Innovation, academic excellence and world-leading research celebrated at the ICE Showcase Event

On Thursday 15 January 2015, the University of Kent hosted an afternoon of innovation, creativity and enterprise attracting businesses from a variety of sectors.

The annual 'ICE' (Innovation, Creativity and Enterprise) Showcase Event demonstrated the University’s cross-disciplinary approach to supporting and developing projects with external partners.

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Innovation, academic excellence and world-leading research celebrated at the ICE Showcase Event (cont)

Key business and University representatives were invited to give presentations on the day. These included Dr Ian Denley from Shearwater Healthcare Solutions, Perry Holmes from Medway Council, Neil Gridley from Design Council, Dr Jane Reeves from the Centre of Child Protection and Professor Darren Griffin from the School of Biosciences at the University.

Topics explored included: a network to support epilepsy sufferers through technological advancement, the University’s successful partnership with Medway Council, using design as a framework to innovate, videos and game simulation to improve the training of welfare professionals and the benefits of research funding to improve sustainability, cost and efficiency for pig farming specialists.

Delegates had a unique opportunity to see a selection of the University’s latest innovations and technologies including humanoid robots, child protection training simulations, fatigue testing and water purification technology in the Innovation Zone and meet the University’s School representatives in the SME Marketplace.

Guests were also invited to 45 minute workshops on Business Mandarin – Languages and Etiquette, Leadership in Challenging Times and Business Collaborative Funding.

At 6pm Wayne Garvie, Chief Creative Officer of International Production at Sony Pictures Entertainment and an Alumnus of the University, gave the 50th anniversary Innovation Lecture, titled ‘Innovation: A Catalyst for Failure’.

Carole Barron, Director of Innovation & Enterprise said: ‘ICE is a great way to connect the public, private and third sector with the latest innovation and expertise from the University and demonstrate how organisations can ensure long-term growth by using creativity to inspire innovation in their organisation.

This event showcased how innovation is a key driver of economic growth and the pace of change is quickening as successive technological breakthroughs accelerate innovation in the business community. The delegates now have a greater understanding about how the University’s approach to innovation and enterprise can add value to their business.’
Supporting economic growth

Kent Vice-Chancellor included in first county power list

Vice-Chancellor Professor Dame Julia Goodfellow features in the first Power List of the 40 most influential business people in Kent.

The list recognises the decision-makers, whose actions have a big impact across the county. It has been compiled by an independent panel of judges, including entrepreneurs, industry consultants, chairmen of influential bodies and representatives from the media industry.

To qualify, each member of the list must own or work for a business based in Kent. Deciding factors included the ability to create jobs, control large wealth and the number of everyday people who engage with their product.

Dame Julia’s citation highlights her forthcoming role as the first female president of Universities UK, where she will represent the country’s academic institutions in talks with the government on funding and policy.

Other influential business-leaders featured in the Kent Power List include: Jonathan Neame, Chief Executive of Shepherd Neame brewers; Paul Carter, Leader of Kent County Council; and Victoria Pomery, Director of the Turner Contemporary.

The full Power List is available at: www.kentonline.co.uk/kent-business/power-list/

Innovative technology driving epilepsy treatment

A project to develop technology to improve the quality of life for epilepsy sufferers has been awarded £722,000 funding by Innovate UK (formerly Technology Strategy Board).

The Epilepsy Networks Project will use automated sensing and geo-location technologies in smartphones and wearable technology to record and track patient-related information.

The project, led by UK healthcare software specialist Shearwater Systems includes members of Graphnet Health, Poole Hospital NHS Foundation Trust and The University of Kent.

The University of Kent will provide the tracking elements of the project. The research team led by Dr Christos Elfratiou and Dr Jim Ang from the School of Engineering and Digital Arts (EDA) has a particular focus on mobile computing, the smartphone-based sensing of human activities, and social activity tracking using wearable sensing technologies.

A combination of a patient portal, integrated digital records, social networking and data analysis tools will be used to gather textual, visual and audio data. This will be combined with the temporal, spatial and contextual information relevant to the epileptic seizures of a patient.

The data collected will be embedded in the patient’s NHS digital record so it can be shared throughout the care community and studied using automated analysis and data visualisation tools developed by the project. The aim is that novel clinical pathways, including real-time pre-emptive interventions, will reduce the costs of care and improve the treatment of a life-altering condition.

It is one of the first attempts to apply social activity tracking in the domain of patient generated health records.

Dr Ian Denley, chief executive of Shearwater Systems said: ‘This information is key to providing patients with epilepsy with the most effective treatment and the minimisation of interventions. Good datasets can empower patients by helping them understand seizure triggers, for example, and empower clinicians by helping them in the process of monitoring and adjusting drug prescriptions.

Once the technology is complete, the intention is to move it across to other long term conditions, where similar benefits are anticipated.

For more information about the project or how you could work with the University, please get in touch using the contact details at the back of this newsletter.

New support for SMEs

From January 2015 small and medium sized enterprises (SMEs) receiving an award through one of Innovate UK’s eligible funding competitions, including Knowledge Transfer Partnerships (KTP), will automatically have the chance to participate in a growth workshop, complete an online diagnostic survey and discuss their business needs with an expert to develop a growth plan for their business.

Based on the results of the diagnostic, the SME will be connected to opportunities to get coaching, mentoring or entrepreneurial skills training including:

• Developing a business model
• Sales and strategic marketing
• Access to finance
• Leadership
• Change management

The SME will also be linked to other support from Catapult Centres, the Knowledge Transfer Network, the Enterprise Europe Network and expert advice from UK Trade & Investment.

For more information please visit www.gov.uk/government/news/small-business-growth-new-support-on-offer
How students can help your business

Kent IT Consultancy launches Technical Mentoring to help solve business needs

Kent IT Consultancy (KITC) at the University of Kent have announced a new service which offers owners of small and medium sized enterprises (SMEs) guidance for their IT business needs.

Technical Mentoring was launched at the start of the spring term and aims to give ad hoc technology advice to pre start-ups and SMEs.

Undergraduate final year or Masters students with training in mentoring, can offer their technical expertise to businesses for effective, problem solving consultancy. Mentors are skilled in website engineering, search engine optimisation (SEO), project management tools and have access to a wide knowledgebase which can provide vital advice and information for SMEs or start-up businesses.

KITC Manager Jason Marshall said: ‘We achieve an element of clarity for business owners, what their problems are and what their next actions might be. We are not technical support, we are there to fix an IT problem but we are a sounding board, helping businesses to help themselves and find solutions to meet their business needs.’

Technical Mentoring will be based at both the University’s Canterbury and Medway Campuses. KITC offers businesses their first consultation free of charge and can then work with the business owner to decide on an individualised programme tailored to their needs.

For more information on Technical Mentoring or to arrange an appointment with a mentor, please contact Jason Marshall by phone: 01227 823819 or email contact@kitc-solutions.co.uk.

For more information about KITC, please visit the website, www.kitc-solutions.co.uk.

Celebrating the success of the University’s career-boosting Employability Points scheme

During the University of Kent’s 50th anniversary, the Employability Points (EP) scheme has gone from strength to strength.

To date over 4,700 students are actively engaging with the scheme and taking part in extra-curricular activities focused on enhancing their graduate employment prospects.

The EP team is indebted to the external business community for their continued support of the scheme. Over 120 companies are now associated with the EP Scheme and for 2014-15, there will be over 450 rewards offered to the most engaged students.

A number of University of Kent students and graduates have credited the scheme and the opportunities provided to them for boosting their career prospects.

With the deadline passed for 2014-15, the EP team will be welcoming sponsorship for the next academic year from August 2015. Such sponsorship can also be mutually beneficial to companies:

• Access to the most engaged students at the University of Kent, a Guardian top 20 institution.
• Fulfil potential Corporate Social Responsibility requirements.
• Exposure of your company to the student body, for general marketing and recruitment.
• The scheme is managed by the business arm of the University, providing a gateway to further services and collaboration.

If you would like to find out how the EP Scheme can benefit your business come and join us at our Rewards Evening on Tuesday 2 June, please email Employabilitypoints@kent.ac.uk or phone 01227 824641.

Attract new talent and skills into your business with the Santander Internship Programme

The University of Kent is part of the Santander Universities SME Internship Programme providing final year students and recent graduates with paid work experience within local businesses.

Santander is contributing £500 per month for up to 3 months towards the cost of the internship (maximum contribution is £1500). Businesses are also eligible for multiple interns, subject to availability.

Recruit in 5 easy steps

1 Send the details of your internship opportunity to enterprise@kent.ac.uk and we will check that you qualify for the scheme.
2 We will advertise and promote your internship to Kent students via our Careers and Employability website.
3 You will take control of the shortlisting process by recruiting your intern according to your criteria.
4 To be eligible for the Kent scheme, a Kent intern must be selected; please confirm your selection by emailing us their details.
5 We will register your company details on the Santander portal and organise for you to receive your funding.

If you are interested in finding out more, or would like to gain a valuable workforce through this scheme, please get in touch using the contact details at the back of this newsletter.
Focus on training

Unlock the potential of your workforce

The benefit of ensuring that your workforce’s skills and knowledge are up-to-date and progressively improving is widely recognised. Encouraging and promoting a learning culture leads to more satisfied staff and ultimately higher retention for your business.

For individuals, regular updates of skills and knowledge help competence and effectiveness at work. Training and development ensures individuals are kept informed, and remain proficient to changes in practice, increasing confidence and overall capability.

Kent Innovation and Enterprise’s training and development offer continues to grow to include workshop and course delivery from experts across the three Faculties.

In December 2014, Professor Michael Kölling, lead developer of Greenfoot and BlueJ educational programming environments, delivered a one day introduction to programming in Java using the latest Greenfoot environment for computer science teachers, which was very well received.

He said: “We now have all the resources we need to start teaching Java in a more simplistic, holistic way to our learners.”

Training and development programmes can be specifically designed to meet the skills needs of your business, and can be delivered in house on request. Workshops taking place across the University’s campus this spring include a suite of one day training sessions offered by the Centre for Health Services Studies:

- **Course title:** Building Your Research Idea: Protocols, PPI, Data Collection & Analysis
  - **Cost:** £200 per person
  - **Date:** Thursday 23 April 2015

- **Course title:** Introduction to Clinical Trials & Developing Interventions
  - **Cost:** £200 per person
  - **Date:** Thursday 30 April 2015

- **Course title:** A Gentle Introduction to Cost-Effectiveness Analysis in Health
  - **Cost:** £200 per person
  - **Date:** Thursday 14 May 2015

- **Course title:** A Gentle Introduction to Quantitative Statistics & using SPSS
  - **Cost:** £200 per person
  - **Date:** Friday 22 May 2015

The Centre for Research and Education in Forensic Psychology will be delivering the first workshops in their new programme of much sought after and rarely available training including:

- **Course title:** RSVP (Risk for Sexual Violence Protocol)
  - **Cost:** £315
  - **Date:** Wednesday 22 April 2015

- **Course title:** IOSH Managing Safely
  - **Cost:** £645 per person
  - **Date:** 16 – 22 July 2015

If you are interested in finding out more please get in touch. Contact details can be found at the back of this newsletter.
Celebrating Research Excellence

The University has welcomed the results of the UK Government’s first Research Excellence Framework (REF).

Published on 18 December, the results show that Kent is among the top 20% of UK Higher Education Institutions for research power, alongside other leading universities.

The assessment looks at research outputs from 2008-2014, and takes into account the significance, rigour and originality of the work, and its impact both nationally and internationally. Research power takes into account the quality, profile and number of researchers included in university submissions to the REF. Kent is especially pleased to have increased its number of research active staff by 49% since 2008.

Contributing to the University’s REF success were its number of world class publications and the demonstrable impact it has made to society and the economy.

Significant strengths in all three academic Faculties resulted in exceptional performances across a number of Schools including Arts, Biosciences, Law, Social Policy, Sociology and Social Research (SSPSSR); and European Cultures and Languages (SECL).

Impact was a key component of the assessment. Just under a third of Kent’s submissions were rated as world leading and internationally excellent. Particularly high scores were achieved by Schools including: Computing; Psychology; Physical Sciences; Politics and International Relations; SSPSSR; and SECL.

Schools submitting for the first time included Medway-based Sport & Exercise Sciences and the Kent School of Architecture, both of which had 40% of their submissions classified as world leading.

Kent’s Vice-Chancellor, Professor Dame Julia Goodfellow, said: ‘I am delighted that the strength of research across the University has yet again been recognised. The University has done exceptionally well showing that high quality research can lead to significant economic and social impact. This is a direct result of our institutional strategy to increase both the quality and the quantity of our research. I would like to acknowledge the hard work of all staff who contributed to this success.’

Director of Innovation & Enterprise appointed as Chair of Council at AURIL

Carole Barron, Director of Innovation & Enterprise at the University of Kent has been appointed as Chair of Council at the Association for Research and Industry Links (AURIL).

The AURIL represents those involved in knowledge creation, development and exchange in the UK and Ireland and is the largest such knowledge transfer association in Europe.

AURIL ensures that new ideas, technologies and innovations flow from universities into the market place.

Mrs Barron, who took over as AURIL Chair of Council on 1 January 2015, said that her appointment represented an opportunity to ‘increase awareness of the contribution knowledge exchange has on economic impact, engage with central government departments at a high level and also help raise the profile of the University across the sector’.

The appointment means that the University chairs both the quality and the quantity of our research.

Dr Simon Kerridge, the University’s Director of Research Services, is the current Chairman of ARMA, the professional association for research managers and administrators in the UK.

In addition to this prestigious role, Mrs Barron has also been accepted as a Fellow of the Higher Education Leadership Foundation.

The Leadership Foundation has been at the forefront of designing and delivering leadership development for higher education since 2004.

Top ten place for Kent in Green Metric league table

The University’s green credentials have been underlined by its top ten ranking in an international Green Metric league table.

Kent has been ranked 10th in the UK and 42nd in the world in the UI (University of Indonesia) Green Metric league table, published in January 2015.

The 2014 survey collated information provided by 360 Higher Education Institutions (HEIs) from 62 countries. Results were based on performance in six main categories: green statistics, energy and climate change, waste management, water usage, transportation, and education.

Kent is ranked 42nd out of 360 HEIs from across the world with a total score of 6,620; up from 76th last year. Kent’s total score increased by 12.7% (up 745 points to 6,620, compared with 6,096 in 2012). The University scored highest in the water usage category, where it was ranked 1st in both 2014 and 2013.

The University of Kent is certified to ISO 1400, an International Standard for Environmental Management. Sustainability is one of six key messages in Kent’s Institutional Strategic Plan 2012-15 and is at the heart of everything we do.

Kent’s annual Green Impact project offers departments across the University a practical opportunity to embed good environmental and ethical practices in their everyday work.

Further information on Green Impact at Kent can be found at www.kent.ac.uk/estates/services/environmental.

Full results from the Green Metric league table are available at www.greenmetric.ui.ac.id/ranking/year/2014
New hope for understanding sudden cardiac arrest

New biosciences research at the University could point the way to greater understanding of the heart mutations that cause sudden cardiac arrest.

Hypertrophic cardiomyopathy is a genetic condition that one in 500 people carry and is a leading cause of sudden cardiac arrest in young athletes. The footballer Fabrice Muamba famously collapsed during a match when his heart suddenly stopped. Although he was eventually resuscitated, he is now unable to play football competitively and has a chest implant to restart his heart.

Now a team led by Dr Neil Kad, Lecturer in Molecular Biophysics at the School of Biosciences, has managed to identify for the first time at the single molecule level how heart muscle is turned on and off by calcium.

By understanding how the heart is regulated by calcium, the research team has set the ground for greater insight into how the heart is affected when specific components are mutated during disease.

Using this new approach, the researchers were able to identify how the motors (myosins) within muscle talk to each other along the long protein tracks (thin filaments). They found that two motor heads are required to turn on a thin filament segment as regulatory unit. Once activated, this regulatory unit was found to be capable of accommodating 11 further myosin motors.

To date, all treatments for sudden cardiac arrest target the symptoms of this disease. The findings from this study are expected to provide new tools for research into treating the causes of the condition, rather than only the symptoms.

The research, titled Using Fluorescent Myosin to Directly Visualize Cooperative Activation of Thin Filaments (Dr Neil Kad, Professor Michael Geeses, University of Kent; and Rama Desai, Imperial College London) can be viewed at the Journal Biological Chemistry’s website, www.jbc.org.

£3.5 million for ‘world leading’ bioscientists

Bioscientists at the University have been awarded nearly £3.5 million to research the production of bacterial cells with enhanced internal organisation.

Such cells are key to driving forward the UK’s knowledge-based bioeconomy (KBBE) through a combination of basic and strategic research aimed at improving cellular productivity and the synthesis of fine chemicals and biotherapeutics.

The research, led by Professor Martin Warren and his team at the University’s School of Biosciences, is one of five projects to be recognised by the BBSRC (Biotechnology and Biological Sciences Research Council) as part of its Strategic Longer and Larger Grants (sLoLaS) scheme.

Professor Warren’s five-year research programme will engineer new ways of reorganising the internal metabolic machinery of cells.

The team hopes to build ‘micro-factories’ inside cells that will be able to produce useful and valuable molecules, such as pharmaceuticals, without intoxicating the cells. The overall aim of the project is to increase bacterial metabolic efficiency through the ergonomic design of specific intracellular compartments. This involves the use of cutting-edge technology in synthetic biology to tackle the redesign of the bacterial cytoplasm to accommodate the inclusion of bespoke self-contained mini-bioreactors.

This research will provide an important edge for UK biotechnology companies, existing and new, through the provision of greater productivity and new molecules, peptides and proteins for a number of purposes, including the development of fine chemical and protein-based drugs.

Professor Warren, who is receiving the largest grant (£3,484 million) among the five university beneficiaries, said that support for his research was ‘exciting’ and would help keep the University of Kent at the forefront of synthetic biology, resulting in strong interaction with industry.

University Twitter praised by industry experts

The University's Twitter profile, @UniKent, has been recognised as an example of good practice by Inside Higher Ed and the THE magazine.

The Times Higher Education (THE) magazine ran an article, titled ‘Is your university Twitter profile perfect?’ in its 8 January 2015 issue. The article, based on a blog by Inside Higher Ed blogger Eric Stoller, praises Kent’s @UniKent account ‘because its biography points out that it is ‘looked after by Allie 9am-5pm, Mon-Fri’.’

Eric Stoller said: ‘This gives you an immediate connection to the fact that there is someone who will be there, ready to answer, if you tweet at them.’

The @uniKent account is looked after by Allie Burnett, Digital Content Editor in the Corporate Communications office.

The University of Kent Economic Impact Update

University of Kent and our students generated £0.7bn for the south-east region during the financial year 2012/13. A substantial and efficiently run business, our total revenue was £201.3m. The bulk of this money, £98.6m, is earned from tuition fees and educational contracts; an additional £62.2m comes from research grants and contracts, and funding council grants. But nearly 20% of the income is earned from consultancy services, the provision of residential and catering services, conference support and facilities hire.

More details on the University’s economic impact will be published in the next edition of the ICE Newsletter.
Hold the date

University of Kent’s 50th anniversary events
Schools across the University will be hosting events and conferences to celebrate Kent’s 50th anniversary.

University of Kent’s 50th anniversary Employability Points evening
Developed by Kent Innovation & Enterprise at the University of Kent, the EP Scheme encourages students to develop personal and work skills of value to future employers and offers reward points for their active engagement in extra-curricular activities outside their degree programmes. The scheme has been highly praised by central Government and the business community.

Sponsors and supporters from around the country will attend the evening to celebrate the successes of the scheme. The rewards evening is a fantastic opportunity to showcase student talent and achievement during their time at University.

A light buffet will be provided to registered guests. Limited tickets are available so please register to this free event before Tuesday 26 May using the link below. https://eprewards2015.eventbrite.co.uk

For more information, please visit the webpage: www.kent.ac.uk/employabilitypoints/events/epceremony2015.html

School of Sport and Exercise Sciences
The School of Sport and Exercise Sciences will further establish the University of Kent at Medway as the beacon for endurance research in the UK, Europe and beyond.

The school will be hosting a conference on Endurance Research in September 2015. This conference will include world-leading authorities in the field of endurance research, as well as oral and poster contributions from scientists interested in fatigue, endurance exercise, endurance training, and endurance performance.

The conference will also include an open lecture tailored to the general public, as well as sessions specifically designed for athletes and coaches. Finally, it will provide an opportunity for the School’s competition winners and exchange students to showcase their research to a wider audience.

The aim of the event is to foster new collaborations and investment in research projects that are mutually beneficial to both the industry partners and the Endurance Research Group (ERG). This part of the Beacon Project will be crucial to strengthen the international reputation and network of the school’s ERG and, consequently, promote Kent as the UK’s European University, where Europe meets the world. The conference will also provide support for student learning and personal development, and ensure public engagement with research activity at Kent.

For more information or to register your place at the conference, please contact Bradley Cronk on 01634 888463 or email b.cronk@kent.ac.uk.

University of Kent’s 50th anniversary Employability Points evening

Engineering and Digital Arts
The School of Engineering and Digital Arts are hosting a series of one-off lectures to showcase the academic excellence and world-leading research within the school.

Mutator 1 + 2 and Computer Games
Speaker: William Latham, CEO of Games Audit
Time and date: Wednesday 1 July 2015, 6pm to 7pm
In this lecture, William will share his experiences working as a Computer Artist in the Games Industry.

Engineering at the heart of society?
Speaker: Professor Sarah Spurgeon, OBE, Head of EDA
Time and date: Wednesday 21 October 2015, 6pm to 7pm
In this lecture, Sarah will share her passion for engineering and discuss its role in society.

To Err is Human; to Forgive is Divine; to Check is Engineering!
Speaker: The Right Reverend Dr Tom Butter
Time and date: Saturday 5 September 2015, 4pm to 5pm
In this lecture, Tom will fondly recall his time in the Department of Electronics at the University of Kent.

All lectures mentioned below will take place at Jennison Lecture Theatre, Jennison Building at the University’s Canterbury campus. To register your place, please email c.r.butler@kent.ac.uk or phone 01227 823251.

For more information on the EDA 50th lectures including speaker biographies, please visit www.eda.kent.ac.uk/school/50th/lecture_series.aspx

KIE launches new promotional video
The University has created a short video promoting the many and varied ways it works with businesses.

The video, titled ‘Delivering Innovation, Building the Future’ was previewed at the ICE Showcase Event in January 2015 and is available to view on the KIE homepage: www.kent.ac.uk/enterprise.

New Year... New strategic plan?

Are you looking to take forward a new strategic plan or project? If so, why not consider a Knowledge Transfer Partnership (KTP)?

KTP is a tried and tested national scheme. For 40 years, partnerships between business and universities have delivered real success, increasing profitability with an average increase in annual profit of £550,000 pa before tax for participating companies and organisations.

The programme provides a dedicated full time member of staff to deliver a bespoke project of your choosing with the total project costs supported by significant funding. In addition, businesses are able to access the University’s world leading academic expertise and facilities.

If you’d like to discuss a strategic challenge with us or would like to know more about the KTP Programme and funding available to support delivery of strategic projects, then get in touch using the contact details on this page.

Contact us
The University established Kent Innovation & Enterprise as their central entry point for business engagement to help make it easier for you to connect with the University. Whatever your ambitions may be, we will help you on your way to achieve them with specialist expertise and cutting-edge facilities.

If you are interested in any articles in this newsletter and would like to speak to us, then please email: enterprise@kent.ac.uk or call: 01227 816032.

We look forward to talking to you.

www.kent.ac.uk/enterprise @ICE_UniKent