 'Get Shorty' section, which focuses on the best new international short films.

WE WANTED TO TAKE THIS
TRADITIONAL RUSSIAN
FAIRYTALE AND GIVE IT A
MODERN SLANT. THE IDEA
REALLY CAME FROM MY LOVE
OF HORROR MOVIES AS A CHILD

Directed by Clive Tonge and produced by Siobhan Fenton, pictured top right, both lecturers in computer animation at the University of Teesside; the film is a modern adaptation of a traditional Russian story about the Baba Yaga, a cannibalistic cantankerous old woman who lives in a dark forest and preys on children.

The old Russian fairytale gets a dark modern scary makeover from the Teesside film-makers.

It took three years to make, and involved a 21-strong unique team of traditional artists and digital animators. Nineteen of the production team are based in the North East, and 18 are graduates or staff from the University of Teesside.

The film was first shown at Animex, Middlesbrough's international animation festival, in February, where it was greeted with great acclaim.

News that it was bound for Los Angeles came as *Research and Enterprise* was going to press.

Robert Arentz, one of the organisers of the LA Shorts Fest, told Siobhan and Clive: "After reviewing the many films submitted, we found your short represents the calibre of work we want to participate in our festival.

"We're honoured to be including your film in our festival this year and wish you good luck, and we look forward to meeting you. LA Shorts Fest hopes that by screening the film, it will open doors to infinite possibilities,"

Siobhan said: "I am absolutely thrilled that Baba Yaga has done so well so far on the international festival circuit. We have only just begun the festival submission process so to be accepted into three major festivals and nominated for major awards is a fantastic achievement and very exciting for the team."

The American festival is held at the ArcLight Cinemas in Hollywood during the second week of September, and prides itself on being the largest short film festival in the world.

The Baba Yaga was given its modern scary twist after Newcastle-based writer Rachel Mathews was commissioned to develop the screenplay using the original Russian folk tale as the framework. In the modern remake, the girl, Emily, finds tools including a chainsaw to help defeat the witch. So be warned: the film awakens the dark side of Emily's psyche and it will need a PG certificate at least if it goes on general release!

Clive said: "We wanted to take this traditional piece of Russian folklore and give it a modern slant. The idea really came from my love of horror movies as a child, which developed into a love of movies generally and of fairytales, some of which are weird."

Siobhan said: "In traditional fairytales, the young girl or female figure tends to be portrayed as weak and what we wanted was someone who was not so feminine."

• The *Emily and the Baba Yaga* production team won Best Overall Project at the 2005 DigitalCity Fellowship awards scheme, which helps talented artists get their projects off the ground. Further funding and support came from the University of Teesside and its School of Computing, Northern Film and Media, Middlesbrough Council, Animex, and the Digital City initiative.

Several of those involved with the film have since landed jobs in the animation industry, and Clive and Siobhan now hope the festival profile for the film over the summer brings it to the attention of companies who may wish to use some of the work commercially.

"We don't expect to make a lot of money from the film but we are using it to showcase the kind of talents which exist in the North East and raise the finances for our next big project which will be a longer animated, live action fantasy thriller," said Clive.

Siobhan said: "It was important that we worked with people from the North East. There is a lot of talent in the region, much of it in the Tees Valley."

To view a trailer of *Emily and the Baba Yaga* visit: www.thebabayaga.com





YOUNG ANIMATORS MAKE TV PITCHES

"WE ARE CURRENTLY WORKING WITH A CHILDREN'S AUTHOR WHO HAS ASKED US TO DEVELOP IMAGES FOR A TELEVISION SERIES"

It's the classic inspiration for so many entrepreneurs - looking at a piece of work and thinking 'I can do better than that'.

It was certainly the idea that drove four Teesside graduates to set up moShine, winners of the best new company award at

the DigitalCity Fellowships 2005 exhibition.

Now, having pitched to redesign the graphics for a television chart show, the moShine quartet have set their sights on growing the business as rapidly as possible.

Pictured, left to right, are moShine's Alan Barber, from Chester, Stephen Caie, from Hertfordshire, Satish Shewhorak, from the Wirral, Michael Siu, from Leeds. They met on the University's MA Computer Animation degree and set up the company after graduating last year.

Satish said: "We looked at the TV chart show and thought we could improve the graphics, so we contacted the makers of the show. The UK office loved our ideas, and supported us, but even though the American branch didn't feel able to use them we're not too disappointed. We valued the experience of working with a broadcasting client and it gave us the inspiration to set up our own animation company.

"It taught us a lot about dealing with customers and how to prepare pitches to clients. We recently did the graphics for the DigitalCity promotional DVD and we've also been commissioned to create the graphics for the Best New Business Awards ceremony.

"And we are currently working with a children's author who has asked us to develop images for a television series," said Satish

That project brought them into contact with Kent-based animation specialist mentor, John Bullivent, who is helping to mentor the moShine team and sharpen their commercial skills.

Satish said: "Digital media is coming to the forefront in this region and the University has given us essential support during the critical phase of our business start-up. We now aim to go beyond being simply an animation company and evolve into other areas, taking advantage of the wealth of talent here and promoting the area as a hub of digital talent."



RESEARCHBENTERPRISE

BUSINESS INCUBATION GETS

ROYALAPPROVAL



"THERE'S NO REASON WHY
MIDDLESBROUGH SHOULDN'T
RIVAL MANCHESTER, BRISTOL
AND LONDON ONE DAY AND
BECOME A CENTRE FOR
ANIMATION"

The Duke of York met Teesside graduates who have set up their own companies on the campus when he visited the University's new graduate business incubation centre in June.

Among those meeting Prince Andrew were Doug Wolff and Paul Dolhai, two Canadians who came to Middlesbrough from Ontario to study for a Masters in Computer-Aided Graphical Technology Applications. They are part of a growing number of Teesside graduates taking advantage of a pioneering initiative which helps graduate entrepreneurs incubate their business ideas on campus.

When Doug and Paul launched their own computer games development company, Onisoft, they never thought teaching a senior member of the Royal family how to use a game-playing version of a computer dance mat was part of the job description.

But that's what happened when the Duke of York came to call on them in their studio in the University's newly opened Victoria Building.

A fleet-footed Prince Andrew proved to be a quick learner when he met the two Canadians, and despite the glare of TV cameras from Sky Television and Tyne Tees it was best foot forward from the Duke under guidance from Onisoft director Doug, pictured, left.

Doug told the Duke: "We decided to stay on at Teesside as we have ready-made access to highly skilled graduates and students that we can bring in as and when we need them."

As well as Onisoft, the Duke met Sara Waters, from Middlesbrough, Matt Sibley from Stockton and Richard Hemsworth from East Cleveland, who set up their own animation company, Fake Believe, while they were third year students.

Prince Andrew also chatted to Clive Fencott, who founded Strange Agency as a University spin out company (See pages 6 and 7).

All three companies are based in the University's graduate business incubation centre in the former Victoria Road School, which provides accommodation for up to 20 of the campusbased graduate business start-ups at any one time.

Over 60 companies incubated on the campus since 2000 are still successfully trading and a total over 180 jobs have been created through the Upgrade² Graduate Enterprise initiative, said Maurice Tinkler, the centre's manager. He explained that graduate businesses receive a comprehensive package of advice and support, including business guidance and mentoring.

During his visit, the Duke also heard about DigitalCity from the project's director, Janice Webster and met representatives from Nisai, the Indian company that recently relocated part of its operation to Middlesbrough to take advantage of the skills and expertise of Teesside University's computing graduates. (See story opposite)

The Duke ended his visit to the campus by officially opening the University's new Gateway entrance commemorating the 75th anniversary of the official opening of the original Constantine College by the then Prince of Wales in 1930.

• The Victoria Building was renovated and transformed into a graduate enterprise centre with support from the European Regional Development Fund and One NorthEast and was officially opened by the Regional Development Agency's Chairman, Margaret Fay, on 17 May, 2005.

Keynote speaker at that event was Curtis Jobling, a former student of Cleveland College of Art & Design, and production designer for Bafta winning *Bob the Builder*.

Curtis is pictured below (right) with IT graduate Gillian Maxfield, a former Head Girl of what was Victoria Road Junior School before the renovation. She recently launched her own training company, ICT City Ltd, through the University scheme. Maurice Tinkler, is pictured, left.

Also starring at the official opening in May were three Computer Animation graduates, Rob Womersley, Neil Kidney and Morgan Powell, who formed Seed Animation two years ago to produce innovative short animated films.







Seed Animation produced a pilot for a potential animated series called *Freerange*, which won the Best Animated Short Film prize at this year's DigitalCity Fellowship Awards, and the trio are now working with Curtis on a series of short animated films called *Good Cat Bad Cat*. A still from the feline animation can be seen above.

Curtis, who is based in Thirsk, is mentoring the Seed Animation trio through a project supported by Northern Film and Media.

Mark Elliott, DigitalCity's Business Director, says: "Securing high-profile mentors for the new companies is one of our most valuble achievements and underscores our position as a true centre of excellence for digital media and digital technology initiatives."

Rob, Neil and Morgan met while studying on the Teesside Masters degree and moved into the Victoria Building shortly after it opened.

They were introduced to Curtis at the Animex Festival two years ago, and returned this year to give *Good Cat Bad Cat* its premiere screening at the Animex Production showcase in the LIGC cinema

Curtis said: "I wrote the scripts and came up with the designs for the *Good Cat Bad Cat* films and the guys at Seed produced the animation in their studio. What they created is fantastic and we have been exploring a number of new projects together."

One of them is *Curious Cow*, a series which Curtis initially produced for Nickelodeon, which has now commissioned more of the short films.

Curtis is confident about Teesside's digital future and says: "There's no reason why Middlesbrough shouldn't rival Manchester, Bristol and London one day and become a centre for animation."

GOING OFFSHORE TO THE BORO!

It made readers of *The Times* sit up and take note when a story appeared about more jobs moving offshore.

However, this one was about jobs leaving India for North East England and appeared under the headline 'The search for staff loyalty switches to Middlesbrough'.

The company involved was the Nisai Group based in west London. Originally they set up a team of 40 in Hyderabad to develop interactive online games-playing software for their Virtual Academy, which enables excluded pupils and those with long-term sickness to go online to keep up to date with class work.

But Dhruv Patel, the firm's Chief Executive Officer, found his staff in Hyderabad were being poached by big name companies and his staff turnover rate rocketed to 200 per cent a year.

Looking for an alternative location with a big pool of talent and better staff loyalty led him to Middlesbrough. And when he learnt of the University's reputation for high quality software and computer animation graduates and the DigitalCity project, his mind was made up. He switched his IT operation from India to the Tees Valley.

To date 30 jobs have been created and Nisai has sub-contracted some animation and computer-gaming work to Onisoft, Fake Believe and Seal, three of the companies emerging from the University's graduate business incubation scheme.

And to celebrate Nisai's success in coming onshore, Mr Patel and some of the graduate companies met the Duke of York when he visited the Victoria Building.

Prince Andrew was impressed to hear there could be as many as 120 jobs in Middlesbrough as a result of the move. "We wanted people who could hit the ground running," said Nisai's sales manager Stephen Briggs. "That was a key factor in relocating to the North East."

GIVING PEOPLE THE CHANCE TO

SUCCED

Trade unionist Tom Sawyer, now a member of the House of Lords, became Chancellor of the University of Teesside in 2005. Here, Lord Sawyer of Darlington reflects with NIC MITCHELL on how Teesside, and the North East, have changed since he worked here in the 1970s and on the values needed to make the region a success in the 21st century.



When Tom Sawyer left the North East in the early 1980s to become Deputy General Secretary of one of Britain's biggest unions, the last of the coal mines and shipyards were closing.

Confidence in the region was draining away and the scourge of unemployment had returned big-time to the region.

Maggie Thatcher's Conservative Government looked invincible. The Labour Party was in turmoil, divided and unwilling to accept that it needed to change if it was ever to be elected again.

Today, it seems like another age, and in many ways it was!

"AS A COUNTRY WE HAVE
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CREATIVITY"

Now in the Palace of Westminster, Lord Sawyer of Darlington often reflects on those years of upheaval and change - both for himself and the Labour Party - and the way the North East is facing up to the challenges of the 21st century.

He shared his thoughts in his inaugural speech as Chancellor of the University of Teesside, recalling that 1979 was the crunch year for the labour movement.

"We had to come to terms with the loss of power and accept the long period of Conservative government to follow. It was a time for thinking and learning the lessons of that defeat and for preparing for the future. We had to find new ways to apply the old values of the labour movement, to adapt our thinking through new generation and a new set of realities."

And so Tom Sawyer, as he is still known to his many friends in the North East, began a journey that eventually saw him play a key role in reshaping the Labour Party after Tony Blair became Leader of the Opposition in 1994.

That voyage of discovery actually began when he left formal education at 15 to go onto the factory floor at a County Durham engineering works.

He became an active trade unionist and was secretary of Darlington Trades Council when I first met him in 1972 or '73.

I was a local newspaper trainee reporter and delegate from the National Union of Journalists. Tom had left Cummins Engines by then to join the National Union of Public Employees (NUPE) as a full-time organiser in their Middlesbrough office, just yards from Teesside Polytechnic on Borough Road.

He rose up the Union's ranks to become Northern Regional Officer and Tom, pictured left from the early 80's, moved to London in 1981 and became Deputy General Secretary of the giant public sector union UNISON.

He became Labour Party General Secretary in 1994 and held the post for four traumatic years. A colleague said of him: "While Tony Blair modernised the politics, Tom Sawyer modernised the machine."

He went on to be one of Labour's strategic thinkers behind a new approach to labour relations. The aim: to replace old style class warfare with the realism that employers would also benefit if they valued their employees. Ideas he helped to introduce to a number of companies, including the Royal Mail.

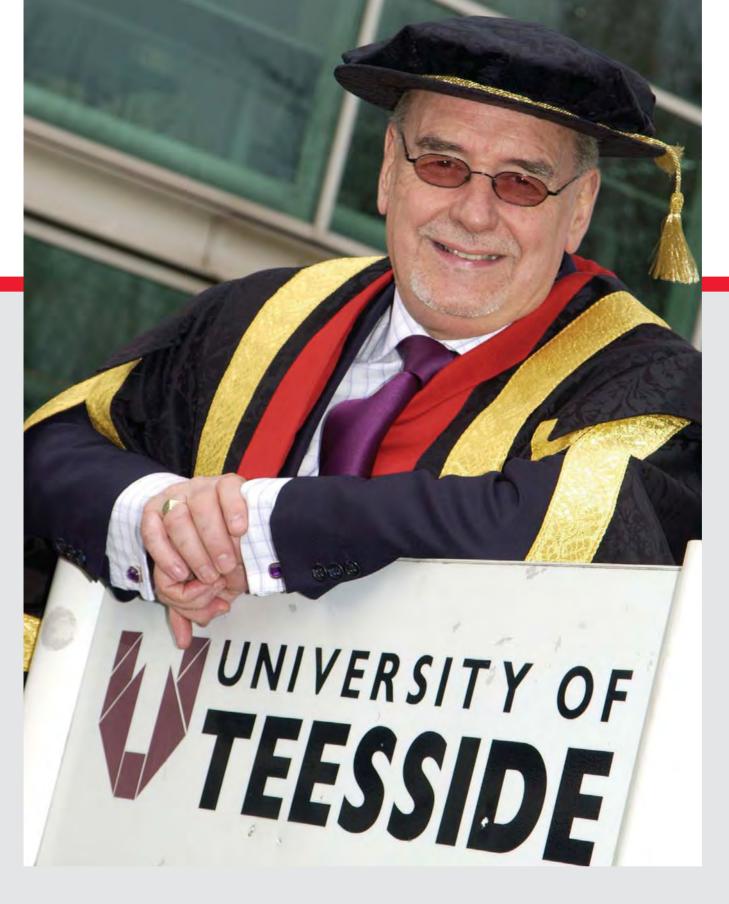
He became a director of Investors in People UK in 1998 and a non-executive board member of organisations, such as the Reed Healthcare plc, Thompson's Solicitors Supervisory Board and the Britannia Building Society, where he chairs their Members' Council. He has also been a Visiting Professor at Cranfield Business School since 1999.

But as fellow trade unionist and honorary graduate of University of Teesside, Bill Morris, said: "You could take Tom Sawyer out of the North East, but you couldn't take the North East out of Tom."

That's the great attraction for Tom in becoming Teesside's Chancellor. He can renew ties with the North East, which he sees as finally achieving a long-awaited revival in fortunes.

"Just look at the University," he says. "Nothing from my memory of those days in Middlesbrough could have prepared me for the impressive institution that the University of Teesside has become with its magnificent campus."





But as he admitted to the 750 guests at his installation ceremony in Middlesbrough Town Hall, Tom never dreamed of becoming the University's Chancellor.

"I was never a great dreamer," he confessed, "but when I did dream it was more about football and Marilyn Monroe than going to University. In fact, when I left school in 1958, only 8% of pupils went on to higher education. I don't know how many of them were boys, but the ones I knew went into factories, shipyards or mines, almost none of which exist today."

He is now determined to do whatever he can as Chancellor to ensure that this generation of North Easterners do not miss out on life chances, as most of his generation did, because of a lack of education and skills.

"In my day only a few professionals were considered worthy of degree level training, but today we have a government that

understands that all our young people need a post-16 education and at least half of them will need a degree.

"As a country we have finally grasped that it is not enough to hire 'hands'. We also need heads full of ideas, understanding and creativity. Young people who can embrace enterprise and change, who can create new opportunities - just as the graduates who are starting their own businesses on Teesside University's campus are doing.

"This is the real difference between my time and now, and why I feel so much at home as Chancellor of this University. I share its mission of providing opportunities and widening access to all who can benefit from higher education. I know it is really making a difference to so many lives on Teesside and beyond. That's what makes me feel so confident about the future for Teesside."



TACKLING THE SAGA OF THE

RED RIVER

IT'S the red river, whose ugly discolouration brings back memories of an industry long since gone. But now the ochre which stains Skinningrove Beck, in East Cleveland, is helping to preserve precious natural resources thanks to a University of Teesside project.

A team from the University's Clean Environment Management Centre (CLEMANCE), working with industry, has developed a way of extracting the ochre and recycling it for use in the cement industry. JOHN DEAN investigates.

The people of Skinningrove are used to their red beck, a legacy of the ironstone mines which were at their most numerous in the 1850s, but which gradually declined and have now all gone.

The red colour comes from ochre dissolved out of old mine workings, smothering everything in the stream. A treatment system had previously been installed to extract the ochre, but once it was full it stopped working and the river ran red again.

Villagers, working through the community organisation Skinningrove Link-Up, called in Dr Richard Lord, from CLEMANCE's Bioremediation Programme, to see if he could find a way of easing the problem.

Richard, an expert at cleaning up old industrial sites for re-use, and Industrial Symbiosis Project Officer Christine Parry, have been working with waste disposal company Onyx to come up with a solution.

The answer was simple. Using specially designed bags to filter the water from the treatment system sludge, the team extracted solid iron oxide, so the filters work again to remove more ochre.

However, handling iron oxide is very difficult because when it is transported, it turns back into a liquid. Previously, it has tended to be used as a landfill because it is of so little use.

But under a programme run by Onyx, the Skinningrove iron oxide is being salvaged for re-use as a component of cement.

CLEMANCE Centre Manager Gareth Kane says: "Because the iron oxide is now being recycled, it means that the aggregates industry does not have to mine for new resources, which gives an added environmental benefit."

Dr Lord adds: "In the 1850s, the area was the worldwide centre for iron and steel and the mines were part of that.

"Although the last mine closed in the 1960s, the red water continues to leach out of the underground workings, which is bad for the beck. It is unsightly, smothers everything, wildlife is affected, and local people say it blocks the sewers. Removing the iron oxide has a benefit all round, cleaning up the beck and protecting natural resources which do not need to be mined."

CLEMANCE has been awarded £1.2m to extend its industrial symbiosis work helping companies find ways of reusing or recycling waste created during industrial processes, everything from un-needed sand to excess heat.

The organisation has been running an industrial symbiosis project in the Tees Valley for two years and the cash award from the Department of the Environment, Food and Rural Affairs (Defra) will expand it across the North East in collaboration with the Centre for Process Innovation. Four full-time staff will be taken on.

The money has come from Defra's £284m BREW (Business Resource Efficiency and Waste) fund for the National Industrial Symbiosis Programme, of which the North East will be an important part.

Environment Minister Elliot Morley said: "A wide range of industries, from manufacturers to retailers, can save literally billions of pounds a year by cutting waste and improving resource efficiency, often with little or no investment."

The Tees Valley project has already proved its worth and has helped companies divert 50,000 tonnes of waste for other uses with a further 100,000 tonnes planned.

In one example, the team brought together the chemical and agricultural industies to demonstrate best practice in dealing with organic waste.

"The composting expertise of the local farming community has saved the chemical industry thousands of pounds a year" said Christine Parry, Project Officer for CLEMANCE's industrial symbiosis initiative. Christine is pictured with Dr Lord, right, and Dr Rahman Pattanathu, from CLEMANCE.

PUTTING SOCIAL INTO

ENTERPRISE

There have been high hopes that the spread of enterprise would halt the cycle of deprivation and hardship which has hit the North East since the decline of traditional industries like ship building and coal mining. But can the Tees Valley actually benefit from enterprise schemes designed to encourage people who are out of work to start their own small businesses?

Will thriving enterprises really plug the gaping hole left in the economy, or is it unrealistic – cruel even – to expect individuals to lift themselves out of poverty and welfare-dependency by creating their own means of employment? ALISON UTLEY finds out.

What do we mean by 'enterprise'? Is it merely wealth creation and if so, how can people without jobs be persuaded to start businesses? What expertise do they have, and how many of them will truly succeed without the flair of a Bill Gates or a Richard Branson?

We need to give a broad definition to enterprise because making a difference to the lives of people who live in poorer communities is a question of social as well as economic regeneration. In other words, building confidence is the first step to building businesses.

Tony Chapman, Director of the Social Futures Institute at the University of Teesside, says that in regions like the Tees Valley which are struggling with the problems of multiple deprivation – housing, health, crime, education and lack of work – expecting individuals to become business entrepreneurs overnight is a pipe dream.

"You really can't reasonably expect most people's mindsets to change radically overnight," he said. "In fact, it may take a generation to raise the aspirations of a whole community. At the moment, the idea of running a business is a remote opportunity for many. But we can create some positive role models for our children to aspire to if members of the community who are interested in social enterprises are fully supported."

Dr Chapman believes that at least part of the answer is the creation of community or social enterprises as a first step in building an enterprise culture. These enterprises are owned by partnerships of local people helping each other to generate work in hard-pressed communities, often supported by various agencies.

The term 'community enterprise' covers a wide range of formal and informal organisations. Operating on a not for profit basis, community enterprises delivers public services which benefit disadvantaged groups. Perhaps a small nursery which frees up parents to find work, or a small catering operation or care service.

Community enterprises can also be social firms specifically set up to employ people with disabilities and to pursue a social mission through the production and sale of goods and services in the market-place. Alternatively community enterprises might be trading companies owned by charities, co-operatives or mutual organisations such as those established to run services for public sector organisations.

The key difference is that they are driven by values rather than profit motives.

It is only in recent years that the contribution of the social economy to cultural, environmental and social wealth has begun to be recognised. But increasingly, social entrepreneurship is regarded as an innovative way of tackling social problems that cannot easily be resolved by the public sector or by conventional businesses. In an environment where the welfare state has become overstretched, social entrepreneurs are increasingly seen as vital to the development of a fairer society.

Social enterprise is also now a key feature of the Government's strategy to address social exclusion. It is hoped that the approach will increase the productivity of some areas of public service while fostering a culture of grass roots community engagement in regeneration.





It can be an uphill struggle getting such enterprises off the ground, but when they do work, confidence begins to be restored to communities and invaluable work experience is built up, Dr Chapman said.

The next phase of the Institute's work, which is funded by the Higher Education Funding Council for England's Higher Education Innovation Fund, involves a team of researchers developing new educational materials to help both young and established social enterprises in the development of business planning.

Social enterprises nationally are growing in political and social importance, and their economic benefits are emerging. Until recently, very little was known about the extent of social enterprise in the Tees Valley. But the Institute, based in the University's School of Social Sciences & Law has worked with Teesside Business School to put that right and formulated a plan for a social enterprise strategy for the Tees Valley.

"Initially there was a need to increase knowledge about the size, spread and strength of the sector at local level," Dr Chapman said. "Now that we've done that, we need to develop the capabilities of social enterprises, in terms of their business or enterprise skills, to enable them to move away from grant dependency. This is where we come in. We believe firmly there is a bright future ahead and we want to do everything we can to help."

Among the social enterprises in the Tees Valley is Community Campus '87. It was formed, as the name suggests in 1987, by a group of people to provide housing accommodation facilities and amenities for homeless people, particularly young people who find themselves in hardship or distress.

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It also gives personal advice to young people to help determine their future housing needs and personal development opportunities.

And alongside property management, it now also offers a range of innovative initiatives to help young people achieve their potential such as the Key Skills Project. This involves the renovation of empty properties while offering young people the chance to gain a recognised construction qualification.

Carl Ditchburn, Co-ordinator at Community Campus '87, said: "We believe that social enterprise is the key to improving the economic and social well-being of young people and therefore the wider community. We would like to see many more social enterprises set up in Tees Valley as they are a great way of doing business."

Carl is pictured left, with Judith Brown and Dr Tony Chapman from the University of Teesside.

SPOTLIGHT ON SAFER

BRIDGES

After the tragic Selby rail crash in North Yorkshire four years ago the safety of Britain's road bridges was suddenly big news. But Professor Brian Hobbs, Dean of the Univerity's School of Science and Technology, was way ahead of the headlines.

He was already working hard to make road bridges safer because he knew that many of the UK's 40,000 ageing masonry bridge parapets could be in a dangerously weak condition. ALISON UTLEY reports.



It shouldn't really have been a surprise to anyone. Most of our road bridges were built to cater for people crossing on footor at worst on horseback. They certainly hadn't been designed to withstand an impact from a car let alone a lorry

To determine the extent of the problem Professor Hobbs, pictured left, used the University's Heavy Structure Laboratory in Middlesbrough and built a unique laboratory test rig to simulate what

happens when a vehicle crashes into a brick or stone wall.

Following painstaking experimentation, and with help from brick manufacturer, Marshalls, Professor Hobbs has assessed the different strengths of the numerous types of constructions. He says: "The energy required to simulate car impact is obtained essentially by dropping a one and a half ton piece of steel from the 5m high ceiling in the lab."

"This is the best way to simulate a car travelling at 60mph in a controlled way," he said. "It is the only way we can model how a traditional masonry parapet will behave - without actually destroying real bridges! Computer modelling is extremely useful but it needs to be calibrated against a real impact test."

The testing revealed that while most parapets would probably be able to stop a car, some masonry would be likely to be dislodged onto railway lines below - with potentially disastrous consequences.

Perhaps even more worryingly, only a minority of bridge parapets could withstand an impact from a lorry, according to Professor Hobbs' findings.

Unfortunately simple replacement of the old masonry with steel or reinforced concrete is not an option in most cases: "The problem is that a large proportion of the bridges are more

than 100 years old, they are national monuments forming an important part of Britain's industrial heritage and they often have very attractive architectural features that we don't want to lose "

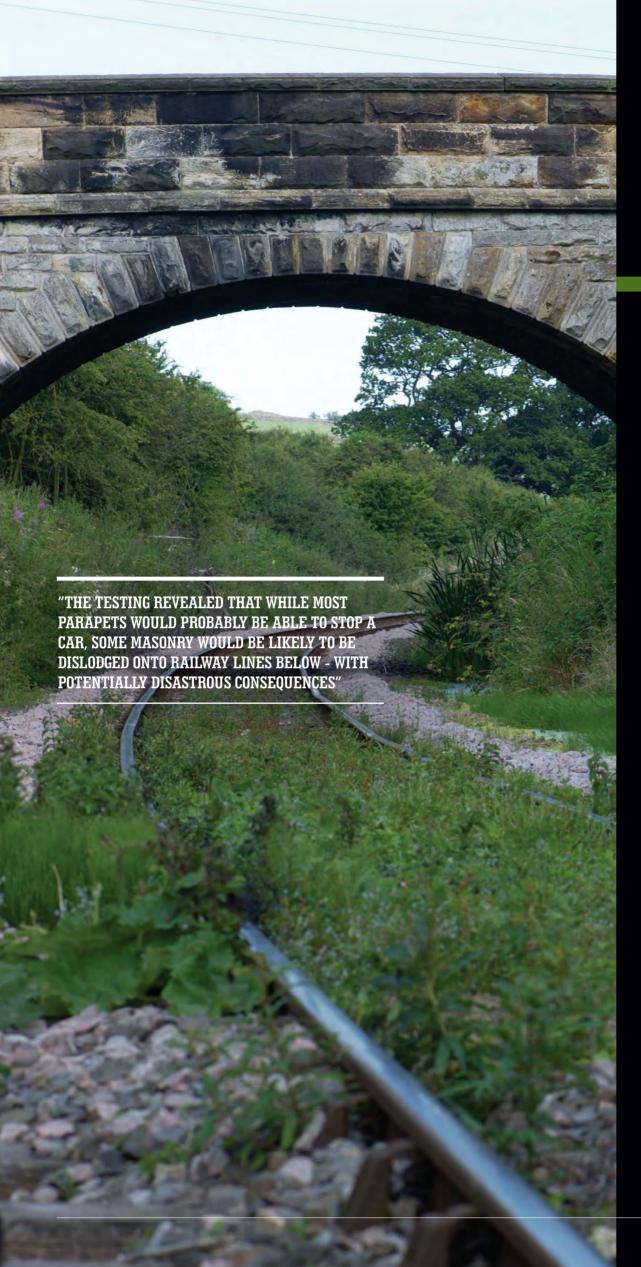
A way needed to be found to reinforce the bridges without altering their appearance and following a six year programme funded by the Engineering and Physical Sciences Research Council (EPSRC), involving collaboration with the Universities of Sheffield and Liverpool, with backing from organisations including Railtrack and London Underground, Professor Hobbs has come up with a unique solution.

His method involves removing the coping stones from bridge parapets, inserting fibre composite reinforcing bars in a carefully arranged pattern inside the walls, then replacing the coping stones.

Visually the bridges remain unchanged but structurally they are transformed.

The technology is not confined to bridge repair and could be used to invisibly strengthen any vulnerable walls. And Professor Hobbs believes an important market for his technology could be opened up in the world's earthquake zones where buildings need to be strengthened to help them resist collapse.

"We hope this will be the next phase of our work but there are always difficult issues to overcome to do with the levels of acceptable risk and the consequences of accidents," Professor Hobbs said. "Of course it can be complicated to work out who takes responsibility – and who pays for safety improvements. But we have a number of engineering companies interested in our technology and we are in discussions about the next phase of the research when we hope to take our ideas forward into new and unexplored areas."



Work is under way to upgrade safety barriers on bridges over railway lines across North Yorkshire in an attempt to avoid another Selby rail crash. The Selby accident happened at Great Heck in February 2001 when a car and trailer ran off a bridge on the M62 and into the path of an express train below. The express train then collided with a freight train. Ten train passengers died in the accident, including Professor Steve Baldwin, Professor of Psychology at the University of Teesside. A further 82 passengers were injured leading to calls for improvements to barriers where roads cross railway lines.

After an inquiry the crash barriers were said to be too short. Motorway-style barriers were put on seven of the road bridges which cross the East Coast Main Line and thousands more "danger spots" on the rail network were reviewed after a safety report commissioned in the wake of the crash. The Health and Safety Commission recommended that 10,000 locations where railways and roads cross, or run close to each other, should be looked at to ensure they are safe.

A QUESTION OF

SPORT

MARIA HOPWOOD, who lectures in Public Relations at Teesside Business School, has been researching the impact of the Barmy Army, the dedicated band of supporters who follow the English cricket team all over the world.

Here the sport-loving academic, pictured below, tells how fans are changing the nature of the game and making it more accessible to young people.



Picture the scene - it's mid-afternoon on Easter Sunday 2004, the venue is the Antigua Recreation Ground and it's day three of the fourth and final Test match between England and the West Indies.

The sun is beating down on the rickety, packed West Indies Oil Stand, which has become the place to be.

Just before lunch, Brian Lara scores a record 400 not out and everyone in the ground, West Indies and England supporters alike, enthusiastically acknowledges his fantastic and historic achievement.

It was one of those sporting moments you know you'll never forget - the emotion, the camaraderie, the 'just being there' as part of the crowd.

Now England are batting and the time has come to let the players know we're right behind them.

And so it begins, a chap dressed in a leopard skin toga with his face painted with the flag of St George starts the refrain with "Everywhere we go-o . . ." and the whole contingent of England's supporters, all around the ground join in, word-perfect. The song ends with a rousing chorus of "Michael Vaughan's Barmy Army, Michael Vaughan's Barmy Army, Michael Vaughan's Barmy Army . . . " And so the chant goes on, comfortably breaking day two's 20 minute record and setting the benchmark for day four's efforts.

We'd better put in some practice on the bus on the way back to

Even if you've never actually attended an international cricket match when England are playing you're likely to have heard of the Barmy Army.

There the most colourful, noisy band of supporters that provide a unique atmosphere that has become the hallmark of the modern international game.





This is what the Barmy Army is all about, but perhaps more importantly as far as cricket and sport generally are concerned, they have become an immensely powerful sports public relations mechanism, raising awareness of cricket as a form of entertainment and attracting a new and younger audience to the game whilst simultaneously debunking some of cricket's outdated stereotypes.

Contemporary cricket is an excellent example of how sport is changing and developing as a worldwide business phenomenon.

Sport has changed radically over the last 30 years - what was once a local Saturday afternoon activity for both participants and spectators can now take place on any day or night of the week and be broadcast to a global audience.

Not only that, much of what happens on and off the field of play regularly finds its way into the newspapers and celebrity gossip magazines.

Very little of what is reported about David Beckham and his lifestyle has anything to do with his ability as a footballer. What Wayne Rooney and his girlfriend get up to on his days off has nothing to do with his playing genius.

We even know that Australian spin bowler Shane Warne's preferred method of communication is text messaging!

Sport in the 2000s, therefore, is a multifaceted, multimedia industry whose appeal is extending to an ever-increasing number of stakeholders and supporters.

Sports organisations are waking up to the fact that they are businesses and that their long term survival depends not least on all those involved with the organisation, from the groundstaff to the Chief Executive, adopting a strategic business focus.

It is this evolution which is providing some exciting research opportunities into sport business.

Apart from spending the 2004 Easter holidays observing the Barmy Army in Antigua, I have recently returned from a month's research sabbatical at Griffith and Bond Universities on Australia's Gold Coast.

"CONTEMPORARY CRICKET IS AN EXCELLENT EXAMPLE OF **HOW SPORT IS CHANGING AND DEVELOPING AS A WORLDWIDE BUSINESS PHENOMENON**"

Australia's intense involvement with anything to do with sport is legendary and the prospect of studying the operation of cricket in the land of the Baggy Green was an opportunity not to be missed. Cricket's most successful and lucrative product extension of recent times has been Twenty20 cricket.



Created exclusively from a huge marketing research initiative led by the England and Wales Cricket Board (ECB), the Twenty20 Cup has transformed cricket's image by broadening its appeal and successfully reaching new markets while regularly achieving the rarely-seen phenomenon of advance ticket sell-outs at grounds across the world.

The Australians have been rather slower to embrace Twenty20 cricket, but as more and more of the sport's financial and commercial records are hit for six, it's now a certainty that Twenty20 will be making regular appearances Down Under next season.

In fact, as I write, I am working on a research project with Australian colleagues which includes work with Queensland Cricket to help prepare for Australia's first international Twenty20 match in January 2006, at one of cricket's spiritual homes, the 'Gabba.

Who says cricket's boring? Certainly not me!!

CELLULOID

On Teesside 'A Century in Stone' has been an unexpected cinematic hit. Craig Hornby's 118-minute documentary about Eston's ironstone miners has spawned a video, DVD, touring exhibition and virtual reality model.

And the appetite for such instant regional nostalgia appears insatiable. So it is fitting that the Northern Region Film and Television Archive (NRFTA), which contributed to Hornby's epic, should have its home at the University of Teesside.

But the archive is not simply a repository for all our yesterdays, as DAVID LORIMER reports.



It's a century in celluloid, projected through the halls of academe and back into the community from which it came.

A touch of serendipity!

Take the world's oldest surviving lifeboatthe Zetland - preserved in Redcar. The oldest reel preserved in the Northern Region Film and Television Archive (NRFTA) vaults - dating from 1910 - shows flickering images of the region's lifeboats in action

That reel came to light in the Isle of Wight, but another recent acquisition came from closer to home

"The Elizabeth Hayes Collection of about 40 films goes back to the 1930s" says Brian Barker, the archive's education officer,

pictured with Film cataloguer Laura Towns and the telecine machine from the 1960s. The machine is used to transfer old film to DVCAM and DVD.

"Her grandfather, who had a shop in Newcastle, was a very keen amateur film-maker. Even his holiday films are riveting. He must have been quite wealthy – because he went all over the world."

"One film, called *Around the World in Ninety Days*, depicts his travels to the Middle East, Jerusalem, India, Australia, Canada and America.

"It has some fascinating shots of Jerusalem during partition. Barbed wire dividing the city, and footage of the King David Hotel just after it was blown up. And the fact that it's in colour is an added bonus.

"The collection also contains material from London in July 1939 and the USA before War World II, all in colour. And there's a great film of an old Dakota aircraft in which the family travelled as well as many reels more relevant to the North East."

The archive building on the University campus already holds 20,000 cans of film including *BBC Look North* location reports from 1957 to 1991 and many *Tyne-Tees* documentaries from the 1970s and '80s.

Now it has a further 5,000 cans of more recent *Tyne-Tees* footage and soon the 20,000 to 25,000 cans held by Tyne and Wear Archives - part of the NRFTA consortium - will be transferred to Teesside.

Another successful negotiation has brought in all the ICI films made on Teesside - some 300 to 400 of them.

"They were short magazine films of about five to ten minutes" says Brian. "And there is some fantastic material in them of great social as well as industrial interest.

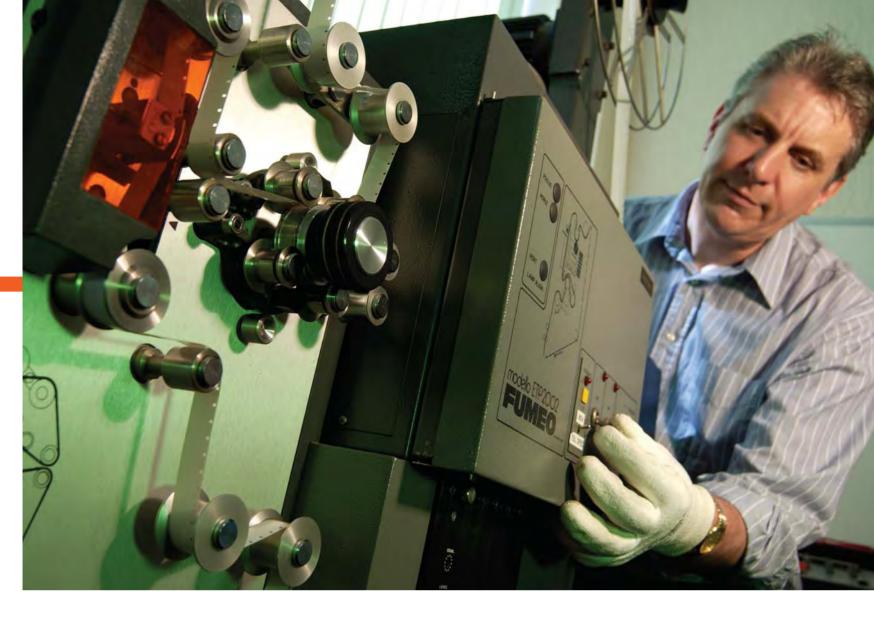
"Some are training films. And there are films about the Synthonia Club, sports days and works outings – images of a bygone era.

"We've also had individual deposits and some really interesting industrial training films - the industry of the region is one of our themes. One is a bit like 'I'm all right Jack' without the comedy. It's about a time-and-motion study introduced into a factory, with actors playing the parts.

"It's about the negotiations, the trouble it causes around the works and the conflict between the workers and management."

Interesting, certainly, but safely stacking these cans in the archive's purpose-built temperature-controlled storage area is merely preserving the past for posterity, admirable though that may be.





Safeguarding this fragile footage goes hand in hand with developing it as an essential tool for the University's students and academics, making it easily accessible to a wider audience through public film shows and commercial sales.

Says Brian: "We have lots of students and academics coming in and using it for their degrees and research activities.

"We put together what they want on DVD, DVCAM or video and they can use it in their project. It's probably best for media studies, history and social studies. We want to develop and organise the material in a systematic way so that it can be widely accessed. And we're also planning to integrate it more fully into the work of the University, by developing modules for degree courses."

The ICI films are a case in point. They reflect a time when the company's name was ubiquitous on Teesside.

Says Brian: "We've already presented a show based on all the ICI films. Called *ICI on Teesside, Chemicals and Community,* it went down very well both in the University cinema and the Wilton Centre. Our next step is the production of DVDs."

• In a parallel development, senior history lecturer Margaret Williamson is acting as a consultant to the ICI Oral History Project for which the Heritage Lottery Fund is providing almost £50,000 backing.

"It's an attempt" she says "to gather an oral history from the local community who worked at ICI. The company recognised the need to capture ICI's past before it disappeared from Teeeside's map.

"My role is to advise them on their historical approach, advise on the art of gathering oral history and train some of the volunteers".

"SAFEGUARDING THIS FRAGILE FOOTAGE GOES HAND IN HAND WITH DEVELOPING IT AS AN ESSENTIAL TOOL FOR THE UNIVERSITY'S STUDENTS AND ACADEMICS, MAKING IT EASILY ACCESSIBLE TO A WIDER AUDIENCE" The aim is to produce a book, teaching packs for schools and eventually a website by Christmas 2007. Transcripts of the tapes will be archived.

Together with the film footage this will create an unrivalled resource for those researching ICI's presence in the region.

Meanwhile archive curator Dr Leo Enticknapp has re-negotiated a new copyright deal with *Tyne-Tees* TV for the archive and its users. A new database is

also up and running and constantly growing. Eventually its catalogue will feature on the archive's website.

And as demand for material grows, more and more of the stored material is being transferred to DVDs which unlike the precious originals are easily accessed and handled, and even disposed of when redundant.

When it comes to preserving and presenting our pictorial past the NRFTA has got it canned.

A BRIGHT FUTURE FOR

CHEMICALS

ICI was once a byword for Teesside. But the chemical giant sent shock waves through the industry, and the whole of the North East, when, over ten years ago, it announced a major restructuring which cut its workforce in the Tees Valley by thousands. But Sandy Anderson, a former ICI director who managed the chemical giant's Teesside operations for five years in the 1990s, tells EDDIE JOHNSON the future is still bright for the industry.



Sandy Anderson believes Teesside's chemical industry has emerged in good shape, after the major change of direction a decade ago by ICI left many people wondering whether the industry had a future in the Tees Valley.

Now Chair of Governors of the University of Teesside, Sandy managed ICI's Teesside operations from 1989 to 1994 before becoming the chemical giant's Director of Engineering and then Senior Vice President, Technology, for the ICI group worldwide.

The reason for his optimism: other chemical companies stepped in and developed the former ICI businesses to fill the void, and many other organisations worked tirelessly to ensure that Teesside and the chemical industry would have a bright future at the start of the new millennium.

Sandy, pictured above, says: "ICI has a much smaller presence on Teesside these days, when you think that it used to employ thousands of people on three major sites. It was a byword for Teesside and along with British Steel it employed most of the people here.

"I think the region derived significant benefit from that presence, but in the late 1980s ICI began to implement a strategy to transform the company from a major global producer of bulk commodity chemicals into a specialty chemical based business that would be less vulnerable to the economic cycle. That meant a dramatic reduction in its Teesside base."

Sandy recalls that the early 1990s saw the beginning of that process, with the de-merging of pharmaceuticals businesses and the creation of Zeneca.

"For a lot of people the news that ICI was fragmenting was not very welcome, but I think perversely it has probably been good news for Teesside.

"When you have a dominant company in a region it is comfortable when things go well, but, as has been shown elsewhere, over-dependence can have serious economic consequences when that business declines or when strategy change redirects investment.

"I believe ICI behaved responsibly in that it sold sound businesses to other companies who really wanted to grow them.

"Consequently investment in the process industry on Teesside now lies in many hands: 15 to 20 years ago it was in the hands of one or two companies - ICI and British Steel.

"Because ICI was so big, it tended to do lots of things itself. For example, it ran its own maintenance and commercial services. When it broke up that work passed to several companies in the North East allowing them to grow and develop.

"So yes, ICI's departure was the consequence of a long-term strategy to move out of commodities, but it sold valuable businesses to companies that have since invested and grown.

"There has been a spin off in many of the support businesses like legal and maintenance and those companies have also grown.

"From that point of view I would say that although many of us were very sad about the departure of ICI - for Teesside it has not been all bad news at all.





"IF WE ARE TO BE MORE THAN A BRANCH MANUFACTURING REGION WE MUST SUSTAIN OUR INHERENT RESEARCH CAPABILITY TO DEVELOP NEW PRODUCTS AND PROCESSES" Some of these positive developments include:

- A record £200m investment by multinational chemical giant Huntsman in what will be the world's largest polyethylene plant.
- Advansa, formerly Du Pont polyesters, investing £50m since 2,000.
- Invista spending £250m on a modernisation programme over the past few years.
- Sembcorp, which took over the services and power station at Wilton, investing £20m in a new gas turbine.
- Huntsman spending £58m in Greatham on the development of Titanium Dioxide.

So while Sandy feels confident that process manufacturing on Teesside has a strong future, he emphasises that another part of the legacy must also be protected. And that's the research and development capability, which was largely based at Wilton employing over 700 scientists and engineers. In his view this is a unique strategic asset for the North East

"If we are to be more than a branch manufacturing region we must sustain our inherent research capability to develop new products and processes.

"The University has been involved in this process through the European Process Industries Competitiveness Centre (EPICC), which it set up with industrial partners in 1995, and which I chaired from 2000 until 2004 when it was absorbed into the Centre for Process Innovation (CPI) which is now playing a key in the NorthEast's Strategy for Success."

The CPI aims to stimulate applied research and development in the region as an anchor for existing industry and to attract new investment. It has a clear vision to be the pre-eminent innovation resource and partner for the industry.



UNEARTHING MY HOUSE OF

SECRETS

When Tony Nicholson, an academic historian, moved into his 200 year old house in the East Cleveland village of Brotton five years ago, little did he know that secrets lurking within its stonework would lead him on a voyage of discovery that sounds like something out of Jane Eyre. Now he's writing a book to reveal what he has found. NIC MITCHELL investigates.

Will Child, the blacksmith, was something of a legend back in 18th century East Cleveland.

If there was something wrong with your horse, you knew there was only one man who had the healing powers to put it back on its feet in record time.

People came to the village of Brotton from as far afield as Guisborough and Whitby and the horse doctor with the magic touch soon became a wealthy man.

So rich that when he died, his son used his father's inheritance to knock down their old house and build The Cottage on Brotton High Street, a solid stone-built structure that let the world know that the family were people to look up to.

It was another 40 years before Will Child's grandson went bankrupt at the height of the post-Napoleonic depression and the family were forced to sell their beloved home to the local squire, Thomas Hutchinson, who lived in Brotton Hall.

The house was then rented to Edmund Howard Pace, a lieutenant who had served in Nelson's Navy. He had fought many engagements across the globe, including a major offensive against the Barbary Coast pirates who were menacing European shipping in the Mediterranean and the Atlantic from their Moroccan bases.

"By the time he rented our house, he was easing his way towards retirement as the chief of the East Cleveland coastguards mopping up the last of the Saltburn smugglers," said Tony.

And so opened a chapter in the history of The Cottage that could have come straight from the pages of Jane Eyre.

For at the same time as Will Child's grandson was staring bankruptcy in the face, another East Clevelander was facing financial ruin 250 miles to the south. Thomas Stephenson had made his fortune trading with Imperial Russia and lived in an enormous villa in the then fashionable London suburb of Clapham. He lost everything on one final speculation and died penniless. His daughter Frances became a teacher to help keep the bailiffs from the door.

Some years later Thomas Hutchinson met her in London and although much older than her, they agreed to marry and she was rescued from poverty. The couple moved to Brotton Hall and lived happily together until he died four years later.

After his death, Frances moved to The Cottage which became her dower house for the next 30 years.

"From all my research she sounds like a Jane Eyre character, whose family was reduced from opulent wealth to struggling to get by for ten years on a teacher's wage in Victorian London.

"What intrigues me about her are the links between the local and the global. When she moved to Brotton, she kept in contact with her brother who lived in Paris, cousins and nephews who lived in St. Petersburg and a nephew who became Lord Mayor of London.

"When she died, the house passed to Thomas Hutchinson's nephew, Henry Saville Clarke, the son of a local clergyman, who became a very successful West End playwright. He was the first to stage Lewis Carroll's Alice stories in London's theatreland.

Tony is now trying to fill in the missing pieces in the jigsaw that make up the history of the old house and has used the power of the internet to find living relatives of Frances Stephenson as far away as Australia. "I was a bit sceptical about the internet, but it's been the single most useful source for my research. I am now hooked on using the communication tools of the digital age to bring stories like this back to life," he says. His book should be published early in 2007.

• Dr Tony Nicholson, pictured, is highly regarded in academic circles for bringing local history to life. Last year he won a prestigious £50,000 National Teaching Fellowship award from the Higher Education Academy in recognition of his excellent work on history courses at the University of Teesside.

It was while he was using the internet to research his book about his new home that he decided to invest most of this large cash award to pump prime a project to digitise the content of local newspapers like the *Evening Gazette* and *Northern Echo* and make them available on the web.

In the old newspapers he found stories about the latest casualties from the Crimean War lying side by side with reports about drunk and disorderly behaviour in Loftus and sporting triumphs of local teams. All human life was laid bare and some of the old newspaper stories eventually helped lead Tony to unearth the secrets of his cottage in the East Cleveland village of Brotton.

RESEARCHMENTERPRISE

NEWS ROUND UP



Games Research

A leading specialist in Artificial Intelligence (AI) and Virtual Reality technologies has secured a £150,000 collaborative research contract from the Department of Trade and Industry to examine how rapid advances in AI can make computer games more interactive for players.

Professor Marc Cavazza, Assistant Dean (Research) in the University's School of Computing, will be working on the project with Eidos, the computer games giant behind market leading games as *Tomb Raider*, *Hit Man* and *Championship Manager*.

Marc joined Teesside five years ago after establishing a reputation for developing and applying Artificial Intelligence technology within 3-D graphics.

Tees trio at top event

The National Council for Graduate
Entrepreneurship (NCGE) short-listed three
Teesside graduates among 84 young
entrepreneurs from UK universities for a three
day Flying Start event in Cambridge in July.

The government-sponsored event includes advice on developing commercial strategies from business mentors and is designed to inspire an entrepreneurial spirit within higher education. Taking part from Teesside were Sara Waters from Fake Believe, Satish Shewhorak from moShine and Dries Vandorp, who has an idea for a computer application for DJs.

Food for thought

The University's Food Technology Centre has formed a consortium with the five Tees Valley local authorities to drive up standards in the food preparation industry. They have won a major training grant under the Government's 'Safer Food, Better Business' programme and will work with 2000 companies, offering tailored on-site training as well as specialist workshops. The University will evaluate the impact of the programme.

SHARING KNOWLEDGE WITH BUSINESS

Three Business Development Managers have been appointed to support the University of Teesside's enterprise strategy. The appointments follow the University's successful bid for a £3 million grant from the Higher Education Innovation Fund (HEIF) last year.

The new BDMs, as they are known, will raise the external profile of the different Schools with the business community and encourage more collaborative knowledge transfer and applied research projects.

The BDMs are, pictured from left to right, Tim Brunton, Judith Brown and Geoff Archer.

Tim will look after the School of Computing and the School of Arts & Media. He worked in the construction industry before studying Interior Architecture and Design at Teesside and joining the University's Virtual Reality Centre. He went on to manage the Digital Knowledge Exchange which recently appointed Joanne Marwood to take over from Tim.

He said: "Teesside University has some of the finest creative and technical talent walking its corridors and I hope to bring these people together to help support the fledgling digital media industry in the Tees Valley. I see both Schools as being pivotal in the development of the creative industries quarter here in Middlesbrough and I hope that we can help make the dream of DigitalCity a reality."

Judith has responsibility for the School of Social Sciences & Law and Teesside Business School. She is keen to establish strong external relationships with small-medium sized enterprises (SMEs) and the social enterprise sector, and will also work closely with the voluntary, community and the public sectors.

Before taking up her new post, Judith worked in the manufacturing and service sectors and for local government in community economic development. She turned to consultancy three years ago. Her recent projects include writing a Regional Sustainable Development Framework for the North East Regional Assembly and working as a Co-ordinator for the North East Social Enterprise Sector.

Geoff will look after the School of Science & Technology and the School of Health & Social Care in terms of the academic-business interface. He has 15 years of experience of research and development, focusing on food science and nanotechnology and formerly managed the North West Food Centre in Manchester.

He undertook commercial consultancy for a range of multinational and SME clients in the food, chemicals, water and healthcare industries and has first-hand experience of the rewards and difficulties of protecting, developing and commercialising inventions after founding a small limited company to commercialise an innovative electronic kitchen gadget.

Catherine Kearney, who manages the University's Centre for Enterprise, said: "The BDMs are the lynchpin in the University's enterprise strategy. They will work to actively promote and manage the transfer of university knowledge and expertise to businesses."

For further information contact the Centre for Enterprise on 01642 384577 or email cfe@tees.ac.uk.

CONCRETE STEP INTO THE FUTURE

Flight simulator technology is to be applied to the precast concrete manufacturing industry in a bid to promote resource efficiency, reduce waste and encourage recycling.

The move, led by the Centre for Construction Innovation and Research at the University of Teesside, involves partners at Nottingham University, British Precast Federation, Tarmac, Aggregate Industries, Buckan and a host of precast companies.

The two-year project Enterprise Simulation for Precast Concrete Operations starts in September 2005. It has won a £500,000 grant from the DTI through its Technology Programme: Succeeding though Innovation Initiative.

Teesside's Professor Nashwan Dawood said: "The prestigious grant acknowledges our innovation in the use

of simulation in virtual environments and the application of this technology to the precast industry.

"We will be using technology similar to that used in flight stimulators to see if we can improve the production process for pre-cast concrete.

Off-site manufacture is generally recognised as being important to the long-term future of the UK construction sector and any improvements in the production of precast components will lead to economic, social and environmental benefits for the whole construction industry in this country."

CYBERPROFILING CRIMINALS

A joint research project investigating the problem of criminal activities on the internet led by Angus Marshall, a specialist in digital evidence and Senior Lecturer in Forensic Science at the University of Teesside, has won a £170,000 grant from the Engineering and Physical Sciences Research Council (EPSRC).

Researchers at Teesside, Hull and Sheffield are involved in the 12-month project along with colleagues from Computer Associates, Humberside Police, North Yorkshire Trading Standards, the Office of the Information Commissioner and C. Spencer Ltd.

"At the moment, we have to wait for the activity to become a noticeable problem, often after it has caused major damage to companies and the economy", explained Angus. "By bringing together a team with expertise in forensic

science, digital evidence, internet technologies and criminology, we believe that we can take a new approach to assessing and identifying unwanted internet activity. We may even go as far as identifying internet abusers early enough in their career to stop them before they become a major problem."

Initial findings from Angus' research were being presented at the Computer Networks Forensic Research workshop in Athens, as we were going to press.

EMBEDDING ENTERPRISE

Senior management figures are being appointed in all the academic schools of the University of Teesside to take the lead on promoting the enterprise agenda.



Among appointments already made is Professor Christos Kalantaridis, pictured, who has joined Teesside Business School as Assistant Dean (Enterprise). He was previously Professor of Entrepreneurship at University College Northampton.

Born on the Greek mainland in Thessaloniki, Christos came to the UK 16 years ago to study Economics. He says: "The

creation of an enterprise culture across universities, particularly in their business schools, can make a big difference, both locally and regionally. Here on Teesside, we will be building on the considerable expertise in both training and consultancy currently within our Business School. The main aim is to make a significant contribution to innovation and competitiveness of enterprises in the region and increase efficiency and delivery in public sector organisations."

Other appointments include Graham Dean as Deputy Director (Enterprise) in the School of Computing. He was previously Technical Director for the Knowledge and Information Systems division of *QinetiQ* Malvern, where he managed capability assessment and developments over six businesses which together employed 2,000 people. He also worked very closely with academia on the Research Assessment Exercise, the Lambert Review and third stream funding.

Elsewhere, the School of Health & Social Care has appointed former Principal Lecturer in Physiotherapy, Liz Holey as Deputy Dean (Enterprise). Professor Zulf Ali becomes Assistant Dean (Enterprise) in the School of Science & Technology and Dr Tony Chapman takes over a similar role in the School of Social Sciences & Law. Laura Woods, Director of Academic Enterprise at the University, said: "These new roles will play a critical part in embedding the enterprise culture within the academic community."



JAZZ BUSINESS!

Keeping a business running smoothly isn't that different from leading a jazz band, according to trumpet-playing Noel Dennis.

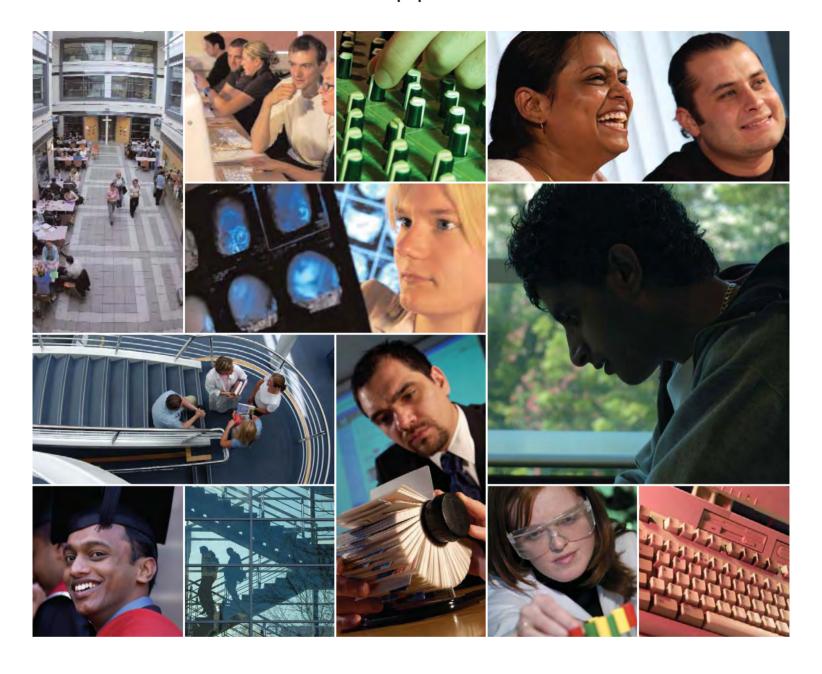
"A jazz tune has an agreed rhythm and tempo that the band sticks to, but you also need to improvise. That's not so different from a business which should have clear priorities and an end goal, but should also be able to adapt and make the most out of the creativity of its staff," said the leader of the Teesside-based Noel Dennis Band.

And putting theory into practice is all part of the day's work for Noel, Senior Lecturer in Marketing at Teesside Business School, who is running a series of workshops with researcher Dr Michael McCauley. The aim is to help businesses adapt, improvise and communicate without losing sight of their objectives.

Apart from the Creativity through Jazz workshops, the pair plan to use the sessions as the basis of academic research.

Open your mind

to more opportunities



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