Manchester scientists win the Nobel Prize
Message from the President

As news travels around the world of Manchester’s Nobel Prize winners, the President looks at what it means to the scientists, the University, the city of Manchester and the scientific community as a whole, to have achieved ‘every scientist’s greatest dream.’
As the implications of the Comprehensive Spending Review begin to unfold, it is important that we recognise achievements and celebrate successes within the University, however small they may be. This month, of course, we have very good reason to celebrate a truly great success, which is the award of the 2010 Nobel Prize in physics to Professors Andre Geim and Konstantin (Kostya) Novoselov for their groundbreaking work on graphene.

Graphene is a fascinating substance in so many ways. It is a carbon lattice just one atom thick with incredible strength and truly unusual electronic properties. It was eloquently described by Andre in an interview for ‘Nature News’ as “the thinnest possible material you can imagine. It also has the largest surface-to-weight ratio: with one gram of graphene you can cover several football pitches (in Manchester, you know, we measure surface area in football pitches”).

As the story has been reported around the world, the University has been filled with journalists and queues of students have besieged Kostya’s and Andre’s offices in search of autographs. The celebrations have not just been in physics (where several parties have already been held), but across the University. On each occasion that I have mentioned the Prize, there has been spontaneous applause and real shared joy. One journalist asked me if all the fuss was just media hype rather than true international recognition. As a scientist myself, I can say that it is most definitely the latter and that winning the Nobel Prize is every scientist’s greatest dream. This is probably true of economists and authors too, but I can’t speak for them.

Occasionally there is controversy about the Nobel Prizes, often because each one can be awarded to a maximum of only three people, all of whom have to be living at the time the award is made. However there is almost universal agreement about the importance of the awards and real respect for the Nobel committees and their decisions. This year’s physics prize has been internationally acclaimed and welcomed.

The Prize was awarded for the remarkable properties of graphene, but there is already much excitement about its many possible applications. Yet Andre and Kostya are truly driven by a curiosity to discover and understand the world around us, rather than the likely application of their work. Graphene provides an outstanding example of how “blue skies” research with no obvious application at the time, could have far reaching benefits and applications. This is where British universities really excel and is why the UK is still world class in almost every area of science. We should also pay tribute to the funders of Kostya and Andre’s work, particularly the Engineering and Physical Sciences Research Council, which made a very major award for the work, the Royal Society (Andre is a Royal Society Professor, and Kostya a Royal Society University Research Fellow), the Leverhulme Trust which has provided both with Fellowships in the past, and many other significant funders. These organisations could see the intrinsic value of the work long before applications started to become clear. It cannot have gone unnoticed by Government ministers that cuts to British universities or UK research funders’ budgets may well prevent work such as this from flourishing in the future or will ensure that it is forced overseas.

The University will continue to celebrate Kostya and Andre’s success and I am personally delighted to be attending the Nobel ceremony in Stockholm later this year. I am sure that Professor Alan Gilbert would be incredibly proud to see his aspiration of having four Nobel Laureates at the University by 2015, realised five years early, especially as these latest two have been for work carried out here at The University of Manchester.
The outstanding accolade – regarded as the pinnacle of scientific achievement – was awarded to the pair for their work with the world’s thinnest material.

Graphene, a two-dimensional layer of carbon atoms that resembles chicken wire, has rapidly become one of the hottest topics in materials science and solid-state physics.

Professor Novoselov, 36, known as Kostya, first worked with Professor Geim, 51, as a PhD student in the Netherlands. He subsequently followed Professor Geim to the United Kingdom. Both of them originally studied and began their careers as physicists in Russia.

The award of the Nobel Prize means there are currently four Nobel Laureates at The University of Manchester.

Professor Geim said: “This is a fantastic honour. People have been talking about graphene as a possible prize winner for a number of years. “Having won the Nobel Prize, some people sit back and stop doing anything, whereas others work so hard that they go mad in a few years. But I will be going into the office and continuing to work hard and paddle through life as usual. “I have a fantastic working relationship with Kostya. We worked together in Holland and then I managed to bring him to England with me. “Very often I fall out with people who don’t work hard but I have never fallen out with those who work as hard as Kostya.”

Professor Novoselov said: “I was really shocked when I heard the news and my first thought was to go to the lab and tell the team. “We have had a fantastic seven years working together on this new material graphene. The University is well suited to this style of research - we have excellent facilities. “It’s great to be a young academic at The University of Manchester and I’m grateful to everyone who has collaborated with us.”

Since its discovery, Professors Geim and Novoselov have published numerous research papers in prestigious journals such as Science and Nature, which have demonstrated the exquisite new physics for the material and its potential in novel applications such as ultrafast transistors just one
At the centre of the world’s media

A media throng descended on the University when the news of our double Nobel Prize winners was announced.

From 10.45am on Tuesday 5th October – when the news was announced – every phone in the University’s Media Relations Office rang off the hook for two days straight.

The Media Relations team dealt with more than 1,000 calls and emails, from all over the world, resulting in some excellent coverage for the University – including BBC News at 10, national and international newspapers including the Times and USA Today, and TV and radio stations across the globe.

In total, around 1,500 media outlets mentioned or covered the story worldwide.

Professors Andre Geim and Konstantin Novoselov calmly and patiently dealt with every media request which was put to them, and gave some excellent quotes and information.

Dozens of requests came through from Russia – birthplace of both of the Professors – and Russian TV crews were seen dashing around the campus for a week.

The news that the two latest winners took our number of Nobel Laureates to four was also given some excellent coverage, the highlight of which was a double page spread in The Independent with the headline: “Manchester: Britain’s Greatest University?”

atom thick – making it a potential successor to silicon – and sensors that can detect just a single molecule of a toxic gas.

A team of materials scientists and physicists from Manchester recently reported that graphene has the potential to replace carbon fibres in high performance materials which are used to build aircraft.

University of Manchester President and Vice-Chancellor Nancy Rothwell said: “This is a wonderful example of a fundamental discovery based on scientific curiosity with major practical, social and economic benefits for society.”
University researcher Dr Joanna Baines has curated the first ever exhibition on the history of Manchester’s world famous cancer centre The Christie. Mancunian actor David Threlfall provided the voiceover for one of its most dramatic episodes – W. J. Meredith’s account of his team’s wartime radon production in the Blue John Mine at Castleton, Derbyshire.

Concerned about radioactive contamination, the government decreed in 1939 that all radium should be moved out of major urban areas. “Mine Kampf or What I did in the War” is Chief Physicist Meredith’s account of the challenges he and other Christie workers faced when transporting the radium and rigging up a radon extraction plant in a cave 100 feet below the tunnel entrance. Despite problems with a lack of electricity, unreliable generators, frosts and snow, The Christie was the only cancer hospital in Britain to continue cancer treatment throughout the war, missing just 14 days overall.

Threlfall – a distinguished actor now best known for his portrayal of infamously feckless father Frank Gallagher in Channel 4’s ‘Shameless’ – has been a long-time supporter of The Christie.

“The Christie has such a phenomenal reputation around the world and we’re so lucky to have it here in Manchester. Its history is incredibly impressive with so many world-firsts and this exhibition will give a real insight into some of those milestones,” Threlfall said.

Dr Baines would still like to hear from anyone with memories of the hospital and hopes her study will give an insight into the centre’s development since it opened in 1901. She can be contacted on 0161 275 0562 or joanna.baines-2@manchester.ac.uk

Shameless star narrates extraordinary episode in Christie history

New recycling facilities for halls

A joint project between the University and Manchester City Council will see over 8,000 students get brand new recycling facilities at their halls of residence.

The scheme will deliver blue recycling bins for paper, newspapers, magazines, cardboard and drinks cartons and brown recycling bins for glass bottles and jars, food tins, drinks cans, aerosols, plastic bottles and silver foil. The new facilities will be placed next to every domestic waste bin to encourage residents to recycle.

Recycling bags will also be made available for kitchens to encourage students to take waste outside to the recycling bins instead of throwing it into landfill bins.

Al Clark the Environmental Officer for halls of residence at the University said: “This is a fantastic scheme which will encourage more students to recycle as easily as possible, which will cut down on the amount of waste students produce that is thrown into landfill.”

Graduate rocks in Delhi

Mike Rock, who graduated from the University in the summer, won a silver medal at the Commonwealth Games, finishing second in the men’s 200m Butterfly final.

Rock said: “It’s been a great year in two ways, I’ve finished my law degree and I’ve managed to put in a great performance at a major meeting.”

Manchester team wins major EU biofuels grant

The EU has agreed to fund a project to develop photosynthetic microorganisms that directly convert solar power and carbon dioxide into engine-ready fuel.

The DirectFuel project – involving the University and eight partner institutions – will produce propane, a non-toxic, end product that is volatile at room temperature, easily liquefied and which has an existing distribution infrastructure.

New arrival at the Dalton Nuclear Institute

Professor Bob Ainsworth FRS, internationally recognised for his contribution to the development of structural integrity assessment procedures for nuclear plants, is to join the University. Professor Ainsworth will begin work as the BNFL professor of structural integrity early in 2011 following his planned retirement from his role as research coordinator at EDF Energy.

Booker Prize 2010

Manchester-born novelist Howard Jacobson won the Booker Prize for his comic novel, The Finkler Question. Jacobson is a regular visitor to the University’s Centre for New Writing.

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Scientists, builders and architects gathered at Jodrell Bank to celebrate the start of the development of a new ‘Live Science’ Discovery Centre.

Jodrell Bank founder, Sir Bernard Lovell (pictured right), officially got the project underway at a private ceremony at the building site.

The centre, which is set to attract thousands of extra visitors to the observatory every year, includes a new entrance building – the Planet Pavilion – and a new Space Pavilion for exhibitions and events.

The project also includes a glass-walled café with spectacular views of the iconic Lovell telescope, an education space and landscaping of the Arboretum to create a new Galaxy Maze.

Its main aim is to inspire young scientists and connect them to cutting-edge research as it happens. The new centre is set to launch in summer 2011.

Sir Bernard said: “I am delighted that this project is going ahead. Jodrell Bank has always been an icon of UK science and has the power to inspire the scientists of the future.

“In these challenging times, investment in science is key to securing the future of our nation. This project will make a great contribution to that future.”

Work starts on new era for Jodrell Bank

Aircraft software puts greener, quieter flights on the horizon

A collection of poems, by Professor Emeritus Raymond Leonard, 17 years in the making, is set to be published this month.

‘Pearls along the Path: What the Poet told the Professor’ is a collection of 90 poems on a wide variety of themes from diesel engines to professors.

Having joined UMIST as a Lecturer in the Department of Mechanical Engineering in 1971, Professor Leonard founded the Department of Total Technology in 1977 which won the 1998 Queen’s Prize for its collaborations with industry.

Lifelong fascinations have been science, religion and the future. These interests were combined for a series of novels, published in the 1980s, whose titles included, The Nostromadus Inheritance, OMega, and Legacy of the Shroud.

The entire collection of poems can be downloaded online at: www.raymondelonard.com

The ISBN is 1453839461.
Nobel visit
Nobel Laureate Seamus Heaney visited the Whitworth Hall during the Manchester Literary Festival to speak about his life and work. The reading, which was organised by the Centre for New Writing, celebrated the launch of Heaney’s twelfth collection of poems *Human Chain*.

Manchester rules science top ten
The University of Manchester dominates a new guide to the 100 most important people in British science, with three academics listed in the top ten.

Eureka, The Times’ monthly science magazine, celebrated its first anniversary with the inaugural Eureka 100 - a list of the most important contemporary figures in British science.

Professor Sir John Sulston, Nobel Laureate and architect of the Human Genome Project, was at number six; Professor Andre Geim, who won the Nobel Prize for physics in October, was at number nine and neuroscientist Professor Dame Nancy Rothwell, President and Vice-Chancellor of The University of Manchester, completed the top ten.

The University is also represented elsewhere in the list by Professor Brian Cox, particle physicist and broadcaster, who is listed at number 22.

The Top 100 was headed by Paul Nurse, President-elect of the Royal Society.

Mexican symposium
The Faculty of Engineering and Physical Sciences recently hosted the 13th Symposium of Mexican Students in the UK. The event was opened by Professor Colin Bailey, Vice-President and Dean of the Faculty of Engineering and Physical Sciences.

Student’s art strikes a ‘cord’ with clinic staff
University of Manchester researchers in the Maternal and Fetal Health Research Centre based at St Mary’s Hospital played host to local youngsters interested in learning about the centre’s work.

The students from Manchester Health Academy in Wythenshawe were told about research within the Placenta Clinic looking at fetal growth restriction or FGR, a condition that can lead to complications in childbirth.

Back in the classroom, the pupils were tasked with creating a piece of artwork depicting what they had learned about the work of the clinic during their visit. The artwork was recently put on display in the foyer of St Mary’s Hospital.

Suzanne Thomas, a research midwife who runs the Placenta Clinic with Dr Ed Johnstone, said: “The placenta is key to both maternal and fetal health and is the focus of our research and clinical work, so the winning piece of art had to reflect this.”

Staff at the clinic eventually plumped for a piece of art by Andiswa Mayo (15), pictured above with Dr Johnstone, which they said was “beautifully drawn” and “accurately portrayed the physiology of the placenta”.

Bradbury hosts enterprise event
The third annual Research to Enterprise Summit attracted more than 500 research staff and students from all Faculties across the University. The event, hosted by BBC presenter Julia Bradbury, was aimed at encouraging researchers at the University to be more enterprising.

Guest speakers included Dr Joanne Tippett from the School of the Environment, Professor Richard Walmsley from Gentronix, music industry expert Pete Waterman and entrepreneur Tim Campbell, winner of TV’s “The Apprentice.”
Cancer is a modern, man-made disease caused by environmental factors such as pollution and diet, a study by University scientists has strongly suggested.

The study of remains and literature from ancient Egypt and Greece and earlier periods – carried out at Manchester's KNH Centre for Biomedical Egyptology and published in *Nature* – includes the first histological diagnosis of cancer in an Egyptian mummy.

Finding only one case of the disease in the investigation of hundreds of Egyptian mummies, with few references to cancer in literary evidence, proves that cancer was extremely rare in antiquity. The disease rate has risen massively since the Industrial Revolution, in particular childhood cancer – proving that the rise is not simply due to people living longer.

Professor Rosalie David, pictured, from the Faculty of Life Sciences, said: “In industrialised societies, cancer is second only to cardiovascular disease as a cause of death. But in ancient times, it was extremely rare. There is nothing in the natural environment that can cause cancer. So it has to be a man-made disease, down to pollution and changes to our diet and lifestyle.”

She added: “The important thing about our study is that it gives a historical perspective to this disease. We can make very clear statements on the cancer rates in societies because we have a full overview. We have looked at millennia, not one hundred years, and have masses of data.”

New parenting study aims to help kids with asthma

A successful parenting programme that has previously helped children with behavioural problems is being expanded to see if it can also help improve the lives of youngsters with asthma.

The research, by clinical psychologists at the University, is based on findings that over-protective or overly lenient parenting can make asthma worse.

The study will provide 120 parents of children with asthma with information and guidance on how to manage bad behaviour when it happens and how to prevent problems with asthma and not to fall into ‘parenting traps’. Lead researcher Dr Sally Clarke said: “A parenting trap is, for example, letting a child throw a tantrum in a supermarket just because they are unwell.

“This can teach the child to act sick even when they are well and encourage them to use their illness to get out of things they don’t want to do.”

The research team is using a parenting programme recommended by the National Institute for Health and Clinical Excellence (NICE) called ‘Triple P’, which stands for Positive Parenting Programme.

Triple P, which has previously improved the lives of children with behavioural problems and young people with learning disabilities, is being developed specifically for use with children with asthma.

“Triple P is an excellent programme that has already helped improve the lives of many families,” said Dr Clarke. “This new study will test whether the same principles can also improve the quality of life of children with asthma and their families.”

War reporting not all bad news

A new book entitled ‘Pockets of Resistance’ has praised the way UK newspapers and broadcasters report war and conflict but says that more could be done to ensure that critics of the government line are given a voice in the mainstream news media.

The book, which was compiled by social scientists at The Universities of Manchester, Liverpool and Leeds, focuses mainly on the Iraq war and singled out Channel Four News as being the most likely TV news channel to produce coverage that was largely independent of the official government line.

However, the British press continues to display an admirably wide range of coverage which includes a strongly anti-war element, the authors found.

“Our study has shown that some parts of the UK media can be proud of their record on war reporting,” said project leader Dr Piers Robinson from the University’s School of Social Sciences.

“Its vibrancy is down to a culture of independent thinking, professional autonomy as well as the nationally-based, commercial and highly competitive nature of its press. In part because it is partisan and opinionated, there are higher degrees of independent journalism than is often found in other countries, particularly the US.”

The book was funded by the Economic and Social Research Council (ESRC).
Scientists turn stem cells into cells for cartilage repair

Manchester scientists have turned embryonic stem cells into the cells that produce cartilage, which could be used to repair damaged and diseased joints.

The team, based at the University and Central Manchester NHS Foundation Trust, hope this work will lead the way to the use of human embryonic stem cells to provide cheaper and more readily available treatments for joint diseases and that the principles can be developed for other chronic human conditions.

It is estimated that around eight million people in the UK have osteoarthritis and that about one million of these request specialist treatment, which is limited to pain relief and ultimately leads to joint replacement. Sports injuries involving cartilage damage are also increasingly common.

The findings – published in Nature Biotechnology – are the result of collaboration between the North West Embryonic Stem Cell Centre (NWESCC) and Wellcome Trust Centre for Cell Matrix Research (WTCCMR).

Professor Tim Hardingham from the WTCCMR, said: “Current cell treatment for cartilage repair has some success, but involves two surgical operations as it takes tissue from the patient to derive the cells. It is generally best suited to sports injury in younger healthy patients and is relatively expensive.

“Our work could therefore lead to a treatment for cartilage repair that is both easier and cheaper and may be extended to early osteoarthritis patients, but this will take a considerable amount of time for further development.”

Fantastic art find is Chinese puzzle

An album of 20 beautiful 18th century Chinese prints, found by a University of Manchester historian, has been hailed as the UK’s finest example of Qing dynasty art.

The collection of poster-sized prints, discovered at the University’s John Rylands Library, also contains a mysterious unfinished colour painting.

The 250-year-old views of summer palaces, known as ‘Twenty views of the European Palaces in the Garden of Perfect Brightness,’ were found by Dr Yangwen Zheng Research Director at the University’s Centre for Chinese studies while researching material for a new book.

No other complete set of these prints, which may be worth up to half a million pounds, is thought to exist in the UK.

“Enriqueta Rylands purchased these prints for the Library in 1901 and ever since they have been part of the renowned Crawford Collection of over 6,000 manuscripts and books from around the world, however their significance has not been recognised until now,” said Dr Zheng.

Dr Zheng said: “This is a sensational find – and raises our understanding of the importance of the John Rylands Chinese collections immensely. The images are very important as they help to dispel the myth that China was closed to the world in the 17th and 18th centuries. In fact, the Chinese probably knew more about Europe than the Europeans knew about China.”

Living wills warning

Legislation allowing individuals to decide in advance to refuse life-saving treatment presents serious risks in cases of attempted suicide, a leading psychiatrist has warned.

Under the Mental Capacity Act 2005, those aged 18 years or over in England and Wales can legally refuse specified life-saving treatment through what are known as advance directives or ‘living wills’, providing they are capable of making an informed decision when the contract is drawn up.

But writing in the British Medical Journal, Professor Nav Kapur, from the University’s Centre for Suicide Prevention, argues that health workers should be cautious about adhering to advance directives in suicide cases.

“Firstly, it is difficult to be certain about an individual’s capacity at the time of drawing up an advance directive and, although this is an issue with advance directives generally, it may be particularly pertinent for suicidal individuals,” said Professor Kapur.

“Suicidal behaviour is clearly linked to psychiatric disorder, with most people who die by suicide having evidence of a psychiatric illness at the time of death. This can affect decision-making capacity and even the law recognises that advance directives may not apply if a person is likely to be detained under the Mental Health Act.”
UK’s shipping emissions six times higher than expected says new report

Carbon dioxide emissions produced by UK shipping could be up to six times higher than currently calculated, according to new research.

As the shipping industry’s emissions are predicted to continue to grow in the future, the UK will fail to meet its commitment to avoid dangerous climate change if additional cuts are not made to other sectors.

According to the study, the global shipping industry, despite being traditionally viewed as one of the most energy efficient means of transport, releases increasing amounts of harmful emissions into the atmosphere every year.

Indeed, as the rest of the world strives to avoid dangerous climate change, the global shipping industry’s carbon emissions could account for almost all of the world’s emissions by 2050 if current rates of growth – fuelled by globalisation – continue.

Dr Paul Gilbert, Lecturer in Climate Change at the Tyndall Centre for Climate Change Research, said: “Tackling climate change requires urgent emission reductions across all sectors.

“Unfortunately up until now, global efforts to reduce shipping emissions have been slow, and are not keeping up with the pace of growth of the sector.

“This report explores the potential for the UK to take national measures to reduce its share of shipping emissions to complement any future global or EU action.”

Technology is major lifeline for world’s poor

“Digital technology is likely to become a key tool for reducing global poverty and achieving the Millennium Development Goals”, according to a United Nations report launched at the University last month.

The 2010 Information Economy Report from the UN Conference on Trade and Development (UNCTAD) says millions of poor people are finding income-generating opportunities in the ICT sector through the production and use of information and communication technologies.

The Brooks World Poverty Institute and Centre for Development Informatics, both based at the University, hosted Torbjörn Fredriksson, Head of ICT Analysis Section at UNCTAD, who presented the report. He said: “Thanks to the mobile revolution it is becoming possible - for the first time - for poor people to have immediate access to interactive communications.

“In a few years, mobile penetration in the world’s least developed countries has surged from two to 25 subscriptions per 100 inhabitants.”

Professor Richard Heeks, Director of Manchester’s Centre for Development Informatics which also contributed to the report added: “Our calculations show that it will be 2019 before the poorest countries achieve the internet usage rates reached by the richest countries in 2002. That’s a ‘digital lag’ of 17 years, so governments and private firms must work together to improve access.”

Nigeria’s literary talent can make their mark

Nigeria has a thriving literary scene which deserves a larger international audience, a leading African literary figure said at the University last month.

Publisher and novelist Chuma Nwokolo highlighted the start of a University of Manchester project to support creative writing at two Nigerian universities funded through the British Council over one year.

Though Nigeria – and Africa - can boast some the world’s greatest writers, such as Chinua Achebe, Wole Soyinka and Ben Okri it still struggles to make its voice heard internationally, he said.

Chuma Nwokolo said: “There is an explosion of young literary talent in Nigeria and other countries in Africa at the moment. But, because of low levels of literacy and income, there are restricted opportunities to be published in Africa.”

Creative writing lecturer and author Geoff Ryman will join the editorial board of Mr Nwokolo’s magazine - African Writing - where he will oversee a new educational section which promotes the programme.

Geoff Ryman said: “Every country needs to tell its national story. Nations which can’t do that are dependent on others to do it for them – and that’s why literature is so important.”
Mention the Twin Towers to Colin and you’ll find that his expertise has been called upon. He is currently working on the adjacent World Trade Centre 7 which he says “should never have collapsed.”

Suggest almost any of the new iconic high-rise buildings in London – The Pinnacle, The Heron Tower, The Shard, Trinity House – and Colin’s been involved. His students benefit hugely from his up-to-the-minute reports from cities around the world, most recently Madrid. “They need to understand the social responsibilities of engineering,” he says. “Look at the appalling consequences of the WTC collapse – loss of life, war, upheaval.”

To say that he loves his work and is immensely proud of the research and teaching and output of the Faculty of Engineering and Physical Sciences is an understatement. “It’s a fantastic job,” he says. “Fantastic!” is one of his favourite words, whether he’s referring to his PhD in Fire Engineering at Sheffield or his job as Principal Engineer at the Building Research Establishment (BRE). He uses it to refer to his work here as Professor of Structural Engineering and, in rapid progression, Head of Dynamics, Structures and Design, then Head of the School of Mechanical, Aerospace and Civil Engineering, and now Vice-President and Dean of the Faculty. “Fantastic!” he says, and he means it – his bright-eyed enthusiasm and positive drive are infectious.

Remarkably, Colin’s appointment here in 2002 was his first academic appointment. He left his London comprehensive school without A-levels. He worked for a series of engineering firms, as a draughtsman.
and design engineer, whilst determinedly slogging away at gaining qualifications through day-release and night school. "That was really hard," he says. "Whilst my mates might be going to the pub, I was going to night school."

His hard work paid off. He got his ONC and HNC, "Whilst my mates might be going to the pub, I was people coming through with degrees, so he decided going to night school." In 1989, aged 22, he went to Sheffield to study Civil and Structural Engineering – graduating with a First

Deservedly, Colin got a postgraduate award and stayed on at Sheffield to do his PhD, investigating the behaviour of steel-framed buildings subjected to fire. He was inspired by tutors Ian Burgess and Roger Plank, with whom he published the first of his 105 journal papers, conference papers and design books and guides. "It really was fantastic," he says.

After a spell at the Steel Construction Institute, he moved to BRE – "the best job ever until my present one," he says. It was a role he loved, not least because they would build seven-storey buildings and set fire to them. He conducted experimental and theoretical research into all aspects of structural fire design, investigating steel, concrete, timber and masonry.

After four fulfilling years at BRE, it seemed a wrench to move to UMIST in 2002 and yet Colin viewed it as an opportunity not to be missed. "It's a fantastic job," he says. "I love teaching and research and leadership roles. We have wonderful staff and we are undoubtedly one of the very best universities in the world. Our graduates are well-qualified and rounded people, employers are keen to recruit them and we have links with more than 300 companies. So, we contribute hugely to UK plc in our work. If the government cuts affect the universities, they'll be cutting national growth."

As you might expect he's not shy about beating the drum for Manchester. "We don't do enough of it," he says. "It's a fantastic place." He is an enthusiastic communicator and collaborator. He is committed to crossing boundaries within the University to produce top collaborative research. He is also committed to working with international partners, most recently in Mexico and China, who are sending students here despite fierce competition from other leading universities.

He is personable, determined and decisive. He started at Manchester as line manager for a dozen academics. Now, as Dean, he is responsible for 1,910 academic, research and professional service staff and 9,400 students across the Faculty's nine Schools and three Research Institutes. He controls a budget of £192 million. "Quite a job. Fantastic," he adds.

The Faculty of Engineering and Physical Sciences is now established as one of the UK's finest and aims to be one of the top 25 in the world. At present, four of the Faculty's Schools are at 33 and one is at 38 in the Jiao Tong Rankings (the University is at 44). Colin had eight months' run-in as Acting Head and under his management the financial situation in the Faculty went from being in the red to having a healthy surplus. His strategic plan is bold and thorough. "Fortunately, everybody bought into it," he says.

Colin is a family man and is now very settled in Manchester. During his time at Sheffield he met and married his wife, Fiona and two of their three children were born here – Angus (7) and Laurence (5). Their daughter, Flora (9), was a toddler when they made the move here. He admits to one parental lapse – Angus is a Manchester United supporter, whilst Colin traditionally supports Arsenal. Still, perhaps the main thing is that they're both reds, like fire engines.

Name
Professor Colin Bailey

Position
Vice-President and Dean of the Faculty of Engineering and Physical Sciences at The University of Manchester

Education
1992 - 1995 University of Sheffield, postgraduate studies (PhD), investigating the behaviour of steel-framed buildings subjected to fire
1989 - 1992 University of Sheffield, undergraduate studies in Civil and Structural Engineering

Career
2009 – present Vice-President and Dean of the Faculty of Engineering and Physical Sciences, The University of Manchester
2007 – 2009 Head of School of Mechanical, Aerospace and Civil Engineering, The University of Manchester
2004-2007 Head of Dynamics, Structures and Design Academic Interest Group and Head of the Extreme Loading and Design Research Group, The University of Manchester

Professional Affiliations
Fellow of the Institution of Civil Engineers; Chartered Civil Engineer
Member of the Institution of Structural Engineers; Chartered Structural Engineer
Member of the Institution of Fire Engineers; Chartered Fire Engineer
Teaching for tomorrow: Manchester’s approach to technology enhanced learning

Over the past few years Manchester has seen enormous growth in the use of Blackboard to provide enhanced learning opportunities for students.

Blackboard is an advanced online learning environment which provides students with course materials and interactive learning activities to enhance and support the academic experience.

We now have more than 30,000 users registered on a total of 4,500 course units and are seeing over 14,000 logins per day. We are also now beginning to see an increase in the use of online assessments with more than 5,000 candidates taking such exams last session.

Technology enhanced learning is here to stay and embracing the tools and resources of the Web 2.0 revolution will continue to transform the student experience beyond anything we might have imagined only a few years ago.

So why have we invested so much effort in this facet of the learning experience? Our students are increasingly sophisticated users of technology. They have grown up in a world where social media and on-demand information is the norm. They have learnt how to access, synthesise and assimilate content from multiple sources and media types as part of their daily interaction with the world. Bringing this advanced skill set into the learning environment gives our students the opportunity to engage with their academic courses with greater depth and more creativity than ever before.

As our students go out into the world beyond the University they will be working with people all over the world, collaborating with others and sharing their knowledge, ideas and skills. They will need to be flexible ‘multi-taskers’ who can work effectively and efficiently with colleagues wherever they might be. To prepare them for this world we can give them digital collaborative learning opportunities, fully integrated with their course experience, whether they are abroad, in clinics, spending time in industry, or busy on campus through effective use of technology.

Manchester goes mobile!

“We have technology, finally, that for the first time in human history allows people to really maintain rich connections with much larger numbers of people.”

Pierre Omidyar (founder of eBay)

In today’s fast-paced world we are becomingly increasingly sophisticated users of technology expecting on-demand access to the latest news, information and resources whilst on the move. As part of the continuing investment in technology to enhance learning, we have recently launched Blackboard Mobile Learn to enable students to interact with content, instructors and each other via the latest technologies. Using ‘apps’ available for the major smartphones and mobile devices students will soon be able to access course content, contribute to discussions, contact their classmates or tutors and review assignments, grades and feedback.

A further innovation will be the use of Mobile Central to make campus maps, news, events calendars and directories available to mobile users. The ‘maps’ function will be particularly useful to new students, staff and indeed visitors to the campus since it will provide users with directions to their destination.

Learning can be mobile, interactive, collaborative, flexible and creative – and at Manchester it will be.
Feature

Students continue on the road to success

During the last academic year we featured Aaisha and Ashley - two new undergraduates who had progressed to Manchester through the Manchester Access Programme (MAP).

One of the University's goals is to recruit students who will be successful at Manchester regardless of their educational or social background. MAP has been developed to support talented students who are from backgrounds which are currently under represented in higher education.

In the past four years, over 750 students have successfully completed MAP, using it as the springboard for progression to Manchester and other leading universities. This summer we were able to track the success of the very first Manchester 'MAP graduates.' Pleasingly they performed at least as well as others at Manchester in terms of the proportion of first and upper second class degrees.

Now entering their second year of undergraduate study at Manchester, UnLife caught up with Aaisha and Ashley once again, to see how they are getting on.

**Aaisha Akhter: Second year Medicine.**

I really enjoyed my first year at Manchester and got excellent end of year results. I put maximum effort into my revision and enjoyed revising and learning independently.

During the summer I worked as a Student Ambassador on the MAP University Life Conferences. I really enjoyed being in a position of responsibility, guiding a group of students through a Medical and Human Sciences enquiry-based learning task. It was great to facilitate and provide advice to students who were in exactly the same position as I was two years ago!

Now in my second year, I feel a lot more settled in my course and have completely adjusted to problem based learning styles. I most enjoy the practical sessions and talking to patients when on placement, so I’m really looking forward to this year’s hospital placements.

I’m also looking forward to moving out of my parent’s house next year and living with other Medics during the three year work experience placement. I am still very keen to specialise in paediatrics, but it will also be good to gain experience of other specialist areas on the different wards.

**Ashley Wallis: Second year Computer Science**

My first year exams went really well - I achieved first class honors for the year as a whole.

During my first year, I enjoyed every aspect of my degree course, particularly programming in the labs which was really interactive. I found the modules on computer architecture and assembly language programming most interesting, so I’ve chosen to take modules in these areas again this year.

Living in halls really suited me and I received the Hulme Hall Accommodation Bursary last year. This year I’ve decided to stay in halls at Dalton Ellis, which is really convenient and there’s a great social network to tap into.

As a second year student I am already looking for industrial placements for my third year! I’m looking forward to the year in industry as it will give me an insight into future career choice and it will inform my selection of course modules in my final year.

When I graduate I am still planning to go to California and work in Silicon Valley in the area of developing computer hardware - so watch this space!
The Cosm o Rodew ald Concert Hall
The University of Manchester Baroque Orchestra
Fri 3 Dec, 1.10pm, FREE
University of Manchester Concert Hall
The Martin Harris Centre for Music and Drama
Bridgeford Street, Manchester M13 9PL
0161 275 8951/8950
email boxoffice@manchester.ac.uk
www.manchester.ac.uk/mlmartinharriscentre

The Cosm o Rodew ald Concert Hall
University of Manchester String Orchestra and Wind Ensemble
Sat 6 Nov, 7.30pm, £9/£6/£3
The Cosm o Rodew ald Concert Hall
Sun 7 Nov, 7pm, £9/£6/£3
Stockport Youth Orchestra
The Cosm o Rodew ald Concert Hall
Thurs 11 Nov, 1.10pm, FREE
PSAPPHA The University of Manchester’s Contemporary Ensemble in Residence
The Cosm o Rodew ald Concert Hall
Thurs 11 Nov - Fri 12 Nov, 7pm, £5
Drama Independent Production: The Dogstar by Miron Hadzic
The John Thaw Studio Theatre
Fri 12 Nov, 1.10pm, FREE
Quatuor Danel
The Cosm o Rodew ald Concert Hall
Fri 19 Nov, 1.10pm, FREE
Opera Scenes
The Cosm o Rodew ald Concert Hall
Fri 19 Nov, 7.30pm, £12/£8/£3
Quatuor Danel Evening Concert
The Cosm o Rodew ald Concert Hall
Wed 24 Nov - Fri 26 Nov, 7pm, £5/£4.5/£4
Drama Society ‘Autumn Showcase’ Production
The John Thaw Studio Theatre
Thurs 25 Nov, 1.10pm, FREE
London Uyghur Ensemble
The Cosm o Rodew ald Concert Hall
Wed 26 Nov, 1.10pm & 7.30pm, FREE
VAGANZA: The University of Manchester’s New Music Ensemble
The Cosm o Rodew ald Concert Hall
Sat 27 Nov, 7.30pm, £9/£6/£3
Manchester University Wind Orchestra
The Cosm o Rodew ald Concert Hall
Thurs 2 Dec, 1.10pm, FREE
Black Voices
The Cosm o Rodew ald Concert Hall
Fri 3 Dec, 1.10pm, FREE
University of Manchester Baroque Orchestra
The Cosm o Rodew ald Concert Hall
The Martin Harris Centre for Music and Drama
Bridgeford Street, Manchester M13 9PL
0161 275 8951/8950
email boxoffice@manchester.ac.uk
www.manchester.ac.uk/mlmartinharriscentre

Centre for New Writing
Our unique events bring the best-known, contemporary novelists and poets to Manchester to discuss and read from their work. Everyone is welcome, and ticket prices include a complimentary glass of wine or soft drink.
Mon 8 Nov, 6.30pm, £5/£3
Trevor Byrne and Evie Wyld
The John Thaw Studio Theatre
Thurs 18 Nov, 6.30pm, £5/£3
Craig Raine and Peter Sansom
The John Thaw Studio Theatre
Mon 6 Dec, 6.30pm, £7/£5
Martin Amis Public Event
The Cosm o Rodew ald Concert Hall
Website: www.manchester.ac.uk/arts/newwriting
Online journal: www.themanchesterreview.co.uk
The Martin Harris Centre for Music and Drama
Bridgeford Street, Manchester M13 9PL
0161 275 8951/8950
email boxoffice@manchester.ac.uk
www.manchester.ac.uk/mlmartinharriscentre

Gig Guide
MANCHESTER ACADEMY 1, 2 and 3
Mon 1 Nov - £18 Adv
Sum 41 – The Eastpak Antidote Tour
Weds 3 Nov - £15 Adv
Elli Goulding
Thurs 4 Nov - £37.50 Adv
Avenged Sevenfold/Stone Sour
Thurs 11 Nov - £16 Adv
Klaxons
Fri 12 Nov - £23.50 Adv
Goo Goo Dolls
Sat 13 Nov - £20 Adv
Skunk Anansie
Weds 17 Nov - £22.50 Adv
Goldfrapp
Thurs 25 Nov - £22.50 Adv
Underworld
Sat 4 Dec - £15 Adv
The Complete Stone Roses
Sun 5 Dec - £18.50 Adv
Black Rebel Motorcycle Club

International Society
Saturday 9 Oct
Alton Towers - The Ultimate Fireworks Event
Blackpool and the famous Blackpool Illuminations
Saturday 13 Nov
Chatsworth House and Bakewell
Chester
Manchester City Hall
North Wales visiting Caernarfon Castle and Portmeirion Village
Sunday 21 Nov
Peckham House and Barnwell
York
Lake District visiting the Dickensonian Christmas Festival
 Keswick Traditional Christmas Fayre
Opening hours
Mon-Fri 9.30am – 7pm (during term time)
Mon-Fri 9.30am – 5pm (during vacation)
Small World Café opening hours
Mon-Fri 11am – 3pm
327 Oxford Road (next to Krobar)
0161 275 4959
email int.soc@anthechange.ac.uk
www.internationalsociety.org.uk
The Manchester Museum

SPECIAL EXHIBITIONS

Health Rocks opening 8 November 2010
A display of hand-made books featuring artworks made by the participants of the Health Rocks wellbeing project.

CHINA: Journey to the East until 26 June 2011
Explore 3,000 years of Chinese history and culture and encounter artefacts from one of the most important and influential civilisations in world history. A British Museum Tour supported by BP, a CHINA NOW legacy project.

Finding Manchester, Lost in Bolivia until 30 January 2011
Follow Chris Smith and Liz Peel on their amazing four month journey through the Amazon in search of the small South American village of Manchester.

FAMILY ACTIVITIES

Saturday 13 November, 11am-4pm
Big Saturday: Rainforest Adventure
See live frogs, take part in rainforest craft activities and find out about Manchester in Bolivia.

Friday 26 November, 11am-12pm
Magic Carpet: Rainforests
Get comfy on our magic carpet and enjoy rainforest themed stories and activities.

TALKS AND TOURS

Thursday 4 November, 6.30-8pm
Poetic Inspirations
An evening of poetry reading inspired by the Museum’s collection.

Monday 8 November, 12.30-1pm
A History of the World Mini Tour
Unravel the stories behind objects chosen for A History of the World (a British Museum, BBC and museums across the UK partnership).

Wednesday 10 November, 3-4.30pm
We are here because you were there: archaeology and politics in the 19th century and the origins of Cyprus collections in the UK
Showcase Lecture
With Dr Thomas Kiley, Curator of Cyprus collections, Department of Greece and Rome, the British Museum.

Saturday 13 November, 10am-4.30pm
Day School: The Material Culture of China
Explore the many ways in which China has been represented in museums, listen to expert speakers and handle museum objects.

Tuesday 16 November, 12.45-1.30pm
Chinese movies
Learn two Chinese characters and one useful Chinese phrase or sentence. Part of the Museum’s series of talks by The Confucius Institute.

Find out more about events in the Museum at www.manchester.ac.uk/museum

Opening hours
Open: Tues-Sat 10am - 5pm
Sun-Mon (and Bank Holidays) 11am - 4pm
FREE Admissions

The Manchester Museum
Oxford Road, Manchester
0161 275 2634
www.manchester.ac.uk/museum

John Rylands Library (Deansgate)

EXHIBITIONS

Elizabeth Gaskell: A Connected Life
until 28 November.
An exhibition marking the bicentenary of the renowned Victorian novelist, Elizabeth Gaskell.

Wed 10 Nov, 12-12.45pm, £3
Curator Tour and Close-up
Join the curator of A Connected Life for a tour of the exhibition and discuss Elizabeth Gaskell’s life and works. Booking recommended.

Sat 27 Nov, 11am-4pm, FREE
Christmas at Cranford – a Family Fun Day
A day of creative fun for all the family – make Victorian Christmas decorations, cards and presents using the Library’s collections as inspiration. All welcome, no need to book

Public opening hours
Mon 12-5pm, Tues-Sat 10am-5pm, Sun 12pm-5pm
Reader opening hours
Mon-Wed 10am-5pm, Thurs 10am-7pm, Fri-Sat 10am-5pm
FREE ADMISSION

The John Rylands Library
150 Deansgate, Manchester, M3 3EH
0161 306 0555
email jrl.visitors@manchester.ac.uk
www.manchester.ac.uk/library

Jodrell Bank

Jodrell Bank is going through an exciting period of change with a new visitor centre development and is due to re open in the summer 2011. During the interim period, visitors will be welcomed at a temporary reception area located in the Environmental Discovery Centre. There will be limited facilities and no café. Visitors will have access to the Gardens and Telescope Observation Pathway. Opening times are 11am – 4pm and admission is free. For all development updates please visit our website.

Jodrell Bank Observatory Visitor Centre
Macclesfield, Cheshire, SK11 9DL
01477 571339
www.manchester.ac.uk/jodrellbank/viscen

The Whitworth Art Gallery

EXHIBITIONS

Intuition
until 9 Jan 2011. A first look at highlights from The Musgrave Kinley Outsider Art Collection.

Walls Are Talking: Repeating Patterns
until 16 Jan 2011. As well as featuring typical ‘girls’ and ‘boys’ wallpapers, the display includes many one-off or limited edition artworks.

The Land Between Us: Place, Power and Dislocation
until 23 Jan 2011. This radical approach to landscape art presents historic and modern works together, and on equal terms, to explore nature, habitation, territorial power and culture.

Unstable States: John Ruskin and the Truth of Water
until 23 Jan 2011. Drawing on John Ruskin’s precise observations in his book Modern Painters (1843), this display investigates how artists from Van de Velde to Turner have captured the ‘unstable states’ of water.

1st Saturday of the month, 11-1pm (Textiles), 2-4pm (Life Drawing), £5

Serious About Art
Monthly textiles and life drawing workshops to learn new skills, sharpen up old ones and meet like-minded people.

3rd Saturday of the month, 10.30-1pm, £3

Alternative Camera Club
Breaking the mould on conventional camera clubs, this workshop moves away from stale discussion of technique and concentrates on a considered, conceptual approach to photography.

3rd Saturday of the month, 2-4pm, £3

Crafternoon Tea
Enjoy a cuppa and try your hand at art and craft techniques.

Free Events
We offer a range of FREE family workshops and events. Please visit our website for details.

The Whitworth Art Gallery
Oxford Road, Manchester
0161 275 7450
email whitworth@manchester.ac.uk
www.manchester.ac.uk/whitworth
Nearly 1,800 students applied to take part in this year's Manchester Leadership Programme (MLP) and the 1,200 available places have been quickly snapped up.

Significant rises in registrations were seen in the Faculty of Medical and Human Sciences. The School of Pharmacy and Pharmaceutical Sciences has introduced the MLP into the MPharm degree and 90 students, will be allocated to the programme. One of the primary drivers for the School’s decision to bring the MLP into its course was feedback from regional employers who suggested that students would benefit from the development of ‘softer’ skills. The School of Dentistry has made the MLP compulsory for all 79 of its third year students.

In the Faculty of Engineering and Physical Sciences, a record 100 places have been allocated to second year students in the School of Chemical Engineering and Analytical Sciences, and significant rises were seen in the School of Materials and the School of Mathematics. Welcoming the increase in numbers, Dr Louise Walker, Director of Undergraduate Studies, School of Mathematics, said: “The MLP is an excellent way for our students to develop skills and gain experience outside their subject area.”

The programme remains popular with students in the Faculty of Humanities. MBS and the School of Social Sciences each have over 100 students registered on the programme and there have been big increases in registrations from the School of Environment and Development and the School of Languages, Linguistics and Cultures.

128 students from the Faculty of Life Sciences are also registered on the MLP. Most are taking the MLP’s Leadership in Action unit for ten credits, but the 20 credit unit has always proved popular with optometry students.

The MLP continues to attract large numbers of international students. Over 36% of students on this year’s programme are non-UK with the strongest representations coming from China, India, USA, Bulgaria and Romania.

Jane Ratchford, Director of the MLP, Careers and Employability Division said: "Students representing every Faculty and School and from over 70 countries are taking part in the MLP; a diversity which undoubtedly enriches our students’ learning experience. We are very grateful to the many University colleagues who support the MLP and promote it to their students.”

The keynote address at the first MLP session was given by Professor Rod Coombs, Deputy President and Deputy Vice-Chancellor. In a packed lecture theatre of over 500 students, Professor Coombs encouraged the students to think about the role they could play in helping to address the diverse global challenges facing 21st century society.
From a small meeting to a large formal sit down dinner, Taste Manchester can provide a catering solution to meet your needs.

We deliver refreshments, snacks, lunches, buffets, dinners and much more for you to enjoy at any location around campus and Manchester City Centre. Visit www.tastemcr.com to view the fantastic selection of menus, designed and produced by our Executive Head Chef using local, ethically sourced and Fairtrade produce wherever possible.

www.tastemcr.com

BARNES WALLIS SUITE, SACKVILLE STREET

CHRISTMAS PARTY PACKAGE 2010

The perfect city centre location for the perfect party!

The Barnes Wallis Suite can cater for large groups of up to 450 as well as smaller, more intimate parties of up to 120 in the Harwood Room. Both rooms have their own Private Bars and offer very competitive drinks prices! Early evening ‘after office’ parties, with a light finger buffet are also available.

Whatever your requirements, we can tailor a package to suit your individual needs.

For more information please contact: Linda Wild on 0161 306 4083 or at linda.wild@manchester.ac.uk
China has been a major influence on many parts of the world through trade and the movement of peoples. Its culture and 3,000 year history are explored in a major new exhibition *China: Journey to the East* at The Manchester Museum.

On tour from the British Museum the exhibition examines themes of play, technology, belief and festivals, food and drink, and language and writing. From the world’s earliest porcelain to shadow puppets, picnics and Coca Cola to afterlife, jam tarts and a pillow wishing everlasting peace, *China: Journey to the East* combines fantastic objects from the British Museum with stories from one of the world’s fastest growing economies.

Complementing the displays are a selection of journal extracts and video footage of modern day Wuhan, Manchester’s sister city in China, taken from Curator of Living Cultures, Stephen Welsh’s own visit to Wuhan. Manchester also has its own thriving Chinese community and the city is home to the first true Imperial Chinese arch erected in Europe.

Commenting on the exhibition, Stephen Welsh said: “*China: Journey to the East* presented us with the perfect opportunity to explore links with our colleagues at Wuhan Municipal Museum. It’s easy to see why the cities are sisters as they are both right in the centre of their respective countries, have a long industrial tradition and an umbrella is absolutely essential in both cities when you’re out and about. We all hope that the cultural bonds between the two cities will grow and flourish over years to come.”

Throughout the exhibition, special family activities will mark major events in the Chinese calendar, including Chinese New Year. A programme of talks organised in partnership with the Confucius Institute also complements the exhibition.

*China: Journey to the East* is a British Museum Tour supported by BP, a CHINA NOW legacy project. It will be on display at The Manchester Museum until 26 June 2011.