Manchester’s £38 million boost for graphene
Message from the President

This month the President and Vice-Chancellor takes a closer look at how our University is managed and regulated.

I am often asked how the University is managed; who has overall control; and where does the ultimate responsibility reside? 

The simple answer is that I, as President and Vice-Chancellor, am the chief executive officer and principal academic and administrative officer of the University, and have responsibility for the executive management of the University, and for its day-to-day direction.

I am accountable to the University’s Board of Governors for the exercise of these responsibilities, and to the Higher Education Funding Council for England (HEFCE) for the use of the public funds received by the University.

I have accountability for our strategic plan and its delivery, as well as our finances - I’m afraid that it is me who goes to prison if we face bankruptcy, or major criminal offences!

Of course, in reality, leadership of the University is shared with our excellent senior management team.

The other key bodies are Senate, as the academic authority in the University, and our Board of Governors. I hope that the work of Senate is reasonably well known to many of our staff, so here I will focus on our Board.

Our Board of Governors carries the ultimate responsibility for the University’s strategic direction and governance, but in line with good practice in governance of a public body, it does this by assuring itself that this work is being carried out on its behalf by the officers of the University.

Our Board operates in much the same way as boards of companies work (and I am a member of one). It provides oversight; contributes to strategy; checks; takes a broader view of the University; and gives invaluable advice to our senior staff. It is the Board of Governors which appointed me, and which holds me to account as President and Vice-Chancellor. In addition, the Board is responsible to our key regulator, HEFCE, which oversees our operation as a charity on behalf of the Charities Commission.

The Board comprises eleven members of our staff, elected from Senate and from each part of the University, and fourteen ‘lay members’, one of which is nominated by our alumni association.

We are required to have lay members, who are not employees of the University, to comply with our status as a public body in receipt of public funds, and to ensure objectivity and independence.

Lay members bring expertise in finance, business, government, law, education, communication, marketing and much more. They are chosen carefully by an independent Nominations Committee, chaired by an individual who is not a member of the Board.

In addition to both lay and staff Board members, the Nominations Committee comprises members of the General Assembly. This is a body which is much larger than the Board, 200+ members, and serves as an important interface between the University and the wider community.

The General Secretary of The University of Manchester Students’ Union (currently Letty Newton) and I, as President and Vice-Chancellor, are both ex-officio members. The Registrar, Secretary and Chief Operating Officer, Will Spinks, is ‘Secretary’ (i.e. clerk) to the Board, and oversees the operation and effective conduct of the Board.

The Chair of the Board is Anil Ruia. He is appointed from the lay members and plays a very important role, as he is responsible for its leadership and is accountable to all stakeholders for its effectiveness. Anil and I meet regularly to discuss all matters that are important to the University. Anil’s Deputy, Gillian Easson, also plays a major role in oversight of the University.

The Board meets formally five times a year, and attends a two-day planning conference each year in March, and many other informal briefing meetings and visits to parts of the University.

There are several other Board committees, most notably Finance, and Audit, each chaired by a lay member. These committees act as independent assessors of our practises and our position, and give assurance to the Board, and to our regulators, about the effectiveness of the management of the University.

We also have Board committees which consider staffing matters; an Investment Committee; a Subsidiary Undertakings Committee (which looks at our subsidiary companies like Manchester University Press and spin-out companies); and the Nominations Committee mentioned above.

Our Board of Governors performs an extremely important role in the University – not least because they hold me to account for all major decisions and actions.

All members act without recompense. Our lay members are all highly successful in their own careers, yet give up their time pro bono for the University, while the staff members take on the duties of a Board member on top of their normal University duties. We owe them all a great debt of gratitude.

I hope that this gives some insight into the leadership, management and governance of the University. If you want more details on this topic please see:

www.manchester.ac.uk/aboutus/governance
The University has been invited to be the sole bidder for a £38 million Government fund to set up a world-class National Graphene Institute.

A pot of £50 million was made available by the Treasury for research into the wonder material, the remarkable properties of which were demonstrated by Professors Andre Geim and Kostya Novoselov in 2004 – earning them the 2010 Nobel Prize in Physics.

The University has been invited to submit proposals for £38 million, which will form a large part of the £45 million Institute.

The investment will help establish the UK as a graphene research and technology hub, funded through the Engineering and Physical Sciences Research Council (EPSRC) and the Technology Strategy Board (TSB), that will lead to the rapid commercialisation of graphene technologies in the UK.

The National Graphene Institute will offer access to specialist facilities and equipment which will enable the simulation of manufacturing processes.

Over the last few weeks more of graphene’s remarkable potential has been revealed.

Researchers have found that graphene is superperm eable with respect to water and could even be used for distilling alcohol. The researchers sealed a bottle of vodka with graphene-based membranes and found that the distilled solution became stronger and stronger with time.

And its bid to become a replacement for silicon has taken a huge step forward. Graphene was thought too conductive to be used with computer chips but using graphene vertically and combining it with other chemical compounds reduces its conductivity.

...and it gets the Royal seal of approval

Manchester’s graphene success story was given the Royal seal of approval when His Royal Highness The Duke of York visited the University.

HRH Prince Andrew met Professors Andre Geim and Kostya Novoselov and their research team.

He also visited the University’s joint technology transfer company with the University of Edinburgh and University College London, UMI®, and NanoCo, a University spin-out which grew from a proof-of-principle project to a £100 million plus stock-market listed company in five years.
News in brief

Further funds for new unit

The Department of Health has awarded £1.27 million to a unit that will pioneer new ways of assessing early response to treatment in adults and children with musculoskeletal disorders, including all forms of arthritis.

The funding, which comes on top of a £5 million National Institute for Health Research grant to set up the NIHR Manchester Musculoskeletal Biomedical Research Unit, will help pay for vital research equipment.

Unit head Professor Deborah Symonds (pictured above) said: “Our work will ensure that patients get the right treatment for them, from the earliest weeks of disease.”

Tutankhamen’s curse...celebrity

The dramatic discovery of Tutankhamen’s tomb 90 years ago this year, is well known.

But in her new book, ‘Tutankhamen’s Curse’, Dr Joyce Tyldesley reveals the young King’s true curse was his celebrity.

Dr Tyldesley, who teaches Egyptology online at the Faculty of Life Sciences and is Honorary Research Associate at The Manchester Museum, says: “Egyptologists avoid Tutankhamen because he is too popular – there are lots of books but not many of them are rigorous academic works – and I think this is unfair. It’s not his fault he became a celebrity.”

News

Government role for President

The Prime Minister David Cameron has appointed Professor Dame Nancy Rothwell, the President and Vice-Chancellor of the University, to the Council for Science and Technology (CST) as its new Co-Chair.

The Council’s remit is to advise the Prime Minister on strategic science and technology policy issues that cut across the responsibilities of individual government departments and are of strategic importance, taking a medium to longer term approach.

The Prime Minister said: “The UK’s outstanding research base together with its strong entrepreneurship gives it immense potential as an innovation economy. Nancy Rothwell’s understanding of science and its relationship to business will enhance the Council’s high calibre expertise and ensure that science and technology continues to drive UK growth.”

Dame Nancy said: “I am honoured to be invited to take up this important position and look forward to working with the CST.”

Portrait honours Sir Terry

Former Co-Chancellor Sir Terry Leahy was honoured by Manchester Business School (MBS) when he unveiled a portrait, painted by North West artist Stephen Ashurst.

Donated to MBS by Mo and Brian Clancy, the portrait celebrates his time as a student at MBS, continued contribution to the development of business education within the UK and his legacy to the retail sector as former Chief Executive of Tesco.

MBS Dean Professor Michael Luger said: “As an organisation rooted in original thinking we are thrilled to recognise Sir Terry’s achievements and business acumen in this way.”
Massacre survivor has arm saved by doctors

A Congolese aid worker who survived a massacre in which seven of his colleagues were killed has had his arm rebuilt in the UK thanks to the plea of a University academic.

Pastor Antoine Munyiginya was travelling with co-workers when their vehicle was ambushed on route to the town of Minembwe in October last year.

Antoine, left for dead after the attack, had been shot three times in the arm.

The acclaimed programme he worked for trains teachers and builds schools, using theatre workshops to role play issues of violence, reconciliation and attitudes to women.

James Thompson, a Professor of Drama and Director of ‘In Place of War’ – which researches theatre and performance in sites of armed conflict – has worked with the team in the Congo.

After visiting Antoine in hospital in neighbouring Burundi, Professor Thompson arranged through Professor Tony Redmond and colleagues in the University’s Humanitarian and Conflict Response Institute, for him to be treated in the Alexandra Hospital in Cheadle.

Since arriving in Manchester last November, Antoine has been living with Professor Thompson and his family.

Professor Thompson said: “We are delighted to have the opportunity to host Antoine who is a remarkable man.

“He has been through an appalling tragedy, but I’m delighted by the response of our friends, neighbours and colleagues, who have been so supportive.”

Two surgeons, Waseem Saeed and Adam Watts, performed a seven-hour operation to ensure the charity worker would be able to use his right arm again.

Small is beautiful

PhD students showed the public how small is beautiful at their ‘Meet the Nanoscientist’ event at the Museum of Science and Industry (MOSI). Nanoscientists carry out research at an atomic or molecular level.

The ten students, from the Northwest Nanoscience (NovNano) Doctoral Training Centre, developed a range of activities which included making Manchester's ultra thin wonder material graphene.

To see podcasts taken at the event visit:


News in brief

Director appointed for inflammation research centre

The University, GlaxoSmithKline (GSK) and AstraZeneca have appointed Professor Tracy Hussell (pictured above) as Director of the new Manchester Collaborative Centre for Inflammation Research (MCCIR).

The MCCIR is a unique collaboration to establish a world-leading translational centre for inflammatory diseases with an initial investment of £5 million from each partner over a three year period.

Professor Hussell is currently Professor of Inflammatory Disease at the National Heart and Lung Institute at Imperial College London.

Professor Hussell said: “This new centre provides a unique opportunity, working not only with the University’s academic and medical resources but also with the pharmaceutical industry. I am very proud to have been chosen to lead the centre and, naturally, I am hugely excited by the prospect of guiding it into a world leading institution for translational research and innovation.”

Ferguson appointed key advisor to Irish PM

Mark Ferguson (pictured above), Honorary Professor in the Faculty of Life Sciences and former Dean, has been appointed Director General of Science Foundation Ireland (SFI).

The Director General of SFI plays a leading role in the formulation and implementation of science policy in Ireland, is a key advisor to the Taoiseach (Prime Minister) and other Ministers, and manages the agency’s operations and investments to ensure that Ireland continues to be a competitive location for knowledge based enterprise.
Manchester was a stone’s throw away from a brave new world of helipads, boulevards, tunnels and moving pavements, according to plans unearthed by researchers.

A remarkable collection of architects’ drawings, maps and other exhibits - many of which have never before been seen by the public - are on show at a special exhibition.

Curated by the University’s Dr Martin Dodge and Manchester Metropolitan University’s Richard Brook, it shows how the urban motorway, known as the Mancunian Way and completed in 1967, was originally part of 1945 plans for four ring roads and an array of radial ‘boulevards’.

The plans would have wiped out large parts of the Victorian city and transformed it into an unrecognisable landscape of highways in the sky.

Plans for a helipad on top of Victoria train station, intended as a hub for inter-city helicopter flights, were published in 1956.

A railway tunnel connecting Piccadilly to Victoria stations, though eventually dropped, was given parliamentary approval in 1972 - with the new stations to be built underground, including one below Albert Square and the Town Hall, along with moving pavements connecting Oxford Road station and Piccadilly Gardens.

Six miles of secret tunnels under Manchester’s China Town were built to protect the city’s vital telephone system against atomic bombs during the Cold War.

Dr Martin Dodge said: “The exhibition is about giving the public more knowledge about their city.”

Infra_MANC can be seen at the CUBE and RIBA hub on Portland Street, Manchester, until 23 March.
A former trainee corporate lawyer who spent three months in a coma is finally see her novel in print after completely forgetting she had written it.

Now a Master’s student at the University, Alexandra Singer suffers from long-term memory loss following a near fatal attack of cerebral lupus in 2008.

Her brother Joshua had discovered the notes to her novel while clearing out her London flat. Twenty-nine-year-old Alex spent much of the following two years in hospital teaching herself to write again to work on the book.

And after defying the odds, ‘Tea at the Grand Tazi’ is published by Legend Press next month.

She had been told by doctors she might never be able to walk again, and spent months fighting paralysis, breathing through a tracheotomy tube.

Even today, she still relies on a wheelchair to a large extent, although with intensive physiotherapy her mobility is improving.

Alex, studying Health Care Law and Ethics at the School of Law, said: “My experience was horrendous: the doctors thought I would be brain damaged and for six months I was paralysed and couldn’t speak. But the book helped me to pull through. “I am so lucky to have such a supportive family and to have an amazing University on my doorstep. They thought I was going to die but have supported me in every way.”
Culture is a shot in the arm

The University’s cultural partners and Central Manchester University Hospitals NHS Trust joined forces to link arts and minds last month.

‘Culture Shots’ – involving The Whitworth Art Gallery, The Manchester Museum and Manchester Art Gallery – was a series of taster and handling sessions, lectures, workshops and performances for staff and patients at Manchester Royal Infirmary; Central Manchester Children’s Hospital; St Mary’s Hospital; Manchester Royal Eye Hospital and the University Dental Hospital of Manchester.

Sessions included practical painting and craft making, talks by museum experts and gallery curators, and even a rare opportunity to view and handle some of The Manchester Museum’s collection of live reptiles and amphibians.

Wendy Gallagher, Arts and Health Programme Manager at The Whitworth Gallery and The Manchester Museum, said: “There are 10,000 staff who work at the hospital sites and it was an opportunity for them to access creative arts, which have benefits for health and wellbeing, as well as the patients.”

City slicker with a head for business

Manchester City captain Vincent Kompany is studying for a Global MBA at the Manchester Business School.

The 25-year-old defender, whose team has enjoyed one of its best seasons under his captaincy, is described as “multilingual and multi-talented” on the club’s website.

Professor Michael Luger, Dean of Manchester Business School, said: “We’re delighted that Vincent has joined our part-time Global MBA.

“The intensive three-year programme stretches our MBAs both intellectually and practically – it’s designed to take even the best strategic thinkers out of their comfort zone and attracts successful delegates from across the world.”

Call for Clegg to abandon Lords reform

One of the country’s leading constitutional experts launched a strong attack on the Deputy Prime Minister’s Lords Reform Bill, by arguing it is unworkable and should be abandoned.

Rodney Brazier, a Professor of Constitutional Law, told an audience of students that the current system maintains a “perfectly sensible” balance between representative and non-elected chambers.

“If I had been commissioned to write a Lords Reform Bill designed to be as unattractive to Parliament as possible, Mr Clegg’s draft Bill is more or less the text I would have devised,” he said.

Though Professor Brazier criticises the Bill, he does not rule out reform altogether, arguing for an independent appointments commission and for giving the House powers to remove members who have broken the law.
A spectacular plesiosaur fossil known as ‘Percy’ discovered by University students in 1960 has been installed in a brand new case at The Manchester Museum.

The Museum has worked with the family of the late Fred Broadhurst, the lecturer who led the recovery of the fossil.

His family raised over £28,000 to pay for the new display, while generous donations have also come from The Manchester Geological Association and numerous private donors.

Manchester students discovered Percy on the beach at Robin Hood’s Bay in North Yorkshire, whilst on a University field trip. The fossil turned out to be one of the most complete plesiosaurs ever discovered and helped change our understanding of these fossils.

The 180 million year old reptile is internationally important and is studied by palaeontologists from around the world.
Genetic test hope for blindness

Researchers have developed a unique genetic testing service for patients with inherited blindness to allow some to preserve their sight for longer.

The new test, developed by Professor Graeme Black and his team, can analyse more than 100 genes in parallel, compared to fewer than ten that current tests can scan. It will be given to more than 700 patients every year and there are plans to increase this if there is demand.

Help for teenagers terrified of the dentist

Many people are scared of going to the dentist, but thanks to a new service pioneered at the University Dental Hospital of Manchester, terrified teenagers are now facing treatment with a smile.

Consultant in paediatric dentistry Claire Stevens, and consultant paediatric anaesthetist Sian Rolfe, set up a research study to look at using intravenous (IV) sedation to help anxious teenagers cope with treatment.

Their team assessed whether sedation with the drug Propofol was a viable alternative to “happy air” (inhalation sedation) or a full general anaesthetic.

The study had 50 participants, all of whom were very anxious to the point of some needing psychiatric care. Only two of the 50 patients failed to have their treatment, due to fear of having a drip inserted into their arm, and Claire is working with them to overcome this.

The overall results of the study have astounded the team, and led to the setting up of a permanent IV sedation service, which is fully booked five months ahead.

New star in fight against climate change

A new service, developed by experts at the University and The Mersey Forest, will provide vital information to help urban neighbourhoods avoid the potentially dangerous effects of climate change.

The unique aid, Star, produces temperature and runoff scenarios allowing planners, policy makers, local people and developers to assess if new buildings and roads will make neighbourhoods intolerably hot, or more likely to suffer from flooding.

It will also give cities the ability to assess how green infrastructure – such as trees, vegetation, waterways and lakes – can help neighbourhoods adapt to climate change by cooling surface temperatures and reducing runoff.

Study probes radical rethink on culture

The University is to host a £1.5 million investigation into how society can get the most out of the vast array of often overlooked cultural activities Britons take part in.

Dr Andrew Miles will lead a team of experts from the universities of Exeter, Leicester and Warwick, in a bid to understand the value of hobbies, community festivals and other leisure activities which millions of people take part in every day.

Dr Miles, at the Centre for Socio-Cultural Change (CRESC), said: “Though millions of Britons take part in participatory activities every day, we need to do more to understand the contribution these make to communities and places.

“Our aim is to find ways to promote better identification and more equitable resourcing of the vast array of these overlooked activities which generate well-being, cultural capital and contribute to the development of creative local economies.”
‘Harry Potter-style’ invisibility cloak could protect buildings from earthquakes

Mathematicians have developed a ‘cloaking device’ that could make skyscrapers ‘invisible’ - and immune - to earthquakes.

Pressurised rubber will direct the ‘waves’ of the earthquake around the building, in a technique based on research into cloaking devices that can make objects invisible.

Dr William Parnell’s team in the School of Mathematics have been working on the theory of invisibility cloaks which, until recently, have been merely the subject of science fiction, most famously in the Harry Potter books.

In recent times, however, scientists have been getting close to achieving ‘cloaking’ in a variety of contexts. The work from the Manchester team could eventually help to protect buildings and structures from vibrations and natural disasters.

Dr Parnell said: "Five or six years ago scientists started with light waves, and in the last few years we have started to consider other wave-types, most importantly perhaps sound and elastic waves. The real problem with the latter is that it is normally impossible to use naturally available materials as cloaks."

“We showed theoretically that pre-stressing a naturally available material – rubber – leads to a cloaking effect from a specific type of elastic wave. Our team is now working hard on more general theories and to understand how this theory can be realised in practice.”

Better NHS services reduce suicide rates

Researchers have for the first time shown a positive link between improvements in mental health services and a reduction in suicide rates.

Their research was published in The Lancet in a study by the National Confidential Inquiry into Suicide and Homicide by People with Mental Illness, based at the University’s Centre for Mental Health and Risk.

Researchers compared the rates of suicide in NHS Mental Health Trusts before and after nine recommendations were adopted. They also compared suicide rates in Trusts that adopted few of the recommendations with those that adopted many.

The study shows that Trusts that implemented between seven and nine of the key recommendations had lower suicide rates than those that implemented six or fewer.

It also found recommendations that produced the biggest drop in suicide rates, when implemented, were the introduction of 24-hour crisis teams, policies for drug and alcohol misuse, and multi-disciplinary reviews after a suicide.

Trusts that did not implement the recommendations saw little reduction in suicide rates.

Nav Kapur, Professor of Psychiatry and Population Health, said: “These are really important findings for suicide research and mental health services internationally. No other studies have been able to show what impact specific mental health service improvements have on suicide rates.”

Japanese honour

Professor Adisa Azapagic, at the Sustainable Consumption Institute, has been awarded a Research Fellowship in Japan, given by the Japan Society for Promotion of Science.

The fellowship will strengthen her collaboration on carbon footprinting with colleagues from the Muroran Institute of Technology.

Mum’s the word

Parents of babies who have required neonatal care are working with Manchester academics to design a new study into data-sharing for research.

Professor Alys Young, Dr Victoria Foster and their team at the School of Nursing and Midwifery, are working with parents in the North West and Midlands. Together they have designed a questionnaire being used in neonatal units across the North West and London, asking parents about their attitudes to their babies’ routinely collected health data being used for research purposes.

The study is part of a wider programme – the Research for Patient Benefit programme in collaboration with the charity Bliss, funded by the National Institute for Health Research – that aims to improve health outcomes for babies admitted to neonatal units.

Using health data for research is a topic high up on the agenda in health care. In neonatal services it is particularly relevant because there is currently a lack of research into newborns. This is partly because it is difficult to speak to parents about research when they are coping with the distress of a sick baby. It is also because some of the research needed would assess long-term outcomes which is complex and costly.
Could brain size determine number of friends?

Researchers are suggesting that there is a link between the number of friends you have and the size of the region of the brain – known as the orbital prefrontal cortex – that is found just above the eyes.

A new study shows that this brain region is bigger in people who have a larger number of friendships.

The research was carried out by Dr Penny Lewis in the University’s School of Psychological Sciences, with colleagues in Oxford, Liverpool and Edinburgh.

The study suggests that we need to employ a set of cognitive skills to maintain a number of friends. These skills are described by social scientists as ‘mentalising’ or ‘mind-reading’ – a capacity to understand what another person is thinking.

This study suggests for the first time that our competency in these skills is determined by the size of key regions of our brains, in particular, the frontal lobe.

Dr Lewis said: “Both the number of friends people had, and their ability to think about other people’s feelings, predicted the size of this same small brain area. This not only suggests that we’ve found a region which is critical for sociality, it also shows that the link between brain anatomy and social success is much more direct than previously believed.”

Drug could prevent fatal heart condition

A drug used to treat multiple sclerosis (MS) may also be effective at preventing and reversing the leading cause of heart attacks, a new study has found.

Scientists found that Gilenya, a drug recently approved in the US for treating MS, was effective at reversing the symptoms of ventricular hypertrophy in mice.

Ventricular hypertrophy is a fatal cardiac disorder that can result in an abnormal heart rhythm (arrhythmia), and cardiac arrest. It is caused by sustained pressure on the heart due to stresses or diseases.

Researchers from the University and the University of Illinois have discovered that enhancing the activity of an enzyme molecule called Pak1, that is found naturally in our bodies, using Gilenya, produced remarkable results in mice with ventricular hypertrophy.

Is sporting prowess all in the genes?

In the context of the London Olympics, people might be wondering what gives some individuals amazing strength, speed and stamina – is it all in the genes?

The University’s centre for biomedical education and professional training, Nowgen, organised a public debate to explore this theme.

It included a discussion of the latest DNA tests that claim to identify the Olympians among us; a chance to test your own DNA; and a first-hand account of sporting life by University swimmer Rebecca Guy.

Rebecca, a second-year Philosophy and Spanish student who hopes to join the British team for this year’s Games, swims for the City of Manchester Girls team based at the Manchester Aquatics Centre on Oxford Road, and is a member of the England Talent Development team.

The 21-year-old’s punishing regime of training for at least five hours per day, four days per week, means a typical day of getting up at 5am, cycling to the pool, training for two-and-a-half hours and then going into University. After a day of lectures, she normally heads back to the pool from 4pm until 6.30pm, followed by half an hour of land work.

Her commitment has been rewarded with an outstanding medal haul for 2011, which includes gold in the 50 metres freestyle, 4 x 100 freestyle and 4 x 100 medley with the City of Manchester Girls team.

Meanwhile the discussion of the latest DNA tests led to a variety of reactions – some people embraced the potential of these tests while others were very concerned about them.

To read more about the event see: www.bionews.org.uk/reviews
Green from its roots to its roof

The building and development of the Alan Gilbert Learning Commons continues at a steady pace. As a state-of-the-art learning facility for students, sustainability will play a huge part in the day-to-day running of the building. So how ‘green’ will the Learning Commons be?

A ‘green’ building is a structure that’s environmentally responsible, and resource-efficient, throughout its life. It is designed to reduce the overall impact of damage to the environment by efficiently using energy, reducing waste and pollution, and by helping to conserve and restore natural resources.

Awareness of the environmental impact of the Learning Commons started well before work on the new building began, and opportunities to reduce waste have been in practice from the start. For example, during the initial partial demolition of the old University refectory building, there were large recycling banks for materials and waste strategically positioned around the site to reduce levels of landfill waste.

When walking past the site, you may notice that three of the external sides of the building look almost complete, and that they largely consist of glass. It is thanks to the tall and continuous windows to the entire perimeter of the building, and the large atrium built into the existing refectory structure, that the Learning Commons will be flooded with natural light wherever possible. Both light-reflective surfaces and daylight sensors inside the building will also help to lower energy use.

Carbon emissions will be limited due to triple glazing and natural ventilation will be the sole means of regulating the temperature inside the Learning Commons.

This is due to mixed mode ventilation, which means that while the outside temperature is comfortable, it allows fresh air to flow throughout the building via a low velocity ventilation system.

This also ensures that internal background noise will be kept to a minimum for students during quiet study periods.

When it is necessary to heat the Learning Commons, the system will link to solar panels on the roof, and will also be making the most of local resources by feeding from the existing heat system within the University campus.

The combination of large open internal spaces, and exposed concrete pillars and soffits, will soften any temperature changes, helping to maximize the efficiency of the temperature regulation system.

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Wherever possible, appliances used inside the building have been specified to be low energy and have low water usage, including hand dryers and low-volume-flushing toilets. This is paired with a rainwater harvesting system that will feed the WCs. The rainwater system will be stored on the ‘green’ roof of the Learning Commons.

The roof will be a hive of environmentally friendly activity. Once completed, it will contain photovoltaic panels (to help cover part of the electricity demands of the building); solar panels (to provide hot water for the café and contribute energy towards making other appliances work); plus a tank to collect rainwater for use within the building. The roof will also be home to a host of specifically selected plants, which will grow and flourish to provide a habitat for wildlife and also act as building insulation.

The grounds between the Main Library and the Learning Commons will be an attractive, landscaped area for students to enjoy a break from study. The land will contain more mature trees, plants and greenery to extend the ‘park’ feeling of the site and to introduce additional habitats for different urban species.
Then and Now

We have many members of staff who have dedicated almost all of their working lives to the University. Here we take a look at some of these people and the contribution they have made to our University over the years.

Tony Mulryan

For Tony Mulryan, being made redundant when he was 17-years-old turned out to be the trigger for the start of a career here at the University that has lasted 44 years.

After studying electronics at Oldham Tech, young Tony got a job with a local TV firm, but a year later he was out of that job – and applied for a post as a trainee technician in the Department of Physics at UMIST.

“It brought me into a completely different environment. I found that I enjoyed looking after experiments and there was a good crowd of people. Ironically, I was given some advice – ‘Don’t stay too long.’ Obviously, I didn’t take it and, happily, I’m still here,” said Tony.

Tony is now Information Systems Support Analyst in the Faculty of Engineering and Physical Sciences. He has lived through a dramatic period of major technological advances, seeing the advent of computers and electron microscopes – and taken it all in his stride, growing with the job.

He started on a trainee technician’s salary (less than £1 a day) under the then Chief Technician Fred Dawson, whom he admired. He also started with three other trainees (the others took the advice and moved on). “In those days, there was a lot going on with the inter-departmental social club and we all got involved,” he says. “More importantly, there was also a lot going on technically.”

For seven years, Tony went on day-release to Salford Tech, doing a City and Guilds for his Science Laboratory Technician certificates. In 1970, when he moved to SSEG, his salary was £740 a year, “proper money.”

“They were exciting times, times of change,” he says. “We were building new experiments in the research lab and we had the MSc teaching lab. Then computers started coming in. I’ve been fortunate in being in at the start of new developments.”

Tony is an amiable, unassuming man, who believes in getting on with the job rather than talking about it. He looks back on his 44 years with pleasure and pride.

And he has recently taken up a new interest – playing the euphonium. He and his wife, Cheri, have two children: 25 year-old Calum, who is a mechanical engineer, and Sian, 19, a student at the University of Bolton. His daughter is the inspiration for his new hobby – she plays baritone horn in a brass band at Oldham Music Centre.

“Playing the euphonium makes a pleasant change from supporting Oldham Athletic,” he says with a smile.
The University has announced six ‘flagship’ projects which really show the difference its staff and students are making to local, national and international communities. Here we take a look at Jodrell Bank, and how it touches the lives of millions of people across the globe.

In 1945, Sir Bernard Lovell established a quiet observation site for the study of cosmic rays at the University’s Jodrell Bank site in East Cheshire. Today it is a world-leading astronomical centre. Its research ranges from the origins of the Universe, to the discovery of planets orbiting other stars.

Jodrell Bank opened one of the first public science centres in 1967, and since then it has welcomed over four million visitors. “People travel the length of the country, as what we have here is unique,” says Dr Tim O’Brien, Jodrell Bank’s Associate Director with responsibility for public engagement.

“Outreach is one of our core activities, aimed at inspiring the next generation and helping increase the UK’s science and engineering base.

“We also aim to build strong community links, particularly with harder to reach groups; sharing our work with the people who fund it through their taxes.”

In 2010, Jodrell Bank attracted £3.1 million from the North West Regional Development Agency and the European Regional Development Fund to start building new public facilities. The new Discovery Centre opened in April 2011.

Entering via the Planet Pavilion, visitors can explore the Universe via interactive displays and a scale solar system model, then go outside to get up-close to the site’s main attraction, the iconic Lovell Telescope.

The main exhibition building, the Space Pavilion, investigates the wonders of the Universe, from whether aliens exist to what the Big Bang sounded like. In ‘Ask an Expert’ sessions, a Jodrell scientist or engineer fields questions from up to 150 curious visitors. “The idea is to bring scientists and visitors together and start conversations,” Tim says.

In term-time, hands-on learning sessions for primary age to A-level student show “how science works in a place where it’s actually happening, close to the instruments and people involved.” Staff visit schools and community organisations; there are tailored leisure visits for groups such as the WI; while 1,200 adults have attended part-time courses in the last decade.

Visitors can also stroll in the arboretum and gardens founded by Bernard Lovell in 1972.

To further broaden the Observatory’s impact, the music festival Jodrell Bank Live was launched in 2011. Headlined by The Flaming Lips, its 5,000 tickets were quickly snapped up - 65% of them to people from over 60 miles away. Tim recalls: “There were lots of activities and we played sounds from space before steering the Lovell Telescope towards the crowd and projecting video about our research onto it.”

For those who can’t visit the Observatory, the School’s postgraduate students produce two podcasts each month attracting 3,500 listeners (www.jodcast.net). And the BBC’s ‘Stargazing Live’ TV programme has taken the team’s reach to a whole new level: hosted by the School’s Professor Brian Cox, it attracts 10 million UK viewers a year.

Jodrell Bank’s Discovery Centre is attracting around 85,000 visitors every year, a figure it hopes to raise to 120,000 by 2017. Within seven months of opening, it was named Marketing Cheshire’s Best Small Visitor Attraction and an independent report estimates it will bring an extra £27 million income to the region over the next decade.

Its combination of scientific heritage, world-leading research and public accessibility has led to the site being shortlisted for UNESCO World Heritage Site status. Tim says: “Outreach is paying dividends. Applications to study physics at university increased by 17% last year and, after ‘Stargazing Live’, astronomical equipment sold out and 40,000 people attended linked events.

“Hopefully we are providing a spark of inspiration – who knows what our visitors might go on to do!”

jodrell.visitorcentre@manchester.ac.uk
What’s On

John Rylands Library

(Deansgate)

EXHIBITIONS
Kindle
Nicola Dale presents her new installation Kindle - thousands of unwanted book pages transformed into candles, covering every surface of the Library's Map Room.

St Bartholomew’s Day 1662: The Triumph of Bigotry and the Birth of Toleration until 1 July
This exhibition commemorates the 350th anniversary of the events of St Bartholomew’s Day 1662 - a turning point in the history of religion in England which saw approximately 2000 ministers expelled from the Church of England.

EVENTS
Sat 10 March, 12 – 1pm
Here be Dragons!
The walls and ceiling of the Library are full of strange and mysterious creatures - join our tour to seek them out!

Wed 14 March, 12 – 12.45pm
St Bartholomew’s Day 1662 - Curator Tour and Collection Encounter
Thurs 15 March, 7 – 8.45pm
Neil Campbell and Friends at The John Rylands Library
Enjoy an evening of hauntingly beautiful and atmospheric music with guitarist and composer Neil Campbell.

Thurs 15 Mar, 12 - 1pm
Tour and Treasures
Enjoy a closer look at material from the Library’s world famous collections and find out more about this magnificent building with one of our curators.

Fri 16 March, 2.30 – 3.30pm
Explorer Tour: A Peak Behind the Scenes!
Ever wondered where some of the Library doors and staircases lead to? Then this is the tour for you!

Wed 21 March, 2 – 3pm
Whimsical Wednesday Workshop: Bookmaking
Explore traditional bookmaking techniques and take home your own hand-stitched notebook.

Sat 24 March, 11am – 12.30pm
Secrets and Spies - Collection Encounter and Activities for Families
Venture into parts of the library not normally open to the public, unlock the mysteries and secrets hidden in books and make your own top-secret journal.

Sun 25 March, 2.30 – 3.30pm
Unusual Views: Library tour for photographers
Take the opportunity to photograph the Library building from spectacular viewpoints not normally open to the public!

For further details of our events, please visit our website.

Opening hours
10am till 5pm

Jodrell Bank Discovery Centre
Jodrell Bank Discovery Centre offers a great day out for all the family. Come and explore the planets using our model of the Solar System. Find answers to the wonders of the Universe, listen to the sounds of the Big Bang and discover what the scientists are researching ‘Live’ in our interactive Space Pavilion. The glass-walled café offers spectacular views of the iconic Lovell telescope and fantastic home made cakes!

Crafternoon Tea
A fantastic way to start your day. Please bring your own yoga mat.

International Society
Visit some of the most beautiful and interesting locations around England, Scotland and Wales. There are visits taking place almost every weekend throughout the year.

DAY TRIPS

SAT 10 March
Anglesley North Wales

Sun 11 March
Fountains’ Abbey and Harrogate

Sat 17 March
Aberdare Central Lake District

Sun 18 March
Chirk Castle and Essidg North Wales

Sat 24 March
Snowdon North Wales

Sun 25 March
Alton Towers

Sat 31 March
Whitby

Sun 1 April
Windermere Lake District

Tickets are available from the International Society office on Oxford Road and also from University House on the Salford University campus. For more information, please visit our website.

Opening hours
Mon-Fri 9.30am – 7pm (during term time)
Small World Café opening hours
Mon-Fri 11am – 3pm

The Whitworth Art Gallery

EXHIBITIONS
COTTON: Global Threads until 13 May
A new exhibition, COTTON: Global Threads tells the global story of the production, consumption and trade in cotton.

Idris Khan: The Devil’s Wall until 13 May
This is the first UK showing of Idris Khan’s new installation The Devil’s Wall, which draws inspiration from rituals and practices of the Hajj, the pilgrimage to Mecca that is undertaken by millions of Muslims each year.

Dark Matters: Collections Exhibition until 15 April
Highlights from the Whitworth’s outstanding collections including Rembrandt, Paula Rego, Rachel Whiteread, JMW Turner and Francis Bacon.

ADULT EVENTS
Every Thurs, 8.30 – 9.45am, Free
Yoga
A fantastic way to start your day. Please bring your own yoga mat.

Sat 18 and Wed 15 February, 1 – 3pm, £5
Crafternoon Tea
Monthly social and craft workshop. Enjoy a cuppa and try your hand at art and craft techniques.

Thurs 8 March, 12.30 – 3pm, Free
Handmade Social
Join us here in the Gallery for arts and craft activities from around the world. In partnership with Third Wave www.third-wave.net

Sat 17 March, 11am – 1pm, £5 (booking essential)
Crafternoon Tea
Monthly social art and craft workshop.

Horizons from the Whitworth’s outstanding collections
Handout booklets available.

Thurs, 8 March, 12.30 – 1.15pm, Free
Behind-The-Scenes Tour
A guided tour looking at works from the Whitworth’s collection of modern and contemporary art, with Mary Griffiths, Curator of Modern and Contemporary Art.

FAMILY EVENTS
Fridays 2, 16 and 30 March, 10.30 – 11.30am, Free (booking essential)
Art Baby
Drop-in creative workshops.

Sat 24 March, 10.30 – 11.30am, Free (booking essential)
Art Baby
Drop-in creative workshops.

Sun 1 March, 1:30 – 2.30pm, Free
Treasure Baskets
Explore and play with baskets filled with everyday, natural and sensory objects.

Mon 13 March, 1:30 – 2.30pm
Creative Treats Mother’s Day Special
For under 5’s
Bring along your mum and nana for an afternoon of creative treats and make a present for them to take home.

Opening hours
Monday to Saturday 10am – 5pm, Sunday 12 – 4pm
Entry to the Gallery is FREE
Whitworth Art Gallery
Oxford Road, Manchester
Booking line 0161 275 7450
email: whitworth@manchester.ac.uk
www.manchester.ac.uk/whitworth
The Manchester Museum

SPECIAL EXHIBITIONS

Unearthed: Ancient Egypt, until Sept 2012
Travel back to the 1920s and enter the storeroom of our Egyptologist, played on film by Terry Deary, author of Horrible Histories and Egyptian Tales.

The Museum Atoll, until Autumn 2012
Our atoll has been inspired by our new Living Worlds gallery which shows how we can all shape the future by the choices we make.

FAMILY ACTIVITIES

Most activities are free and drop-in. Some activities may need to be booked on the day and may cost up to £1.50. All ages
Sun 11 Mar, 12 – 3pm, Free
Bug Hunt (suitable for younger children)
The Tech Factor Challenge and Bug Hunt
Follow QR code clues to search for examples of technology amongst the Museum’s displays.
Sat 17 March, 11am – 3pm, Free, all ages
The Body Experience
Come on a tour of the human body with scientists from The University of Manchester.
Fri 30 Mar, 11am – 12pm
Magic Carpet: Dinosaurs
Storytelling and activity session for under 5s and their families/carers.
Sat 10 Mar, 11am – 4pm
Big Saturday: Jurassic Climate Change
Activity session for under 5s and their families/carers.

TALKS, TOURS AND WORKSHOPS FOR ADULTS

Wed 7 March, 3–4.30pm, Free
Showcase lecture: The Park in the City: Whitworth Park Community Archaeology and History Project
Hannah Cobb, Melanie Giles and San Jones (The University of Manchester), discuss the materiality of the Urban Park.
Sat 17 March, 2 – 3pm
Mummies in Medicine and the Imagination
Join local historians for this talk to discover the truth behind the legends of Egyptian mummies. Part of National Science and Engineering Week.
Tues 20 March, 6.30 – 8pm
Body Bits: Ethics of Using Biomaterials
Guided tour of the ‘Human Body Trail’ followed by a discussion on the ethics of donating biomaterials for medical and scientific use.
Every Tues and Thurs, 12-1pm
Tours of the Varium
Book on ManchesterMuseum@varium@gmail.com, free, 13+
Monthly tours in Spanish and French.
Thurs 29 March, 6.30 – 9pm

Musaeum Meets: After Hours
After Hours are evening social events where you encounter the unexpected. Artists, scientists, filmmakers, writers and musicians animate our collections in special one-off performances.
Sat 31 March, 2 – 4pm, £3
Musaeum Meets: Urban Naturalist
Urban Naturalist is a programme of friendly, practical workshops for adults run by leading naturalists. This month find out about amphibians living in Manchester’s ponds.
Book events on 0161 275 2648

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

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

The Martin Harris Centre for Music and Drama

LITERATURE LIVE
Mon 5 March, 6.30pm, £16.14
John Thaw Studio Theatre
Literature Live with Rupert Thomson and Patrick McGuine Matthews in conversation

NEW MUSIC NORTH WEST FESTIVAL 2012 EVENTS

Mon 5 March, 1.15pm
1.15pm Lunchtime Concert
2.30pm Exploring the North West with David Horne
5.15pm Chamber Concert
7.30pm RNCM New Ensemble and Vaganzo

Tues 6 March
1.15pm Lunchtime Concert
2.30pm Vaganzo Young Composers Workshop
5.15pm New Ensemble Concert
7.30pm RNCM Brass Band and University of Salford Brass Band

Wed 7 March
1.15pm Lunchtime Concert
2.30pm Music by Manchester Composers with Jamie Forbes Thompson
5.15pm Chamber Concert
7.30pm Vaganzo and Paspasha with RNCM New Ensemble

Thurs 8 March
1.15pm RNCM Saxophone Ensemble
1.15pm Quatuor Danel Lunchtime Concert
2.30pm Quatuor Danel Seminar: ‘Doctors of Composition’
4.15pm Colin Matthews in conversation
7.30pm BBC Philharmonic and RNCM New Ensemble

Fri 9 March
1.10pm MUMS: Opera Scenes
1.15pm Lunchtime Concert
2.30pm Sound Ideas - RNCM Outreach
5.15pm Afternoon Concert
7.30pm Ensemble 10/10 featuring Adam Gorb’s Anya 17
7.30pm Quatuor Danel Evening Concert
9.45pm Late Night Concert
Sat 10 March
2pm Junior RNCM New Music Day
4pm Junior RNCM Composers’ Concert
7.30pm University of Manchester String and Chamber Orchestra

Mon 12 March, 6.30pm, £10.05
Colm Tóibín in Conversation with acclaimed historian and Yeats biographer, Roy Foster
Thurs 15 March, 1.10pm
Walter Carroll Lunchtime Concert Series - Student Showcase
Fri 16 March, 7.30pm
Ad Salom – University of Manchester Chamber Choir
Sat 17 March, 7.30pm
Manchester University Wind Orchestra (MUWO)
Tues 20 March, 7.30pm
Manchester University Band Big Band
Thurs 22 March, 1.10pm
Walter Carroll Lunchtime Concert
Dream Spaces: Music for flute and live electronics
Fri 23 March, 1.10pm
MUMS Chamber Ensemble
Wed 28 March, 10am – 4pm
British Red Cross Conference: Women and Asylum
The Martin Harris Centre for Music and Drama
Bridgeford Street, Manchester, M13 9PL
0161 275 8951
email boxoffice@manchester.ac.uk
www.manchester.ac.uk/martinharriscentre

Gig Guide

Manchester Academy 1, 2 and 3
Mon 5 Mar
Mark Lanegan Band - £15 Adv
Weds 7 Mar
Protest The Hero + Blood Distance + Blood Command + Uneven Structure - £10 Adv, Justin Furstenfeld The voice of Blue October - £17 Adv
Thurs 8 Mar
Kill Hannah + Dear Superstar - £11 Adv
Fri 9 Mar
Destryers of the Faith ft. Cannibal Corpse + Tritypikon + Enslaved + Job For A Cowboy - £18.50 Adv
FM + Romeo’s Daughter - £15 Adv
Girlschool - £10 Adv
Over 14s ONLY
Chiddy Bang - £10 Adv
Sat 10 Mar
Killing Joke - £19.50 Adv
Boots Electric - £12 Adv
Over 14s ONLY
Sun 11 Mar
3 Doors Down + Seether - £20 Adv Doors 7pm
Tues 13 Mar
The Answers & The Union - £15 Adv
Weds 14 Mar
Rise To Remain + Heaven Shall Burn - £10 Adv
Fri 16 Mar
The Civil Wars - £14 Adv
Nero - £16.50 Adv
Sat 17 Mar
Letz Zep - £12 Adv
Yashin - £8.50 Adv
Sun 18 Mar
The Felice Brothers - £14.50 Adv
RESCHEDULED DATE
Black Stone Cherry + Rival Sons - £16.50 adv Doors 7pm
Tues 20 Mar
Pokey LaFarge - £10 Adv
MOVED FROM NIGHT & DAY CAFE - ORIGINAL TICKETS REMAIN VALID
Fri 23 Mar
All The Young - £7 Adv
Sat 24 Mar
Bullets and Octane + The Goddamn Electric - £7 Adv
Doors 7pm
Fri 29 Mar
The Stranglers + The Pops - £23 Adv
Sun 25 Mar
Spiritualized - £17.50 Adv
Doors 7pm RESCHEDULED DATE
Mon 26 Mar
Los Campesinos! - £10
Weds 28 Mar
Bowling For Soup An acoustic evening with Jaret and Erik - £13 Adv
Korn - £29.50 Adv
Thurs 29 Mar
Wale - £11 Adv
Over 14s ONLY
Fri 30 Mar
Coldside + Capital KO + Busker One - £6 Adv
Steel Panther - £16 Adv
Sat 31 Mar
Ian McNabb - £15 Adv
OVER 14s ONLY

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0871 2200260
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Exploring Turing's poignant final paper

This month The Manchester Museum launches an important new exhibition examining a little-known aspect of the work of Alan Turing, contributing to the celebrations around the centenary of his birth.

‘Alan Turing and Life’s Enigma’ is an exhibition about Turing’s least-known and final work. This was an exploration into how living things develop their shape and structure from simple balls of cells, a subject called morphogenesis. The exhibition combines Turing’s own notes with objects from the Museum collection and is inspired by 1950s design.

As a young mathematician in Cambridge, Turing helped pave the way for the development of the computer as we know it. During the Second World War he worked at Bletchley Park and helped to crack the Enigma code used by German military forces. After the war, he worked on the development of computers. He came to The University of Manchester in 1948, where the world’s first working electronic stored-program computer, the ‘Baby’, had just been built.

From 1951-54, Turing used the more advanced Ferranti Mark 1 computer to explore morphogenesis. He presented his main ideas on this in an incredible article published in 1952, when he suggested that everything from the spots and stripes on animal furs, to the arrangement of pine cones and flowers, could be explained by the interactions between two chemicals. How complexity could arise from simplicity. The full impact of Turing’s amazing insight continues to generate debate among scientists today.

Turing’s brilliance was recognised during his lifetime, but he was a gay man at a time when same-sex relationships between men were illegal in Britain. In 1952, he and another man were convicted of gross indecency. As part of his sentence, Turing had to undertake a year-long ‘treatment’ of female sex hormones. Ironically, Turing was studying the effects of chemicals on development at the same time as the law was forcing him to use chemicals to change his own body. A year after the treatments ended, Turing was found dead at his home in Wilmslow. He had been poisoned by cyanide, apparently taken on an apple.

Nick Merriman, Director of The Manchester Museum, said: “‘Alan Turing and Life’s Enigma’ is an intriguing and surprising look at Turing’s work, an important part of the celebrations which are taking place nationally to mark his centenary. Turing produced a body of controversial work right here on Oxford Road, literally next door to where the exhibition takes place, and we are proud to be honouring him with this exciting exhibition.”

‘Alan Turing and Life’s Enigma’ runs from 24 March – 18 November 2012
Admission is free.