Dear John

Acclaimed actor John Hurt returns to his Lincoln roots

Also inside
- Science’s female trailblazers
- Construction goes green
- Insect-inspired technology
- Maths and the Masters
Whether you aim to develop your career, build on your knowledge, enhance your salary or start a new business, we can help you achieve your full potential.

A postgraduate qualification from the University of Lincoln can make a real difference.
04 Saving lives through scholarship
How health research is improving the survival chances of heart attack and stroke victims

06 Turning the construction industry green
Revolutionary new tools to calculate the real environmental cost of buildings

07 History on television
Revealing the histories which go untold on our TV screens

08 Insect tech
Why insects could inspire a new generation of technology

10 All a Twitter with award-winning garden
Gold for a unique garden at the RHS Chelsea Flower Show

11 Blue sky thinking
Delivering higher education to our military personnel anywhere in the world

12 Women in research
The female researchers blazing a trail in science and engineering

14 Rolling back the years
Conservation experts turn back 200 years to restore architectural treasure

15 Nature's mysterious bacteria killers
The researchers looking to the natural world for new weapons in the fight against superbugs

16 Art imitates life
The mathematical patterns hidden deep in the works of the Old Masters
Saving lives through scholarship

How health research is improving the survival chances of heart attack and stroke victims
Diseases of the cardiovascular system are the single biggest killer in the UK, responsible for roughly one in three deaths.

Between them heart attack and stroke affect more than 200,000 people in Britain each year, claiming tens of thousands of lives. One in three heart attack sufferers die before they reach hospital.

Yet these bleak facts disguise the remarkable strides that have been made in reducing death rates from cardiovascular disease over the past decade. A combination of better prevention and improved treatment has contributed to welcome reductions in both the prevalence and impact of these diseases. Numbers of premature deaths – those involving people under the age of 75 – from all cardiovascular diseases have fallen 40% in the last ten years and deaths from heart attacks have halved.

At the very frontline of this battle to bring down death rates from these conditions are the paramedics and technicians who staff our ambulances. The speed and manner in which they respond to 999 calls saves thousands of lives each year.

A decade of research by health specialists from the University of Lincoln has helped to equip our ambulance crews with more effective tools and tactics in this battle. The work of the Community and Health Research Unit, led by Professor Niroshan Siriwardena, has transformed the way patients across the UK experience emergency treatment. It has produced changes at every tier of the health service: from national policy, to regional guidelines, to the way paramedics operate on the ground every day.

The secret has been in asking the right questions as much as finding the right answers. “A key part of our research is in identifying what the problems are,” said Professor Siriwardena. “That’s really important for the health service, which is so complex and fast-moving. If you don’t know what the problems are, then it’s very difficult to fix them. Often the solutions are very simple.”

CAHRU’s specialism over the years has been in applying quantitative and qualitative research methods to identify areas where quality of care could be improved and how this can be achieved. This does not mean finger-pointing at underperforming organisations or individuals. It involves spotting gaps in systems, policies or work practices and finding ways to address them.

It is often said that NHS targets have eroded the relationship between clinicians and patients. Targets may have benefitted the most seriously ill patients – those classed as Category A where services are required to respond within eight minutes, for conditions such as cardiac arrest, heart attack and major trauma – but CAHRU researchers suspected that response times alone did not paint the whole picture.

“It became evident that rather than simply measuring transport through response times, we also needed to measure the care that paramedics provide to people. It’s vital that paramedics see themselves as part of that whole pathway of care.”

One aspect of this work has been the development of ‘care bundles’ as measures for ambulance services and assessing how these were delivered by ambulance crews. Care bundles serve as a checklist of the crucial actions paramedics should take when assessing and treating conditions such as suspected heart attack or stroke before transporting patients to hospital.

For heart attack, known as acute myocardial infarction, this includes giving aspirin, a drug called glyceryl trinitrate, and pain relief, as well as asking patients to give a verbal ‘pain score’.

After gathering data from all 11 English ambulance services, the CAHRU team discovered wild variations across the English regions in how consistently care bundles were being used.

Professor Siriwardena explained: “Aspirin saves lives. It also reduces the risks of patients suffering further heart attacks down the line. But we found ambulance services varied in giving aspirin from only 50% to 95% of the time.”

Having identified a problem, the researchers set about trying to find a solution. They worked with frontline staff, including paramedics, clinicians and NHS managers, to try and understand the reasons for the regional variations, and how the disparities might be closed.

Crucially, their intervention was welcomed by frontline staff, rather than being perceived as a criticism by outsiders. Central to this was CAHRU’s practice of involving health care professionals who deliver care in diagnosing the root cause of problems and identifying means to fix them.

“You can’t improve things just by telling people to work harder,” said Professor Siriwardena. “You have to figure out what the barriers are that prevent people from finding solutions for themselves. Often it’s not about individuals. It’s that systems are not designed to enable people to do things as they would wish.”

This work to improve delivery of care bundles has dramatically reduced the startling regional variations the team had initially uncovered. In the first 18 months of the project, the percentage of 999 call-outs where care bundles were used in full increased across England from 43% to 79% for heart attack, and from 83% to 96% for stroke. It is estimated that many lives have been saved as a result, and many more patients have gone on to make stronger recoveries than they might have done otherwise.

This achievement received national recognition from the Department of Health as well as being shortlisted for a Health Service Journal award.

Building on this and other research into pre-hospital emergency care, CAHRU helped to develop national clinical performance indicators for ambulance services, which are now used by all English regions. Actions which are known to directly impact on patients’ chances of recovery are now observed and benchmarked alongside response times. As a result, variations in other aspects of emergency care, such as the availability of pain relief in the back of the ambulance, have also been reduced. The CAHRU team is now looking more closely at how the work of paramedics directly affects patient outcomes, and how this might be measured and evaluated, in a five-year project funded by the UK’s National Institute for Health Research.

This work will move closer to the goal of being able to fully understand how the work carried out by ambulance crews influences patients’ chances of survival and recovery across an array of different emergencies.

The improvements in consistency that CAHRU’s work has already helped bring about are a means not an end. The ultimate objective is to benefit patients, not to achieve statistical symmetry, as Professor Siriwardena explained: “There are some things that you can’t standardise. You can’t standardise patients. There will also be some processes or systems where there is inherent variation. What we are trying to do is to increase consistency, and for everyone to aim for the best.”

"If you don't know what the problems are, then it's very difficult to fix them. Often the solutions are very simple."
Turning the construction industry green

Carbon4CAST was developed to help organisations with large property portfolios to reduce their environmental impact. It is a professional predictive modelling toolkit that accurately predicts carbon emissions. It employs a three-phased approach to enable organisations to establish strategies, identify energy saving priorities and optimise spend. Funded by NPS Humber Ltd and the Technology Strategy Board, the UK’s innovation agency, it considers historical CO2 data to make recommendations about future activity.

Crucially, these advances in technology are also enabling developers to calculate the carbon emission costs of buildings across their full life cycle, before a brick has been laid.

Today, sustainability is a major concern for the mainstream construction industry. As more emphasis is being placed on businesses to maximise their financial savings, comply with environmental reporting guidelines and improve their standings in today’s all-important environmental league tables.

“Roughly half of all carbon emissions in the UK come from the use of buildings, so it is vital to pioneer innovative technologies and designs that will make a significant difference.”

...
History on television

History programming has flourished on our television screens in recent years as the public’s interest in personal, local and national heritage has grown. A revealing new study shines a spotlight on the sections of society that are being excluded from our viewing schedules.

The pioneering investigation Televising History was carried out by Ann Gray, Professor of Cultural Studies and Director of Research in the University of Lincoln’s School of Media, and Dr Erin Bell, a Senior Lecturer in History in the Lincoln School of Humanities.

Their extensive research, funded by the Arts & Humanities Research Council, revealed how recent changes in the media landscape have affected the way in which history in general, and whose history in particular, appears on television in the UK. Their findings highlight the notable absence of females, people of ethnic origin and minority groups from history programming on television.

Findings from the Televising History project have been widely published and were presented to the European Parliament as part of the influential A TV History for Europe project. They were also disseminated to key players in the television industry with the aim of raising awareness of the issue.

Professor Gray explained: “Our research engaged media professionals and historians to identify the complex processes behind the production of history on television. We identified the significance of selected images, editing techniques and presentation styles, which highlight a number of regular omissions that are made throughout history programming on television.

“It is often the case that the involvement of females and ethnic minorities in our country’s history is not included in its on-screen documentation. Television audiences are frequently assumed to be male-dominated, and female presenters can be few in number and subject to increased criticism of style and appearance. Our research questions this representation of the historical British identity in a time when television is emerging as an important vehicle for the dissemination of history to new, wide and diverse audiences.”

Their research involved interviews with esteemed historians Professor Mary Beard and Dr Anna-Maria Misra, who shared their unique experiences of media, television and academia. Dr Bell said: “It was fascinating to hear about their experiences of academia and television alike. As a research-active academic, it is important to have inspirational role models and to be aware of the possibilities for females within the sector.”

Professor Gray added: “Working as academics means that we are in the privileged position to pursue research where our thoughts, questions and findings are truly valued. We are both extremely proud of the project and resulting book, and it is very rewarding to be receiving positive feedback from around the world.”

Research by Professor Jane Chapman also highlights the role of women in a decisive moment of history and how this was reflected in the media. As featured in the 2010 issue of Lincoln Magazine, Professor Chapman’s study, Women, Press and Protest in British and French India 1928-48, funded by the Economic & Social Research Council, reveals the impact of women’s economic and political protest in the fight for Indian independence, as seen through their public activities and associated newspaper contributions.

This interdisciplinary research was published in her recent title, Gender, Citizenship and Newspapers, and her findings have been disseminated around the world, resonating with concerns about present-day female citizenship in Commonwealth countries and the ever important relationship between press, economics and ideology.

Professor Jane Chapman is Professor Communications in the Lincoln School of Journalism. An internationally renowned expert in communications, journalism and media history, her research areas include comparative 19th and early 20th century economic and social history relating to gender and press.
INSECT

Why insects could inspire a new generation of technology

Dr Fernando Montealegre-Zapata
and Professor Shigang Yue
"Such performance and sensitivity has the potential to inspire engineers in the design and construction of a variety of technologies."

Ear of bushcricket, eye of locust… not a supply list for would-be Hogwarts students, but some of the features from the insect world that scientists believe could be the biological blueprints for amazing new technologies.

Locusts are commonly associated with plagues, food shortages and death but the grasshopper-like insect also holds the key to scientific developments that may save lives by preventing hundreds of thousands of car crashes.

Inspired by the visual processing power built into these insects’ biology, Professor Shigang Yue from the University of Lincoln’s School of Computer Science has created a computerised system which allows for autonomous navigation of mobile robots.

The work could provide the foundation for the development of highly accurate vehicle collision sensors.

Professor Yue said: "Locusts have a distinctive way of processing information through electrical and chemical signals, giving them an extremely fast and accurate warning system for impending collisions.

"The research started by understanding the anatomy, responses and development of the circuits in the locust brain that allow it to detect approaching objects and avoid them when in flight or on the ground. We created a system inspired by the locusts’ motion sensitive interneuron – the lobula giant movement detector. This system was then used in a robot to enable it to explore paths or interact with objects effectively, using visual input only."

The system allows a mobile robot to detect approaching objects and avoid them. Instead of using the conventional method of radar or infrared detectors, which need intensive computer processing power, it is modelled on the locust’s eyes and neurones as the basis of a collision avoidance system.

This research offers important insights into how a collision avoidance system can be developed; improving performance to such a level that human input could be taken out of the equation entirely.

The insectoid robot designer says the knowledge could also be used in surveillance technology and even video game programming.

He explained: "Vision plays a critical role in the interaction of most animal species, and even relatively low order animals have remarkable visual processing capabilities. This research demonstrates that modelling biologically plausible artificial visual neural systems can provide new solutions for computer vision in a variety of dynamic environments."

Sharing Professor Yue’s fascination with the insect world is entomologist Dr Fernando Montealegre-Zapata, a senior lecturer in Lincoln’s School of Life Sciences.

With a research background in biomechanics, acoustics, sensory and comparative biology, Dr Montealegre-Z studies the ultrasound-sensitive ears of insects.

His breakthrough discovery of a previously unidentified hearing organ in the ear of a South American bushcricket revealed the unique way in which the insect’s ears process sound vibrations, comparable to that of superior tetrapods.

"This ‘missing piece of the jigsaw’ could pave the way for technological advancements in bio-inspired acoustic sensors research, including medical imaging and hearing aid development."

The organ, which constitutes the key element in the insect’s hearing, is a fluid-filled vesicle, or cell. It mediates the process of conversion of acoustic energy (sound waves) to mechanical, hydraulic and electrochemical energy.

In mammals, hearing relies on three stages: an eardrum collecting sound, a middle ear impedance converter and a cochlear frequency analyser. Impedance conversion is necessary to efficiently transmit the vibrations travelling through the air to a fluid medium. Dr Montealegre-Z demonstrated that the bushcricket’s ear performs these steps in the hearing process, something previously unknown in insects.

Dr Montealegre-Z said: "This discovery is a huge step forward in understanding the mechanisms of hearing processes in insects. This level of sophistication, sensitivity and functionality of insect hearing could be transferred into engineered bio-inspired systems. For instance, the ears of some bushcricket species are remarkably sensitive and can detect extreme ultrasonic signals of more than 130 kilohertz at long distances. Such performance and sensitivity has the potential to inspire engineers in the design and construction of a variety of technologies."

Dr Montealegre-Z’s findings will make a valuable contribution to the search for the next generation of ultrasonic engineering technologies.

By improving understanding of insect hearing and sensory systems, new ideas and techniques can be incorporated into a wide range of uses, including hearing aids, biomedical imaging systems for hospitals, and ultrasonic non-destructive evaluation to assess the structural integrity of buildings and bridges.
Twitter users were in control of an award-winning garden at RHS Chelsea Flower Show this year.

Created by academics from the University of Lincoln’s School of Computer Science, School of Psychology and School of Architecture, Digital Capabilities wowed the public with its real-time reaction to Twitter activity.

The garden, which won gold in the Fresh Gardens category, was divided into two separate planting zones – a tapestry of familiar plants and foliage, with partially obscured exotic planting behind a panelled wall.

The wall responded to the buzz of excitement about the flower show with autonomous panels opening or closing to reveal the inner depths of the garden depending on the amount of people using the #rhschelsea tag.

In this way, the public were able to directly influence how the garden appeared at any one time.

The project was a unique cross-disciplinary co-production by the University of Lincoln, involving Professor Shaun Lawson and colleagues in Social Computing and Professor Harriet Gross in Psychology in collaboration with Richard M Wright and Barbara Griffin from the School of Architecture, who all conceptualised, designed and installed the garden, together with garden designers Harfleet and Harfleet.

Most of the garden structure was built by students and staff from the Schools of Architecture and Computer Science in the workshops on campus before it was reassembled and planted on site at Chelsea.

Shaun Lawson, Professor of Social Computing, said: “One of the things we’re trying to do through our research is to understand how digital media can be made to meaningfully intersect with the physical world. The garden was an opportunity to explore aspects of how we can interweave social media data with real space, as well as how it is possible to make sense of this data by creating thought-provoking visualisations. When people engaged with the garden through Twitter, the screen activated by opening various panels, permitting selected views of the ‘concealed’ garden. The planting inside represents the exotic or unknown immaterial world of the internet, moderated and revealed by our desire for knowledge and interaction.”

Professor Gross said: “The process of creating the garden and the excitement of being at Chelsea was amazing. Digital Capabilities shows what can be achieved through collaboration; combining the breadth of skills and knowledge from across the University, working with staff, students and external partners led to a gold medal. It’s a model that I’m sure the University will build on for future projects.”

Davina McCall and Jack Dee were just two of the celebrities spotted interacting with the garden during the show which took place between 21st and 25th May, 2013.
Delivering higher education to our military personnel anywhere in the world

Operating in some of the most challenging environments on Earth, serving members of the UK’s Armed Forces make life and death decisions every day.

Much of this happens away from the frontlines, whether it is the engineers whose diligence keeps military aircraft in the sky or the logistics officers whose planning safely transports people and supplies thousands of miles around the globe. Each individual is a vital component in a system which ensures the nation can respond quickly and effectively to the security challenges of a globalised world.

University lecture halls might seem far removed from modern theatres of war but as global military operations become more complex technically, politically and logistically, senior military decision-makers have recognised the value of higher education in refining the skills of service personnel of all ranks. The challenge, of course, is making degree programmes accessible to a group of people who could be called at short notice to serve overseas, often posted to places where Internet access is not of paramount concern.

The University of Lincoln has been at the vanguard of delivering highly-specialised, relevant continuing professional development for the UK military for a decade. Through the Lincoln Business School, it has developed a suite of work-based distance learning degree programmes specifically for the Armed Forces which has taken the concepts of distance learning and flexible delivery to new heights. These programmes are making academic study accessible to hundreds of military personnel from across the ranks of all three services.

“What makes our suite of military programmes so special is that they are true work-based distance learning: our students can access course material and converse with tutors remotely from anywhere in the world via the University’s Virtual Learning Environment. The programmes are also extremely flexible, allowing students who are posted on active duty to formally interrupt their studies for up to two years. In some of the environments the military personnel are posted to, this is vital,” said Michael Howitt, Head of Work-based Distance Learning Programmes at the University of Lincoln.

This unique suite of courses stems from the University’s location in the heart of Lincolnshire, a county steeped in military history as the ancestral home of the RAF but has evolved more recently to become fully tri-partite with students from the Army, Navy and civilian Ministry of Defence joining their air force colleagues among the student population.

The relationship began in earnest in 2005 when the University of Lincoln was approached by Squadron Leader Jim Nadin, Officer Commanding the Logistics Management Training Squadron within the Defence College of Logistics and Personnel Administration at RAF College Cranwell.

He was seeking academic accreditation for the RAF’s Senior Logistics Management Course, a 13-week formal development programme for RAF logistics officers.

Within two years, this relationship between the University and RAF had been consolidated further with the creation of the Air Logistics Staff Course (ALSC) – an adaptation of the University’s existing MSc Logistics Management degree, tailored specifically for the requirements of RAF logistics. Word soonspread, and by 2010, the ALSC had become the tri-partite Defence Logistics Staff Course, incorporating the Army, Navy and civil service Ministry of Defence alongside RAF colleagues. The same year, a new work-based distance learning undergraduate degree was launched for more junior logistics officers.

“Within the UK’s armed forces, logistics underpins the ability to project military force. This capability must always ensure battle-winning effectiveness, but it also has to remain affordable in terms of both manpower and material in a context of stringent control of defence spending and pressure for ‘leaner’ operational support to forward areas. Furthermore, logistics commanders at all levels must create supply chain linkages that are agile enough to transfer rapidly from peace-time to conflict while keeping close control of spending,” said Professor David Head, Director of the Innovative Partnerships Unit at the University of Lincoln.

Over the past three years, more than 150 military personnel from across the ranks have completed the DLSC. The high esteem in which the course is held reflects in the seniority of the military personnel who attend graduation of students at Lincoln Cathedral each year. Often this is the first time the students have ever set foot in the city.

Air Vice Marshal Graham Howard, Assistant Chief of the Defence Staff (Logistics Operations) said: “Defence Logistics is an immensely complex and expensive activity and it is vital that our military logisticians possess the specialist professional skills and competencies to equip them to meet current and future challenges. The MSc Defence Logistics Staff Course represents the capstone course for military logistics professionals.”

The success of these degree courses has also been acknowledged by logistics industry professionals. In 2012, the University of Lincoln and the Defence College of Logistics and Personnel Administration were short-listed finalists in the Annual Awards for Excellence of the Chartered Institute of Logistics and Transport (CILT). The CILT is one of a number of professional bodies which accredits the courses.

Besides its highly-regarded Logistics Management courses, the University also offers undergraduate work-based distance learning programmes in Business Management and Engineering Management, which has proven popular with RAF engineer officers, and this year has introduced three related degree programmes in Aerospace Engineering & Airworthiness Management; Communications Engineering Management; and Communications Management.
Dr Xujiong Ye & Dr Basabdatta Sen Bhattacharya

As a visionary researcher who transformed our understanding of nature, Marie Curie has become an icon of the scientific world. However, she was not always afforded the prestige she deserves.

It was husband Pierre who presented their pioneering research on radioactivity at London’s Royal Institution in 1903, since the Institution did not allow female scientists to take to the stage. The Curies won the Nobel Prize in Physics later the same year, with Marie being the first female to do so.

She went on to become the most celebrated female scientist in the world and is to this day recognised for her significant role in breaking down society’s prejudices towards women, as much as her remarkable scientific discoveries.

A century on, and the archaic attitudes that prevented Marie presenting alongside her husband have largely disappeared from modern society but women are still statistically under-represented among the ranks of senior academics in UK universities.

The University of Lincoln is different, with a brilliant group of female academics blazing a trail in fields spanning engineering, computer science and forensic anthropology, through to history, English literature and politics.

And with women holding five of the senior management team positions, including the Vice Chancellor’s seat, it is clear the University is building a framework for support, guidance and inspiration for women to achieve and retain gender parity across the institution.

As part of this commitment to create a level playing field for all the University has signed up to the Athena SWAN charter, established to advance the representation of women in science, engineering and technology (SET).

Professor Mary Stuart, Vice Chancellor of the University of Lincoln, said: “I readily support the Athena SWAN principles and am keen to find ways of supporting, encouraging and facilitating our women scientists to realise their potential and ambitions. We need to utilise the talent of our men and women in order to grow and be a world-leading university.”

Belinda Colston, Professor of Analytical Chemistry in the School of Life Sciences, is heading the committee driving the University’s application for an Athena SWAN Bronze Award – the first stage of accreditation.

She said: “Published research shows that women in SET areas often find themselves on the back-foot in academia. This is usually caused by an unconscious bias by both men and women, which is firmly embedded in our organisational culture. For example, how do we assess excellence in academia? Often by weighing research output – not literally, of course, but we have a tendency to look at the number of research papers published, rather than the quality of the research being produced. This immediately affects women who have had career breaks, particularly when applying for higher-level academic positions. Hence, many women find themselves having to choose between family and career – that’s not a choice they should have to make. I’d like to change how we define ‘excellence’ as an institution. Athena SWAN is not about developing women-only policies – it’s about having gender-neutral policies. It’s about giving everyone an equal opportunity.”

A new Women in Science and Engineering website has been created to provide a one-stop shop for information and to raise the profile of WiSE academics and researchers, at all levels, across the University.

The Pipeline mentoring scheme has also been launched, which will involve ten mentor/mentee pairs from the SET schools for a year-long trial period.

This pledge follows the work carried out by the Women into Research network, which was established in 2008 to encourage more women to get involved in research and promote a broader research culture across the University.

Network founder, Principal Lecturer in the School of Social and Political Sciences, Catherine Bochel, said: “The Women into Research network was set up to address the difference in selection rates for men and women highlighted by the Higher Education Funding Council for England’s analysis of the Research Assessment Exercise in 2001 which was broadly mirrored within the University of Lincoln. Support from the University has helped to raise the profile of women in research in the University and it is good to see that commitment continuing.”

“I readily support the Athena SWAN principles and am keen to find ways of supporting, encouraging and facilitating our women scientists to realise their potential and ambitions.”

Professor Belinda Colston
Dr Basabdatta Sen Bhattacharya
Lecturer of Electrical Engineering
School of Engineering

Dr Basabdatta Sen Bhattacharya has a research background in electrical engineering and computer science. Her main focus is computational neuroscience - an interdisciplinary subject that links the diverse fields of neuroscience, cognitive science and psychology with electrical engineering, computer science, mathematics and physics.

This research employs computational modelling and simulation to build pictures of the internal workings of the brain. The aim is to better understand the biological signatures of neurological and psychiatric disorders, with the end goal of improving drug treatments, disease prediction and diagnostics for conditions such as Alzheimer’s, Parkinson’s and epilepsy.

Basabdatta said: “Just as computer models are used to predict the weather, I want to find out whether they can be used to actually predict and provide pharmacological interventions for diseases.”

The daughter of an electrical engineer, Basabdatta loved maths from a young age. She studied Electronic Engineering in India and received her PhD from the University of Manchester. Before stepping into academia, she was a manager at India’s Rourkela steel plant.

Dr Xujiong Ye
Reader
School of Computer Science

Dr Xujiong Ye has more than a decade of research and development experience in medical imaging and processing from both academia and industry. Having been fascinated by science and maths as a child, Xujiong studied at Zhejiang University, China, where she received her PhD. She worked as a post-doctoral researcher at the University of Oxford and spent 10 years in industry, leading advanced R&D in medical image processing and computer-aided detection.

This work applies advanced computing technologies to automatically examine medical images, producing clinically meaningful information and data analysis. The objective is to improve detection and diagnosis for the benefit of patients. Xujiong was part of a team which developed potentially life-saving computer software which can detect colonic lesions from CT imaging. The system highlights abnormal growths which can be missed by radiologists.

She believes the key attribute for a career in science is a love of the subject.

Xujiong said: “There are so many highly enthusiastic and successful women who are having great careers in Computer Science. There are no barriers to women in science that cannot be overcome.”

Gillian Fowler
Lecturer and Forensic Anthropologist
School of Life Sciences

Gillian Fowler is a Forensic Anthropologist with extensive experience working in post-conflict mass grave exhumations.

Before taking up her academic post at the University of Lincoln, she spent six years working for the Forensic Anthropology Foundation of Guatemala, producing many forensic reports for the Guatemalan Prosecutor’s Office. This involved exhuming the graves of victims of the uprising against the country’s military dictatorship of the 1980s.

She still undertakes external consultancy work for a variety of international human rights organisations. Recently this has included a project in Kabul, Afghanistan, consulting for Physicians for Human Rights (PHR), an international group which is training Afghans to conduct mass grave investigations.

The aim of the project is to provide Afghanistan’s people with the scientific and technical capabilities to document past abuses, identify the dead, and ultimately achieve justice and reconciliation.

Gillian said: “I aim to inspire a new generation who will be equipped to go out into the world and investigate the human rights atrocities that continue to occur.”
When London’s Kenwood House re-opens its doors to the public this autumn following years of renovation, visitors will enjoy renewed access to one of the country’s finest 18th century stately homes.

They will also discover the results of decades of meticulous conservation work to reveal the building’s intricate interior, as designed by neo-classicist architect brothers, Robert and James Adam, more than 200 years ago. The fascinating truth about Kenwood House’s interior design has been uncovered by a team of specialists from the University of Lincoln’s renowned conservation consultancy division, Crick Smith.

Specialising in safeguarding the significant historic interiors of important national landmarks, the Crick Smith team was appointed by English Heritage in 1995 to help transform Kenwood House. Since then, the team’s highly specialised preservation techniques have informed the major renovation of its prestigious Robert Adam interiors.

Almost 20 years later, the neo-classical residence next to Hampstead Heath, and home to an important collection of Old Master paintings, is ready to be unveiled to the British public.

Ian Crick-Smith, Senior Research Fellow at the University of Lincoln, said: “We wanted to recreate the rooms as they would have appeared to Kenwood House’s owner, Lord Mansfield. It is not enough to go on the original plans.

“Adam produced a variety of proposals for Kenwood, so we wanted to identify the one that was actually executed.”

To bring the past back to life, Crick Smith uses a revolutionary methodology which combines archival research with microscopic examination of paint samples, to clarify the decorative history of a room, building or exterior. The findings then inform how this history should be interpreted and presented to the public through restoration.

“When we started work on Kenwood House, the extent of the survival of Adam’s original schemes was unknown,” said Ian Crick-Smith. “We have actually uncovered a far more elaborate interior decorative history throughout the period of the house, and our research revealed that the original designs in some areas, for example The Great Stair, were concealed beneath seven or eight subsequent paint schemes.”

Kenwood House did undergo another substantial redecoration 40 years ago, but this is now known to have been historically inaccurate. After uncovering and discounting up to a dozen layers of dated paint schemes and multiple sanded finishes, Crick Smith was able to develop an accurate historic colour palette for the building. This has been used to restore the true beauty of Adam’s 18th century design scheme, and recreate Kenwood House’s important historical context, dating back to 1770.

The original paint colours were analysed by a spectrophotometer, a piece of equipment that measures absolute white, absolute black and everything in between. Crick Smith recreated exact shades using its Natural Colour Scheme – an expansive selection of paint colours, which vary in the most miniscule of degrees.

Gillian Thwaites, Conservator Researcher with Crick Smith, explained: “The colour scheme now in use is much more refined – gone is the bright gilding that could be found in the famous library, overlooking Hampstead Heath. This has been replaced by Adam’s original white, which is typical of the muted scheme he used throughout the house.

“Our new understanding of the colour scheme has formed the basis for a major reinterpretation of the property. Based on our research, we have been able to advise the decorators on the appropriate techniques and best procedures for re-implementing the original colours without damage to the extant scheme, and that could even be reversed at a later date.”

It is thanks to Crick Smith’s painstaking investigations that the world’s historians, together with the general public, can now enjoy the striking interiors of Kenwood House, as its architect and designer originally intended more than two centuries ago.
Imagine it is 2035 and the scourge of superbugs means you are terrified to let your children out to play. The smallest scratch could mean serious infection - a death sentence with no effective antibiotics available.

Operations in hospitals seem a figment of our parents’ imagination, modern procedures such as heart, liver and kidney transplants a remote memory. So what happened to the miracle cures of the 20th century?

It looked so good in 1928 when the modern era of antibiotic invention was heralded by Sir Alexander Fleming’s serendipitous discovery of the first antibiotic, penicillin.

His observation that fungi could be used as bacteria-fighting agents is often cited among the most important advances in the history of medicine. For the next 60 years the medical profession relied on a never-ending supply of new synthetic or semi-synthetic antibiotic chemicals to treat infectious diseases wherever resistance had developed.

The emergence of new antibiotic-resistant pathogens, or ‘superbugs’, began almost as soon as antibiotics were used and rapidly spread among the population.

Some concerned researchers were prompted to investigate alternative treatments to antibiotics and re-examined the potential of mysterious viruses which infected bacteria - called bacteriophage. The Greek-derived name means ‘devourer of bacteria’ and they play a significant role in the life and death of bacteria on Earth.

Mostly harmless to humans, phage infect specific bacteria causing them to ‘pop’ and be destroyed. However phage are not just killing machines - when bacteria are infected by phage they inject their own genetic material, sometimes transferring genes which play a supporting role in the progression of diseases including diphtheria, cholera, dysentery, botulism, ‘flesh-eating’ pneumonia, toxic shock and scarlet fever.

In the University of Lincoln’s School of Life Sciences are three academics investigating the inner workings of phage in a bid to combat infectious diseases.

Royal Society Research Fellow Dr Edward Taylor’s laboratory-based investigations focus on understanding the mechanism of the enzymes that break down DNA and by doing so to possibly discover a way to inhibit them. DNA encodes the genetic instructions used in the development and functioning of all known living organisms and many viruses. He works with a specific bacteriophage which infects a flesh-eating bacterium called Streptococcus pyogens. The phage carries a toxin and DNA which causes the bacteria to damage the human immune system, resulting in scarlet fever, ‘toxic shock’ or more invasive necrotizing forms of infection.

Through the study of these enzymes Dr Taylor hopes to add to the scientific community’s understanding of disease process and lay the foundations for the development of new vaccines.

Dr Ron Dixon has been carrying out research into infectious diseases for the past 40 years, particularly the mode of action and resistance of antibiotics. He looks at ‘phage therapy’ as a potential replacement for antibiotics in certain situations, such as the treatment of the deadly superbug ‘Iraqibacter’ - a superbug that has become a lethal threat to troops in Iraq and Afghanistan.

He said: “Unfortunately antibiotics have been used and abused extensively and since the developmental pipeline from big pharma is now restricted for some life-threatening infections, treatment options for some patients are very limited. Alternatives such as therapies based on phage make good sense, were available in the pre-antibiotic era and may still be effective in the clinic for difficult infections such as MRSA.”

Dr Ross Williams completes the trio of scientists, with his primary research focus being that of ‘sequencing’ phage. DNA sequencing is the process of determining the molecules that form the building blocks of a DNA fragment.
Art imitates life
The mathematical patterns hidden deep in the works of the Old Masters

They say that life imitates art but studies into the complex question of what makes the works of the great artists ‘beautiful’ suggests that the opposite may be equally true: that the most acclaimed art mimics mathematical patterns engrained in the natural world.

Work by Professor George Mather, Professor of Vision Science at the University of Lincoln, is revealing intriguing insights into the psychological basis for our appreciation of visual art.

Professor Mather, an experimental psychologist who leads the Perception, Action and Cognition research group in Lincoln’s School of Psychology, studies how our eyes and brain process visual information to make sense of the world around us.

Evidence suggests the human brain has evolved to process commonly occurring natural scenes in a highly efficient manner and that we may therefore harbour a natural preference for images which adhere to these patterns. Could this explain why some pieces of art are more pleasurable to look at than others?

“One way to look at this issue is to ask how artists translate a real scene into an artistic image,” explained Professor Mather. “Can the process of translation reveal something about human perception?”

By comparing painters’ representations of natural scenes with real-world equivalents, he has been able to examine how closely artists such as Cezanne were mimicking what they saw around them.

“Artists transfer much of the detail in the photographs to their work but the range of detail they present in the artworks tends to gravitate towards a moderate, balanced level.” he said. “Artworks based on the most coarsely detailed images tend to contain slightly more detail and texture than the corresponding photograph, and artworks based on the most finely detailed images tend to contain slightly less detail and texture than the photograph. Such adjustments by artists may reflect the range of detail that is most pleasing to the eye and brain of the perceiver.”

It is not just in the two dimensions of canvas that mathematical patterns pervade. In another study Professor Mather explored how classical sculptures such as Michelangelo toyed with the subtleties of human proportion.

One cue we use to make visual assessments about a person’s physical height is the relationship between the height of the head and the height of the body: known as head-to-body ratio (HBR). Tall people usually have a small head relative to the size of the body (a smaller HBR), so we perceive figures with a smaller HBR as taller.

Leonardo’s Vitruvian Man summarised the ideal proportions of the male figure in classical Greek and Renaissance art. These proportions can be seen in many statues from Ancient Greece and Rome. The head-to-body ratio (HBR) of Vitruvian Man is around 1 to 8, or 0.125 as a decimal. By analysing anthropometric data from thousands of military personnel, Professor Mather found this same number is the average HBR for the typical European male. It seems the mean average is considered the ideal when it comes to body shape in fine art.

However, a handful of classical sculptors stray from this convention. Michelangelo’s statue of David has an HBR of more than 0.14. Was the artist using HBR to convey David’s youthful qualities, by making him appear short? At the other end of the scale, the Roman bronze Hercules has an HBR of less than 0.11. To test whether observers really do use HBR to judge human stature in classical sculpture, Professor Mather devised an experiment in which he asked participants to state which figure looked taller in photographs of a series of classical statues. One image had been digitally altered to increase the HBR.

As expected, participants perceived this figure as shorter than the original. Overall, in more than 50% of responses, the observers said the taller figure was that with the smaller HBR.

The significance of HBR was then taken a step further. Using calculations based on his real-world demographic dataset, Professor Mather estimated how tall the figures in the statues would be in ‘real life’.

Michelangelo’s David registered 165cm tall (5ft 5in) with the Capitoline bronze of Hercules in Rome 186cm (6ft 1in). Despite the ‘real’ height of the sculptures being 4.1metres and 2.41metres respectively.

So why do we have this capacity to make snap judgements of stature based solely on body proportions?

“In an evolutionary setting, assessment of another person’s stature can be important for survival because it can provide vital information about the fitness of both friends and foes,” said Professor Mather.

Even in the modern day, our everyday actions are heavily influenced by these visual cues we extract from our environment and process so fluidly, we barely notice them.

Scientists are eager to improve understanding of how we process these environmental regularities.

“As adults, we can use our understanding of our surroundings to help us to process visual information even when the information is incomplete or full of noise,” explained Dr Kun Guo, a fellow member of Lincoln’s Perception, Action and Cognition research group. “We can look out of a window on a foggy day, and still quickly comprehend what we see. But there comes a point where image quality deteriorates to such an extent we can no longer make use of it.”

By carefully manipulating specific attributes of images, scientists can start to see where these thresholds lie. Louise O’Hare is a fellow Lincoln researcher investigating how the presence of blur impacts on our ability to focus on pictures with varying degrees of detail.

An important property of natural scenes is the balance between fine scale and coarse scale detail, as seen in Professor Mather’s research on paintings of natural scenes. Our brains expect a consistent balance between fine details, like a close-up of a human face, and coarse details, as in a silhouette.

“The visual parts of the brain have many complicated problems to solve. One of those problems is how to focus the image on the retina, a bit like a modern camera’s autofocus function,” said Miss O’Hare. “If you look at real scenes, then there is a point where the world is in focus. However, if the image is a blurred photograph, then this is harder work for the brain, as it is uncertain of the true shape of the scene.”

As viewers, we might feel this harder work as eye strain and even headache. Psychologists call this ‘visual discomfort’, and it appears this may be the antithesis of the ‘easy on the eye’ sensation we feel when looking at artwork we enjoy.

The Magazine of the University of Lincoln Autumn/Winter 2013
Acclaimed actor John Hurt returns to his Lincoln roots

Dear John

It was 50 years ago that John Hurt made his first appearance on screen, as a love-struck student at a fictional Lincoln university. Since that supporting role in The Wild and the Willing, he has established himself as one of Britain’s finest actors during a career spanning six decades and more than 100 movies.

His filmography lists a string of box office hits and critically-acclaimed classics, including The Elephant Man, Tinker, Tailor, Soldier, Spy and the Harry Potter series, and he is also a celebrated Shakespearian, theatre and television actor. He has received two Academy Award nominations, one Golden Globe and four BAFTA Awards, the most recent being the 2012 Michael Balcon Award for his Outstanding British Contribution to Cinema.

Yet before the bright lights of the West End and Hollywood beckoned, John Hurt honed his early acting talents in Lincoln. Born near Chesterfield in Derbyshire in 1940, he was educated in Grimsby and Lincoln, where he first developed his taste for the stage.

Earlier this year he took the opportunity to roll back the years when he visited the University of Lincoln to recall his roots in the city. The event, An Evening with John Hurt, took place in the University’s LPAC theatre and marked the first time in almost 60 years that he had stepped foot on a stage in the city.

Speaking before a 400-strong audience on his 73rd birthday, and in conversation with the University’s Dean of Public Engagement, Professor David Sleight, he recounted how his acting career began with a performance at Lincoln School.

“I remember I played Lady Bracknell in The Importance of Being Ernest,” he recalled. “It was a boys’ school so we played all the parts. I lived for acting really.”

This experience was just the start of his love affair with the stage and screen. It is the remarkable range and breadth of characters portrayed by Hurt throughout his illustrious career that has won him such critical acclaim. From his first appearance on-screen in The Wild and the Willing, to a Shakespearian fool in Laurence Olivier’s King Lear and a heroic rabbit in Watership Down, he has consistently surprised audiences and critics with his ability to tackle challenging characters head-on. It is perhaps his heart-breaking performance as John Merrick in The Elephant Man that remains his most celebrated moment on screen.

He asked his Lincoln audience: “What is life about, if not for taking the risk?”

The infamous and defining scene in Alien, in which Hurt’s character Kane has a monstrous creature burst through his chest, was recognised as one of the most memorable movie scenes of all time in a Guardian poll.

Even at an age when many actors might be tempted to bask in past glories, Hurt shows few signs of slowing down. Rumours abound that he will play a previously unseen ‘dark Doctor’ in the 50th anniversary special of Doctor Who later this year.

“I am always looking for things that are going to be interesting to do, something I can offer something to,” he said.

John Hurt CBE was made an Honorary Doctor of the Arts at the University of Lincoln’s January 2013 Graduation Ceremony, in recognition of his outstanding contribution to television, film and theatre.
Celebrating 150 years of artistic heritage

This year represents a historic landmark for the University of Lincoln as it celebrates the 150th anniversary of its oldest predecessor institution, the Lincoln School of Art.

Founded as a private venture on 2nd February 1863, the School hosted its inaugural class at the Lincoln Corn Exchange. A century and a half later it is an integral part of the University of Lincoln, and it is celebrating the city’s artistic heritage and the significant contribution that its alumni have made to the world of art and design over the decades.

The Lincoln School of Art was one of the first of its kind in the UK, celebrated as a forward-thinking leader in art education. It instructed in French Impressionism long before it was widely accepted within the UK, and embraced the growth of the region’s industry in its curriculum.

Dr Alec Shapley, Head of School of Art and Design at the University of Lincoln, follows in the footsteps of eleven predecessor Heads of School.

He said: “Lincoln School of Art and Design, as part of the University of Lincoln, continues to make a significant contribution to the cultural activity and wellbeing of the city and the wider region, with many of our graduates going on to achieve great success.

“Increasingly the Lincoln School of Art and Design is becoming recognised for its artistic research, and all of our students can benefit from our networks and projects with a number of national and international partners. This anniversary coincides nicely with our move into our new building on the Brayford campus, which is another significant step in our history.”

The School has celebrated this year’s anniversary with two retrospective exhibitions.

The first, Lincoln School of Art: A Celebration of 150 Years, was a week-long public exhibition in the University’s Greestone Building, showcasing the School’s evolution and highlighting its impact upon the region.

The second exhibition, Past and Present: A Celebration of the 150th Anniversary of the Lincoln School of Art, featured artwork from many of the School’s notable alumni and was held at The Collection and Usher Gallery in Lincoln over the summer.

Alumni from the Lincoln School of Art have gone on to exhibit their work as members of the Royal Academy, and at acclaimed venues such as the Paris Salon, Mercury Gallery and even the Bolshoi Ballet. Distinguished graduates include the prolific English landscape, portrait, and genre painter William Logsdail, and internationally renowned artist William T Warrener, who became the illustrious subject of The Englishman at the Moulin Rouge by Henri de Toulouse-Lautrec and excelled in the Parisian post-impressionist scene.

Later this year and into 2014, the University will complete the celebrations with Lincoln School of Art & Design in Session, a series of seminars on artistic research and postgraduate studies in art, design and conservation. The programme includes six evening lectures by international speakers, held in partnership with the Royal Society of the Arts, and will take place in the new Art and Design Building on the Brayford campus, heralding the start of an exciting new era.

Science in the heart of the city

A world class science and innovation park is being created in the heart of the city of Lincoln in a unique collaboration with one of the region’s biggest employers.

The University is working with the Lincolnshire Co-operative on a multi-million pound project to transform a 10-acre site off Tritton Road, the city’s historic industrial quarter, into a hub for science and technology. It will welcome some of the UK’s finest scientific minds and most innovative high-tech businesses.

Featuring a mix of university teaching and research facilities alongside commercial enterprises, the park will become the new home for the University’s School of Life Sciences, whose staff and students will enjoy state-of-the-art laboratories and clinical teaching spaces.

A central component of the park is the University’s new School of Pharmacy, which will move to the site for the start of the 2014 academic year following a conversion of the iconic Becor House.

The new School, headed by Dr Paul Grasby, will enrol its first undergraduates this September and its first postgraduates the following autumn.

A golden year for Paralympic star Sophie

Sophie Wells, the cover star of our last edition of Lincoln Magazine, enjoyed a golden summer as she collected three medals for Team GB in the London Paralympic Games.

The dressage rider, who deferred her studies in Lincoln’s School of Sport and Exercise Science to focus on her dream of competing at the Games, returned home with two silver and one gold medal.

The honours kept coming too as she collected the Lincolnshire Sports Personality of the Year Award 2012, followed by an MBE in the New Year’s Honours List.

Evaluating more new nurses than ever

The number of new Nursing students enrolling at Lincoln quadrupled this year. The University was named as the preferred provider to deliver adult and mental health nursing undergraduate education in Lincolnshire, increasing the annual intake of first year Nursing undergraduates from around 50 to more than 200.

Based in the School of Health and Social Care, the programme is led by Director of Nurse Education Dr Julie Williams, who has more than 30 years’ experience in the profession.

Campus evolution all part of a masterplan

A vision of how the University’s main Brayford Pool Campus might evolve over the next decade has been revealed.

The University’s Campus Masterplan describes the potential to create new academic buildings, office space and student accommodation within the Brayford Pool Campus. It also proposes sites for additional cafes, restaurants, shops and even a hotel.

Some developments are already underway, including the spectacular new School of Art and Design Building and the first phase of an extension of the Great Central Warehouse Library.
Working hours are sunrise to sunset, you will spend prolonged periods alone, often in extreme weather conditions, and you may be at risk of attack by wild animals. It is not everyone’s dream job description, but Dr Richard McFarland loves every minute of his work.

The Lincoln alumnus, who completed his PhD at the University’s School of Psychology in 2011, is now a Postdoctoral Research Fellow at the University of the Witwatersrand in South Africa, where he studies some of the world’s most fascinating primates in their native habitat.

His research career to date has taken him from the rainforests of Puerto Rico, through the bitterly cold climes of the Middle Atlas Mountains in North Africa, into the blazing hot bushveld of the Eastern Cape.

In his current post he is carrying out fieldwork on the Samara Private Game Reserve in the Karoo region of South Africa, studying three groups of wild vervet monkey. His interest is in the behavioural and physiological strategies these primates employ in response to ecological stress, which involves collecting a range of socio-ecological data through direct observation.

There are no shortcuts when it comes to collecting valuable data from the wild, as Richard explained: "When I’m in the field I wake up an hour before the sun does, then drive to the field site where the monkeys are. Once I’ve managed to find the monkeys, I watch them and collect data, whilst avoiding the rhino, buffalo and cheetah! I leave the field at sun down, eat, sleep, and then start again.”

These spells of fieldwork are punctuated by the other crucial activity of any academic researcher: writing papers. This office-based work happens back in Johannesburg, where Richard attempts to make sense of the reams of data he has collected.

“This may sound boring but converting your data into meaningful publications is almost as fun as collecting the data itself,” he said.

Now aged 29, Richard’s interest in pursuing an academic research career began when he was an undergraduate studying for a BSc in Biology at Cardiff. He specialised in animal behaviour and behavioural ecology, and went onto complete an MRes in Primatology at Roehampton - before embarking on a PhD in Psychology at the University of Lincoln, under the supervision of Dr Bonaventura Majolo.

“I have been incredibly fortunate in that every step I have taken into a career in academia has been solely driven by my interest in the topic of the research. I’ve never considered each step as a pathway to a career; it just ended up that way,” said Richard.

During his PhD studies at the University of Lincoln, he spent two years living at a field site in the mountains of northern Morocco, as a pivotal member of the team behind the Barbary Macaque Project. This international collaboration, established by Dr Majolo in 2006, brings together primatologists, biologists and ecologists from universities across Europe and Africa to a unique field site where the Barbary macaque (Macaca sylvanus) can be studied in the wild.

The Barbary macaque is an IUCN Red List endangered species whose numbers have dropped dramatically in the past 30 years, largely due to illegal poaching and habitat destruction. It is a species which fascinates scientists for a number of reasons: It is the only primate, besides humans, with a population in Europe, and also the last remaining species of macaque found in the wild in Africa.

Primatologists call it an Old World Monkey - a deeply ancestral species with origins entangled in the story of human evolution. Having been separated from the numerous Asian species of macaque by the last ice age, it offers a unique reference point for scientists hoping to understand how different aspects of primate behaviour and societies evolved.

Findings from the Barbary Macaque Project describe a charming, sociable and irascible animal with many traits which echo aspects of human behaviour: from the bonds which tie together families and allies, to the power dynamics which dictate winners and losers in the battle for food, mating rights and territory.

Richard’s work has already yielded a string of influential academic publications, several cowritten with Dr Majolo, including a 2013 paper in the Royal Society’s prestigious journal, Biology Letters. This article, which described the devastation caused by an exceptionally cold winter on the two groups of macaques being studied in Morocco, was reported in science media across the world, including Nature and Scientific American.

So what does he believe is the secret to success for other young scholars interested in a research career? For Richard, the key has always been willingness to work hard, whether it is long hours out in the field, or weeks and months writing up results: “In my experience, the best research students aren’t necessarily the most intelligent, or the ones with the best grades. They are those that work hard, are enthusiastic, and are enjoyable to work with.”

Dr Richard McFarland
A talented filmmaker from Lincoln’s School of Journalism has landed a role with a leading European production company after scooping one of the media industry’s most coveted student awards.

Besma Ayari was the winner in the Undergraduate Factual category at the Royal Television Society Student Awards for her film, The End of Silence, which examined the state of Tunisia exactly a year after the start of the Arab Spring.

The End of Silence is a short documentary about post-revolutionary changes encountered by people fighting for a new country. Besma travelled to North Africa to document the personal stories of individuals who participated and played an important role in the revolution. Besma’s film, which she produced while still a student, was described by the national judges as “a brave, intrepid and enterprising film about the legacy of the Arab Spring...a moving testament to the human cost of revolution.”

Besma said: “I was absolutely delighted to win the RTS national award. It is an achievement I never dreamt about while I was making the film. Those endless days and nights I spent in the newsroom really paid off. Now, I think I owe this film to the people of Tunisia, who inspired and helped me to tell their story.”

Besma was also shortlisted for the One World Media Awards and her documentary was selected by the Al-Jazeera Film Festival, where it was shown as part of the New Horizon student film competition.

She has now secured a role with Deepeei Productions in Amsterdam. Having successfully completed an internship with the production company following graduation in 2012, Besma was offered a permanent position and her new role will see her take on responsibility for developing a new documentary series exploring 20 years of democracy in South Africa.

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400 million views and counting for TomSka

YouTube sensation TomSka, also known as Lincoln alumnus Tom Ridgewell, continued to lead the UK’s new media revolution this year.

The Media Production graduate was featured on the front cover of Wired magazine’s February 2013 issue, alongside other successful young filmmakers, bloggers and musicians who are turning the conventional media industry upside down by amassing huge online followings and revenues to boot.

Tom, whose spoof ‘Banned University of Lincoln adverts’ went viral in 2011 while he was still a student in the Lincoln School of Media, has secured a global fan base with his anarchic cartoons, sketches and spoof action sequences. He now has more than two million subscribers and almost 400 million views on his YouTube channel.

Life sciences graduate joins academic publishing’s online revolution

Life Sciences graduate Joe Salter has taken up a position at an innovative new online scientific journal.

Joe, who graduated from Lincoln’s BSc Biomedical Science programme in 2012, was appointed Publishing Assistant for eLife - a new Cambridge-based open access, peer-reviewed journal for the biomedical and life sciences.

A joint international initiative between the Howard Hughes Medical Institute, the Max Planck Society and the Wellcome Trust, eLife will be a platform for extending the reach and influence of new scientific discoveries and will also showcase new approaches to the presentation, use and assessment of research.

Melting hearts with sequel to The Snowman

A graduate from Lincoln’s Animation degree was part of the team which brought one of Britain’s best-loved animated characters back to life.

Lara Margarida, who graduated from the BA (Hons) Animation programme in September 2012, worked with lecturers Peter Dodd and Denise Dean on The Snowman and The Snowdog.

Created to mark the 30th anniversary of Raymond Briggs’s much-loved children’s classic The Snowman, the sequel premiered on Channel 4 on Christmas Eve 2012, attracting almost six million viewers. It was made by Lupus Films, where Peter is lead animator.

Between them, the Lincoln trio contributed to the thousands of individually hand-drawn and coloured frames which make up the 24-minute animation.
Developing new techniques to diagnose chronic diseases, providing expert support to small businesses, creating fresh new dramatic productions and finding new sources of renewable energy – just some of the exciting projects the University of Lincoln is working on.

But we would like to do more and gifts from our generous alumni, friends and supporters are helping us do just that.

From scholarships for the brightest students to world-class research projects tackling society’s greatest challenges, from books in the library to new science laboratories, donations are helping to fund a range of special projects to enhance the University.

A gift to the University’s General Fund, large or small, will support any of these causes according to the area of greatest need at any one time.

The University also offers a tailored programme of giving suited to donors who may wish to leave a lasting legacy in the form of a named building or scholarship, for example.

One of the ways you can support the University is by joining the Friends scheme. The Friends of the University of Lincoln may be former students, parents of students, retired staff, members of our local community or even people with no formal connection, but they all have something in common: they are interested in the University’s work and want to support it.

Friends enjoy a wide range of benefits while knowing they are contributing to the ‘extras’ that make a university truly excellent. This may be through honorariums for exceptional students, for example, or special projects to enhance teaching and research facilities.

Annual subscription is just £12 a year and by way of thanks, you will be invited to receptions, exhibition openings and talks by eminent academics about their work, receive priority booking for some events, enjoy tours of the University’s campus and be kept up to date with news about the University.

There are plenty of other ways in which people support the University according to their circumstances, including providing work experience for current students, giving their time to provide career advice and volunteering at events. These are detailed on the Lincoln alumni website.

However you choose to give your support to the University of Lincoln, rest assured it is greatly appreciated and will make a difference to the next generation of thinkers.
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