

&RB

THE FORGE



ENGINEERING THE FUTURE

Ian Malcolm pushes the boundaries

NEW MAN AT THE HELM

Meet Teesside University's
new Vice-Chancellor

FUSION HIVE

A new home for digital businesses

Welcome

from the Vice-Chancellor

It gives me great pleasure to welcome you to this edition of *R&B* and to introduce myself as the new Vice-Chancellor and Chief Executive of Teesside University. My new role here began on 1 May and I can genuinely say that my first few weeks have given me a real insight into the work the University does together with business in the region and beyond.


As a former Business School Dean, I am appreciative of the depth of experience, expertise and dedication that Teesside has in leading the growth and development of companies and organisations both large and small. Under the leadership of Professor Graham Henderson CBE DL, Teesside has become a great university that makes a difference to its students, stakeholders and community. I am looking forward to the challenges and opportunities ahead to build on this tremendous achievement.

Teesside has had an excellent result in the recent Research Excellence Framework in 2014 which demonstrates the benefit and impact on society of research undertaken. Every single subject area entered in this assessment, the first since 2008, has research that is world-leading. This research ensures the University is at the forefront of new understanding and developments which informs the work we do with business ensuring we offer support that leads the field and ensures competitive advantage.

It is also key to our future and the future of the region that we work closely with the Local Enterprise Partnerships and that together with business we get the priorities right for the area. This can be seen coming to fruition with the regeneration of Central Park at Darlington with the creation of The Forge sitting alongside the National Biologics Centre and the National Horizons Centre. This partnership between ourselves and the Centre for Process Innovation, Darlington College and Darlington Council is a shining example of what can be achieved. Together we plan to develop the industries which will transform the UK economy.

This demonstrates the important catalyst that a university is for attracting investment and matched funding. Our new brand for our work with business, The Forge, illustrates how we can be at the centre of initiatives and bring organisations, businesses, investment, knowledge, research and expertise together.

I am personally delighted and excited to be joining Teesside University at this pivotal time in its development and the role it plays in wider society. We have an opportunity to develop further as a global university with an international reputation for quality, enterprise and learning opportunities.

A portrait of Professor Paul Croney, Vice-Chancellor and Chief-Executive of Teesside University. He is a middle-aged man with short grey hair, smiling warmly at the camera. He is wearing a dark suit jacket, a light blue shirt, and a striped tie. He has his arms crossed and is wearing a watch on his left wrist. The background is a lecture hall with rows of blue seats and wooden desks, slightly out of focus.

Professor Paul Croney
Vice-Chancellor and Chief-Executive

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Success for company which grows soap from bacteria

By David Roberts

A company which has developed a ground-breaking way of growing soap from bacteria is attracting interest across the world.

TeeGene Biotech, a Teesside University spin out venture, has developed unique strains of bacteria which produce biosurfactants, which act like soap and help to emulsify different liquids.

Unlike traditional surfactants which are made using synthetic materials, biosurfactants can be manufactured in a laboratory and are fully biodegradable and have minimal impact upon the environment, making them much more economical and efficient.

TeeGene Biotech's unique way of processing the biosurfactants means the company is able to scale production to meet the demands of industry ranging from cosmetics to biopharmaceuticals.

Other uses include oil recovery, reducing pollution and food processing.

TeeGene Biotech's pioneering research recently saw the company reach the finals of the Industrial Biotechnology Leadership Forum awards at the Industrial Biotechnology Showcase in London.

The event brought together leading figures from industry, academia and government agencies and was opened by Rt Hon George Freeman, Minister for Life Sciences.

Each of the finalists took part in a five minute *Dragons' Den* style pitch to judges.

TeeGene Biotech was a runner-up in the competition and the company attracted considerable interest, from a number of people including potential international investors.

Dr Pattanathu Rahman, founding Director of TeeGene Biotech, is a Senior Lecturer in Process Engineering and Biotechnology at Teesside University with 20 years' research experience on novel biotechnological approaches in bioproduct development, and a recipient of a Society for Applied Technology Award of Excellence in Microbial Biotechnology.

He said, 'It was a great honour to be invited to these awards. There were leading figures from all over the UK from the biotechnology industry.

'As a relatively young company it's fantastic that we're already getting this recognition.

'There was a panel discussion about the move towards a bio-economy and various initiatives to encourage future biotech businesses in the UK. The Minister of Life Sciences attended the event and highlighted the importance of informing schoolchildren about the developments in biotechnology.'

'We have also received interest from international investors for TeeGene's business plan. Overall the event gave an excellent platform for TeeGene Biotech's recognition to the national and international business community and investors.'

TeeGene Biotech was formed in December 2014 and is based in the Wilton Centre at Redcar.

The company is also developing links with the National Biologics Manufacturing Centre, which is under development adjacent to Teesside University's campus in Darlington.

The biosurfactant market in Europe is already worth £511m and is expected to grow to £1.35bn by 2030.

Dr Rahman has also been invited to speak about biosurfactants and TeeGene Biotech at Amity University in Uttar Pradesh in India and also to InCrops, part of the Adapt Low Carbon Group based at the University of East Anglia.

Dr Rahman adds, 'The levels of purity needed for biosurfactants in the industries in which they're used are extremely high.

'Because of this, they can be very expensive. However, the methods we have of producing them make it much more economical and cost efficient.

'It's a very exciting technology with tremendous potential for applications in a range of industries.'



with Professor Cliff Hardcastle



Professor Cliff Hardcastle is Deputy Vice-Chancellor for Research & Business Engagement at Teesside University. He directs the use of University skills and expertise in support of business and industry, heads the institution's work on the DigitalCity regeneration project and grows and develops the University's research strategy.

It gives me great pleasure in this, the fifth edition of *R&B*, to introduce you to The Forge. This is our new and dynamic one-stop shop for all your business needs and makes 2015 an exciting time to get involved with Teesside University and our award-winning products and services.

Our commitment to innovation, flexibility and a professional approach has seen us nationally recognised for excellence with the Queen's Anniversary Prize which recognises our outstanding work at world-class level.

Now we continue to grow and develop our offer to support business with the launch of The Forge which offers an efficient and convenient single point of contact for companies that want to access the comprehensive array of services we, as a University, can offer. This includes everything from research and development to training, leadership programmes and much more.

Our creation of The Forge responds to one of the key recommendations of the Witty report, undertaken by Sir Andrew Witty, the Chief Executive of GlaxoSmithKline, on behalf of the Government. He concluded that higher education institutions should be the drivers of economic growth and help businesses access their wealth of expertise

and knowledge in an easy and accessible manner. The Forge gives us the visibility that companies and organisations will recognise.

Based at our £13m Darlington campus, The Forge sits alongside the National Biologics and Manufacturing Centre which is currently being built on the Central Park site, as well as the planned National Horizons Centre which is a partnership between the University, the Centre for Process Innovation, Darlington College and Darlington Council. The NHC will be a catalyst for the growth of industries vital to the UK economy such as biologics, subsea engineering and industrial biotechnology.

The NHC has the potential to create over 2,500 jobs and 6,000 training places and will place the Tees Valley at the forefront of emerging technologies in the UK. We need to ensure that we are all working in partnership to build the resources and skills in the region which are needed to support these industries.

At The Forge we will continue our work with businesses ranging from fledgling new start-up companies, SMEs and social enterprises through to blue-chip multinational corporations. Our services will be tailored to meet the needs of the individual organisations to give them the

expert and independent advice and support they need to grow and develop their business offer.

The Forge has been shaped by listening to the needs of our customers, partners and stakeholders. They have told us what they want and we are delighted to be able to respond to this excellent feedback.

Having our headquarters in Darlington with easy access to the East Coast mainline and the A1(M) offers vital connectivity for all our clients. The Central Park development is a strategic game changer for the Tees Valley.

We are also looking forward to the opening of Fusion Hive – the new innovation centre at Northshore in Stockton – which is part of a £100m regeneration scheme. It will offer 36,000ft² over three floors for new and growing SMEs in the digital, scientific and creative sectors. Again this is a partnership initiative between the University, Muse, Stockton Council and the Homes and Communities Agency.

These are indeed transformational times and Teesside University is proud to be at the heart of these developments which play an integral role in stimulating the UK's economic growth plans and the regeneration of the North East.

FORGING A BETTER FUTURE FOR BUSINESS

THEFORGE

By David Roberts

A dynamic new identity has been unveiled for Teesside University's award-winning products and services for businesses.



The Forge provides a single point of contact for companies looking to access the University's business services including R&D, training, leadership development and professional education support.

With its main base at Teesside University's flagship £13m campus on Central Park in Darlington, now also home to the emerging National Biologics Manufacturing Centre, The Forge will be the 'front door' to the University for businesses ranging from start-ups and SMEs to blue-chip multinationals.

Teesside University works with hundreds of businesses every year and in 2014 it was presented with the Queen's Anniversary Prize for 'world-class excellence' in the field of enterprise and business engagement.

The University has spun out over 400 start-up businesses and also leads Digital City which marked its tenth anniversary last year. The Forge will build on this enviable reputation and continue to offer a range of services including research and innovation, consultancy, knowledge exchange, start-up incubation and mentoring and graduate placement.

The creation of The Forge responds to recommendations made in a government-commissioned review by Sir Andrew Witty, Chief Executive of GlaxoSmithKline, which said that universities should be drivers of economic growth and "triage" companies' needs through a single point of contact.

Professor Cliff Hardcastle, Teesside University's Deputy Vice-Chancellor (Research and Business Engagement), says, 'At The Forge we will use the applied knowledge, innovation and enterprise of Teesside University to work together with business.

'We will offer bespoke services attuned to the needs of each business to help them grow and succeed.

'Whether you need help to apply new ideas or processes to improve productivity and quality or assistance to develop new ambitious strategies for growth, or simply support to spin-out an idea into a viable



THE FORGE: together with business

by Michael Lavery,
social enterprise
entrepreneur and
the University's
marketing lead as
Director of External
Relations



In a year that the University was awarded the highly-prestigious Queen's Anniversary Prize, and we celebrated the tenth anniversary of Digital City, we undertook a comprehensive programme of review, consultation, market research and creative development to establish a new brand and identity to raise the profile of the University's breadth of business-facing activities.

Our aim was to create a distinctive and recognisable brand in a highly competitive and specialist market of business support services. A brand that would leverage the University's reputation and pedigree for working with business but also create a new identity with a commercial edge and a story and character which our existing and new business customers could relate to.

After completing our consultation and development work which engaged businesses of all shapes, sizes and sectors from across the UK as well as the University's business-facing and marketing staff, our new brand name – The Forge – was established.

With a nod to our region's business heritage but also as a word with duality that spoke of creating and honing new ideas and 'bringing together', The Forge, along with our 'Together with business' brand statement gives us an opportunity to create a single point of enquiry and to reposition our business-facing team and all the products and services we offer to support business success.

A new name and logo alone do not create a brand or build a reputation, but we hope you'll also see that the way we work with you, and understand and respond to your business needs, is our secret to ensuring we forge ahead. Together.

business, we can work in partnership to give your business the tools it needs to flourish.'

The Forge was developed following extensive consultation with the University's business partners as well as staff involved in business engagement.

Laura Woods, Director of The Forge, adds, 'By listening to our customers' needs we have designed a dynamic, flexible approach that will give businesses the right professional support at the right time to help them innovate and grow.

'The Forge will be the place to come for innovative businesses with big ambitions. Our Darlington base is right next to the East Coast mainline and the A1(M), which makes us very easy to find.

'Working in partnership, we can use our long experience with business to provide a needs-driven service that makes use of the latest technologies and innovations and adds real value for business clients.'



The Forge will be
the place to come
for innovative
businesses with
big ambitions.



FUSION HIVE



CREATIVE BUSINESS INNOVATION

- Competitive rent and payment arrangements
- Easy in, easy out terms
- Business rate relief for technology based companies (up to £50k pa for qualifying businesses)
- High-performing ICT with 24-hour support



www.fusionhive.co.uk



Postgraduate degree put Noreen on the path to becoming a Chartered Engineer

Noreen Hussain had always wanted to be an engineer and a postgraduate degree at Teesside University has allowed her to flourish in her chosen career.

She is now a Project Quality Engineer at JDR Cables in Hartlepool and has also achieved her Chartered Engineer status.

Noreen graduated from Teesside University with an MSc Advanced Manufacturing Systems after completing her undergraduate degree in computer aided design and mechanical engineering.

'I wouldn't be where I am in my career if I didn't go to Teesside University and obtain the qualifications that I have,' she said.

'During my time at Teesside I had a good relationship with my tutors who gave me the advice and support I required. I took part in voluntary work at Ken Home Engineering and completed my master's dissertation at the company.

'This provided a good basis for what the world of work offered and gave me the confidence in my ability when I started my first job as a graduate engineer.'

After completing her postgraduate degree, Noreen undertook a two year graduate scheme at Siemens VAI, working in the iron and steel industry. She then worked in various roles within the oil and gas industry before deciding she would like to work offshore and secured a role as a Project Engineer with DeepOcean UK.

Noreen, 31, adds, 'I enjoyed the mix of working in the office and offshore as it made my job a lot more interesting. I gained a lot of experience working offshore and my knowledge of this industry has increased, making me a better engineer and somebody who is always eager to learn more.'

After DeepOcean UK, Noreen moved to her current role with JDR Cables. 'I am enjoying the challenge of this new role as I am involved in the manufacturing processes at JDR, which allows me to utilise my MSc degree,' she explains.



Noreen Hussain

'As a Projects Quality Engineer, I work alongside clients and the projects and manufacturing teams to ensure project quality control. No day is the same and I look forward to the day-to-day challenges.'

'I achieved my Chartered Engineering status at the end of 2014, so I am now a Chartered Engineer with the Institute of Mechanical Engineers.'

'Studying a postgraduate degree at Teesside University was definitely the right decision. It enabled me to progress my career and do something I really enjoy.'

Providing postgraduate opportunities

Teesside University offers a wide portfolio of taught postgraduate courses which can help take your career to the next level and change the way you think and work.

Whether you are considering postgraduate study to change your career, enhance your CV, or further your subject knowledge, Teesside University has a variety of courses, from digital animation to clinical psychology and forensic science to fraud management.

The University is also providing a number of funding opportunities for postgraduate courses, including discounts and scholarships.

Find out more at tees.ac.uk/postgraduate

ENGINEERING A FUTURE

in the North East

For many years Ian Malcolm, Scotsman and Managing Director of ElringKlinger (GB), has been pushing boundaries – not least trying to move the Scottish border south.

He tells Alison Ferst how he intends to secure the future of engineering in the North East.

In 2015 Ian Malcolm is sitting at the head of a successful and growing engineering business – it's the result of what he jokingly refers to as 30 years of missionary work in the region.

Over the next few years he has a mission to double the size of ElringKlinger at its Kirkleatham Business Park site just outside Redcar, but he freely admits it's been a white knuckle rollercoaster ride to get where he is today.

Ian, a chartered accountant, joined the company permanently 20 years ago as financial controller and he has seen a great many changes in that time. He became MD in 2002 when the company was doing reasonably well manufacturing car parts – in particular gaskets and heat shields for engines.

But in 2005, the firm's German parent company decided to relocate some manufacturing – essentially a third of ElringKlinger's business and the part that generated 90% of their profit – back to Germany. Ian had to reduce the workforce from 200 to 130. 'It was a huge blow. I had to make people redundant, some of whom

I had known for a decade. We were also left with the older technology so it was hard to get performance back up.'

By 2008 he thought he had done it. 'By then I felt we were back on a level footing. Sales were at just over £1m a month.' Then the recession hit. 'Within two months we were down to sales of £200,000 a month and went down to just 80 staff.'

A tough time for Ian but not one a 'tenacious Scotsman' would give up on. 'We were on short time working, cutting back production, paying people for three days though they were working five days – we were doing everything to keep the business afloat. In 2009 I would probably have said I thought the writing was on the wall for ElringKlinger in the North East. We were losing a lot of money.'

And that's never a position an accountant wants to be in. 'Everything we made could have been made elsewhere and we are only a small part of a multi-billion pound group – but we turned it around. We stripped out £300,000 a month in costs and kept going.'

Today the firm, which produces the car parts for brands such as Jaguar Land

Rover, BMW, and Ford, is celebrating 50 years on Teesside. Turnover is now at £20m, the business is worth £30-£40m compared to less than £9m in 2009 and Ian is determined that the only way is up.

'I'm getting people to think about what we do and what we can do differently to achieve growth in the future. It's easy in one way to cut costs but it's emotional when that means saying goodbye to people. So instead we're looking at investment and the resources we need to double the size of the business.'

Ian freely admits this is somewhat scary for a 'money man' – and he is the only accountant among ElringKlinger's general managers around the world – all the rest are engineers. 'You are investing in people and equipment for tomorrow and if we get it wrong we are in trouble.'

Yet you get the impression that after having survived two major downturns, Ian, 51, is unlikely to give up now. He puts a lot of his success down to being unafraid to ask the dumb questions. 'I spend time on the shop floor and I want to know why things are done certain ways, can we do it differently and I don't accept answers that



You have to get young people interested in education from an early age so we start in years four and five when they are nine and ten.



don't explain what I need to know.'

In recent years, Ian has also started to invest more in the engineers of the future. 'I used to think that no-one would know ElringKlinger was here unless they drove up and down the road past us every day. Then I was talking to a student from Teesside University who did drive up and down the road every day and he still didn't know we existed. We need the company to be known so we can attract the right people to work in the business and that's very difficult to do without a profile.'

Ian has also recognised the skills gap in the region and has started to work with education providers to address this. As well as working with Teesside University, he has made it part of his mission to get into schools and colleges and engage young people in education. 'You have to get young people interested in education from an early age so we start in years four and five when they are nine and ten.'

It also means offering sponsorship for a number of programmes, including an annual prize to Teesside University engineering students, taking students on

placements for a year in industry and developing an in-house apprenticeship programme.

'All of these routes are beneficial to the company – we get to know students and see if they will fit in after they graduate. We are committed to encouraging and supporting training throughout the organisation, which sees us invest in those working towards degree-level qualifications as long as they invest their time in the company for a certain period,' he smiles.

The eldest of his own three sons, Kieran, 20, is himself a beneficiary with an engineering advanced apprenticeship at ElringKlinger but Ian is keen to point out that it is on his own merit. 'He had to prove himself in the engineering department to get it – he's not an accountant like me,' he laughs.

'On a serious note, we're delighted to be able to find ways to support and encourage young people to foster an interest in engineering – it's important for the future of engineering and manufacturing in the region.'



Helping to create the

BUSINESS LEADERS OF THE FUTURE

By David Roberts

Teesside University has developed a range of flexible bespoke courses to help equip future business leaders with the skills they need to help the region's economy grow.

The wealth of Teesside's large and diverse range of industries, from traditional, heavy industry to petro-chemical multinationals through to digital start-ups, means a 'one-size fits all' approach to training and development is not appropriate.

Each of these industries, and each individual company, has its own inherent set of challenges and issues which it needs to address in order to grow and prosper.

The University has an evolving set of programmes, developed in conjunction with businesses, to provide training and upskilling of workforces in order to meet these challenges.

Dr Sue Smith, pictured right, who heads up Teesside University's professional leadership and management programmes, said, 'Rather than operate in an academic silo, we feel it is vital that we take on board the genuine needs of businesses.

'Therefore, when devising any sort of training programme, we work closely with our target customers to ensure it fulfils all their expectations.

'This close collaboration means that we can offer real solutions to real-world problems.'

One example of this is the Leadership Accelerator programme which has been developed with leading companies in the region's process industries to help future leaders of industry develop their potential.

Many talented graduates in the engineering and manufacturing sectors have degrees in a related discipline, but no formal management training.

Leadership Accelerator was devised to bridge this skills gap and enable them to achieve their personal and skills goals.

By working with industry partners, including Lotte Chemical, Sembcorp, Huntsman, Cordell Group and GrowHow, the University was able to devise a flexible course which differed from traditional development programmes and addresses the specific needs of the manufacturing industries.

Leadership Accelerator has proved so successful that the University was a finalist in the Provider of the Year category at the recent Science Industry Skills awards.



This close collaboration means that we can offer real solutions to real-world problems.

The University has also worked closely with several major employers in the region to develop bespoke courses to suit the needs of their employees.

These range from an accredited Higher National Certificate in Energy from Waste developed for employees at SITA UK, to an Understanding Polymer Processing course designed for staff at Nifco UK as part of the Memorandum of Understanding the University signed with the car parts manufacturer to work closely on skills, innovation and R&D.

The University also responded to a need within the Tees Valley's start-up community for leadership and business development skills for owner-managers of SMEs who are looking to grow their business.

Thanks to funding from the European Regional Development Fund, it was able to develop the Leading Growth programme which has provided 60 SMEs with business support worth £10,000 each.

This includes one-to-one business coaching, site visits, mentoring, business exchanges and a two-day residential event.

The positive effect of the Leading Growth course on these start-ups has been dramatic with some participants reporting growth as high as 200% after taking the course. Dr Smith adds, 'All of the participants welcomed the opportunity to learn from entrepreneurs who had undergone the same journey they are on and faced the same challenges and difficulties.'

'The individual needs of businesses may be different but we feel that as a University we can always work with them to provide a solution.'

'By responding to the needs of the individual and the organisation and offering up the right interventions, we can work together to ensure that businesses and our region can continue to grow.'

Research results bring real world benefits

By Gary Martin

Results of the Research Excellence Framework (REF) have strengthened Teesside's position as a leading institution for high quality, impactful research and reinforced the benefits of the wide-ranging and varied specialist work being carried out at the University.

The Research Excellence Framework assesses the quality of research in UK higher education institutions and provides accountability for public investment in research.

Teesside's results, released at the end of 2014, showed considerable progress since the 2008 Research Assessment Exercise (RAE) with the majority of work rated as world-leading or internationally excellent.

The University is committed to sustaining and growing a culture which stimulates high quality, impactful research and improving performance through continued collaboration, knowledge exchange and business engagement.

The translation of research into business benefit drives economic growth and Teesside University plays a major role in supporting and stimulating economic activity in the North East, using its expertise to respond to regional needs through knowledge

and technology transfer. This includes the provision of consultancy services, the commercialisation of the intellectual property generated from research, the licensing of technologies, and the creation of start-up and spin-out companies.

The impact of research produced at Teesside University was a driving force behind the positive REF results. Impact accounts for 20% of the evaluation under the REF 2014 and requires higher education institutions to demonstrate the beneficial impact of their research to the economy, society, culture, public policy or services, health, the environment or quality of life. 100% of the Social Policy, History and Allied Health submissions, and 90% of the General Engineering submission, was rated as having outstanding or very considerable impact.

Other Teesside University highlights from REF 2014 include:

- > **87%** of research entered in Social Policy is recognised as world-leading or internationally excellent and Teesside is ranked joint fifth place from 62 submissions for this quality measure
- > **73%** of research entered in History is recognised as world-leading or internationally excellent
- > **68%** of research entered in Allied Health Professions is recognised as world-leading or internationally excellent.

The 2014 REF results also highlighted strengths in two new categories submitted for assessment in Art and Design and English Language and Literature.



Professor Zulf Ali, Dean of the Graduate Research School.

The REF placed an increased and deliberate focus on the impact agenda. The emphasis on impact being 'beyond academia' is important. It means that researchers are required not just to demonstrate the regard in which their research is held in academia, but also how it is making a difference more broadly. For the purposes of REF, this is defined as an effect on, change or benefit to the economy, society, culture, public policy or services, health, the environment or quality of life.

'The 2014 REF results highlighted the benefit and impact of research produced



at Teesside University. We were able to demonstrate the very many positive effects of our research. This was a pleasing outcome, but we will continue to work on strengthening and consolidating routes to impact, particularly through business engagement and knowledge exchange.

'Sir Andrew Witty, in his report Encouraging a British Invention Revolution, challenges universities to facilitate and drive economic growth. We want our research to make a difference not only in terms of supporting economic growth but also for wider societal benefits. To bring about real-world impact it is going to be critically important that we collaborate with businesses of all sizes as well as other research partners. Collaborations have to be based on using the complementary expertise of partners and exploiting this in novel and innovative ways. To drive economic growth we will need to open up more opportunities for extended dialogue and by working together we can make more use of the latent capacity that is available for the benefit of all partners.



There has been a significant improvement in all areas which is a fantastic result for the University. These results provide a strong message about the quality and value of our research.

Teesside University is also proud to be working with the University Alliance in a national campaign to showcase the real world impact of academic research in the UK and around the world. Several impact case studies from the University have been selected to show how Alliance universities are finding new ways to overcome key socio-economic challenges such as the growing and ageing population, the depletion of natural resources, climate change, cultural and social cohesion, and a fast-changing technological and economic landscape. The case studies demonstrate that Alliance universities' research is focused on the real problems facing industry, the professions and the public sector and provide compelling evidence that the strength and quality of UK research depends on the government continuing to fund excellence wherever it is found.

Commenting on the University's performance in REF, Professor Graham Henderson CBE DL, Vice-Chancellor of

Teesside University, said, 'We have created a culture here at Teesside University which is supportive of high-quality, impactful research. I am delighted with the progress that has been made and that so many of our researchers have had their work judged as world-leading or internationally excellent.'

Professor Cliff Hardcastle, Deputy Vice-Chancellor (Research and Business Engagement), adds, 'There has been a significant improvement in all areas which is a fantastic result for the University. These results provide a strong message about the quality and value of our research.

'I am particularly pleased about the impact our research is judged to have made and that every single subject area has research that is world-leading. We have continued to invest in research and have created a culture in which research can flourish. These fantastic results are a significant indication that we are moving in the right direction.'



Ithica Films



Filmmaker Matt McGough's passion for the North-East is evident in his work. Here the founder of Ithica Films talks to Michelle Ruane about why his roots will always remain in the region.

Having only set up within the last two years, Ithica Films is already making its mark in the film and television production industry.

Primarily focused on creating marketing films for business which promote both the client and the region, Matt explains the company's simple ethos is to ensure they understand their client's business, how it works and where it wants to go.

And having already attracted a growing number of clients, particularly among Teesside's engineering and process industries, Ithica Films has also received considerable praise for its *Love Letters to Teesside* series of short films, which they continue to work on between client commissions.

Teesside University graduate Matt began the BA (Hons) Media and Television Production Professional Practice degree after studying media at college. He said, 'I'd become more interested in camera work and wanted to progress to the degree programme as the School of Arts & Media has a good reputation and great links with industry.'

'I liked that there was a lot of focus on documentary making and we were encouraged to think ahead to what we would do while working in the industry. During the degree I was involved in a project celebrating the tenth anniversary of the final game at Ayresome Park – former home of Middlesbrough Football Club. I've always been interested in promoting the North East.

'Studying at Teesside moulded my whole approach to filmmaking, from learning as you work to learning how to handle a vast range of people who may be nervous or experiencing their first time in front of a camera. My approach is you are there to get the best from the person you are filming so you need to be adaptable and good to work with.'

While still a student Matt was commissioned to film in China and has since filmed in America and across Europe, but his passion for Teesside shines through with his *Love Letters to Teesside* films, which use slow motion footage and interesting camera angles to highlight particular landmarks on Teesside. Films on the Temenos sculpture in Middlesbrough and Infinity Bridge in Stockton have been extremely well received on social media.

Matt, who is originally from Middlesbrough, said, 'I wanted the films to help people to re-engage with the area and remind them of some of the fantastic landmarks which perhaps we take for granted. This region has a great history and I'm very proud to come from here and be back in the area.'

He decided to branch out and launch his own company after reaching a crossroads, saying: 'I realised I had been working for the same company for nine years and had reached the point where there was no room for progression. I was getting more involved in the business side as well as having technical and creative skills. Setting up my own business has been fantastic. It has allowed me to go from being a cameraman to becoming a filmmaker and a business owner.'

Ithica Films was set up almost two years ago with help from a DigitalCity Fellowship scheme offering mentoring and financial

support. Now with five members of staff, the business is due to move from its current Stockton base to Boho One in central Middlesbrough this summer.

Matt said, 'Our clients are diverse, including offshore and engineering, civil engineers, pharmaceuticals, dental practices, education and charities. Often a client can surprise you too with what they ask for.'

Ithica Films is also a corporate sponsor of the Butterwick Hospice in Stockton, donating time to create films primarily for the charity's website, explaining what the charity does and encouraging people and businesses to get involved. As a Teesside graduate, Matt also said it's important to maintain the company's links with the University, with Ithica Films continuing to play a vital role in nurturing and retaining talent.

'We've got personal experience of the University so we know the quality of students coming through. We've had students on placements and internships which help us to see the talented work they can do while also providing them with experience of working in the industry.'

Matt adds, 'Although our work may take us all over the world, the plan is to always have a headquarters in Teesside. I get great satisfaction doing national jobs, taking our Teesside expertise to other parts of the country or further afield.'

'We're aiming to grow as much we can, while also retaining our main focus which is on the quality of the work we do. We're constantly looking at ways to improve results for our clients and to help people who work with us to thrive.'

Find out more at ithicafilms.com

FUSION HIVE

offers a new opportunity for enterprise

By David Roberts

A new development managed by Teesside University is to help accelerate the growth of the Tees Valley's digital economy.

Fusion Hive, an impressive business and innovation centre, has been built on Stockton's Northshore specifically for new and growing digital and technology companies to provide them with the best opportunities for growth.

The facility will equip tenants with high-tech modern workspace, along with access to the University's established business networks, expertise and innovation services.

It has been developed in conjunction with Stockton Borough Council, who will provide opportunities for potential rates relief and access to other forms of funding support.

Fusion Hive is being built on land owned by the Homes and Communities Agency (HCA), which has invested nearly £3m in the project. This HCA funding has been matched by a similar investment from the European Regional Development Fund, enabling the development to go ahead.

The development is being led by Muse Developments, with the physical build of Fusion Hive carried out by Esh Build, part of the Esh Group.

Fusion Hive is a three-storey, 36,000 ft² facility offering flexible working spaces for around 60 small and medium sized enterprises (SMEs) in the digital and scientific sectors. Innovative open spaces for collaborative working will help like-minded businesses to interact, network and work together.

Laura Woods, Director of The Forge – Teesside University's new business hub – said, 'We have helped some of the region's most exciting and successful businesses to grow. Fusion Hive represents a fantastic opportunity to grow our portfolio of services.

'Not only will SMEs at Fusion Hive benefit from a state-of-the-art working environment but they'll also have access to the University's resources, knowledge base and talent and our proven expertise at helping companies to succeed.'

Stockton Council's Cabinet Member for Regeneration and Transport, Councillor Mike Smith, adds, 'This fantastic, modern

facility in its enviable riverside location will offer SMEs all the help and support they need to grow.

'This area has a fine tradition in innovation and by providing high quality business accommodation like this, we can ensure that it continues for generations to come, and in exciting, rapidly developing fields such as digital and technology.

'With its spectacular setting, University backing and opportunities to network with similar businesses, it's hardly surprising that companies are already showing a strong interest in setting up home here.'

If you are a small or medium sized enterprise and are interested in joining the Fusion Hive visit fusionhive.co.uk or call 01642 384400 for further information.



Research Round-up

By Gary Martin

The majority of research at Teesside University was classed as world-leading or internationally excellent in the latest Research Excellence Framework (REF), with results highlighting the real world impact of the work being undertaken. Academics have been involved in a range of high profile studies including the UK's first nationwide trial on shoulder fractures, and research examining the psychological impact of football release on adolescents, which made national headlines and has been picked up by news outlets in Australia.

Research findings could lead to a change in clinical treatment

A five year study to determine the best treatment for a broken shoulder – surgery versus no surgery – could lead to significant financial savings.

Together with researchers from Teesside University and the University of York, Professor Amar Rangan, Clinical Professor in Trauma and Orthopaedic Surgery at The James Cook University Hospital, secured over £1.25m funding from the National Institute for Health Research's Health Technology Assessment Programme to lead the largest randomised clinical trial on shoulder fractures.

Results were published in the prestigious international Journal of the American Medical Association, and could lead to considerable cost savings for the NHS as the researchers found no significant difference between having surgery, which is being increasingly

used for the more serious types of proximal humerus fracture (broken shoulder) and non-surgical treatment.

The trial recruited 250 patients who were randomly allocated to surgery or no surgery. They were followed up for two years with data collected at six, 12 and 24 months.

Patients recorded and scored their own progress and experiences after treatment on a specially compiled questionnaire and the analysis showed that there was no significant difference in self-assessed function and pain between those patients who were allocated surgery and those who were not allocated surgery. Other data showed no clinical or significant differences on measures of health-related quality of life, complications related to surgery or shoulder fracture, later surgery or treatment for these complications, or death.

Dr Helen Handoll, Senior Lecturer and Research Fellow in Teesside University's Health & Social Care Institute said, 'This important trial, which has involved a huge team effort over several years, has produced reliable evidence to guide treatment on this common and serious injury.

'Crucially, it will help to reassure patients with these injuries that in most cases they would not do any better if they had surgery.



Having such powerful evidence available for this condition is exceptional and it has the potential to change clinical treatment considerably.'

Highlighting the significant psychological impact of football release

Research conducted at Teesside University found that a significant number of adolescent footballers who are released by their clubs go on to experience clinical levels of psychological distress.

The work by Dr David Blakelock was used as a back page splash in *The Times*, featured several times on *Sky Sports News* and was picked up by news outlets in Australia.

Dr Blakelock carried out the research as part of his Doctorate in Clinical Psychology, supported by Dr Tim Prescott, Director of Clinical Psychology at Teesside University, and Dr Mark Chen, Senior Lecturer in Sport and Exercise.

They found that depression, anxiety, and a loss of confidence are among the psychological problems experienced by teenage players who have their professional careers prematurely cut short. Some players may also turn to alcohol or drugs as they struggle to come to terms with the fact their dreams of being a footballer may be over – the research showed.

As part of the study, almost 100 players at professional clubs across England and Scotland completed questionnaires

at three time-points – prior to club selection procedures, seven days after and 21 days after.

Of those players that were released, 55% experienced clinical levels of psychological distress. Psychological distress was more common at 21 days (55%) than it was after seven days (36%) – suggesting that young players may find it increasingly difficult to cope when they are cut adrift from professional football.

'These results suggest that in the first month following release, a proportion of players can experience a range of psychological problems, namely depression, anxiety, a loss of confidence and impairment in everyday functioning,' explains Dr Blakelock.

Dr Prescott adds, 'This research indicates that release can trigger clinical levels of psychological distress. More research is needed to find out the impact of release in the longer term and to understand more about what protects the teenagers from this potential distress. This could help football clubs to develop systems and support for the young people who participate in their youth development programmes.'

Arts and humanities partnership launched

Teesside University is part of a consortium of northern universities offering additional postgraduate opportunities and strengthening research across arts and humanities.



The North of England Consortium for Arts and Humanities (NECAH) has created 12 fully-funded PhD studentships starting this October.

NECAH is a partnership between Teesside University and the universities of Hull, Bradford, Huddersfield, Leeds Beckett and Sheffield Hallam.

It aims to strengthen the six institutions as beacons of arts and humanities research in the north, by offering innovative training and cross-institutional research supervision.

Teesside's contributing areas are History, English and Visual Culture.

Dr Natasha Vall, Reader in Teesside University's School of Arts & Media, said: 'We are delighted to be part of this new consortium that provides PhD students with an excellent environment in which to undertake humanities research training.'

Gateone project calls on Teesside University expertise

Experts at Teesside University are part of a prestigious European project which will equip SMEs with smart technologies and bring a raft of new products to market.

The Gateone project brings together renowned research and technology organisations to offer a selection of new, innovative product concepts to SMEs across Europe.

Professor Zulf Ali, Dean of Teesside University's Graduate Research School, is part of the team of experts in the project, which is

being led by Yole Développement in France and is being funded through the European Commission's Horizon 2020 programme.

Much of Professor Ali's work has been on microfluidics for point-of-care diagnostic devices and for complex chemical and biological processing on a chip.

The new innovations offered by Gateone address business opportunities in the areas of energy management, connected devices, smart cities, mobility, assisted living, security and safety.

Professor Ali said, 'We are very pleased to be part of the Gateone project with leading research partners across Europe to support SMEs to innovate through the use of smart technologies.'

Access to the portfolio of innovative product concepts and demonstrators is free of charge. Interested SMEs can email hamelin@yole.fr, Scientific Co-ordinator of Gateone. For more information about work at Teesside University please email z.ali@tees.ac.uk.

Welcome to the future



Earlier this year, while scooting around a function room of the Thistle Hotel in Middlesbrough on a motorised Segway device, Jason Bradbury, the star of Channel 5's *The Gadget Show* gave an interesting vision for the direction of DigitalCity.

While Jason's talk was illuminating and his mode of transport extremely novel, what was most interesting was the audience who had gathered to hear him launch the *Get Your Head Into Digital* workshops.

Delivered as part of the Government's national SME Digital Capability Programme, *Get Your Head Into Digital* was delivered by DigitalCity, in conjunction with Tees Valley Business Compass, to help small businesses improve their digital skills.

Throughout March and April, nearly 400 people booked onto workshops or took part in one-to-one mentoring on subjects including social media, using Google apps, search engine optimisation and online banking.

Like the audience at Jason's talk, these people were not solely the business-to-business clients that have traditionally used DigitalCity's services.

Taking part in *Get Your Head Into Digital* were also business-to-consumer (B2C) clients, including a range of businesses not usually associated with the digital industries.

The success of DigitalCity is well documented, bringing millions of pounds of investment into the Tees Valley and the North East and creating hundreds of new businesses.

However, as the current round of funding from the European Regional Development

Fund (ERDF) comes to an end in September, there is an opportunity to reflect on and reassess priorities for DigitalCity and set the agenda for its future delivery.

The popularity of *Get Your Head Into Digital* proves there is a massive demand for DigitalCity services from B2C companies who would not ordinarily be able to access them because of the strictures of ERDF funding.

DigitalCity needs to be more involved in the skills agenda and also aim services at people who it has not dealt with before, identifying who needs help the most and also the individual areas of the Tees Valley which would benefit the most from services.

To this end, DigitalCity is pursuing multiple streams of funding. This mixed economy of funding will ensure that DigitalCity matches the mixed needs of Tees Valley.

Start-up channel will work alongside the business incubators across the North-East, and work more closely with companies at a pre-start-up stage to prepare them for incubation.

This clearly defined interface will provide a seamless connectivity with incubators and make the process from start-up to incubation much more efficient.

DigitalCity will also improve its innovation channel making it much easier for outstanding ideas and products to be developed.

By seeing commercialisation as a second step in a business rather than as a requirement, DigitalCity wants to enable individuals to create truly innovative products without worrying about where the money is going to come from in the initial stages of their business.

This extension of services means DigitalCity can continue to help the economy of the North-East to grow by allowing businesses to take advantage of the latest digital trends.

Find out more at thedigitalcity.org



Broadening the horizon at Darlington

By David Roberts

With the recent additions of the National Biologics Centre and Business Central to the skyline at Central Park, a further development is set to enhance the horizon in Darlington.

Plans are well under way for the National Horizons Centre (NHC), a flagship centre for skills, leadership and innovation and emerging technologies, which is due to open in 2018.

The Teesside University-led project is being developed at Central Park in partnership with the Centre for Process Innovation, Darlington College and Darlington Council.

The National Horizons Centre aims to help develop the industries which are set to transform the UK economy, including biologics, industrial biotechnology, subsea engineering and digital.

By focussing on skills provision for the UK bioscience sector, advanced, integrated design, production and production support processes and on the innovation and management skills which are needed to embed them, the NHC aims to create 2,600 jobs and 6,000 training places.

Professor Cliff Hardcastle, Teesside University's Deputy Vice-Chancellor (Research and Business Engagement), said, 'The NHC will deliver cutting-edge solutions to help produce the workforce of tomorrow.

'It will work to enable new technologies to grow and prosper and provide a fantastic setting for the delivery of ground-breaking programmes which will enhance skills, leadership and innovation not only in this region but across the UK.'

The NHC, which has been earmarked Government support from the Tees Valley Local Growth Fund, will complement the work being carried out by The Forge in Darlington.

Alongside its specialist facilities, the NHC will consist of a central core which will comprise meeting, seminar and conference space as well as IT training labs, high-spec residential accommodation, creative break-out spaces and restaurants and catering.

Other proposals include:

- > **Training and innovation suite** – to deliver applied industrial science courses for the biologics and industrial biotechnology industry, from BTEC Levels 1 to 3 and feeding directly into undergraduate and graduate programmes.
- > **Specialist biologics suite** – to provide high-end training and mini-production facilities for piloting and prototyping new products, programmes for technical and scientific staff, and specialist postgraduate, doctoral and post-doctoral modules.
- > **Digital, manufacturing and design suite** – a leading-edge, open innovation space with computer design tools, data analytics, modelling and simulation kit for developing and testing integration of pioneering design methods, advanced manufacturing technologies and agile business practices. These will be underpinned by leading-edge practice and innovation in resource-efficient manufacturing systems.



with Steve Dougan

Steve Dougan is Teesside University's senior business advisor. He coaches and supports graduate entrepreneurs as part of an award-winning business incubation project funded by the European Regional Development Fund.

Got a question for Steve?
Email s.dougan@tees.ac.uk and remember to include your contact details.

Q: Money, money, money... Where do I get the money and funding to start a new business?

A: Every start-up needs access to capital, whether for funding product development, for initial roll-out efforts, acquiring inventory, or paying that first employee. Most entrepreneurs I meet think first of grants and funding as the primary source of start-up money, only to find out that most funding now focuses on growth.

The commercial alternatives to grant funding are many, but they are not easy. The most successful entrepreneurs are the ones who think creatively, not only about their product or service, but also about how to acquire cash. They have to sell themselves, more than their product, to leverage alternative sources of funding.

Here are my top 10 sources of start-up capital:

1. **Personal financing.** You may not think this is very creative, but I'm amazed at the number of 'wannabe' entrepreneurs who haven't thought about saving any money before they start, or wouldn't think of using their own savings to start a business. No investor I know will put money into a business if they see that you have no 'stake in the game.'
2. **Personal credit lines.** You qualify for a secured personal credit line based on your personal credit rating. We all know start-ups that have been built on a personal loan. The advantage is that you retain total ownership and control, as long as you make minimum payments.
3. **Family and friends.** These are people who should believe in you, without waiting to see if your idea works, or waiting until you have real customers, revenue, and hard cash. These commitments should always be positioned in writing as promissory notes, with a return in cash or shares.
4. **Angel group or peer-to-peer lending.** This is a process whereby a group of people come together to lend money to ventures they understand and can support. It's been around for many years in the start-up context. Look for a successful entrepreneur peer willing to fund similar new ideas.
5. **Crowd funding.** Here you use the power of the internet to find a crowd of like-minded people, with small amounts each, to back your efforts. This approach is now spreading beyond non-profits, pre-sales, and memento rewards. Popular platforms include Kickstarter and Indiegogo.
6. **Microloans.** There are many brokers for the government backed start-up loans scheme that offer small loans, up to £25,000, to promote entrepreneurship, to individuals who would not normally qualify for bank financing. Search Google for 'start-up Loans'.
7. **Proof of Concept Funding.** Many Venture Capital funds such as Northstar Ventures here in the North East provide early stage investment for high growth potential technology start-ups, up to £100,000. You will need to demonstrate IP ownership, a strong management team and a product that can scale up internationally.
8. **Purchase order financing.** The most common scaling problem faced by start-ups is the inability to accept a large new order, since they don't have the cash to build and deliver the product. PO financing companies will often advance the required funds directly to the supplier, allowing the transaction to complete and profit to flow to the start-up.
9. **Factoring accounts receivable.** This is similar in concept to PO financing, but applies the advance to unpaid amounts not yet due or collected from customers. In high volume start-ups starting to scale up, this will provide cash on your sales immediately, rather than waiting for 30 to 60 days or longer for payment.
10. **Bootstrapping** – trading. Using capital released from your customer's pockets is the cleanest, although often the slowest, form of financing. Many start-ups need to have an early stage offering that allows them to generate cash and test the market. The classic example of this is the 'pop up shop', or the web developer building word press templates. Just be careful that you don't compromise your brand.

If you're looking to finance a start-up, it's worth getting some advice before you choose your source of funding. Whichever path you choose you will need a validated business model and a business plan to proceed. We can help.

If you have any questions regarding business start-up support, incubation services or training, please contact the Enterprise Team on 01642 384068 or email sue.clark@tees.ac.uk.

Share your knowledge – GROW YOUR BUSINESS

The Business Exchange is a network of senior leaders from businesses and organisations in the North East and North Yorkshire – events are organised throughout the year at The Forge, Teesside University's new business hub in Darlington.

Each event features a high-profile national or regional business speaker sharing their business knowledge, followed by a question and answer session, and networking time.

Meetings are free and a great opportunity to exchange valuable business knowledge and network with your peers. Each lasts 60 to 90 minutes, held at the beginning or end of the working day to minimise operational disruption.

Speakers touch on practical issues that resonate with business leaders such as branding, managing through a recession, developing a business, who to employ and how to grow.

Laura Woods, Director of The Forge, says: 'This programme is designed to inspire, connect and add value for senior leaders in the region, whether a managing director of an engineering company or the financial director of a packaging firm.

'The Business Exchange is supported by expert research on what drives the people at the helm of successful enterprises.

'The synergies created by like-minded business people coming together offer tremendous value, not only for those attending, but for the businesses and organisations they represent, helping us collectively to achieve our aim of inspiring and growing the economy in the north east.'

The next meeting of the Business Exchange will take place from 7.30am - 9.25am on Friday 5 June at The Forge. The guest speaker will be 'brand guru' Rita Clifton, named in *Debrett's 500* 2015 as one of Britain's most influential people.

For more information or to sign up for updates, call **01642 384068** or email theforge@tees.ac.uk.



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The Business Exchange is supported by expert research on what drives the people at the helm of successful enterprises

Busting myths about unemployment and poverty

Research by Professor Rob MacDonald is helping to reshape the debate about worklessness in the UK and proving that 'welfare ghettos', with whole streets where nobody works, simply don't exist.

The common stereotype of the welfare 'scrounger' spending hardworking taxpayers' money is a bleak image which does not represent the reality of people stuck in a 'low-pay, no-pay' cycle, argues Professor MacDonald.

His research, conducted with colleagues in the Social Futures Institute, included talking to families in some of the most deprived areas of Middlesbrough and Glasgow. It found that there is no such thing as 'benefits street', where most people are out of work, where families have never worked over generations and where unemployment is a preferred way of life.

Instead, most households contain people who have jobs and the vast majority retain a strong commitment to getting employment. But many are stuck in a cycle of poorly paid jobs and Professor MacDonald is urging politicians and policy makers to provide long term, secure jobs with good pay and benefits to help people move away from poverty.

He said, 'The idea of 'benefit ghettos' where unemployment is a lifestyle choice is a powerful one that helps justify the Government's cuts to welfare budgets. Yet our research has demonstrated that this is a myth, in the sense that it does not reflect the facts of the matter.

'If a culture of worklessness cannot be found in the extremely deprived neighbourhoods we studied, then they are unlikely to explain more general patterns of worklessness in the UK.'

Professor MacDonald's research has made national headlines and featured in the likes of *The Independent* and *The Guardian*. He has also received invitations to join advisory committees of several charities including the Joseph Rowntree Foundation, Work Foundation and the North East Child Poverty Commission.

The impact of Professor MacDonald's work was highlighted in the 2014 Research Excellence Framework (REF), which assesses the quality of research in UK higher education institutions and informs funding allocations. The submission to Social Work and Social Policy resulted in nearly 90% of work being classed as world-leading or internationally excellent, the highest two classifications available.

Professor MacDonald's impact case study which debated how to tackle worklessness and poverty in the UK was submitted to the REF and was also used by the University Alliance in a national campaign to highlight the impact of academic research in the UK and around the world.

Professor MacDonald has been at Teesside University since 1992 and became a Professor of Sociology in 2002. Because of his international reputation in the field of youth research, he was recently invited to take up a prestigious Obel Foundation Visiting Professorship at the University of Aalborg's Centre for Youth Research, in Copenhagen.

This will help forge links between Danish and UK research about young people and youth issues. Professor MacDonald is also co-organiser of the second international Journal of Youth Studies conference, to be held at the University of Copenhagen in April 2015, with over 300 participants from over 30 countries attending.



Increased support for social enterprises

By David Roberts

New funding programmes worth almost £130,000 have been launched at Teesside University to establish a network of social enterprises across the region and provide them with training, support and mentoring.

The University has won the funding from UnLtd, a support charity for social entrepreneurs, to provide three different schemes to encourage social enterprise.

This latest tranche of funding from UnLtd means that, over the last three years, Teesside University has accessed almost £250,000 to help social enterprises to grow.

The schemes offered include a Teesside University-led social enterprise cluster across the North East, funding to help high-growth social enterprises and a collaboration to create a creative and cultural ecosystem in Darlington.

The funding is part of UnLtd's SEE Change programme which has been launched with the Higher Education Funding Council for England to advance higher education led support for social enterprise.

Teesside has already had considerable success working with UnLtd and has helped to fund 19 social enterprises ranging from a company providing activities for disabled children, to an online hub for community groups in East Cleveland.

Eileen Wicks, Graduate Enterprise Manager at Teesside University, said, 'We are delighted to be able to offer these exciting new opportunities for social enterprises across the North East.

'This is the next step in the development of our support for social enterprise and will build upon the achievements we have already had in this field.

'Running a social enterprise can be an incredibly rewarding experience and we want to provide as much help as we can to enable social entrepreneurs to succeed.'

There are three strands to the SEE Change programmes which will be offered at Teesside University.

The first is the creation of a social enterprise support cluster involving the five North East universities, led by Teesside, who will work in partnership to improve the social enterprise support infrastructure, and include other organisations including support agencies, businesses and community groups.

The cluster will develop the social enterprise activity of the student unions and enterprise departments and also provide regional social enterprises with graduate placements.

Louis Garbutt, the new social enterprise associate, has been appointed to facilitate the delivery of the cluster project.

Louis will work with the five universities to implement social enterprise activities and programmes.

The second strand of funding is a scale and growth programme which will help high potential social enterprises to expand.

The programme will provide a range of financial and non-financial support to the social enterprises to assist them to grow.

Already, grants have been awarded to Media Savvy, a Sunderland-based digital social enterprise which promotes education and creativity in the media and arts, and Mediacultured, a specialist social enterprise which uses digital learning tools to tackle extremism and racism.

The final strand of the programme will see a Cultural and Creative Partnership formed in collaboration with arts group Creative Darlington.

This strand of the programme will be led by Sharon Paterson, Assistant Dean (Business Engagement and Partnerships) in Teesside University's School of Arts & Media.

It will work to create an eco-system which

promotes the use of creative and cultural activities to meet social aims and provide opportunities for social enterprise in this field.

Sharon said, 'This project has been conceived as part of a long standing and close working relationship between Teesside University and Creative Darlington.

'It demonstrates our commitment to growing the local infrastructure to support creative/cultural social enterprises.

'Both partners are looking for ways to improve how they support creative and cultural social enterprises and the legacy of this project will be a support network which will, in turn, improve the general social enterprise infrastructure through the learning from this project and through a healthy balance of creative companies.'

Stephen Wiper, Creative Darlington Manager adds, 'Developing Darlington as a creative place in which artists, arts producers and creative businesses can flourish is one of our aims.

'It's great to see people develop careers through social enterprise in the arts and working with Teesside University with UnLtd's support will help us to progress this.'

Eileen Wicks



Internship success

Internships can bring in new skills and expertise to a company.

David Roberts looks at some companies who have benefited from Teesside University's range of internship schemes.

A Teesside engineering firm has become more efficient thanks to an internship scheme.

Middlesbrough-based QA Weld Tech turned to Teesside University's Resource Efficiency Pathways to Sustainable Growth (REPS) project to identify resource inefficiencies and provide recommendations to enhance business operations.

The recommendations were then implemented through the University's unique Knowledge Exchange Internship (KEI) programme.

Fredrick Okwute was employed as a Business Systems Co-ordinator to analyse data from thousands of different operations and look at ways in which the company can optimise the way it works.

Fredrick was employed on a 12 month KEI which, as well as providing academic support and mentoring to the intern, also subsidises the cost of his or her salary.

QA Weld Tech, which provides specialist welding and engineering services to clients around the world, is now reaping the rewards of the KEI and is already seeing improvements in how it operates.

Paul Langley, the company's Finance Director, said the firm recognised there was a need to optimise its data collection using its current Enterprise Resource Planning software.

He said, 'We already had the front end of the system in place but there was a lot of time and effort needed on the back end and we felt that we needed a dedicated resource to do this.'

'Having identified this need, we felt that the right person to fulfil the role was a graduate and so we contacted the University. Teesside were able to help us through the whole process. They helped create the job specification and recruit the right graduate.'

'We've already seen a lot of progress, particularly an improvement in our estimating. If we hadn't had that dedicated resource, I don't think we would have made these improvements. We have a much clearer vision now.'

'It's been great having that knowledge and support available from the University, it's really helped us move forward.'

Fredrick, who is originally from Nigeria, joined QA Weld Tech in July 2013 after completing his MSc Engineering Management at Teesside University.

Throughout the project he was helped by Teesside University's Dr Ruben Pinedo-

Cuenca, a Project Manager at Teesside Manufacturing Centre in the School of Science & Engineering.

At the end of the internship, Fredrick was offered a full-time position at QA Weld Tech. He said, 'I was brought in to enhance the use of shop floor data collection and help to improve the business systems. I've been looking at different sections of the company, such as procurement estimation and sales orders and work orders and identifying what needs to be done to improve efficiency. It's been a fantastic experience.'

Dr Pinedo-Cuenca adds, 'This was a very complex and interesting project which involved some extremely complicated data handling.'

'The fact that thousands of operations are happening at a time made this a massive challenge but one which can realise massive benefits for the business.'

Left to right: Paul Langley, Dr Ruben Pinedo-Cuenca and Fredrick Okwute





Left to right: Femi Waters-Ajtsafe, Senior Lecturer in Marketing and Corporate Programmes, Stephen Gibson, General Manager of Castle Grange Technologies, Josh Alexander and Joanne Hughff, Teesside University's Graduate Internship Project Manager.

A technology company which supplies and installs audio-visual equipment is increasing its sales thanks to a Knowledge Exchange Internship scheme.

Castle Grange Technologies, which is based in Redcar, employed graduate Josh Alexander on a Knowledge Exchange Internship (KEI).

Thanks to Josh's work overhauling the company's marketing strategy, Castle Grange is identifying and winning new customers and it is anticipated this will lead to a substantial increase in revenue per year, equivalent to 80% growth over the next three years.

Castle Grange supplies a variety of innovative audio-visual systems ranging from projectors to touchscreen systems to video walls.

Josh, who graduated from Teesside University with a BA (Hons) Marketing and Advertising, was brought in as the company looked to expand its marketing team and position itself at the forefront of the industry, particularly within the education sector.

His job involved an initial audit of the current marketing activities before looking at other potential areas where the company might attract new clients.

He is also working on a pay-per-click advertising campaign as well as helping with the development of a new company website.

He said, 'It's been a brilliant challenge and it's great that I have been able to apply the skills that I learnt at University into the workplace.'

'The company understands that marketing is important and has put a lot of trust in me.'

'However, I have been given great advice and have had all the support I needed from the University.'

Castle Grange General Manager Stephen Gibson, who is also a Teesside University alumnus and graduated in 2001 with a BA (Hons) Business Management, adds, 'Josh has settled in really well and made an effective contribution to the team.'

'Through his work, we hope that the business will have a much better understanding of the marketplace and also have a structured plan to identify and win new customers.'

An internship has helped a marketing agency position itself at the forefront of cutting-edge touchscreen technology.

Gateshead-based Daykin & Storey employed James Leftley as a software developer as part of a Knowledge Exchange Internship.

James spent 10 months developing new programmes and researching different ways to maximise touchscreen technology to help Daykin & Storey's clients make the most of the emerging technology.

The internship has allowed the company to experiment with new forms of programming and has resulted in testing the concept for a 21st century restaurant ordering system using table top touchscreens.

Peter Daykin, Director at Daykin & Storey, said, 'Thanks to the internship we now have a basis of code that our developers can use to develop new programs for touchscreens.'

'We also have a working prototype which we can take to our clients and together that forms a springboard to get into new markets. We will be working to put this concept out to market and will be talking to touchscreen manufacturers and restaurant owners about how they see value in it.'

James adds, 'This was a fairly unique opportunity for me to work with this cutting-edge technology – not many people have the chance to work in this field. 'The internship has also helped me to develop my project management and presentation skills and seeing the whole thing come together has been fantastic. It has been a really positive experience.'

Academic supervisor Joao Ferreira from Teesside University's School of Computing said the knowledge taken from this project will help inform and improve the University's teaching, particularly in relation to touchscreen technologies.

Left to right: James Leftley, Joao Ferreira and Peter Daykin



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