

MANCHESTER
1824

The University of Manchester



ANNUAL REVIEW

2012/13

REVIEW OF THE YEAR

The 2012/13 academic year was an exciting one for the University, in which we achieved some notable successes, many of which are covered in this annual review.

We have also made significant progress towards many of the goals contained in *Manchester 2020*, the University's strategic plan, but we should acknowledge that we still face significant challenges in some areas in achieving the step change that will be required to meet our ambitions.

Notable awards and successes include funding from the Higher Education Funding Council to support a new facility for advanced materials and manufacturing (£18 million) and our new cancer building (£13 million), and major awards for nuclear manufacturing (£14 million) and the Dalton Cumbria Facility (£10 million).

Our bid to the European Regional Development Fund for £23 million for our National Graphene Institute was supported in full. We also received £6 million from the Department for International Development for work on effective states and inclusive development, £6 million from the Department of Health for primary care research and £5 million from the Medical Research Council for our eHealth project.

One of the key performance indicators in *Manchester 2020* is our performance in the Academic Ranking of World Universities carried out annually by the Institute of Higher Education in China's Shanghai Jiao Tong University. In the 2013 rankings we remain in 5th position in the UK, but we dropped one place in the international table to 41st position, in spite of a slightly higher score; a disappointment, but also a timely reminder of the fast-moving competitive environment in global higher education at this level.

On the research front, our research grant and contract income increased by 6.2%, which reflects the significant growth in the value of awards made to the University starting to flow through. A more encouraging sign for the future was the dramatic 37% increase in research awards during 2012/13 – though I hope that with a concerted effort we can do even better than this in the future.

Preparations for the November 2013 submission of the University's Research Excellence Framework (REF), which will assess research quality, were a major task. Our 35 submissions to 30 different units of assessment demonstrate the volume and range of internationally leading research going on here. This REF exercise differs from previous national assessments because it will assess the impact of research on wider society as well as academic quality. Research impact is a complex area to demonstrate and measure, so the whole exercise has a degree of uncertainty. The REF submission will now be evaluated by a panel of experts in each discipline and we expect to receive a judgement on our performance in December 2014.

The results of the National Student Survey of satisfaction of undergraduate students were published in August 2013 and show that this University has increased its overall level of student satisfaction this year by two percent to reach 85%. This is good progress, and the six percentage points increase in the last two years reflects our sustained efforts to enhance student satisfaction. These increases extend across individual questions (21 in total) and it was gratifying to note substantial improvements in the challenging area of 'assessment and feedback'. There was also an increase in satisfaction with the Students' Union (up by four percent to 71%) and some tremendous achievements in individual subject areas with 23 subjects achieving 90% or more overall satisfaction (up from 16 subjects in 2012). This sets us well on our way to achieve our aim of 90% satisfaction, but there are still areas where we need to work harder to improve student satisfaction.

We now need to build on these achievements to reach our goal of being in the top quartile of the

Russell Group of universities. We are continuing to invest in the student experience, and the Alan Gilbert Learning Commons, which was formally opened by the late Professor Gilbert's wife Ingrid in the summer, has been hailed as a great success by our students.

We have been working hard over the past year to define a sharper focus to our work on the Goal Three – Social Responsibility agenda. We held a major consultation with staff, students, members of the local community and other key stakeholders to establish the most important and powerful contributions that we make in this important area. As a result of this, we have re-aligned our structures and activities to focus on specific activities and ensure that we can measure and demonstrate more effectively the real impact we are making. We have launched a major campaign around some of these specific themes to demonstrate the positive difference that we are making to the lives of people in our local neighbourhood and wider afield.

All of these achievements in research, teaching and social responsibility are only possible because of the hard work and dedication of our staff. Our staff demonstrated their commitment to the University in their response to the staff survey, which was conducted on our behalf by Capita in the spring of 2013. An impressive 6,500 staff (71%) completed the survey with a remarkable 92% of respondents saying they are proud to work for the University and 94% feeling that the University is a good place to work – the highest score of the 28 universities that Capita has worked with during 2012/13. Of course, there are other areas where staff indicated that we could make improvements and we have analysed the results and conducted consultations to inform detailed action plans that are now being implemented.

In early July 2013, the University undertook a fundraising exercise in the form of a public bond issue to enable the commencement of Phase 1 of the University's Campus Masterplan. Rating agency Moody's were engaged and issued a rating of Aa1 Stable for the University. The bond issue was extremely successful, being nearly four times oversubscribed, and raised £300 million on a 40-year basis at 4.25% annual interest. The bonds are listed on the London Stock Exchange.



2 News
Graphene momentum ramps up



6 Feature
Ten years of arts for all



8 Research
Manchester continues to rise to cancer challenge

The fundraising exercise was a new and fascinating experience for me as I learnt about gilts, coupons, bookrunners and other financial terms. We presented in London, Manchester and Edinburgh to potential investors, talking to them about the University and our Campus Masterplan in about 20 separate meetings. External experts have suggested that this was a very successful bond issue for us.

Securing this funding has enabled us to commence work on our vision to create a single campus and will involve the construction of new teaching and research buildings, student facilities and major improvements to the public realm. This first phase of the plan will be delivered over the next five years and will include the building of a new engineering campus to relocate these activities from North Campus, a new centre for the School of Law, major refurbishment of the Manchester Business School, a new teaching block, refurbishment of the University Library, a bigger and better Students' Union and a new building for our medical students in Dover Street.

We will also spend several million pounds to improve our public realm and landscaping in order to capitalise on the future improvements to Oxford Road, which will see wider pavements, tree-lined boulevards and the removal of all cars from some roads during 2015.

Although first-class buildings and infrastructure are important features of any world-class organisation, people are by far our most important asset. That is why we are making a further investment in recruiting new world-leading scholars and researchers in key disciplines and are continuing to invest in the development of our current staff.

I would like to end by paying tribute to colleagues from across the campus for their hard work delivering the outstanding achievements and progress towards our strategic goals demonstrated in this annual review.

**Professor Dame Nancy Rothwell
President and Vice-Chancellor**



Professor Dame Nancy Rothwell



10 Culture and community
University joins forces with Premier League giants



12 People
Volunteers of the year

CONTENTS

News	2
Feature	6
Research	8
Culture and community	10
People	12
Facts and figures	16

GRAPHENE MOMENTUM RAMPS UP

Work began this year on the £61 million National Graphene Institute (NGI) – the home of the UK’s commercialisation of the wonder material.

Set to open in early 2015, the 7,800m² building will see academics and industry working side by side to produce the applications of the future.

Having already received £38 million of funding from the Engineering and Physical Sciences Research Council (EPSRC), the NGI was this year awarded a further £23 million from the European Regional Development Fund.

Already the NGI has signed up its first strategic partner, leading graphene manufacturer Bluestone Global Tech, who have signed a £5 million deal to work on three major graphene research projects.

The company has recently moved into research laboratories at the University and plans to open its European headquarters in Manchester. Other strategic partners are expected to be announced in the near future.

Research into graphene’s vast potential this year included how it could harvest the Sun’s energy to power homes, improve security scanners and drug testing devices, and provide flexible, super-strong electronic devices.

This year the University received three major graphene-related EPSRC funding awards worth more than £9 million. A total of £3.5 million was provided to research graphene membranes, which could bring desalination plants, safer food packaging and enhanced disease detection closer to reality. A further £2.2 million was awarded for research into graphene energy storage devices, such as batteries and supercapacitors, while a £3.3 million grant will help researchers explore how these energy devices could be adopted in utility and grid applications.

Graphene took centre stage at the Conservative party conference in September, with graphene displays and prototype products viewed by a number of cabinet ministers and thousands of delegates.

Sir Andre Geim and Sir Kostya Novoselov both received the freedom of the city of Manchester and were honoured by the Royal Society; Sir Andre won the Copley Medal and Sir Kostya the Leverhulme Medal.



Artist's impression of the National Graphene Institute

MANCHESTER 2020 VISION LEADS TO £1 BILLION CAMPUS MASTERPLAN

We are investing £1 billion over the next ten years to create a world-class campus for our staff and students.

The Estates Masterplan, approved by the Board of Governors in October 2012, will create a single campus and will involve the construction of new teaching and research buildings, student facilities and major improvements to the public realm.

The first phase of the plan, costing around £700 million, is underway and will be delivered over the next five years. It includes the building of a new

engineering campus, new centres for the School of Law and Manchester Business School, a major refurbishment of the University Library, and a new Medical School for our students in Dover Street. There will also be investment in a Combined Heat and Power Facility, as well as a new car park and the refurbishment of the telescope at Jodrell Bank.

The University will also spend several million pounds to improve our public realm and landscaping in order to capitalise on the future improvements to Oxford Road. Students will benefit from major IT upgrades, a new teaching

block, refurbishments of several teaching rooms and an extension to the Students’ Union building.

Outline plans have been drawn up for a second phase which is expected to cost a further £300 million and would begin in 2018 and end in 2022.

Director of Estates and Facilities Diana Hampson said: “This visionary building programme will give us one of the most modern campuses in the world, where the vast majority of our students will be studying in brand new or refurbished buildings.”

The new investment is in addition to the £750 million spent since 2004 that has seen the completion of ten new buildings and many large-scale refurbishments.

Public bond issue

The campus masterplan will be partly funded by proceeds from bonds issued in July 2013.

The University issued £300 million in principal amount of its 4.25% bonds due 2053. The bonds were assigned a rating of Aa1 by Moody’s and were priced at a spread of 0.80% over the relevant reference gilt.

Barclays, HSBC and The Royal Bank of Scotland acted as joint bookrunners and National Australia Bank as co-manager, while Rothschild provided independent debt advice to the University.



Proposed redevelopment of Manchester Business School

SWEET SUCCESS FOR MBS GRADUATES

Kaffeination Ltd – the innovative energy sweet company founded by Manchester Business School (MBS) graduates – swept the board at the Rice University Business Plan Competition in Texas, the largest competition of its kind in the world.

The company took first prize in the Shark Tank Presentation round, first prize in the Best Company Showcase and third prize in the Best Elevator Pitch.

Team members Matthias Schmid and David Reetz studied on the MSc Innovation Management and Entrepreneurship degree programme at MBS.

The idea for the energised jelly sweets, called UPs Solid Energy, came when the co-founders were sitting at their desks revising. After several coffees a bag of sweets was lying next to an empty cup and they wondered why there wasn't a product on the market which combines both sweets and caffeine.

The company also won the University's annual business Venture Further start-up competition and took first prize in the European final of the Indus Entrepreneurs International Business Plan Competition, which allowed the team to compete against 41 other finalists from across the globe in this latest win.



The Kaffeination team and their award

They received \$2,750 in prize money, made some fantastic contacts and met a number of potential investors. The scale of their achievement is highlighted by the fact that they were the only retail-product business among the finalists, a majority being from science or technology backgrounds. Their success received press coverage in Fortune Magazine and on the CNN website.

Co-founder David said: "It's thanks to the MBS enterprise team and their support with producing our business plan for the Venture Further competition that we have been able to achieve what we have."

UNIVERSITY DEVISES TRAINING FOR EMERGENCY RESPONSE WORKERS

Experts from the University devised specialist training for emergency response workers who sign up to deal with major disasters like earthquakes.

The training for UK medics who join the UK International Emergency Trauma Register focuses on the common conditions encountered after earthquakes, such as limb salvage surgery and crush syndrome.

Professor Tony Redmond, who set up the courses, is director of the UK International Emergency

Trauma Register, which provides medical response to earthquakes on behalf of the UK.

"The courses formalise best practice, building on knowledge we have gained responding to many earthquakes including Haiti, Pakistan and China in the last quarter of a century," he said.

Professor Redmond has been responding to disasters like earthquakes for 25 years. He is Global Health Theme Lead at the Manchester Academic Health Science Centre, a partnership between the University and six NHS organisations.



Professor Tony Redmond

IT'S OFFICIAL: THE UNIVERSITY OF MANCHESTER IS A GOOD PLACE TO WORK

Results from The University of Manchester's staff survey were published in June, with 94% of those who took part responding that they think the University is a good place to work.

This meant that the University ranks first out of the 28 higher education institutions surveyed by global market research company Capita Surveys and Research in 2012/13, which carried out the survey on the University's behalf.

Of 9,120 eligible staff, 71% completed the survey, making it the largest number of responses to a staff survey run by Capita in the higher education sector in 2012/13.

Other headline findings of the survey include:

- 92% of respondents said they are proud to work at the University.
- 89% said they are interested in the University – it's more than just a job to them.
- 95% said they felt safe and secure on campus.
- 88% said they knew what they were expected to achieve in their job.

Professor Martin Humphries, a Vice-President and Dean at the University, led the staff survey project. He said: "These results are extremely encouraging and on the whole show that staff are

very positive about their experience of working here at the University.

"But we are not complacent; we know that there is more that we could be doing to make our university an even better place to work. Each part of the University will be constructing action plans addressing those areas where more work is needed."

Three charities also benefitted from the staff survey – the University donated £1 for each survey completed, with staff able to choose which charity they wanted their donation to go to. The Christie and Cancer Research UK received £2,037 and £2,666 respectively, while Water Aid received £1,673.

UNIQUE PARTNERSHIP WITH PHARMA GIANTS

A ground-breaking centre dedicated to investigating inflammatory diseases like asthma and arthritis officially opened in March.

The Manchester Collaborative Centre for Inflammation Research (MCCIR) – a unique partnership between the University, GlaxoSmithKline and AstraZeneca – aims to deliver more effective treatments for a range of conditions such as asthma, arthritis and inflammatory bowel disease.

The centre's director, Professor Tracy Hussell, said: "Bringing together academia, industry and clinicians in one centre creates the real possibility of innovation.

"The ideas that spring from this partnership will fuel the treatments of the future and provide the ideal platform to transfer scientific progress into clinical benefit."



Professor Tracy Hussell



Professor Michael Wood

PEOPLE'S HISTORIAN COMES TO MANCHESTER

One of the country's best-loved historians became Professor of Public History at the University in September.

Michael Wood, who has been a regular face on our TV screens for over three decades, joined us to teach undergraduate and postgraduate students, lead historical field trips and give four public lectures a year.

Originally from Moss Side, Manchester, Michael has made well over 100 documentary films and is known for his work with community historians across the UK. He is also the author of numerous best-selling history books and will be based at the University for three years.

Over the next couple of years he will be writing and presenting a major BBC series exploring the history of China, a country with which the University has strong and growing ties.

On joining, Michael said: "I am thrilled to be involved in such an exciting project in history and the humanities, in such a dynamic and forward-looking university, and especially in my home town Manchester, one of the world's great historic cities."

Professor Keith Brown, fellow historian and Vice-President and Dean of the Faculty of Humanities, commented: "Michael Wood is the UK's leading public historian. He has had a huge popular impact, and we are delighted to announce his appointment."

£1.33M DONATION FOR POVERTY RESEARCH

Dr Rory Brooks and his wife Elizabeth made a £1.33 million gift to the University, taking their total donations to £4 million since 2004.

The money will go to the Brooks World Poverty Institute (BWPI), an international centre of excellence established to create and share knowledge to end poverty throughout the world. The University is an international research leader in poverty and poverty eradication.

This significant donation means that the University has now attracted £100 million in private philanthropic donations since its foundation less than a decade ago.

President and Vice-Chancellor Professor Dame Nancy Rothwell said: "This is far-sighted, generous and sustained philanthropy of the highest order. This milestone is to be celebrated with warm thanks to all of our donors, at all levels, and from all parts of the world. We can do a lot alone, but a great deal more together."

Manchester alumnus Rory said: "The Rory and Elizabeth Brooks Foundation is delighted to commit to further support for the University to enable the BWPI to continue its important work as part of a wider commitment

to support the bold aspirations of The University of Manchester's 2020 vision."

The University uses donations in a variety of ways, from funding scholarships for disadvantaged students, to supporting research into a range of issues including poverty and cancer.

Rory, co-founder of the international private equity group MML Capital Partners, graduated from UMIST in 1975. He funded the UK's first chair in Enterprise at the University, is Chairman of the University's Global Leadership Board and was awarded an honorary doctorate by the University in October 2010.



Rory Brooks in Bangladesh

UNIVERSITY HELPS BBC REVEAL THE WONDERS OF LIFE

The wonderful world of biology took centre stage on BBC2 through January and February 2013 with the series *Wonders of Life*. Not only was the programme presented by Professor Brian Cox, but the University also had a starring role behind the scenes.

Professor of Zoology Matthew Cobb was one of two named consultants on the ambitious series and on the accompanying book, alongside Nick Lane from University College London. Other Manchester staff involved included the Professor Martin Humphries, Dean of the Faculty

of Life Sciences, Professor Andrew Loudon and Dr Bill Sellers, all of whom offered scientific advice to the programme team.

Wonders of Life tackled the fundamental question: 'What is life?' Brian explored the globe to reveal how a few fundamental laws of science gave birth to the most complex and unique feature of the universe – life.

On how the University became involved, Matthew explained: "Because Brian was presenting the series he already knew what expertise the university could offer. The Faculty of Life Sciences was approached by the producers and we had an initial meeting with a number of academics, including the President and Vice-Chancellor, Professor Dame Nancy Rothwell. We discussed what aspects of the evolution of life the series could cover from a scientific perspective and looked at the science behind some of the ideas the producers already had."

Matthew, Nick and the Manchester team helped to ensure the science in the series was accurate and worked closely with Brian and the producer on the script.

Matthew added: "Brian was great to work with. He really appreciated the advice that Nick and I could provide and it was interesting for us looking at biology through a physicist's eyes. I think Brian's unique perspective has helped to take *Wonders of Life* to a whole new level and offers viewers something they haven't seen before.

"In fact, after watching the series I learnt a few things about the wonders of life!"



Professor Brian Cox

EUREKA! IS A WINNER WITH STUDENTS



Jade Brodie

Jade Brodie's idea to free up study space received first prize in the Eureka! final, hosted by TV presenter Ortis Deley, in May.

Hundreds of innovative ideas to enhance the library experience were whittled down to eight in a painstaking shortlisting process.

The eight finalists all impressed the panel of judges with great ideas and entertaining pitches.

The judges needed extra time to deliberate, eventually choosing Jade's idea of individual study desk log-ins. Jade, who won £1,000, was a final-year student in International Management with American Business Studies.

Runners up were Jacqueline Austin, who suggested a 'refresh zone', and Ariana Demian, with her idea for a system to indicate where in the library desks are available.

Jan Wilkinson, University Librarian, said: "It is so inspiring to see what a fantastic pool of talented students we have here at Manchester. This growing partnership with our students helps us to ensure that our services meet their needs."

HQ OF WORLD'S LARGEST RADIO TELESCOPE OPENS

The international headquarters of the world's largest radio telescope – the Square Kilometre Array (SKA) – was officially opened by Universities and Science Minister David Willetts in May.

Based at the Jodrell Bank Observatory, the new HQ is the hub for an international team of engineers and astronomers working on the development of a revolutionary new telescope.

SKA is a radio telescope that will be built in the deserts of Australia and southern Africa. It will comprise thousands of dishes and other receptors spread over thousands of kilometres to create a single giant telescope. The total collecting area of the dishes will be about one square kilometre, making SKA 50 times more sensitive than any existing radio telescope.

Construction of the £1.27 billion SKA is due to begin in 2016. By the time it is fully operational in 2024 it will be able to collect data equivalent to 100 times today's global internet traffic.

TEN YEARS OF ARTS FOR ALL

In October we celebrated the tenth anniversary of our Martin Harris Centre for Music and Drama. The Centre is a vibrant and diverse venue providing access to the arts for all, and its growth and success is thanks to its dedicated staff, students and donors.

Since its official opening in 2003, the Martin Harris Centre has hosted many famous names and even staged world firsts. It was named after Sir Martin Harris CBE, who was Vice-Chancellor of the Victoria University of Manchester from 1992 to 2004. A keen follower of the arts, Sir Martin was a key figure in securing funding for the Centre to be developed.

Initial discussions centred on bringing the music and drama departments together, both of which had very strong identities. Professor Viv Gardner, former Head of Drama, remembers: "We knew that Drama needed to secure somewhere central that would serve not only as a rehearsal space, but also a public performance venue – which we'd never had – that could accommodate the new audiences we wanted to bring into the University."

Professor John Casken, former Head of the School of Music and Drama, identified the need for up-to-date facilities and was heavily involved with formulating ideas and pushing through the vision for the building's design. He recalls: "We were very keen to maintain Manchester's reputation

nationally – the Music department had scored 5* twice in the Research Assessment Exercise in 1996 and 2000 – and the best way forward was to develop exceptional facilities fit for the needs of our excellent students and internationally recognised staff, particularly as student numbers increased dramatically.

"Coming together with Music was ideal; it generated an energy between the two subjects. There was a creative buzz about the new building among students, staff and visitors."

The Centre could not have been established without the generous support of Mr Cosmo Rodewald and the John Thaw Foundation, as well as the support of over 90 individuals and trusts that contributed through the Martin Harris Centre Supporters Group.

Inspiring

One of the aims was to provide a performance space that would reach out to all audiences: from schoolchildren visiting for the first time to regular arts devotees. For students the

The Centre's facilities offer fantastic spaces in which to study and perform





The Martin Harris Centre, Coupland Street

experience of studying and performing in a bespoke venue has had a huge impact – and has given them something from which they can draw inspiration later in their careers.

Music alumnus Gavin Osborn says the contemporary music ensemble Trio Atem was “born and nurtured” at the Martin Harris Centre. Now a professional ensemble, Trio Atem collaborates with and commissions composers of international standing. Gavin comments: “The Martin Harris Centre for us is our spiritual home, where we regularly give premieres of new work and collaborate with the Music Department to help foster the next generation of composers and performers.”

Drama alumnus Alistair McDowell went on to win the Bruntwood Prize for Playwriting in 2011. He has gone on record to acknowledge the city’s importance to his career, saying that his playwriting skills were honed during his student days and that he first tried out his plays at the Martin Harris Centre.

And it’s not just students who find the venue inspiring – local schoolchildren have taken part in events and workshops such as the Animation 13 Computing Awards, John Hegley Poetry Days and

Vaganza Music Composition Days. Toby Howard, organiser of the annual UK Schools Computer Animation Competition Awards, says: “Both teachers and pupils alike have thoroughly enjoyed the events at the Martin Harris Centre. The team there are great to work with and willingly go out of their way to accommodate our needs.”

Ambitious

Centre Manager Mark Woolstencroft says: “We have built strong cultural relationships with partners such as Manchester Science Festival, Psappha, the BBC, the Hallé, Manchester International Festival, Manchester Pride and Manchester Literature Festival. This offers students and colleagues opportunities to work and rub shoulders with a wide range of professionals. My ambition is to bring more of our local community into the Centre to perform, watch and listen to what we do.”

In October 2012 the Centre hosted a world first when music aficionados got to hear the first known performance of a ‘lost’ hymn by Beethoven, discovered by Professor of Music Barry Cooper and performed by Manchester music students. Staff, students and visitors alike were able to experience Professor Cooper’s reconstructed movement of the string quartet – and a live broadcast on BBC Radio 4 ensured it reached a national audience.

Celebration

To mark the ten-year milestone, an exciting line-up of events took place. Manchester alumna Meera Syal MBE – best known for TV comedy show *Goodness Gracious Me* and her novel *Anita and Me* – appeared at the celebration event on 17 October, in conversation with BBC Radio 4 presenter and fellow alumna Sheila McClellon.



“I have fond memories of my time in the city and my experience at university helped shape my career,” comments Meera.

Other events throughout the autumn semester included Louis de Bernières, the acclaimed author of *Captain Corelli’s Mandolin*, current Professor of Creative Writing Jeanette Winterson, and the newly appointed Professor of Public History Michael Wood.

President and Vice-Chancellor, Professor Dame Nancy Rothwell says: “The Martin Harris Centre is indisputably a great asset to the University and we are very proud of it. It is a fantastic facility for students, staff and visitors to the University alike.”

Professor Jeremy Gregory, Head of the School of Arts, Languages and Cultures, adds: “The Martin Harris Centre has been home to our world-leading departments of Drama and Music for the last decade, providing an inspiring space in which to teach, learn, rehearse, practise and perform.”

From its roots in music, drama and improving arts access, the Martin Harris Centre has inspired many people for different reasons, and future generations will benefit from its place in the University and the city.



MANCHESTER CONTINUES TO RISE TO CANCER CHALLENGE

Cancer research in Manchester has continued to flourish with the University securing funding through a number of major competitive bids this year.

The University was selected by Cancer Research UK and Engineering and Physical Sciences Research Council as a cancer imaging centre, in partnership with the University of Cambridge. The centre will see researchers share a £35 million investment, split between four centres across the country. This builds on previous investment at our Wolfson Molecular Imaging Centre.

Professor Ian Jacobs, Vice-President of The University of Manchester and Dean of the Faculty of Medical and Human Sciences, said: "We can anticipate that the Centre will, in due course, result in advances in cancer knowledge and cancer care that will save lives and benefit people in the North West, across the UK and worldwide."

Work has progressed well on the Manchester Cancer Research Centre (MCRC), a partnership between The University of Manchester, The Christie NHS Foundation Trust and Cancer Research UK. The new £28.5 million MCRC building is set to open in summer 2014. A topping out ceremony was held to mark the construction of the highest point of the building in autumn 2013.

The University and The Christie NHS Foundation Trust partnered on a £30 million investment plan to attract and recruit 20 internationally outstanding investigators to Manchester.

This follows last year's £12.8 million award from the Higher Education Funding Council for England, which helped fund the MCRC building and enabled the purchase of new equipment.

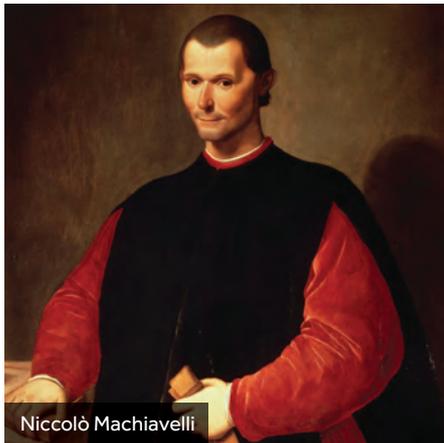
Manchester scientists continue to lead the way in cancer research, with a team leading a £5 million European study to come up with methods to reduce the unwanted side-effects of radiotherapy and improve cancer treatment. Our researchers are also involved in a new £14 million, UK-wide study to track how lung tumours develop and evolve as patients receive treatment.

Manchester joined a worldwide investigation that found a near doubling of the number of markers associated with breast, ovarian, and prostate cancer, while lung cancer researchers found that adding drugs to targeted melanoma treatment could increase survival for certain patients.

Our researchers have been working in Uganda and Kenya on projects to improve cancer screening for women while, in the UK, our research has found that survival rates among teenagers and young adults with cancer have climbed by about 11% over two decades.



Artist's impression of the Manchester Cancer Research Centre



Niccolò Machiavelli

MACHIAVELLI'S 'MOST WANTED' NOTICE DISCOVERED

The original copy of a 500-year old proclamation calling for the arrest of one of the world's most infamous political operators was discovered by a University academic.

Professor Stephen Milner from the School of Arts, Languages and Cultures, came across the 1513 proclamation which led to the downfall of Niccolò Machiavelli, known as the Italian Prince of Darkness, buried in the state archives in Florence.

The 'most wanted' notice began a chain of events that led to him writing his best-known

work *The Prince* and marked a change in the civil servant's political fortunes.

The Prince, infamous for advocating the sacrifice of virtue and morality to maintain power at all costs, has been reinterpreted over the centuries to apply to areas as diverse as banking, finance, business and politics.

In 2013 the city of Florence celebrated the 500th anniversary of the guide's publication – beginning with a reconstruction of the events surrounding his capture and imprisonment.

STUDY OFFERS HOPE FOR PARASITIC INFECTION TREATMENTS

University scientists have discovered that weight loss plays an important role in the body's response to fighting off intestinal worms.

The findings from a study using mice show that the immune system hijacks the natural feeding pathways causing weight loss. This then drives the defence mechanisms down the correct pathway to expel the worms.

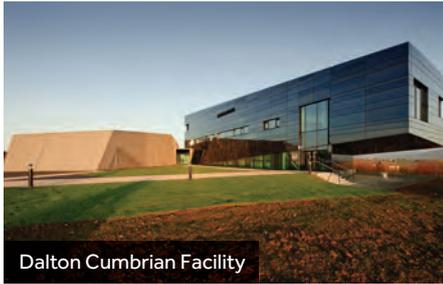
Nearly a quarter of the world's population is infected with gastrointestinal parasites, often resulting in reduced appetite and, as a result, weight loss.

Dr John Worthington, from the Faculty of Life Sciences, said: "We were surprised. Normally weight loss is associated with a negative immune response but this appears to suggest just the opposite – the immune-driven weight loss was actually beneficial to the mouse's ability to resolve an infection and get rid of the worm.

"Our study provides novel insights into how the immune system interacts with feeding pathways during intestinal inflammation. We hope it will help us to design new treatments for the many millions of people who suffer from parasitic infections of the gut."



The worm *Trichinella spiralis*



Dalton Cumbrian Facility



CUTTING-EDGE NUCLEAR RESEARCH FACILITY OPENS IN CUMBRIA

The University's Dalton Nuclear Institute officially opened its Cumbrian research facility in September.

The Dalton Cumbrian Facility (DCF) is a new research base established with an initial £20 million joint investment by the University and the Nuclear Decommissioning Authority (NDA).

Now a core component of the new National Nuclear User Facility, announced as part of the Government's Nuclear Industrial Strategy, the DCF is designed to complement and significantly expand the nuclear research and education capability of the UK's nuclear R&D sector. The overall aims of the

facility are the delivery of world-leading nuclear research and the transfer of knowledge to industry.

Its research will focus primarily on the areas of radiation science and nuclear engineering decommissioning.

The Rt Hon Lord Hutton of Furness, who officially opened the facility, said: "I commend The University of Manchester and the NDA for the foresight, vision and commitment they have shown in creating the Dalton Cumbrian Facility – a world-leading facility for nuclear research, for nuclear skills development and a major driver for socio-economic growth in West Cumbria."

FUNDING FOR MAJOR MATERIALS FACILITY

The University received £18 million from the UK Research Partnership Investment Fund to set up a state-of-the-art Multidisciplinary Characterisation Facility.

This will be supported by an additional inward ten-year investment of more than £100 million from founding partners BP, Rolls-Royce, AMEC, Sellafield,

NNL, FEI Company, Xradia, Rapiscan Systems, AREVA, Westinghouse, EDF and TISIC.

Advanced materials research and development underpins all manufacturing sectors and is essential to UK economic growth. UK businesses that depend on the production and processing of materials represent 15% of the UK's GDP, have a

turnover of £170 billion and have exports valued at £50 billion.

The new facility, which will be operational by 2014, will focus on the UK's strategic development in advanced materials and manufacturing, and will provide the necessary expertise to accelerate innovation from the laboratory to market.

OVERDOSE DEATHS REDUCED BY SMALLER PACK SIZES

A study revealed that the number of deaths from paracetamol overdoses has fallen by 43% in England and Wales after packets were made smaller.

Researchers from the universities of Manchester and Oxford found a reduction in the number of deaths following legislation introduced in 1998 to restrict pack sizes to 32 tablets at pharmacies and 16 for non-pharmacy sales.

The study analysed data from 1993 to 2009 and found there were 760 fewer deaths during the period since the legislation – with around 70 lives saved per year.

Professor Nav Kapur from the University's Centre for Suicide Prevention said: "This may be something to do with interrupting the thought processes of people who feel suicidal. Those few minutes or seconds can sometimes make all the difference."

UK FIRST AS 6,000-YEAR-OLD 'HALLS OF THE DEAD' UNEARTHED

Archaeologists from the University and Herefordshire Council discovered the remains of two large 6,000-year-old halls, each buried within a prehistoric burial mound.

The sensational finds, which are a UK first, on Dorstone Hill near Peterchurch in Herefordshire, were thought to have been constructed between 4000 and 3600 BC.

According to the team, the halls were deliberately burnt down after they were constructed and their remains incorporated into the two burial mounds.

The buildings, probably used by entire communities, are of unknown size, but may have been of similar length to the Neolithic long barrows beneath which they were found – 70 and 30 metres long.

Professor of Archaeology Julian Thomas, co-director of the excavation, said: "These early Neolithic halls are already extremely rare, but to find them within a long barrow is the discovery of a lifetime."



Professor Julian Thomas

WORLD'S LARGEST STUDY OF FOOD ALLERGIES GETS UNDERWAY

People with severe allergies to nuts and other foods are to benefit from a new worldwide study spearheaded by the University.

The £7.6 million project sees the University work with the world's leading experts in the UK, Europe, Australia and US.

Professor Clare Mills, from the Allergy and Respiratory Centre of the University's Institute

of Inflammation and Repair, said: "This is a massive research project which will have far-reaching consequences for consumers and food producers.

"The evidence base and tools that result from this will support more transparent precautionary 'may contain' labelling of allergens in foods which will make life easier for allergy sufferers as they try to avoid problem foods."

Up to 20 million European citizens suffer from food allergy, but management is thwarted by lack of evidence-based knowledge. The research will also help to inform nutritional advice on nutrition for pregnant women, babies and allergy sufferers.

UNIVERSITY JOINS FORCES WITH PREMIER LEAGUE GIANTS

The University teamed up with Manchester City Football Club this summer to launch a new Learning Through Football programme.

Student volunteers from the Manchester Leadership Programme (MLP) joined coaches from City in the Community for a Skills and Enterprise Day at the Etihad Stadium, as the two organisations embarked on a new partnership.

The students helped to teach literacy and numeracy to pupils from the School of the Resurrection in Beswick, East Manchester, using the home of last year's Premier League champions as a giant classroom.

Lindsay Gilbert, Head of Volunteering and Community Engagement, said: "Our MLP students learn about key contemporary issues, contribute to community projects and meet high-profile leaders from different sectors. MLP is an exciting programme that helps students to develop leadership skills and a greater awareness of social, economic and environmental sustainability."

Debbie Glynn, Skills and Enterprise Manager at Manchester City, said: "We see first-hand every day the unique power that football has to inspire young people. We want to use that special connection to get children excited about learning."



Samir Nasri (left) and Kolo Toure meet pupils

TOURISM AWARDS FOR JOHN RYLANDS LIBRARY AND JODRELL BANK

Two of the University's cultural gems gained recognition this year from local and national sources.

The John Rylands Library on Deansgate was named Manchester's Large Visitor Attraction of the Year at the city's annual tourism awards.

The building, described by the judges as progressive and exciting, is one of the city's most famous landmarks as well as a world-renowned research library.

Built in the 1890s by Enriqueta Rylands in memory of her husband John, Manchester's most successful cotton tycoon, the Grade I-listed building has enjoyed a new lease of life since reopening in 2007 following a £17 million conservation programme.

Jan Wilkinson, Director of The John Rylands Library, said: "We've worked tremendously hard to create a venue and programme of events and exhibitions which will appeal to all residents and visitors to Manchester."



The John Rylands Library



Jodrell Bank Observatory

Meanwhile, Jodrell Bank had three reasons to celebrate. Marketing Cheshire named the Discovery Centre as Tourism Attraction of the Year, while its Planet Pavilion Cafe was listed as one of Cheshire's top ten budget restaurants by the *Guardian*.

Thirdly, Jodrell Bank's first ever musical festival, Transmissions 001, won Best Outdoor Event at the Event Awards.

MUSEUM WINS FUNDING TO BETTER LIVES THROUGH VOLUNTEERING

Manchester Museum celebrated the award of a Heritage Lottery Fund grant of £528,700 for a ground-breaking volunteer and learning programme, in partnership with the Imperial War Museum North.

Improving Futures: Volunteering for Wellbeing is a three-year project to create opportunities for more than 200 volunteers to learn new skills and engage with museum collections and visitors at the Museum and partner venues across the city.

The programme will focus on young people aged 16-25, older people and ex-service personnel.

Volunteer Shaun Bennett, who joined In Touch at the Museum in September 2007, can testify to the impact of such an opportunity: "There are so many activities I enjoyed and the training I received helped me gain back my confidence in my personal life and prepared me for my role as a volunteer," he said.

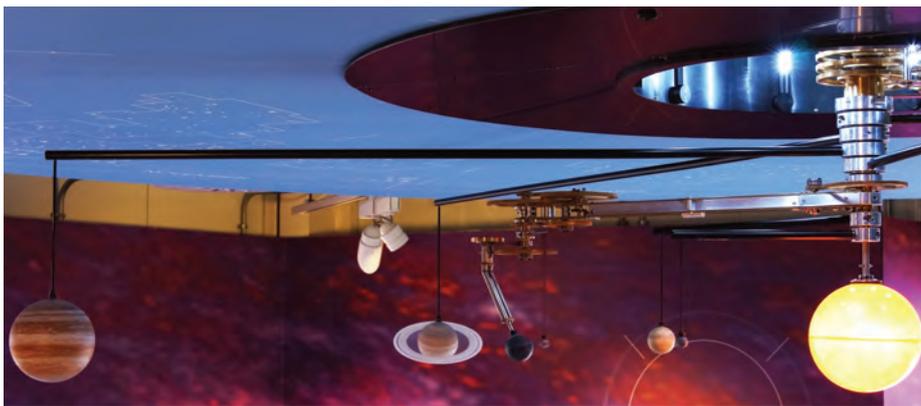
In December 2008, Shaun was employed as the Museum's Visitor Services Assistant; he was later promoted to Supervisor of the Front of House Team.

Museum Director Nick Merriman says: "Improving Futures will have a significant impact on the organisations it involves, transform the lives of those we engage and create a lasting legacy for heritage volunteering."



Volunteer Shaun Bennett

WORLD'S LARGEST ORRERY GOES ON DISPLAY



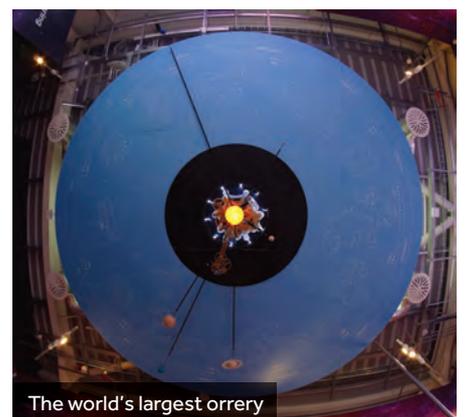
Jodrell Bank Discovery Centre welcomed the arrival of its newest exhibit – a beautiful and unique mechanical orrery – a moving model of the solar system.

At five metres in diameter, the orrery is believed to be the largest of its kind in the world and includes a complex system of 52 brass gears that ensure that the planets orbit around the Sun at exactly the right rate in relation to each other.

Built by London's innovative Science Projects, the orrery was installed in the gallery space of the Discovery Centre's Planet Pavilion. It can be driven by a large winding handle, allowing visitors to orchestrate the motion of the planets themselves.

Following the orrery's arrival, Dr Teresa Anderson, Director of the Jodrell Bank Discovery Centre, said: "We've been planning this exhibit for almost two years so it's wonderful now to see it in place. It's completely bespoke and unique to Jodrell Bank and gives visitors the opportunity to interact with some of the UK's finest precision engineering and craftsmanship first-hand."

Dr Tim O'Brien, Associate Director of the Jodrell Bank Observatory, added: "This is one of those rare occasions when doing lots of calculations results in the creation of something that is immediately appealing to everyone, regardless of their level of familiarity with physics. It's a handsome piece of engineering."



The world's largest orrery

VOLUNTEERS OF THE YEAR

In our Social Responsibility and Volunteer of the Year Awards, the University celebrated the volunteering achievements of staff, students and alumni who share their skills, knowledge and experience while juggling busy lives.



Professor Dame Nancy Rothwell with winners (l-r): Alice Engelhard, Dr Rebecca O'Loughlin and Dr Sheena Tyler

This year's staff winner was Dr Rebecca O'Loughlin, who has been a listening volunteer for the Leeds branch of the Samaritans for 11 years.

A challenging and demanding role, Rebecca's commitment adds up to around 160 hours a year, which is particularly impressive as she often starts a shift after finishing work and a two-hour commute.

Rebecca works as a learning and assessment developer within the Careers and Employability Division, and her line manager, Colette Cooke, nominated her for the award. Colette said: "The great thing about Rebecca is she doesn't realise how special she is, she's a very understated person – it's extraordinary that sometimes she finishes a full day's work and then completes a shift for the Samaritans, which might be overnight."

After the ceremony, Rebecca said: "The simplicity of what we do – just being there to provide confidential, non-judgemental support for people who often don't know which way to turn – is its own motivation and reward."

The student prize was awarded to Alice Engelhard. The European Studies and Spanish student is the lead coordinator of a project for homeless women.

Dr Sheena Tyler won the alumni prize for her work on the Longdendale Community Group in Tameside, where she has inspired hundreds of people to make their voice heard.



Professor Dame Nancy Rothwell

DAME NANCY A BIG HITTER ON BBC POWER LIST

The President and Vice-Chancellor, Professor Dame Nancy Rothwell, was named one of the UK's most powerful women in a BBC survey.

She took 15th place in a list of the country's 100 most influential females for Radio 4's Woman's Hour. What's more, 4 of the top 20 women studied at or taught at our University.

The list also includes Supreme Court judge Baroness Hale of Richmond, who taught law here, and alumni Professor Dame Sally Davies, Chief Medical Officer for England, and Frances O'Grady, TUC General Secretary.

Eve Pollard, journalist and one of the judges, said: "What this list does is shine a light on those sectors where too few women are getting to the top, like politics, FTSE companies, the military and journalism. Our legacy, we hope, is that this list might change that."



University Challenge team coach Stephen Pearson

UNIVERSITY CHALLENGE COACH CONTINUES PROUD RECORD

When Manchester retained its University Challenge title with its fourth win in just eight years, it marked the pinnacle of a long, demanding but ultimately joyous journey for team coach Stephen Pearson.

The research information analyst was himself a team captain in the 1996/97 series, when he lost in an exciting, close-fought semi final. Since then, he has selected and coached eleven Manchester teams, including two winning teams in consecutive years.

The reigning champions – captain Richard Gilbert, Adam Barr, David Brice and Debbie Brown – beat University College London 190 to 140 in the televised final.

The team and Stephen were honoured by the Lord Mayor at Manchester Town Hall and by the University at the Cockcroft Rutherford Lecture.

So is Stephen after a record-breaking fifth title? "It would be nice," he admits. "However, even though I tell the teams to relax and enjoy it, and not to feel any pressure, I suspect that each successive team does feel a certain amount of pressure in that each of the last eight Manchester teams on the show has reached at least the semi-finals.

"I don't want to put any more pressure on them by talking about another win!"



(Top l-r): Debbie Brown, Adam Barr, David Brice, Richard Gilbert
(Bottom l-r): Former Lady Mayoress Linda Geoghegan, Stephen Pearson, Former Lord Mayor Elaine Boyes

WAR CHILD'S JOURNEY TO MANCHESTER

An inspirational teenage refugee, who at 12 travelled through eight countries to escape war-torn Afghanistan, is now studying for a degree at Manchester.

Gulwali Passarlay, 18, fled for his life and endured a year of solitary hardship on the road. He is now taking a BA in Politics and Philosophy, supported by the Manchester Access Programme.

Many members of Gulwali's family, including his father, were killed during the conflict. In 2006 his mother urged her 12-year-old son to make his way to England.

His journey meant months of hunger, illness, loneliness, a frightening 50-hour sea crossing crammed below deck without food or drink with 100 other refugees, in a space designed for 20, and a terrifying motorway journey clinging to a hot engine inside a lorry.

When he arrived in 2007, his troubles were not over: penniless and speaking no English, he endured months of racism, loneliness and poverty.

Despite the setbacks he has gone on to achieve remarkable success in and out of school.

Gulwali was chosen to join a Department for Education panel which scrutinises how policy affects young people. He was the first Afghan ever to take part in the Olympic Torch Relay and is on speaking terms with government ministers and politicians, including Ed Miliband, the leader of the Labour Party.

He said: "University is the most important thing in my life right now. It will enable me to achieve my ultimate goal of going back to Afghanistan to help change my country for the better."



Gulwali Passarlay

Julian Skyrme, Director of Social Responsibility, said: "Congratulations to Gulwali who has conquered so much to make it here. His story should make us all feel rather humble."

TOP HONOUR FOR EQUALITY CHAMPION



Emerita Professor Katharine Perera receives the Medal of Honour from Professor Dame Nancy Rothwell and Professor Aneez Esmail, Associate Vice-President for Equality and Diversity.

Emerita Professor Katharine Perera has received the University's most prestigious medal, its Medal of Honour.

Katharine, who was once described as representing everything that is intended by the phrase 'academic leadership', is a former senior pro-vice-chancellor of the Victoria University of Manchester.

Even when she officially retired from the University, she continued to make an impact, directing the Women in Leadership project and identifying ways to increase the proportion of women in leadership positions at the University.

She also played a huge part in establishing the Athena Swan awards at the University, which focus on the career advancement of female academics in science, engineering and technology.

The Medal of Honour is bestowed on people who have made an exceptional contribution to the work of the University, the city or the region.

President and Vice-Chancellor Professor Dame Nancy Rothwell described Katharine as "a true role model for many staff – men as well as women."

A GRAND JOB – CHRIS IS OUR 1,000TH EMPLOYEE

The University helped its 1,000th long-term unemployed person into work at the University and elsewhere in just two years, as Chris Livingston from Whalley Range started work.

Chris was helped into employment through The Works, an employment and skills centre established by the University in 2011 to equip unemployed local people with skills that make them attractive to employers.

Now working in the School of Physics and Astronomy, Chris, 48, said: "I am absolutely delighted. My friends and family have noticed a real difference in me and they're really happy for me."

Chris had previously worked for more than a decade as a metal finisher at a company supplying car parts, but was made redundant in 2009 due to the recession and had been out of work since.

The University's Assistant Director of Human Resources Steve Grant said: "The Works is a part of the University's wider ambition to support communities in Manchester.

"We recognised that there was a gap in the support available to unemployed people and decided that, as a major employer in the region, we could make a difference."



Chris Livingston (left) and Stores Manager Noel Ogden



UNIVERSITY CELEBRATES ITS 10,000TH DONOR

University alumna **Stephanie Sparkes** rounded off 2012 by donating a gift to support scholarships for students from the local area – and became the University's 10,000th donor.

Stephanie, who graduated in 2011 with a BA in Geography, made her gift of £20.11 to celebrate her graduation year during the Your Manchester Fund telephone campaign.

She chose to give towards Opportunity Manchester Scholarships, which are targeted at students from the Greater Manchester area who may not be able to attend university without additional financial support.

Stephanie said: "I was more than happy to miss a night at the pub and instead give a donation that,

alongside others, will ultimately allow people to have the valuable educational experience which I enjoyed.

Chris Cox, Director of Development and Alumni Relations, said: "This marks a real milestone in The University of Manchester's long history of philanthropy. I would like to thank Stephanie and the other 9,999 recorded donors over the decades for their commitment to helping the University and its students.

"The annual fund now provides over £500,000 for student-focused support across campus each year, which, alongside our major gifts programme, is making a meaningful difference to research and learning."



Stephanie Sparkes



STUDENTS

We have the largest student community of any campus-based university in the UK. Of the 38,430 students registered at the University, 27,085 are undergraduates and 11,345 are postgraduates. In addition, we have 4,040 students studying wholly outside the UK who are either registered with us or are studying for a University of Manchester award.

	Home/EU	Overseas	Total
Undergraduate study	22,250	4,835	27,085
Postgraduate taught	4,980	2,915	7,895
Postgraduate research	2,210	1,240	3,450
Total*	29,440	8,990	38,430

*Source: HESA standard registration population (excludes writing-up students, dormant students, incoming visiting and exchange students and students who have left within two weeks of the anniversary of their start date).

Numbers are rounded to the nearest 5

STAFF

With more than 11,000 staff, we are one of the largest employers in Greater Manchester.

Headcount figures at 31 July 2013	
Academic (including 1,975 teaching-only staff)	4,030
Research	1,940
Academic support	1,545
Clerical/secretarial	1,620
Administrative/management	1,230
Manual/craft	715
Total*	11,080

*Numbers are rounded to the nearest 5



INCOME

We have an annual income of £827 million.

Income

Tuition fees and educational contracts	£302m
Funding council grants	£178m
Research grants and contracts	£200m
Other operating income	£129m
Endowments and investments	£18m
Total	£827m

THE UNIVERSITY AT A GLANCE

Mission and vision

"By 2020 The University of Manchester will be one of the top 25 research universities in the world, where all students enjoy a rewarding educational and wider experience; known worldwide as a place where the highest academic values and educational innovation are cherished, where research prospers and makes a real difference, and where the fruits of scholarship resonate throughout society."

Senior officers

President and Vice-Chancellor	Professor Dame Nancy Rothwell
Deputy President and Deputy Vice-Chancellor	Professor Rod Coombs
Chancellor	Tom Bloxham
Pro-Chancellor and Chairman of the Board of Governors	Anil Ruia
Pro-Chancellor	Gillian Easson

