

THE UNIVERSITY *of York*

2013  
1961

REFLECTIONS  
50 YEARS OF CHANGING THE WORLD



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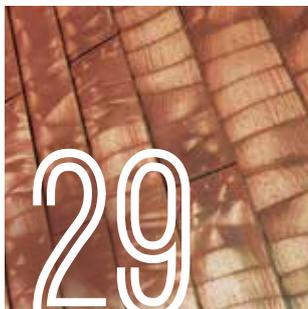
The global University



The visionaries



The evolving campus



Student life



Embracing the future



Towards new horizons

For more about the history of the University of York and our 50th Anniversary celebrations visit  
[www.york.ac.uk/50](http://www.york.ac.uk/50)





# 5 THE GLOBAL UNIVERSITY



The 3Sixty demonstration space in the Ron Cooke Hub

# THE GLOBAL UNIVERSITY

**H**ad Lord James lived to see his cherished progeny reach its 50th Anniversary in 2013, the first Vice-Chancellor of the University of York would have been deservedly proud. As one of Britain's youngest universities, York has risen from modest beginnings to the very top rank of higher education institutions in the country and the wider world.

## Top of the league

In 2012, two international league tables of the most successful young universities ranked York as number one in the UK and number six in the world: a fitting birthday present.

"In just 49 years, the University of York has managed to forge a powerful global reputation as a strong research-led university, and it performs very well against the world's elite heritage institutions," said the Editor of the Times Higher Education Rankings, Phil Baty, when he announced the league table results in 2012.

These elite heritage institutions include the likes of Oxford and Cambridge in the UK, and Harvard and Stanford in the United States, all of which have centuries of tradition and experience behind them, and are backed by significant levels of private funding.

For York's current Vice-Chancellor, Professor Brian Cantor, this success: "stems from the hard work, dedication and ability of all our staff and students over many years. It is their commitment to the pursuit of excellence and inclusivity in teaching, research and knowledge transfer that has enabled us to achieve this leading position in the world."

## Meeting the global challenges

But he is not complacent: "Over the last ten years we have worked hard to establish the University of York as a world-class player. We are there now. The challenge in the coming decade is to consolidate and strengthen our position by maintaining our focus on excellence in teaching and research. I believe it is our reputation for research that leads people from all over the world to come to York. They want to work with us in meeting and overcoming some of the most pressing challenges facing humankind today – from global warming



Professor Brian Cantor

and food scarcity to eliminating poverty and delivering modern healthcare and welfare systems in the emerging new economies."

When Professor Cantor was headhunted for the Vice-Chancellor's position at the start of the new millennium, he was told that one of his key tasks would be to raise the profile of the University on the global stage. "Under my predecessors, Berrick Saul and Ron Cooke, York had established a reputation as one of the most consistent, top performing, British universities in both teaching and research. The challenge was to extend that reputation to the wider world," he said.

But why go global? "For a modern university to be successful it has to compete on a global stage," said Professor Cantor. "Economic growth in countries such as Brazil, Russia, India and China is creating a huge middle class with an insatiable appetite for higher education. These students are incredibly mobile and, through the internet, they are also well informed when it comes to choosing where to study.

"The world's leading universities – and York is one of those – face big challenges in the next decade. There are massive problems for human society and we have a duty and responsibility to play a role in finding solutions to those problems – whether they are of poverty and deprivation, climate change and global warming or food security and conflict resolution."

Professor Brian Cantor  
Vice-Chancellor

## Times Higher Education Awards

2012 – The University of York was ranked first in the UK and eighth in the world in the Times Higher Education world rankings of universities less than 50 years old

2012 – Outstanding Support for Early Career Researchers

2011 – Outstanding Engineering Research Team, member of the Widening Participation Initiative of the Year partnership

2010 – University of the Year

2009 – Outstanding Contribution to Leadership Development

2008 – Outstanding Employer Engagement Initiative

“The same is true of industry, which is both global and highly mobile. Business is looking for research partners around the world and will choose them according to the best fit with their strategic goals. Competition for students and business partners will only intensify over the coming decade, and York needs to raise its game if it is to continue to rank among the best in the world.”

Nearly a quarter of the University’s academic staff and students come from outside the UK, from 132 different countries. Business partners include global brands such as IBM, GlaxoSmithKline, AstraZeneca, Rolls-Royce and Unilever. York is a founding member of the Worldwide Universities Network, comprising universities from the US, China, Australia and South Africa.

Today the world student population is estimated to be around 100 million and the money spent supporting them and their research is thought to be as much as £2 trillion and is growing at six to eight per cent per annum. York’s Development Plan in 2003 and its University Plan 2009/19 underscore the need to compete successfully in this international arena.

commitment to excellence, inclusivity, sustainability and internationalisation. A strong focus on excellence in teaching and research has, of course, run through York’s history like a golden thread. Likewise, the close relationship between the research activities of staff and the teaching of students, has also been a hallmark of the York approach.

“Our teaching and learning will be informed by our research activities and based on the particular interests and expertise of the staff. While using modern technologies, we will continue to place a high value on academic contact with students,” states the University Plan. This latter point highlights another feature of the York experience – a pedagogy in which seminars and tutorials play a very important role in the education of young people, even in a world where smartphones and social networking are kings.

“At York, we believe that the best higher education is a residential, lived experience in a vibrant, intellectual environment,” said Professor Cantor.

## Qualities of leadership

One of the most important reasons for York’s remarkable rise to global pre-eminence can be traced to the leadership qualities of its Vice-Chancellors, and the teams they have assembled around them. Each, in their own way, has had a distinctive vision for where they wanted to take the University.

“But having and articulating the vision is only the beginning,” said Professor Cantor. “The vision has to be worked through and shared with colleagues. One of the great things about York is that people work together. An independent study of British universities found that York has the strongest institutional culture – people see themselves as members of the wider University rather than just their department or research unit. This creates a shared approach to achieving the vision.”

Interestingly, the University’s very first Vice-Chancellor, Lord James, noticed this same attitude almost half a century earlier when he was forced to make difficult spending cuts. “I received the support of my academic colleagues who were prepared to put the interests of the University before those of their own departments,” he was later to write. “I was initially surprised and always gratified by the fact that one was rarely deafened by the sound of the grinding of axes.”



**“At York, we believe that the best higher education is a residential, lived experience in a vibrant, intellectual environment.”**

Professor Brian Cantor  
Vice-Chancellor

“Ultimately success will depend on recruiting the best students and staff worldwide, delivering world-leading research and providing an excellent environment in which students can learn,” the University Plan states.

## Research-based teaching

To become a magnet for top-flight students, researchers and teachers from around the world, the University Plan reinforces York’s

## Re-engineering York for the 21st century

In the early 2000s, Professor Cantor and his senior colleagues worked with everyone throughout the University to re-engineer its approach: extending the subject mix to include professional and creative arts departments; re-engaging with alumni worldwide to create an extended academic and professional family network; forging international partnerships with other universities, research institutions, government agencies and NGOs across the world and embedding the notion of using the University's intellectual riches directly to create economic value and to enhance people's health and well-being.

## Independent thinking

The history and culture of York was also something that Professor Cantor took care to acknowledge and build upon. "Our vision had to work with the culture, which is collegiate and friendly. It is also rooted in Yorkshire and in the 1960s, so there is a strong streak of independent thinking and an acute sense of social inclusivity and equality."

The University Plan acknowledges the role that this culture has played, and will continue to play, in the evolution of York. "Our distinguishing features include the collegiate system, the University's informality and friendliness, and its flat management structure. This York ethos is valued by students and staff and admired by people outside the University who have a stake in our success."

York's commitment to inclusivity is both a moral and an operational imperative. The University Plan states: "It enables us to work more effectively as a community. It facilitates interdisciplinary collaborations within the University where much of our most novel research is done. It enables us to bring together talented students and staff from increasingly varied backgrounds and world views. We will protect and develop this ethos because it contributes to the dynamic intellectual environment on which our future success depends."

## Going with the grain

By working with the grain of this ethos, Professor Cantor said he learnt that "if you get enough people behind you, you really can move mountains." In this case, it meant that the University was able to double in physical size and more than double the scale of its activities over the last decade. In ten years, the University increased the number of students from 8,000 to 16,000, without losing the collegiate and friendly character that defines the personality of York. Over the last decade, the University's turnover trebled and a healthy surplus was created in a way that would have won the approval of any thrifty Yorkshire person.

Vice-Chancellor Professor Brian Cantor and Head of the Department of Archaeology Professor Julian Richards accepted the Queen's Anniversary Prize from Her Majesty the Queen and Prince Philip in Buckingham Palace in 2012, the fifth time the University has won the award. Past prizes have gone to Computer Science, the Centre for Novel Agricultural Products (CNAP), the Centre for Health Economics (CHE) and the Social Policy Research Unit (SPRU)



A big part of this increased turnover, and the doubling in capacity, can be seen in the new £750m campus on Heslington East, which has created the excellent learning and research environment which York needs if it is to compete in the global market place.

Four academic departments – Computer Science; Theatre, Film and Television; and the Law and Management Schools – have already moved into purpose-built accommodation.

The Ron Cooke Hub, which is a landmark building on the new campus, provides an eclectic, multi-purpose environment which is ideal for the new, interdisciplinary ways of working that are becoming the hallmark of successful global research institutions.

Lecture halls, seminar rooms, computer rooms, study spaces, research centres, cafes, meeting rooms, businesses, arts centres and conference facilities jostle together side-by-side to promote the maximum intellectual mixing of all the different people who come to the University. It's an exciting and dynamic



## York is a member of the World Universities Network (WUN)

This group of research-intensive institutions spanning six continents is dedicated to making significant advances in knowledge and understanding in areas of global concern:

University of Alberta  
University of Auckland  
University of Bergen  
University of Bristol  
University of Campinas  
University of Cape Town  
Chinese University of Hong Kong  
University of Leeds  
Maastricht University  
Nanjing University  
Pennsylvania State University  
University of Rochester  
University of Sheffield  
University of Southampton  
University of Sydney  
University of Western Australia  
University of Wisconsin-Madison  
University of York  
Zhejiang University

place in which to work. The growth and expansion of the University has not only enabled it to pack a bigger punch on the international stage, but has also allowed it to widen participation on its doorstep: a goal that has been pursued at York since 216 undergraduate students first arrived at Heslington Hall in 1963.

## Widening participation

Writing in 2007, just before work began on the building of Heslington East, Professor Cantor said: “This is one of the most exciting chapters in our history. We want everyone to believe that they have the potential to study, whether it is for a degree or on one of our lifelong learning courses. We have been widening participation in higher education since our doors first opened in October 1963. Our expansion plans give us renewed scope to do this and to open our doors to an increasing range of students, researchers, industrial partners, staff and visitors.”

## Russell Group

It is a measure of York’s ability to be both inclusive and yet known for its reputation for excellence in teaching and research that, five years after penning these lines, Professor Cantor was also able to celebrate the University’s admission into the elite Russell Group of universities.

“Elite in social terms is not a concept I am comfortable with,” he said. “But as a quality, what York represents is elite, as well as widening opportunity for all. And being a member of the Russell Group has been much more important than I imagined. The Russell Group and the Ivy League are the two most powerful collective brands in global higher education. We have already noticed how important this brand is in the international arena. It increases our credibility and reinforces our reputation as a centre of excellence. In quality terms, it confirms that we are one of the best universities in Britain and the world.”

## The language of the world

But York is not resting on its laurels. At a recent meeting with one of the world’s leading communications companies in the Far East, Professor Cantor was told by its research director that the company only recruits people who speak at least two languages and who,

ideally, have worked in two countries.

“I remember thinking, well that is fine for all our international students who are coming from outside the UK and will automatically develop two cultures. But how many of our British students have this qualification? This was a trigger point for me. It made me realise that our British students need to be able to speak another language and to spend a period overseas, absorbing the culture and way of life.”

He introduced a programme of free language tuition for every student and has promoted the need for all students to spend a period of time abroad. In the three years since this has been in operation the number of students learning a second language has increased dramatically. The number of students taking advantage of increased opportunities to go overseas has also doubled to eight per cent, but the rate of growth is slowing partly because of the difficulty of fitting it into the curriculum.

“Despite these obstacles I think that it is necessary and we will see a lot more students signing up because it has such a fantastic educational value,” said Professor Cantor.

## Future proofing

If the last ten years has been about establishing York’s place on the global stage, the next ten will be all about consolidating that position and using York’s strength to tackle some of the world’s major problems. “Now the competition really gets going,” Professor Cantor said.

“The world’s leading universities – and York is one of those – face big challenges in the next decade. There are massive problems for human society, and we have a duty and responsibility to play a role in finding solutions to those problems – whether they are of poverty and deprivation, climate change and global warming, or food scarcity and conflict resolution.

“The finger is pointing at all of us: are we up to the challenge? Is our research relevant? Do we have the right scale and capacity to make a difference? And how do we prepare our young people to go out into the world and become part of the solution rather than part of the problem? Here at York we are addressing those problems, both in the nature of our teaching and our research, but also in the way we encourage our students to engage with the world outside the University, volunteering locally, regionally and internationally. We are helping to make them good, global citizens.”

# 11 THE VISIONARIES

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## First impressions

A reflection by Oliver James, son of Lord James, the first Vice-Chancellor



Lord and Lady James at Heslington Hall

On my father's first visit to York he was given a guided tour of the site of what was to become the new University by the man who would become the institution's first Registrar – the energetic and enthusiastic John West-Taylor.

From the beginning he was preoccupied with hiring the best academic staff, deciding on the range of subjects to be taught and with attracting the best students. Crucially, however, he was focused on the planning and building of the new campus.

My father's three guiding principles were that the University of York should be collegiate in character, that its subject spread should be limited and that its teaching should primarily be through tutorials and seminars rather than mass lectures.

As for subjects to be studied, he and his colleagues wished to avoid the classics and law, which were already very well served elsewhere. From the start, social sciences were given prominence, as were the core subjects of English and history.

More innovative fields such as education and social work added breadth to the curriculum and provided opportunity for students to enter these expanding professions. The sciences – chemistry, biology and physics – were not forgotten but would have to wait until the first laboratories were built in 1965.

In that same year the students were asked why they had come to York. Broadly, they replied that they had 'been attracted to the new'. They felt it might be 'less hidebound' and had 'interesting courses' and were strongly 'attracted to the collegiate and tutorial system'.

But most of all, I think there was a great sense of fun and *esprit de corps* in those early days. I am sure the staff and students were having a great time: I know my father was.

# THE VISIONARIES

The dedication to excellence in teaching and research that has propelled the University of York to the top rank of the world's universities in just five short decades was hard-wired into the new University's DNA from the very beginning. Indeed, even before York opened its doors to 216 idealistic young people in 1963, the University Grants Committee had set up a high-powered Academic Planning Board three years earlier to ensure that York got off to a flying start. Chairing the group, whose members were to play godparents to the nascent University, was none other than Lord Robbins – economist, former Chair of the London School of Economics, adviser to government, chair of the *Financial Times* and the man whose eponymous report ushered in the modern university system.

## Modern and informal

Alongside Lord Robbins sat the bold and visionary Lady Ogilvie. During her time as Principal of St Anne's College, Oxford, she was instrumental in creating a college whose culture was 'modern, informal and open to the world' and which would undergo rapid expansion and growth – an approach familiar to all those who have studied or taught at York.

Closer to home, Sir William Mansfield Cooper, Vice-Chancellor of Manchester University, also offered sage counsel, having occupied his post during a period of great change with the expansion of staff and student numbers. Among the seven-member Board, it was he who pushed for Lord James to become the first Vice-Chancellor of the new university. Before formally accepting the role, however, Lord James thought it advisable to see the site for himself.

Heslington Hall, an Elizabethan mansion with substantial grounds in a village just a mile from York, was once the seat of Lord Deramore. With the outbreak of the Second World War, the family evacuated and the RAF took over the Hall as headquarters of 4 Group Bomber Command. After the war, Heslington Hall stood empty until it was sold to J B Morrell, Lord Mayor of York and Chairman of Rowntree Social Service Trust. He initially had plans to turn the estate into a folk park, with a village green, water mill and boat house. But as the possibility of a university became greater, Morrell saw that

as a worthier use of the site. So the Trust made a gift of Heslington Hall to the University, and together with King's Manor, in the centre of York, it formed the University of York's core accommodation.

## The three core principles

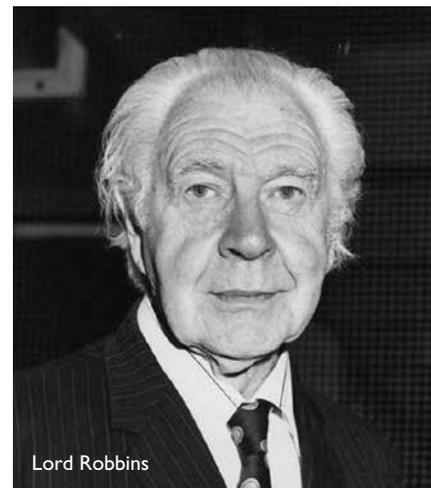
Supported by the Academic Planning Board, Lord James was able to articulate and win backing for the 'three principles' that were fundamental to his own 'thinking on the new university'.

The first was that it should be 'collegiate in character'. The second that it should 'deliberately limit the range of subjects it should cover, so that it should not aim to be too large'. The third was that 'much of the teaching should be by tutorials and seminars rather than lectures'.

While these three principles have evolved and changed over the last 50 years, during the first decade they formed the intellectual compass that guided the development of the new University.

## Small is beautiful

Lord James turned the smallness of the new institution to his advantage, since it enabled him to bring together a tightly-knit team of academics and administrators who would focus on excellence in teaching and research: the two hallmarks which have remained consistent over the last five decades.



Lord Robbins

The *Robbins Report* heralded a major expansion of British higher education in the 1960s and 1970s, which led to the formation of the modern British university system. These universities, of which York was the pioneer, were established not only to make places available for an increasing number of students, but also to make the education relevant to the needs of the developing British society.



John West-Taylor was a young Cambridge graduate when he was appointed as Secretary of the York Academic Trust. A knowledgeable lover of art and architecture, he was a passionate prosecutor of the university cause. Intending only to stay for a year or two, he stayed for two decades, becoming the fledgling University's first Registrar until he retired in 1981



Vanbrugh College

Having a small number of departments that were able to grow to a sufficient strength and scale – what a future Vice-Chancellor, Sir Ron Cooke, called the Princeton Formula, after the American university – was to prove one of the keys to York's global recognition as a centre of excellence for research.

Circumventing the normal recruitment process, Lord James used his extensive private network of contacts to attract some of the best and brightest talents of the day.

These included the renowned Shakespearean scholar, Philip Brockbank, who became the founding head and Professor of English; the feted historian of the English Civil War, Gerald Aylmer, who was the founding head and Professor of History; and, most controversially perhaps, the school Headmaster, Harry Réé, who became Professor of Education.

The economist Alan Peacock – who became the University's first Deputy Vice-Chancellor and later a key economic adviser to Prime Minister Margaret Thatcher – was poached from Edinburgh by Lord Robbins.

### The best and the brightest

The quest to find the best and the brightest in their chosen fields was driven by a desire to ensure that the new University rapidly established a reputation for excellence in teaching and research, which was also one of the key reasons why Lord James asked to interview new staff.

“Given [it was to be] a small university I believed that it would be a mistake to try to cover too many fields of study. A small university with comparatively few large departments achieves the best of most worlds. Academics thrive on talking to colleagues in their own broad areas. The interplay of ideas stimulates research. To have a few strong departments was, then, the first principle,” he said. And strong departments quickly developed. In his first Annual Report to the Court in 1964, Lord James noted a generous grant from the Nuffield Foundation to stimulate language research and the establishment of a Language Teaching Centre.

By 2008 the national Research Assessment Exercise placed the University's Department of Language and Linguistics Science second in the UK for research – with two-thirds of its output being judged to be world-leading or internationally excellent.



The first cohort of Economics students in a lecture, December 1963

### An international dimension

This same Annual Report also identified a theme that would run throughout the University's 50-year history: an international dimension. In 1964 Lord James reported that a group of administrators from Central Africa had arrived in York to study public finance for a year.

A similar group from 'the poorer European countries' took part in a short, but intensive, course, funded by the Organisation for European Economic Co-operation. These links with Europe and the African continent have strengthened over the decades.

Professor Peacock, who was also the founder of what was to become a world-renowned Department of Economics, recalls how the University also began quickly to establish a reputation around the globe in public finance. In a little over a decade he had supervised PhD students from more than 17 different countries.

### The 'York Mafia'

One of those who Professor Peacock took under his wing was a young South Korean student by the name of Han Seung-Soo. A gifted scholar, his PhD on economic integration won the premier thesis award of the European Community, the Charlemagne prize. He later became South Korea's Prime Minister and remains a close friend of the University.

Han also became a member of what Professor Peacock would later call the 'York Mafia'. These people were a "motley crew of professors of economics," notably but not exclusively in public finance, who include Ministers of Finance and the Prime Minister of Portugal, Anibal Cavaco Silva, whom the University was to honour in 1995 with the award of an Honorary Degree.

### Chancellors



1963–1967  
The Earl of Harewood



1967–1978  
Lord Kenneth Clark



1979–1990  
Lord Michael Swann FRS



1991–2004  
Dame Janet Baker

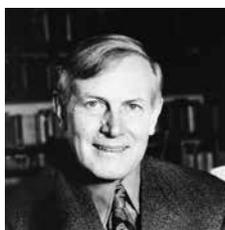


2004–present  
Dr Greg Dyke

## Vice-Chancellors



1960–1973  
Lord Eric James



1973–1978  
Dr Morris Carstairs



1979–1993  
Professor Berrick Saul



1993–2002  
Professor Sir Ron Cooke



2002–2013  
Professor Brian Cantor CBE

### Top of the English league

When the renowned literary scholar and critic, Dr F R Leavis took up residency at York, he helped raise the profile of an already distinguished Department of English and Related Literature which, in years to come, would produce a number of influential novelists.

These included: Booker Prize-winner Graham Swift, Orange Prize-winners Linda Grant and Helen Dunmore, the hugely prolific Anthony Horowitz, and more recently the poet and playwright Valerie Jack.

With such notable alumni, few will have raised an eyebrow when the most recent Research Assessment Exercise ranked the Department of English as the number one in the national league table for research excellence.

### Tears and joy

As the University grew in stature and reputation during the 1960s and 1970s it fell to Professor Berrick Saul, who was Vice-Chancellor of the University from 1979 to 1993, to steer the institution through the difficult times of economic recession and political turbulence.

It was under Professor Saul's leadership that the University celebrated its 25th Anniversary in 1988/89. The original plan had been for an institution of 4,000 students. 'We reached that number in 1989/90 for the first time – 3,100 undergraduates and 1,055 postgraduates,' he was to write in his Annual Report to Court of that year.

This period also saw a shift in emphasis towards industrial collaboration, with the



Among the Department of Economics' notable former students is the President of Portugal, Anibal Cavaco Silva, who received an honorary degree in 1995. He is pictured here (right) with Kenneth Dixon, former Chair of the University Council



The University's £25m Biology building was completed in 2003

appointment of Professor Tony Robards as Director of Industrial Development – who was also tasked with accessing the growing amount of funding from the then European Economic Community (now the European Union).

It was under Professor Saul's leadership that the idea of a Science Park took shape, the intention of which was "to attract science-based firms whose presence will help begin the transformation of the industrial scene in York, from one based on the 19th and 20th centuries to one based on modern technology," he told the University Court.

Less than a decade later, with Ron Cooke as Vice-Chancellor, the Science Park was opened and it now plays a pivotal role in technology transfer and business development for the city's knowledge, bioscience, creative, media and IT-based enterprises.

**"The University of York is a world-class institution which puts our city on a global footing."**

Kersten England, Chief Executive of the City of York Council

## The science of collaboration

The Science Park was a physical manifestation of the University's growing desire, under Ron Cooke's leadership, to reach out and collaborate with the wider world – either in the public or the private sector. Through Ron Cooke and Tony Robards' evolving contacts with City of York Council, the University was able to set up Science City York – a partnership which, like the University itself, was "ahead of its time."

Indeed, when Richard Lambert published his pivotal report into the links between business and universities a decade ago, he singled out the University of York's leading role in helping to create Science City York as a collaborative model that others should follow.

"Science City York," he said, "has helped create 1,800 new jobs and 30 new businesses in its first four years, and it is forecasting a total of 18,000 new science and technology-based jobs by 2021.

"York's high-technology sector now includes over 240 companies, and the three clusters already employ as many as those employed in tourism in the city. The Science City York clusters provide more than ten per cent of the jobs available in York and employment growth in the clusters is growing at a current rate of seven per cent each year."

What Lambert failed to mention, however, is that in starting this initiative the University of York was a good six years ahead of the central Government initiative in getting this key collaboration off the ground.

According to Kersten England, the Chief Executive of the City of York Council, no one now doubts the positive impact that the University has had on the city. "In the case of York," she said, "the University of York is a world-class institution which puts our city on a global footing."

Business Secretary Vince Cable opened the new Biorenewables Development Centre (BDC) at the University on 5 July 2012. Based in the BioCentre on York Science Park, BDC integrates modern genetics with green chemistry and processing techniques to create renewable chemicals and materials. The Centre will support industry in developing manufacturing technologies that use plants, microbes and biowastes as raw materials for high-value products





19 THE EVOLVING  
CAMPUS



The Department of Chemistry's iconic water tower became a landmark of the 1960s campus

## THE EVOLVING **CAMPUS**

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**P**lanning and building a new university and campus came at a time when public funds were being kept on a tight rein, and it is clear that Lord James felt he had a battle on his hands. “If this represents a policy of massive university expansion,” Lord James wrote in 1964, “it is difficult to imagine what a policy of retrenchment would be like.” But he also felt that he had an advantage. Starting from nothing, he said, was easier than taking on an existing institution. Freed from “the menace of committees” decisions could be made quickly and things got moving. “One felt that one was living on an avalanche rather than a glacier and it was a stimulating experience,” he later wrote.

That a new university emerged intact from beneath this avalanche is testimony to Lord James’s vision and determination. It also shows his skill in choosing architects and colleagues who could design a campus that embodied his ideals for a collegiate university.

Two men were key to the success of the new campus at Heslington. The first was Stirrat Johnson-Marshall, a man who had been doing ‘revolutionary work’ in building post-war schools in Hertfordshire. And the second was Andrew Derbyshire, who Lord James was quick to appoint as the senior architect of the project.

“Almost immediately a relationship developed that is very rare indeed between an architect and a client,” Lord James was later to reflect. “From the time they were appointed in early 1961 until I left, no month ever passed without at least one whole day of intense discussions between us. They were uncompromising in their demands and regarded me as their legitimate prey who must be catechised relentlessly about his ideas and ideals.”

### **Down-to-earth challenges**

But, for all the high-minded talk of ideas and ideals, Lord James and his architects had other more down-to-earth problems with which to contend. There was a main road to construct and bridges to be built to avoid the division of the Heslington site. And there was the small matter of the lake: a 14-acre hole had to be dug and lined with plastic, the spoil from which was used to create a gentle undulation.



“As it filled with water,” Lord James wrote, “the lake came into being, afterwards to be stocked with trout and inhabited with birds. It is the lake that now impresses visitors to say how fortunate we were to possess such a site, and it is a remark that causes me to remember the flat, largely treeless swamp that was, in fact, the site that some of us knew.”

For the architectural historian, Sir Nikolaus Pevsner, the new lake was a “stroke of genius, which provided all the undulation and some of the variety one wants to see, and it allows the buildings to be entirely reasonable and to keep away from all gimmicks.”

Stirrat Johnson-Marshall and Andrew Derbyshire, architects in charge of the University Development Plan, in front of the architects’ drawings of the Colleges

In October 1965, the Queen and Prince Philip visited the campus to open the two new Colleges – Langwith and Derwent – and a young Mill Mount schoolgirl, Helen Peacock, daughter of the Deputy Vice-Chancellor, presented the Royal guest with a bouquet of flowers. Flag waving students greeted the Royal couple as they entered Derwent College where the Duke asked one of the students what she was studying. She replied: “Sociology.” There was much laughter when the Duke then asked: “Are you going to practise it on your husband?”



and Alcuin (1969). It also had three laboratories, the iconic Central Hall, the J B Morrell Library, the Sports Hall, the Department of Music and the Sir Jack Lyons Concert Hall.

Looking back on this achievement Lord James was to comment: “No building was ever late and none cost a penny over the cost limits.”

### A hostile climate

By the mid-1970s the early excitement of the first decade was beginning to be replaced by a growing sense of maturity. According to Professor Fred Cornish, who was Deputy Vice-Chancellor between 1975 to 1978: “Departments had reached a viable size and several had established strong reputations in research and teaching.”

But maintaining momentum and standards in the coming decade was to prove a significant challenge. The heady optimism of the '60s and the expansion of the modern university system that followed the Robbins Report had, by the late '70s and early '80s, been replaced by an era of retrenchment in higher education.

The oil crisis, recession, the three-day week, followed in the early 1980s by the miners' strike, expenditure cuts, and a government that was beginning to ask universities some very tough questions about funding, were the backdrop to a much more difficult period.

As early as 1981, Professor Berrick Saul, who had been appointed as Vice-Chancellor in 1979, told the University Court that: “These have been difficult years for all universities. Naturally we would not expect to be exempted from the general cuts in government expenditure.”

Despite these difficulties, Professor Saul was able to sustain growth, especially in the science disciplines – Biology and Chemistry in particular – by a combination of good housekeeping and judicious expenditure. Like the founding father of the University, Professor Saul concentrated on attracting and retaining the very best academics, while providing them with modern facilities in which to both teach and conduct research.



The eminent conservation architect Sir Bernard Fielden oversaw the conversion of Heslington Hall and the King's Manor in the city of York for use by the University. The 16th-century pendant stucco ceiling in Heslington Hall, which has been compared with the similar ceiling at Gilling Castle, may be the work of the same craftsman

But it was the CLASP building system pioneered in Hertfordshire that allowed for the fast turnaround times that Lord James needed. These modular systems were both cheap to build and relatively adaptable – important considerations to a university with a limited budget and the need to flex to meet the demands of growing student numbers.

Within a decade of the first students arriving, the new University campus boasted five colleges: Derwent (1965), Langwith (1965), Vanbrugh (1968), Goodricke (1968)



The Department of Physics workshops in the 1970s

## Raising our profile

A reflection by Professor Berrick Saul, former Vice-Chancellor

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One of the things that attracted me to York was the possibility of developing a new university, a small university, which wasn't full of people who knew how to do it. It was a happy place, with some very gifted administrators, but it was also lacking a clear sense of direction.



My priority from the start was to talk to the departments – to get them to be honest about their strengths and weaknesses – so that we could make robust decisions about which ones to encourage, in a way that would enable the University to make a hit.

Research was not given the weight it needed. There were some very distinguished people, but you were not looking at departments with national and international reputations. I knew we would get nowhere unless we had that.

English and History were very strong departments but I felt the future lay in the sciences: Chemistry and Biology were outstanding. With a top appointment in Physics, we were able to strengthen that department, when other universities were closing theirs. And by bringing in really talented people, like Professor Dianna Bowles in Biology, we began to build that international reputation.

The development of the Science Park was also part of raising the profile and importance of research, but it was controversial at the time. Some people thought the land should be used for other university developments. At that time, I was opposed to the creation of a Law School; it would have been too costly and at a time when the government was cutting back on funding.

It was important that we stood our ground on funding. I think my predecessors were very much of the old school – you didn't argue about money. But we put our case strongly to the University Grants Committee and when the allocations were made we got slightly more grant than we'd expected. Improving fund-raising and raising the profile of research were vital to getting the University on the right track.



## Return to expansion

It is a tribute to Professor Saul that the University emerged from this period not only with a balance sheet in good health – a combination perhaps of the departing Vice-Chancellor’s financial prudence and his colleagues’ native Yorkshire thrift – but also with its reputation for excellence and high standards unimpaired by damaging central government cuts.

The new Vice-Chancellor, Professor Ron Cooke, who was appointed in 1993, was determined to see the University expand its facilities to meet both the growing student demand and to broaden and deepen York’s research capability.

“People told me there wasn’t any space to build and that it was impossible to do anything because all the room had been taken up,” Professor Cooke said. “But that was completely untrue for anyone coming from central London, where every inch matters.”

To make the best use of the limited buildable space, however, it was vital to have a masterplan, as Lord James had done in the ’60s.

## A masterplan for growth

The University selected one of the country’s most innovative architectural teams, the Manchester-based practice of Leach Rhodes Walker, to carry out the masterplanning.

Among the new additions during this time was the Raymond Burton Library for Humanities Research, which was funded by one of the University’s most generous benefactors and opened in 2003.

Two years later, the Borthwick Institute for Archives was incorporated into the recently constructed Library, thus creating a fully integrated facility making it one of the biggest archive repositories outside London.

Unlike many of the original buildings on Heslington West, these new additions were built to much more demanding energy and environmental requirements, bringing them up to the highest standards in the world.

The Borthwick Institute for Archives moved from the 15th-century St Anthony’s Hall in the centre of York to purpose-built premises on campus, with the help of a £4.4m grant from the Heritage Lottery Fund

## Collaborative working

The new masterplan also acknowledged that the world of higher education was changing at a rapid pace. “The world was shrinking; globalisation was bringing us into closer contact with the wider world. There was much more interdisciplinary research activity going on and we had to change and adapt to harness that,” said Professor Janet Ford, who was appointed Pro-Vice-Chancellor for Estates and Strategic Projects in 2003.

One of those leading the call for this more interdisciplinary approach to research was the celebrated health economist Professor Tony Culyer, who played a key role in establishing the new Alcuin Research Resource Centre (ARRC) – which was established with help from the Wellcome Trust/ESRC Joint Infrastructure Fund.

The ARRC provides a collaborative infrastructure for researchers involved in health and social sciences research, including a range of specialist labs, facilities and services for undertaking primary research and analysis, and space for visiting and researchers.

The Centre for Immunology and Infection has become recognised as a leading facility in the fields of immunology, pathogen biology and experimental medicine, publishing its research in the highest impact international journals and helping in the development of new medicines



## Burgeoning biology

To the south of the original campus, the Department of Biology, which accepted its first undergraduates in 1965 and moved to its present location in 1968, had established such a strong international reputation that it, too, had to expand significantly.

The appointment of Professor Dianna Bowles to the Department in 1994 had been an important catalyst in raising its profile and the quality of its research. Along with the new Vice-Chancellor, Professor Ron Cooke, she was pivotal in establishing the Centre for Novel Agricultural Products (CNAP).

The formation of CNAP, which is leading the world in finding a plant-based cure for malaria, confirmed the need for Biology to expand. Under the guiding hand of York's internationally renowned ecologist, Professor Alastair Fitter, the Department opened the doors to its new £25m Biosciences building in 2003.

This also houses the York Structural Biology Laboratory and the Technology Facility. According to the latter's Director, John Pillmoor, “This allows ready access to a wide range of technologies and expertise in an integrated manner that can help drive forward research efficiently and cost effectively.”

But development has not stopped there and in 2010 the Department added a £5m extension to its Centre for Immunology and Infection, with more facilities planned in the coming years.

## The science of success

In the five decades since the first science building was constructed, the University of York has established a global reputation in diverse fields of scientific research, and nowhere more so than in the field of Chemistry – the Department is now ranked in the top five in two prestigious league tables measuring university performance.

This has been achieved by significant investments in staff and new buildings. A £29m phased redevelopment is now well underway under the guiding hands of Professor Paul Walton and Richard Taylor. The result will provide first class facilities for both research and undergraduate laboratories.

## Dorothy Hodgkin Research Building

The first stage of this development was completed in the summer of 2012 with the opening of the second phase of the Dorothy Hodgkin Research Building. This provides additional accommodation for about 100 researchers.

The building is constructed on the site of the laboratory where, in her retirement in the 1970s and 1980s, Professor Hodgkin wrote up the findings of a total of more than 30 years' research into insulin structures carried out principally in Oxford.

## The greening of chemistry

In a second development, a two-storey building will be constructed. The ground floor will be mainly for teaching, with a single laboratory able to accommodate 160 students. The first floor will house the Green Chemistry Centre of Excellence, a world-leading research facility led by Professor James Clark. This will promote the development and implementation of green and sustainable chemistry and related technologies into new products and processes.

“Traditional petroleum resources will gradually be replaced by sustainable resources derived from nature including trees, plants and food and biorefinery wastes,” Professor Clark said. “Chemicals determined to be hazardous to the environment will have to be substituted. The unique set of circumstances provides an exciting opportunity for the discovery and application of new green chemistry solutions to these sustainability challenges.”

Air pollution is one of the major environmental problems facing the planet today causing a significant reduction in lifespan and considerable social and economic impacts. The Wolfson Foundation, a long-standing supporter of developments across the campus, donated £1.25m in 2012 towards a new building for atmospheric sciences, including a unique trace analysis laboratory, supported by the largest donation from an alumnus to a campus infrastructure project. Research in the new facility will focus on laboratory data, field observations and models to aid understanding of atmospheric chemistry and the impact of air pollutants.



## Expanding eastwards

But well before these developments to the original campus, there were plans for a major expansion into new territory which would give the University significant space to grow. These would be driven forward by the next Vice-Chancellor when he arrived in 2003.

Professor Brian Cantor could have chosen a cautious, short-term approach, acquiring small parcels of land for incremental development, but that was not his preferred option. “Brian showed that he had a long-term vision for the University, a vision that would enable us to expand and grow and develop over the next half century,” said Elizabeth Heaps, the current Pro-Vice-Chancellor for Estates and Strategic Projects.

“A more incremental approach would have meant constant upheaval, change and disruption. By deciding to acquire the whole of Heslington East – effectively doubling the size of the University in one giant leap – he has allowed us to expand the University in a way that reflects our strategic vision.”

It is this strategic vision that BDP, the international firm of architect and urban designers, sought to embody in their Masterplan for Heslington East. BDP's proposals were consonant with the original Development Plan of 1962, but reinvigorated for the 21st century. Their designs incorporated new materials, greater energy-efficiency, complex hydrology and informal landscaping in a contemporary environment.

While at the University of Oxford and then at York, Professor Dorothy Hodgkin worked with Professor Guy Dodson to devise the very intricate experimental, crystallographic and computer techniques that led to the final solution of the structure of insulin



Heslington East is now home to four academic departments and two colleges, plus embedded business spaces in the Ron Cooke Hub and The Catalyst. It also includes the £9m York Sport Village, a joint venture between the University and City of York Council offering a range of sports facilities available for use by students and members of the public

**“We have widened the original notion of community to include all our stakeholders which makes us more open and collaborative”**

Elizabeth Heaps  
Pro-Vice-Chancellor for Estates

### A 21st-century campus

But this is a 21st-century campus, and differences with the early pioneers were inevitable. So, while the integration of activities remains central to the University’s culture and success, it was no longer seen as appropriate that teaching facilities and staff offices were intermingled with students’ living space, as in the early colleges.

The challenge, therefore, was to find new ways of integrating residential, academic and amenity buildings that are located in close proximity. “I think we have succeeded in doing this in the first cluster on Heslington East,” said Elizabeth Heaps. “The Ron Cooke Hub is not only an iconic building by design, it also provides a flexible social, study and meeting space to support the activities of academic departments and colleges along with embedded businesses and other stakeholders.”

### An interdisciplinary campus

The Hub – along with the Berrick Saul Building on Heslington West – reflects the growing importance of interdisciplinary working to the life and character of the modern University. To this end, the new

campus creates academic complexes as opposed to stand-alone departments.

“We have also widened the original notion of community to include all our stakeholders, which makes us more open and collaborative. This now includes our business partners: Science City York, the City Council, our Science Park, start-ups and incubators,” said Elizabeth Heaps.

The Catalyst building on the new campus is founded on these collaborative principles and supports the growth and development of early stage companies in the creative, IT, digital and media sectors. It fosters links with departments such as Computer Science, the Law and Management Schools and the new Department of Theatre, Film and Television.

The York Sport Village is also built with the wider community and stakeholders in mind. This £9m joint venture between the University and the City Council is another example of how collaborative and partnership working can transform lives, and shows the city and its people that the University is a real asset to them.

### On time and within budget

The speed and efficiency with which the development took place would surely have impressed Lord James, who was all too familiar with working to tight deadlines and with limited budgets.

Planning consent for the new campus was granted in May 2007 after a complex public enquiry handled by Professor Ford and Frances Putterdale QC. By October 2009 the new 600-bed Goodricke College was built, and at the start of the following academic year the Department of Computer Science, the York Law School, the York Management School and the Department of Theatre, Film and Television, moved into their respective buildings. A year later, in November 2010, the Ron Cooke Hub and The Catalyst building opened. And 2012 saw the opening of new accommodation for Langwith College and the York Sport Village.

“Our projects have been built to deadline and to budget,” said Elizabeth Heaps. Lord James would doubtless have approved.



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LIFE



Jugglesoc member Claire Stephens lights up the winter campus with her expert fire-spinning technique

## STUDENT LIFE

Today's University, with more than 15,000 students, is a very different place to the one that greeted the first intake of 216 undergraduate and 14 postgraduate students in the early '60s, when mop tops and beehive hairstyles were all the rage and The Beatles were number one in the charts with their single, *She Loves You*.

### Finding digs

Back then, Mike Newby arrived in York from London to study English and Related Studies: "I lugged my case and guitar up from the station, up Blossom Street and the Mount, up along the Knavesmire and wearily down into a road by the railway sidings to the front door of the 1930s semi that was to be my first York digs. I had left my family in London that morning, this was the North, and I was now a student. Like everyone else, my head was full of Beatles songs."

### A different kind of university

The first Vice-Chancellor, Lord James, wanted York to be different to most modern universities where: "The lives of students had three focal points. First, where they slept and ate in their residences; second, where they were taught in a departmental building; and third, where their social life centred on a large and frequently lavish Students' Union building."

The former head of Manchester Grammar School wanted none of that. While his system is said to have resembled the Oxford and Cambridge model, it did not slavishly copy it: admissions, for instance, would be centralised. "It resembled them in that a good deal of teaching would take place in the colleges, to which all students would be attached, whether they lived there or not.

"The colleges would be centres of social life, with common rooms, bars, dining halls and a small library. No central Students' Union building was ever envisaged nor was one ever built," he wrote. This is certainly what the colleges became and, largely, how they have stayed, though there is now a central Students' Union.



### A sense of community

"All our life revolved around the colleges – they enabled us to make friends very quickly and many of us have long since remained friends," said Fleur Anderson, who began her degree in Politics in 1992.

"There is something about the fact that, for all three years I was a member of Goodricke. It gave us an identity and a sense of belonging to a wider community, and it gave us a home base from which to make friends.

"Even now when I meet up with my university friends we talk very fondly of the different colleges we were in and what that meant.

New undergraduates and a local resident toast the health of the University in the Charles XII pub in Heslington Village on the eve of its opening in 1963

## Free spirits, free thinkers

A reflection by Phil Harris, Students' Union President, 1977–1978

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York to me was designed for nonconformists and stimulated us all to support difference and flair and to make a contribution to building a better world. I was a mature student of 23 when I joined Derwent College in October 1975 and moved into my ten-bedroom house in Eden's Court with a remarkable mix of characters: dilettantes, sports people and thinkers, all imbued with the idea of making things different and enjoying life.

The lectures I remember most were by the economists, politicians and sociologists. I think it was either Tony Culyer or Alan Maynard, the founders of what we now call Health Economics, who served up 'The economics of surgery versus palliative medicine for varicose veins', and believe it or not it was both riveting and challenging.

David Edwards introduced me to Plato, Marx, Mill and, most of all Machiavelli, who has subsequently been a lifetime companion. As for Sociology, that was dominated by some wonderful performances by Laurie Taylor. One day I seem to recall he came dressed in a broad brimmed hat with a cape and cane for effect. Or am I now just imagining it?

Tutorials and seminars were small and highly charged, and we benefited from intense questioning and reasoning which brought out the best in us. The breadth of reading and ideas was excellent and I recall hearing about oral history tapes for the first time and finding them so insightful in bringing the living past alive. I was introduced to another of my passions, China, in one of the second year programmes, and I often still think about the Long March and four thousand years of civilisation when I am in Beijing or Wuhan. It was difficult to keep pace with the course work and assessments for an active student unionist like myself, but somehow with friends I managed it.

Another important learning process and skill one gained at York was the ability to operate at all levels, irrespective of age, ability, class, disability, race, religion or sporting prowess. York had some of the best facilities for the disabled and many of us enjoyed sharing life as a result with such as the late great poet, Richard Gom, and became aware of an array of many multi-talented fellow human beings. The University also had many students from Southern Africa and Rhodesia sheltering from oppression, who later became members of the new governments.

Topping this was the legendary Turf Club. The Pimms parties were incredible and strictly by invitation only, and they are still talked about today. York RAGs were special – the one where two future Labour MPs re-enacted *The Italian Job* in Minis driving full circle around the University campus paths and over bridges is legendary.



It was a big part of being at York – all my friends were from different departments and disciplines, and each college had its own character and style. You felt very attached to the one you were from.”

### Having a ball

In 1993 Fleur was elected as President of the Students’ Union and became very involved in the inauguration of the Junior Common Room at the newly built James College. “We started the first race around the quadrangle and that was also the year of the first Graduation Ball – it was set up by my deputy, Andrew Cartmell, who did all the fun things and is now a producer of *Strictly Come Dancing*.”

Fleur chose York for two reasons – she wanted to study politics, but not statistics, and York had the flexibility to allow that. And second, York had perhaps the first radio station of any university in the country.

### University Radio York

“I wanted to do something with the media and this provided me with an opportunity to do that,” she said. “The radio station was another kind of community, with all those people who worked there from DJs to producers. I ran a show with my great friend Chris Hogg who

went on to be a BBC radio journalist. We called the show *Richard and Judy* – and played music and invited lots of campus celebrities on to the show.”

URY first broadcast in 1968 at the height of the student demonstrations in London and Paris. York, at the time, was a much quieter place, but still not immune from copycat sit-ins and protests.

### Student politics

Julian Friedmann, a Philosophy student who became the Students’ Union President in 1967, recalls how difficult it was to get students involved: “The cleverness with which the Vice-Chancellor had planned the University meant that getting political activism going was extremely difficult as we had amazing new, comfortable and well-appointed common rooms all over the place,” he said. “We didn’t have a Students’ Union building. Lord James used the divide and rule principle and it worked. Student politics was fairly bland despite attempts to jazz it up.”

### Tea and biscuits

One story of student activism at the time tells of an assortment of would-be student revolutionaries ‘occupying’ Heslington Hall.

Sociology Professor Laurie Taylor, now a satirical columnist and radio presenter, gave flamboyant lectures with lots of jokes and arm-waving





Student activists in a bid to occupy Heslington Hall in 1980



“The University has been good – not to say, forgiving – to me. It was at York during the early 1970s that I secretly served an apprenticeship as a writer, while pretending (I’ll come clean) to study for a PhD. I never submitted (or wrote) my thesis, but many years later I was very generously given an honorary doctorate. So I finally made the grade.”

Graham Swift, author

Very quickly they found themselves up against a formidable foe – Cordelia James, the charming wife of the University’s first Vice-Chancellor.

Armed only with a tray of tea and biscuits and a pile of warm blankets, Lady James expressed concern that the young radicals might go hungry, or worse, catch cold.

Faced with such generosity it is said that the more militant Maoists found themselves in a moral dilemma: whether to accept this act of kindness from the ‘hands of the oppressor’ or to spurn her entreaties and forgo the blankets.

Most accepted, and the revolution is said to have passed without the spilling of blood or the catching of colds.

### Permission to revolt

Almost three decades later, a more modern group of radicals were to repay the kindness when they wrote to the newly appointed Vice-Chancellor, Ron Cooke, seeking permission for a public protest. ‘Dear Ron,’ their letter began, ‘Please may we use Central Hall for a sit-in.’

Fleur Anderson recalls that occasion well. “We wrote and asked for permission to hold a demonstration about student loans. Some of the students decided to carry on after the protest and have an occupation. It all happened in Central Hall on the same night as people were arriving to listen to a Gilbert and Sullivan concert.”

### A memorable place

These vivid accounts show that York, even as early as the 1960s, was a memorable place to study, which is exactly what the principal architect of the new campus, Andrew Derbyshire, set out to achieve. He aimed to do this by creating a harmony between the environment in which the students and academics lived and worked, and their experience of study and research.

If the testimony of the early students is a reliable guide, Sir Andrew succeeded in turning that vision into a reality. He helped create a campus that promoted openness and collaboration that was to serve the University well in the decades to come.

John Fuggle, who studied Chemistry during the early years – before becoming Professor of Physical Chemistry at a leading Dutch university – said, that “the contact with people from other disciplines was something quite exceptional compared to the rest of my career.”



### A unity of ancient and modern

The celebrated cellist, Moray Welsh, who studied music at the new University between 1966 and 1969, also commented on what Sir Andrew had called the “identity of place and experience.”

“I still recall the elation offered by the combination of old and new, the feeling of the ancient roots of the city intermingling with the new challenges of the campus, or in the case of the King’s Manor and Micklegate, old buildings put to new and vibrant purpose.”

### From York to Moscow

At the end of his studies the young cellist recalls meeting Benjamin Britten at his degree ceremony in 1969 when the composer was being awarded an Honorary Degree. “He heard me play at the University and set up an introduction to Rostropovich with whom I then studied in Moscow. Meeting Britten in York that day changed my life rather significantly,” he said.

And music was very much a part of student life from the very beginning. “I felt extremely privileged to have been in the Department of Music while it was under the aegis of Professor Wilfrid Mellers whose extraordinary catholic scholarship coloured the life and activity of the whole Department. Wilfrid opened doors like a genie revealing the delights of an Aladdin’s cave – never was discovery so enjoyable,” Moray added.

### The Hendrix experience

For other ‘60s students, a different kind of musical dream was fulfilled when the guitarist, Jimi Hendrix, topped the bill at Derwent College. “The hour-long set was awesome,” said History student, John Beresford, who paid the princely sum of half-a-crown to see the man who was soon to become a rock legend.

“He did all the trademark Hendrix things: knelt on the floor with his guitar laid out in front of him, caressing the strings behind his back and with his teeth. After that, his career took off and we all recognised how lucky we had been to see him for half-a-crown.”

The Musical Society’s production of *West Side Story* in February 2013: there has always been a vibrant music community at York both within the Department of Music and across the campus in student-run music groups and societies



Jung Chang, whose autobiography *Wild Swans*, and later her biography of Mao Zedong, won global acclaim, studied Linguistics and completed her doctorate in 1982. “As a result I became the first person from communist China to receive a doctorate from a British university. I learned far more than my subject, not least the right way of thinking: to keep an open mind. I am immensely grateful to York and I love it.”

### Collegiate harmony

When the linguist Geoffrey Pullum – who went on to become Dean of Graduate Studies at the University of California, Santa Cruz – was asked to reflect on his memories of York he remarked on how successful its founding fathers had been in establishing a collegiate mentality among students and their tutors.

“I think back to my time at York and visualise the relatively harmonious co-existence of academic departments alongside Derwent, Langwith, Alcuin, Vanbrugh and Goodricke, and think that perhaps the planners at Santa Cruz (who struggled with designing a collegiate campus) should have studied at York and not Oxbridge. The University of York was not 1,000 years old with an endowment reckoned in millions, but two years old and ahead of its time,” he said.

### Multiculturalism

Geoffrey also noticed a strong multicultural and multi-ethnic atmosphere at the young University. In the mid-1960s he studied Linguistics at York with a number of West Indian graduates who remain friends to this day.

He contrasts this experience to his six years of teaching at University College London in the 1970s, where he “never once taught or even met a West Indian student despite the massive West Indian population in London. Yet at York, Professor Robert Le Page had built by 1968 a Department of Language in which significant numbers of West Indians attained a PhD in Linguistics, later to go on to productive careers in research and teaching.”

### Equality and friendliness

Baroness Haleh Afshar, a non-party political peer in the House of Lords, was in the first cohort of students in 1963. Now a Professor in the Department of Politics, she recalls, “What was memorable about the early days was the huge fun; there were seminars that were sometimes conducted in pubs or in a member of staff’s sitting room. Lounging around in a fog of smoke we languidly considered deep philosophical ideas and talked late into the night.”

### Research-based teaching

Another distinctive feature of the new University was the style of the teaching, which placed a strong emphasis on seminars and tutorials, often led by academics who were research leaders in their chosen fields. This approach allowed students to ask questions, to engage in discussions, and to more easily draw on the knowledge and experience of the tutors.

But this style did not suit everyone. “The tutorials and seminars were very small. Everyone seemed to know what everyone else was doing,” said Julian Friedmann, a Philosophy student in the late 1960s. “One of my abiding memories was that those students who came from fairly regimented schools didn’t like not getting marks, and didn’t like being told to decide what they wrote an essay about. I remember one young woman plaintively asking the tutor to give her a tutorial subject.”

Two decades later, the same focus on small teaching groups, often led by academics who were thought-leaders in their fields, was experienced by Politics student Fleur Anderson and her colleagues. “While we were taught by a mix of lectures and seminars, it was the latter that were really important. Seminars gave us the chance to disagree and argue, and to talk through what we were learning – which was really crucial. My personal tutor was Keith Alderman who was such a great support both on the course and outside course matters.”



Live and Loud: the first Freshers Ball on Heslington East was held in October 2012

**“My experience at York has been the right kind of challenge. Academically you are expected to push, not just yourself, but your peers too. A key thing that comes alongside this is that the York learning experience was, and still is, very human. There’s a strong element of healthy competition between students here.”**

Kallum Taylor  
Students’ Union President,  
2012–2013 and 2013–2014



### The challenge of tutorials

Anne-Marie Canning, who came to York to study English and Related Literature in 2004, found the tutorials both challenging and rewarding. “We usually had two tutorials in a term and these consisted of around half an hour with the tutor who had led the seminar series,” she said. “I always felt quite nervous about these sessions as they offered nowhere to hide. But I found they offered the most accelerated form of learning as the tutor drilled your line of thought. It was the interaction between seminars and tutorials that was the key.”

### Time and change

Today, students from more than 130 countries around the globe come to the University of York to study as undergraduates or postgraduates, and comprise almost a quarter of the total

student population on the campus. This figure is reflected in the teaching staff, where, again, almost a quarter are from overseas.

This modern, global social network may be very different from anything that Lord James could have imagined. But when Anne Hollindale wrote of her early experience of York for the 40th Anniversary celebrations she was very clear that today’s University would be instantly recognisable and loved by its founder.

“I think if Lord James could come back today he would be pleased with what has happened,” she wrote. “He would find the same pioneering spirit, the same teamwork, and the same sense of building for the future that fuelled the early years. Times have changed, as they always do, and expectations of higher education are very different from what they were then. But the vision he and the other early planners had has become a reality of which, I think, they would proud.”



As part of its programme of internationalisation, the University is strengthening links with leading universities in Brazil, and in 2012 welcomed its first group of students to study in the Departments of Biology and Chemistry under the ‘Science without Borders’ scheme



39 EMBRACING THE  
FUTURE



Langwith, one of the first colleges on the original campus, opened on Heslington East in October 2012.

# EMBRACING THE FUTURE

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Where many people could see only fiscal constraints and financial cut backs during the 1990s, Professor Ron Cooke arrived at York and saw immediately the ‘huge potential’ for the University and the city to develop into major players on the national and international stage. The new Vice-Chancellor, who took up his post in 1993, spent the early days listening to his new colleagues before charting a course for the University that would follow familiar contours – the principles of teaching and research excellence espoused by Lord James in the 1960s and consolidated by Berrick Saul during the difficult 1980s.

## Top quality teaching and research

During one of his early conversations with his new colleagues Professor Cooke asked one of them whether the University could be of the same quality as Oxford or Cambridge. “Oh, we will never be as good as they are,” came the reply.

The new Vice-Chancellor thought otherwise, and was to be proved correct – though not in the way he may have expected. Under the Conservatives, universities were challenged to prove they were good custodians of public money. To assess this, the quality of university research and teaching were subjected to external examination.

While this was often resented by academics – many of whom saw it as an assault on traditional academic freedoms – the outcome for York was to prove providential. When the results were published in 2001, York was ranked top for teaching quality. Here, for all to see, was official recognition of just how good the University of York was at teaching students and at carrying out groundbreaking research. Under his leadership, this commitment to excellence evolved into a strategy for continuous improvement.

“We never set out to be top of the league tables, but the aim of quality improvement was definitely embraced in a genuinely collective effort,” Professor Cooke said.

The drive for continuous improvement, however, needed both teaching and research talent along with significant external funding.

## New sources of funding

“We couldn’t remain in the top flight on diminishing central government funding alone,” he said. By raising money from external funders and benefactors, Professor Cooke picked up the pace of change at York.

The new funds were used to recruit academic staff who were thought-leaders in their chosen fields and to develop the physical infrastructure that would enable them to excel. New laboratories, research space, and new departments were created – including History of Art, Management and Health Sciences – and some of the original CLASP buildings were knocked down to make way for new colleges. Such was the pace of growth during Professor Cooke’s tenure that the University almost doubled in size: but he and his team were careful that this growth enhanced teaching and research performance. He made sure the new money from his fundraising activities kept teaching and research on track at a time of government cut backs and austerity. But he also used these activities to connect York to a wider network of external partners who would bring new ideas and new thinking, along with new money, to the University.

## The importance of alumni

It was also under Professor Cooke’s leadership that the University began to take seriously the role of alumni in raising funds and the profile of the University. “Hilary Layton [former Director of Communications] was running this side of our operation and helped us build up the alumni database. We had about 40,000 people on our books,” he said.

“We worked very hard to extend our contact networks in the city, the business community, nationally and internationally, and we re-established links with many alumni.”

Professor Sir Ron Cooke,  
former Vice-Chancellor

## Creating an engine for growth

A reflection by Professor Sir Ron Cooke, former Vice-Chancellor

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When I arrived at York the financial position had been stabilised by Berrick Saul, my predecessor; York wasn't a university that was saddled with debt. It had also built up a reputation for excellence in both research and teaching, expressed in a small number of very successful departments.

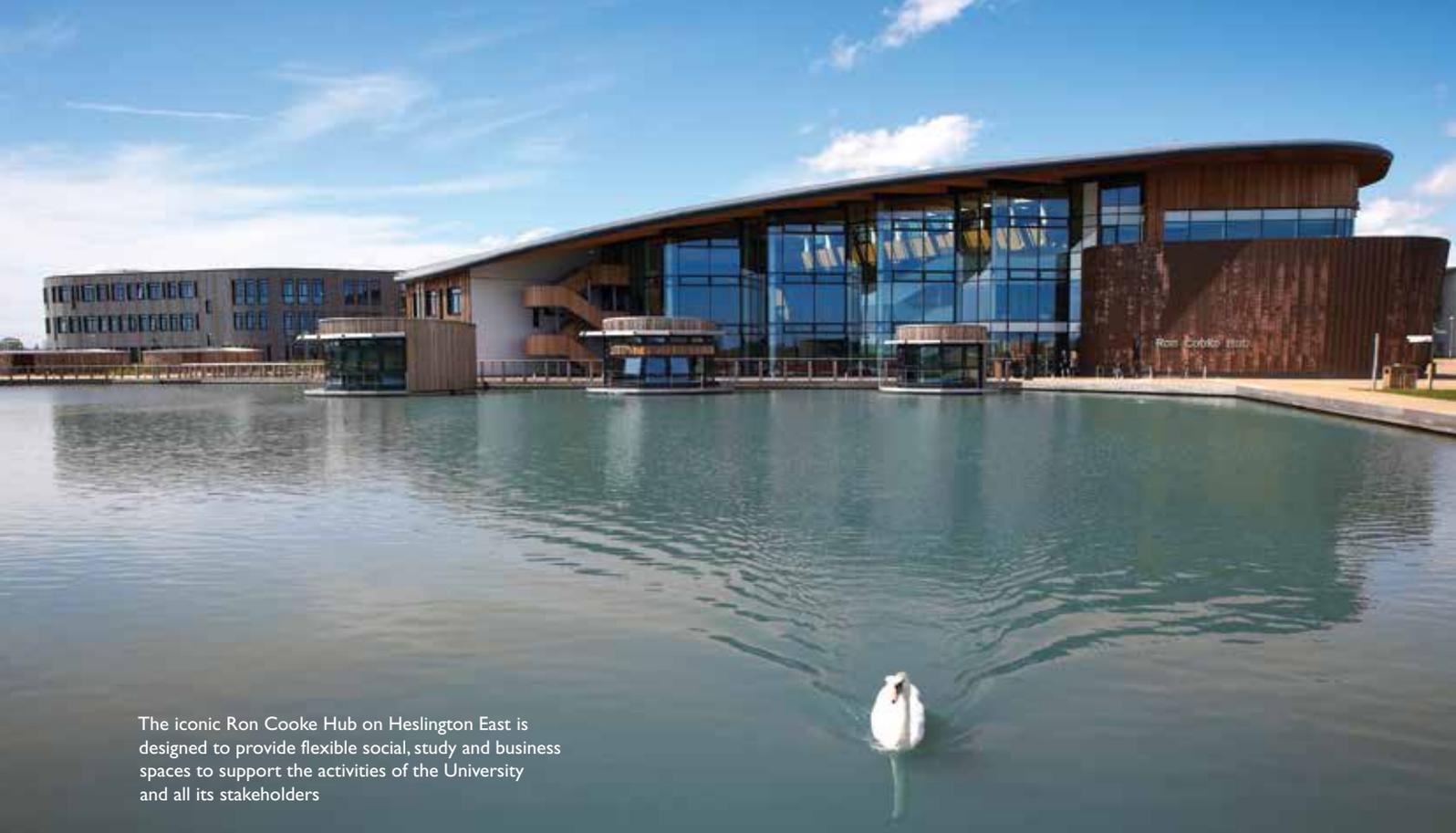


I worked on what I loosely called the Princeton model. That is, the size of the institution is not the key to its success: the key is for all departments to be sufficiently large to compete internationally at the highest level. And that's a very different matter. So York traditionally has had a small number of subjects compared with many much larger universities, but each department is big enough to compete internationally. That was always the objective.

But it was clear to me that we couldn't extend our national and international reputation by relying on public money alone – so we had to go out and raise funds. We worked very hard to extend our contact networks in the city, the business community, nationally and internationally, and we re-established links with many alumni.

Modern university vice-chancellors have got to be good networkers; either that, or they just put on weight and die early. I learned fundraising from square one, because I'd never done it before. I soon realised that important benefactors don't give to anybody but the boss. At least, that's my experience. As a result, we were able both to grow and improve quality and performance at a time of severe public funding cuts. The cuts led ultimately to a national funding crisis and the Dearing Report.

External partners were essential. Thus, for example, Tony Robards and I persuaded the York City Council to see the University as an engine for growth and development and something they should support. They bought into this idea and, eventually, Science City York was the result of this partnership. This showed how important the University could be in rebuilding the local and regional economy. Science City York created more than 5,000 jobs in a city that was losing many of its traditional industries.



The iconic Ron Cooke Hub on Heslington East is designed to provide flexible social, study and business spaces to support the activities of the University and all its stakeholders

Professor Brian Cantor, his successor as Vice-Chancellor, then took the role of the alumni to the next step. “Our alumni are our biggest natural supporters,” he said. “I’ve met many who feel proud of being a member of the University and who sees it as having been an absolutely life-changing event.

“When I came to the University, part of raising the international profile of the University involved building links with our overseas alumni. At the time we had no overseas groups – we now have close to 50 groups in all of the world’s biggest cities. They are great ambassadors for York,” he said.

### The networked university

One vital new network was the creation of the White Rose Universities consortium, a strategic partnership between the big three Yorkshire research universities: York, Leeds and Hull. Professor Cooke immediately saw the value of collaborating with our two most important neighbouring universities. Among the many projects in which the White Rose group is now involved is the groundbreaking Low Carbon Futures team, looking at novel ways of tackling the problems of climate change.

But Professor Cooke also understood that if the University wanted to raise its profile on the international stage it would have to find like-minded partners around the world.

“There is one more step in that process, which was to create the Worldwide Universities Network,” he said. “There the thinking was – in the White Rose, that is – why don’t we try and get the best academics from a group of universities to collaborate together across the world?”

As a result, York became one of the founders of the Worldwide Universities Network, which now embraces leading universities from around the world, from Europe and the United States to the Far East. The network prides itself on being a flexible and dynamic alliance that gives universities such as York access to “the combined resources and intellectual power of its members to achieve collective international objectives and to stretch international ambitions.”

Again, Professor Cantor built on Professor Cooke’s initiatives, adding to the multilateral WUN partnership a whole series of major bilateral partnerships with many of the world’s leading universities in many different countries.

**“Our alumni are our biggest natural supporters. I’ve met many who feel proud of being a member of the University and who see it as having been an absolutely life-changing event.”**

Professor Brian Cantor;  
Vice-Chancellor

**“The new medical school is a real landmark for the NHS in North Yorkshire, East Riding and Hull, and South Humber. It will mean that we are able to attract the very best people to train and work in our services in future decades and that will be a tremendous boost.”**

Barrie Fisher, Chief Executive,  
North Yorkshire Health  
Authority

## Hull York Medical School

It was Professor Cooke’s ability to network and win friends that helped the University achieve a long-held ambition – the creation of a medical school. The joint venture that led to the formation of the Hull York Medical School (HYMS), which now has its home on Heslington West, reinforced Professor Cooke’s belief that, “The University would best succeed when it was well networked.”

Likewise, the building of the Raymond Burton Library for Humanities Research was another example of Professor Cooke and his team’s ability to build close personal relationships with potential benefactors.

In a different field, Professor Cooke’s ability to win friends and influence people enabled York to secure substantial financial support from the Garfield Weston Foundation for the creation of the Centre for Novel Agricultural Products in 1999, adding a new dimension to research in the Department of Biology.

## Closer links with York

But networking was not all about funds and establishing regional and international links. From its inception, the University was keen to develop a closer relationship with the City of York Council. Following the successful creation of the University’s Science Park – which is now home to more than 100 innovative, knowledge-based companies – the University joined with the City Council and the private sector to form the groundbreaking Science City York.

## The pursuit of quality

Like his predecessors, Professor Cooke knew that the success of the University depended greatly on the quality of its staff and students. He took time to look at each department, talking to their leading lights before formulating a policy based on what he had learnt.

“The key strategy was to go for the best people and not to compromise – to be unequivocal in the pursuit of quality. If you think about it, every single appointment of a Chair is a million pounds of public money, roughly – it was in those days anyway. And that’s a huge commitment of public funds. We were spending public money most of the time and we took our responsibility to get that right very seriously.”

For Professor Cooke, the record speaks for itself: “If you look at those years (1993–2003), you’ll see that we had a very substantial increase in excellent staff. We also managed to retain excellent staff. Both these things are essential to a successful research-led university.”

## Strategic vision

After four decades of expansion and growth – due, in no small part to its consistently high rankings in national league tables – the University of York entered the new millennium determined to achieve its full potential on the international stage.

The new Vice-Chancellor, Professor Cantor, who took up his post in 2003, carried out a strategic review of the University’s aims and ambitions that would be a guide for growth over the next two decades.





Launched in 2012, Heslington Studios is the commercial arm of the new £30m Department of Theatre, Film and Television, and is purpose-built to support and foster interactions between the University and the film and television industries. It boasts two HD broadcast TV studios, a 140-seat cinema, a multi-purpose sound stage, as well as superb audio and video post-production facilities

This strategic review led to the University Development Plan in 2003 which adopted the aim of doubling the size of the University over the following decade. It foresaw major growth of most of the University's departments which were too small to be viable in a modern, tightly managed, professional world. This growth would be achieved principally via the purchase and development of Heslington East.

### Expanding the curriculum

The Development Plan also foresaw the University's growth in international partnerships and alumni groups, the extension into more professional and vocational subjects (such as law in the new York Law School and media in the new Department of Theatre, Film and Television) and the embedding of industrial and societal developments in all departments. This was followed by the publication of the University Plan 2009–2019 in which strategic objectives for the following decade were identified – excellence, internationalisation, inclusivity and sustainability. These embodied the new vision for York which is to be 'a world leader in the creation of knowledge through

**“York's success will depend on recruiting the best students worldwide, delivering world-leading research and providing an excellent environment in which students can learn.”**

University Plan 2009–2019



The distinctive building that houses the York Law and Management Schools includes a lecture theatre in the round and a moot court

fundamental and applied research, the sharing of knowledge by teaching students from varied backgrounds, and the application of knowledge for the health, prosperity and well-being of people and society’.

According to the Plan: “Its international appeal is enhanced by its dynamism and its parkland setting which lies close to a historic yet vibrant city and attractive countryside. Ultimately its success will depend on recruiting the best students and staff worldwide, delivering world-leading research and providing an excellent environment in which students can learn.”

This latter sentence is one that has echoed through York's corridors since Lord James first established the University in 1963.

### Fusion of arts and sciences

But Professor Cantor understood that if York was to build a commanding international presence, it would not only have to expand its facilities, but also the range of subjects it offered. The campus extension at Heslington East would, therefore, include the newly established Department of Theatre, Film and Television in which the application of science to the creative arts would be the core theme.

The building of the Law School – which Lord James had resisted in the '60s largely on cost grounds – was identified as an imperative. As were the further development of the Hull York Medical School and the Management School. The new subjects were chosen for their vocational characteristics and to widen participation.

But Professor Cantor has not neglected the contribution the University makes closer to home. “The University represents about eight per cent of the GDP of the city. We are the biggest employer outside the council and the NHS. While times have been tough nationally, York has suffered remarkably low levels of unemployment and the University has helped make the local economy more resilient.”

He cites Science City York as one of the reasons for this resilience. “York was one of the earliest adopters of the science research industry,” he said. “A lot of companies come and set up in York because of this. They not only have access to great graduates but a lot of the research and the ideas come from us too. And that research is vital to building the knowledge economy.”



47 TOWARDS NEW  
HORIZONS

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**“The job I do is not easy. South Sudan is not safe but I believe in the power of knowledge, particularly for women and children, as a way to create more peaceful and stable communities. The knowledge I am gaining at York will allow me to help more people when I return home.”**

Karak Denyok, human rights defender, South Sudan



## TOWARDS **NEW HORIZONS**

**F**or five decades the University of York has set its moral and intellectual compass by an unswerving commitment to excellence in teaching and research – and it is this commitment that will guide the University as it extends its reach towards new horizons in the future. The University’s *Learning and Teaching Strategy* draws on the lessons learned from a half a century of teaching at York while at the same time giving clear directions for maintaining its global reputation and position. It presents a compelling vision: ‘Our students will be engaged with an academic community which nurtures excellence and generates the confidence, adaptability, breadth of understanding and global perspective that will enable them to achieve their full potential as leaders in society.’

### Global citizens

The strategy states: “We will embed within the curriculum opportunities for students to develop as global citizens, socially and environmentally aware, and sensitive to international contexts and cultures: qualities which will be increasingly important in daily and working lives.”

It adds: “Students will be encouraged to learn a foreign language and we will build on the growing international links in departments to increase the opportunities for students to work or study abroad during their programme and participate in international exchanges.”

One of York’s great strengths has always been the way it interweaves the research interests of staff with the education of its students. And this, too, is reinforced and reaffirmed in the strategy document. “Staff should have the opportunity to teach topics relevant to their field of research and scholarship and which excite them.”

### Energy and excitement

It is this sense of excitement, energy and intellectual curiosity which is the engine of discovery and understanding, and which stimulates the best kind of learning. This overwhelming sense of dynamism catapulted York to its preeminent positions in teaching and research. Here at home, and for more than four decades, York has led the field in evidence-based research that has helped shape the evolution of the British welfare



and healthcare systems, a tradition that continues to this day, with researchers providing Parliamentarians with robust evidence on which to base policy.

The thought leadership of York’s researchers, across a range of research disciplines, is also acting as a catalyst for regional economic development and growth, and leads directly to the creation of new, high value-added, knowledge-based industries nurtured in our purpose-built incubator and start-up units. As a university, York’s goal is to use its knowledge and understanding of the way the world works to change the world for the better. This is done across disciplines and with partners across the globe.

Fighting malaria: a major breakthrough by researchers in the Centre for Novel Agricultural Products (CNAP) has enabled them to accelerate the growth of medicinal herb *Artemisia annua* and respond to increasing demands for anti-malaria treatments. The work has been supported by the Garfield Weston Foundation, GlaxoSmithKline, the Medicines for Malaria Venture and the Bill and Melinda Gates Foundation

## Health and medicine

From combating malaria – a disease infecting more than 500 million people a year – to developing therapeutics for treating the most common cancers among men, and discovering ways to help stem the advance of AIDS across the developing world, academics at the University of York are engaged in research that is improving the life chances of millions of people around the world. Some of this research is already providing working solutions, while outputs from other areas of research are very close to being implemented.

### Beating malaria

With the aid of a \$27m grant from the Bill and Melissa Gates Foundation, Professor Ian Graham and a team of researchers at the Centre for Novel Agricultural Products (CNAP) have developed higher yielding varieties of a plant called *Artemisia annua*. Artemisia produces artemisinin which, when used in combination with another drug, effectively cures malaria.



Surround sound: children as young as two will happily interact with the AB-York Crescent of Sound which uses a semicircular set-up of speakers to test three-dimensional hearing

### Combating prostate cancer

One of the most common cancers in men could soon be treated by therapies based on the findings of a team of researchers led by Professor Norman Maitland at the York Cancer Research Unit. Professor Maitland said: “We have developed the means to obtain stem cells specifically from prostate cancers. The properties of these cells suggest that they form a treatment-resistant core, which must be eliminated if we are to obtain longer-lasting treatments or even a cure.”

### Tackling parasitic disease

York is at the forefront of a worldwide drive to tackle leishmaniasis, a devastating parasitic disease spread by sand flies that every year kills around 40,000 people from some of the most poverty-stricken areas in the developing world. A team led by Professor Paul Kaye, Director of the University’s £6m Centre for Immunology and Infection, is making major advances on the development of a vaccine. Meanwhile Professor Deborah Smith, Professor of Molecular Parasitology and Head of the Department of Biology, is leading a team of scientists from York and Imperial College on a new drug development programme which aims to ease symptoms and reduce the severity of the disease. The Centre has also identified a new compound for treating sleeping sickness and a range of new HIV interventions are in an advance stage of planning.

### Scanning speed and accuracy improved

Work is being undertaken in York that could revolutionise the way in which MRI scans are used to view the molecular events behind diseases like Alzheimer’s without invasive procedures. This is to be achieved by effectively increasing the sensitivity of an average hospital scanner by 200,000 times. The technology is being developed in the new, purpose-built £7m Centre for Hyperpolarisation in Magnetic Resonance (CHyM) and has received a £3.6m Strategic Award from the Wellcome Trust to pursue medical applications. The work is spearheaded by Professors Gary Green and Simon Duckett who discovered SABRE (Signal Amplification by Reversible Exchange), a method which boosts the signal strength of compounds such as biomarkers in MRI measurements.

### Helping children to hear

Leading UK hospitals are using pioneering technology developed at York to test spatial listening in children and adults. With the AB-York Crescent of Sound, developed by Professor Quentin Summerfield and his team in the Department of Psychology, tests can be done in a clinical setting rather than specialist laboratories. The apparatus and its state-of-the-art software produces personalised reports in plain English.

### HIV vaccine trials

Hull York Medical School (HYMS) is part of a multi-million dollar programme of research into HIV funded by Microsoft billionaire Bill Gates. Professor of Medicine Charles Lacey is working with a group conducting trials of an HIV vaccine designed to protect women in developing countries. Researchers at York are also taking part in multi-centre trials examining new antiretroviral drug strategies both for management and prevention of HIV-1 infection.

### Insights into insulin

Diabetes is one of the major drains on NHS resources – predicted by University spin-out, York Health Economic Consortium, to spiral to 20 per cent of the overall NHS budget in the next 20 years. It is also emerging as a healthcare time bomb in developing countries such as India and Sri Lanka. Scientists at the University of York are playing a pivotal role in new research that marks a significant step forward in the understanding of how insulin works which could lead to more effective hormone therapies for treating diabetes.

Researchers in the York Structural Biology Laboratory (YSBL), led by Dr Andrzej Marek Brzozowski, are part of an international team that has established the first three-dimensional insight into the complex way the insulin hormone binds to its receptor on cell surfaces.

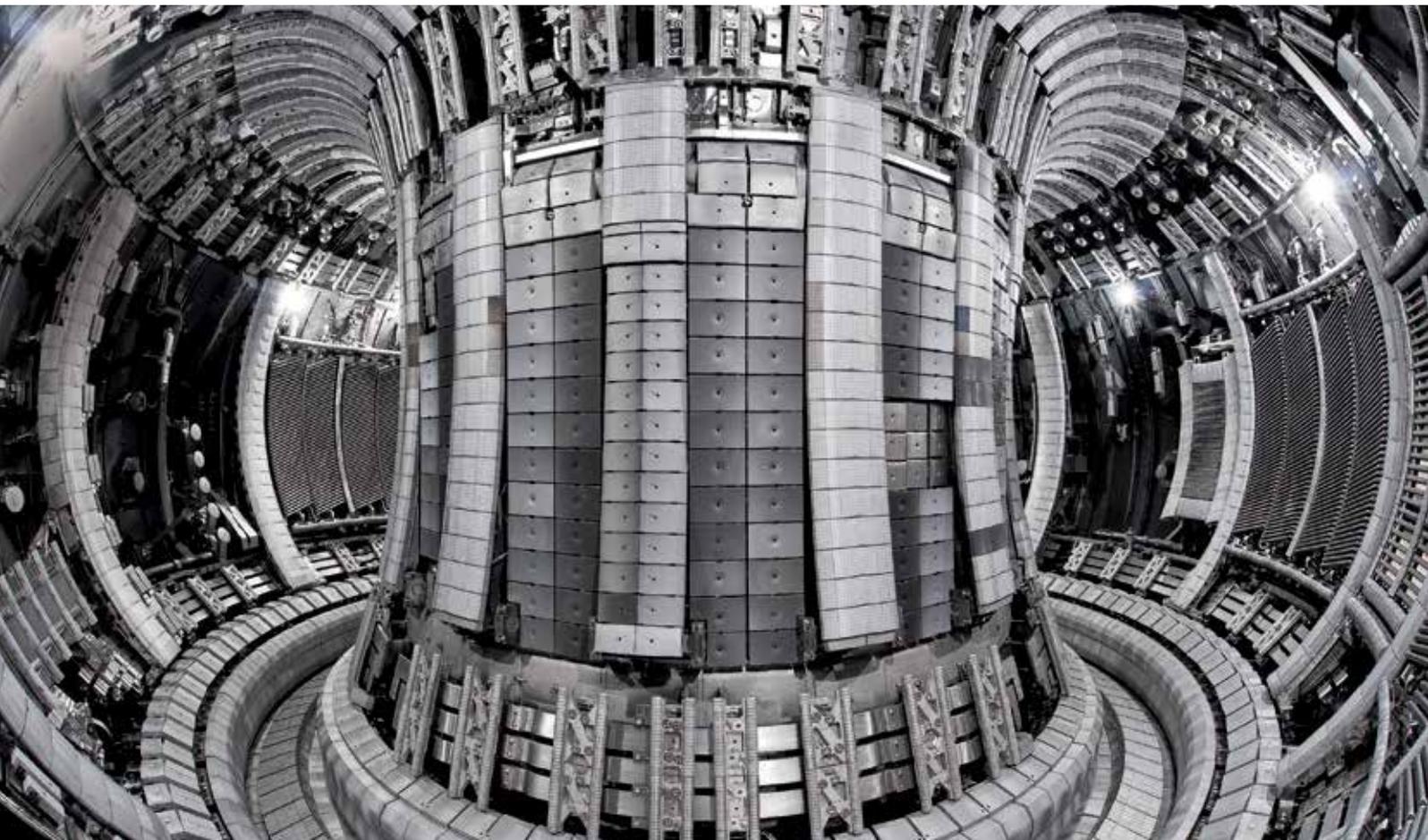
### Science and technology

Collaboration is the watchword for scientific and technological research at York. By working across disciplines and intellectual boundaries, academics are able to pool their talents and resources to provide new insights and quicker breakthroughs.

### Fusion

For instance, the University is a leading partner in one of the world's most ambitious fusion energy projects known as Mega Amp Spherical Tokamak – or MAST for short – based at the Culham Centre for Fusion Energy in Oxfordshire. Fusion technology has the potential to provide effectively limitless power to the grid without environmental damage and without using up the world's resources.

Inside the JET fusion device at the Culham Centre for Fusion Energy in Oxfordshire



### **The Morrell Fellows**

These donors have made major gifts to the University:

Ashley Burgess  
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### **Transformational gifts**

These gifts were made by charitable trusts:

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It does this by reproducing the fusion energy process that powers the sun. It involves very high temperatures when the fuel becomes a plasma. York is the UK leader in this science, along with our key partners at Culham and for laser-driven fusion, Rutherford Appleton Laboratory. A plasma, the fourth state of matter, is a term for an electrically charged ionised gas. As well as the high-temperature plasmas for fusion research there are low-temperature plasmas with industrial and biomedical applications ranging from manufacturing computer chips to packaging and from sterilisation to possible cancer treatments. Understanding these plasmas, often with businesses, is a huge research field for York scientists.

In 2012, with £4m funding from the Engineering and Physical Sciences Research Council (EPSRC) and the University, the York Plasma Institute was established, led by Professor Howard Wilson, a world-class research facility that is strengthening the collaborative links between academics and plasma industries in low-temperature plasmas, alongside high-temperature plasma research. Applications include recreation of astrophysical phenomena using high-power lasers in the laboratory and advancing the progress towards environmentally-friendly fusion energy.

### **Dealing with complexity**

It is a common complaint today that the world is becoming far too complex. Such complaints are meat and drink to researchers at York's Centre for Complex Systems Analysis. Located in the new Ron Cooke Hub – the interdisciplinary heart of research at York – the Centre draws together some 50 leading academics in fields as diverse as biology, chemistry, computer science, electronics, history, management studies, mathematics, physics, psychology, and social policy and social work.

Professor Reidun Twarock, of the Departments of Biology and Mathematics, for instance, is studying the geometry of viruses, which will help to devise new anti-viral strategies. She is also working on HIV inhibitors and cancer-causing viruses.

### **Saving lives on road and rail**

Increasingly our lives are shaped and influenced by computer-based systems, from the braking control mechanisms in cars to online banking.

Professor John McDermid, former Head of the Department of Computer Science, led the world's largest research group studying these aspects of new and evolving technologies. Technologies developed by his team were critical to the success of a recent Highways Agency project that allowed hard shoulder driving on the M42 in the Midlands. This improved traffic flow, travel times and safety. The University also has a joint research programme in China with Beijing Jiaotong University, developing and applying the safety processes for the new Chinese high-speed railway system.

### **The new electronics**

York is a key partner in an international network of universities and industry studying spintronics, an exciting and challenging area of nanotechnology with the potential to have as profound an impact on electronics as the development of the transistor over 50 years ago. The work is coordinated at York by Dr Yongbing Xu from York Spintronics Laboratory in conjunction with Nanjing University in China. Spintronics is playing an increasingly significant role in areas such as high-density storage, microelectronics and biomedical applications.

## **Environment**

### **Protecting our oceans**

A vast area in the middle of the storm-tossed North Atlantic, larger than the UK, now enjoys special protection from over-fishing and exploitation, thanks to an award-winning University of York marine biologist, his students and an international team of experts. The world's first network of high seas marine protected areas was agreed by Environment Ministers from 15 nations in a show of governmental cooperation in September 2010 and was based on research carried out by Professor Callum Roberts and a team of students from the University's Environment Department. The new protected area network is the only one in the high seas and is designed to protect fish stocks and restrict activities such as deep sea mining at a time when the world's oceans and marine habitats are facing growing threats from overfishing, pollution and the increasingly desperate search for mineral wealth.

### Probing pollution

The effects of atmospheric pollution have been the subject of research at the University's Department of Chemistry. Professor Alastair Lewis led a team of scientists from seven universities to the Azores where a mass of polluted air was tracked from the United States to the UK and mainland Europe. The scientists measured chemical reactions within the air-mass, quantifying the resulting pollutants delivered to Europe. Professor Lewis also worked with Professor Lucy Carpenter on research which showed that large amounts of ozone – around 50 per cent more than predicted by the world's climate models – are being destroyed in the lower atmosphere over the tropical Atlantic Ocean. The findings resulted from measurements from the Cape Verde Atmospheric Observatory, led by Professor Carpenter in collaboration with German and Cape Verdean scientists on the island of São Vicente in the tropical Atlantic. Atmospheric pollution at the edge of space was the subject of studies by Professor Peter Bernath and an international research team who used a satellite in low earth orbit to detect emissions of carbon dioxide caused by human activity in the highest regions of the atmosphere. Back down to earth, Professor Colin Brown, Head of Department at the University's Environment Department, has been researching the potential effects of land contamination on human health, in particular the effects of exposure to cadmium from contaminated soil.

### Society and policy

As a child of the '60s, and one that has grown up in a city with a strong Quaker and social heritage, it was perhaps inevitable that the University of York should rapidly develop strengths in issues of great social and political concern.

#### Shaping national policies

In the four decades since the Social Policy Research Unit (SPRU) was established its researchers have helped influence and shape British health and welfare systems. Regularly consulted by policymakers, civil servants and national media, the views of SPRU academics are sought after on topics as diverse as abuse by foster parents and caring for people with



dementia, through to giving advice and evidence to a Parliamentary Select Committee on the Work Programme.

One of the most notable members of a very notable team is Professor Jonathan Bradshaw whose studies of poverty and social exclusion have defined public debate on this issue for more than a decade.

#### Healthier economics

Governments across the world spend billions of pounds on healthcare – but do they spend this money wisely and equitably, and does it have the most beneficial impact on the health and well-being of their populations? These are just some of the questions that researchers at the University of York have been asking – and answering – over the last three decades.

Researchers here have pioneered the development of health economics and today York's Centre for Health Economics is one of the largest and best-known groups of its kind in the world. It developed a method to measure health outcomes that allowed comparisons of health benefits to be made across different types of treatments and diseases (the Quality-Adjusted Life Year), now the international gold standard in economic evaluations. More recently, its researchers advised government on the creation of the National Institute for Health and Clinical Excellence (NICE), resulting in more cost-effective interventions being made available in the NHS.

Stewarding the sea: overfishing and pollution are having a devastating effect on the oceans and researchers in the Environment Department have helped to establish the world's first network of high seas marine protected areas in order to fight the decline in these valuable resources

### Rebuilding nation states

The advice of social scientists at the University of York is also sought by governments and institutions around the world. The Post-war Reconstruction and Development Unit (PRDU), one of the University's flagship research units in this field, has been actively engaged with policymakers and practitioners in issues related to reconstruction and development in conflict-affected and fragile states since 1992. An excellent example of the far-reaching impact of the Unit's work is their 2008 strategic conflict assessment of Afghanistan, conducted on behalf of the British Government by a team of six academics from York led by Professor Sultan Barakat. The thoughtful analysis and practical recommendations arising from this assessment were well-received by both the British and Afghan governments.

"It was good to see our research having a tangible effect on British and international policymaking and to have received positive feedback from the British and Afghan governments," said Professor Barakat, founder and Director of the PRDU.

The Department's MA in Post-War Recovery Studies has run for over 15 years and trained professionals in how to rebuild war-torn societies across the world such as Iraq, Nigeria, Afghanistan, Vietnam and Libya.

### Protective fellowship for human rights

Around 35 people who have fought for human rights in some of the most volatile and violent countries in the world have found sanctuary at York through the University's Protective Fellowship Scheme. The scheme, the first of its type in a UK university, provides ten places each year to human rights defenders. Each fellowship, lasting from three to six months, aims to provide a chance to rest and reflect in safe surroundings while offering access to educational opportunities and training.

"We believe that human rights defenders are key agents in creating more socially just societies around the world and they deserve our support," said Professor Paul Gready, Director of the Centre for Applied Human Rights. The Centre was set up with a benefaction from one of York's alumni Sigrid Rausing after discussions with Vice-Chancellor Professor Brian Cantor. It is aimed at improving people's social, legal, professional and economic position throughout the world, wherever their basic human rights are being compromised.

One of those to benefit from the scheme is Karak Denyok whose family lost everything when they fled ethnic violence in South Sudan. She went on to study at universities in Sudan and Uganda before setting up two commercial farm projects in South Sudan which have helped thousands of women break out of poverty by learning farm skills and gaining a basic education. She continues with the work despite intimidation by local leaders who are opposed to her efforts to empower women. Karak is using her time at York to learn about human rights and how it could help her work in South Sudan.

Karak said: "The job I do is not easy. South Sudan is not safe but I believe in the power of knowledge, particularly for women and children, as a way to create more peaceful and stable communities. The knowledge I am gaining at York will allow me to help more people when I return home."

### Equality is better for everyone

When *The Sunday Times* reviewed Professor Kate Pickett's award-winning book on equality it was described as 'a big idea, big enough to change political thinking.'

Using a wealth of new evidence as the backbone to *The Spirit Level: Why equality is better for everyone*, Professor Pickett, and

MA students from the Post-war Reconstruction and Development Unit are working in Jordan with people who have fled the violence in Syria and are now housed in huge refugee camps like this one at Za'tarai



her co-author Professor Richard Wilkinson, showed that societies with a smaller gap between rich and poor perform better on a range of health and social indicators. Most startling of her findings is that inequality affects the rich as well as the poor. Wealthier people in unequal societies are more likely to suffer mental illnesses, work long hours, get into debt, and die younger than their counterparts elsewhere.

## Arts and culture

York's Department of History of Art has agreements with Tate Britain, the V&A and the National Gallery, all of which facilitate strong partnerships and the sharing of expertise with colleagues working in these institutions. The partnerships contribute to the research and teaching culture of the Department, allowing students and staff to benefit from the collaborative venture while gaining first hand experience with collections of international importance.

"Tate has established a strong partnership with the History of Art Department at the University of York over recent years and our various contacts with their researchers – especially in the field of British Art – and students have brought valuable opportunities, such as the dissemination of research outcomes and the exploration of research ideas through MA teaching by Tate staff," said Professor Nigel Llewellyn, Head of Research at Tate.

The University's student-run Norman Rae Gallery is a vibrant art space in Derwent College promoting the work of both students and professional artists in a wide range of media. The gallery hosts three exhibitions a term with lectures, seminars and events. The Ron Cooke Hub on Heslington East provides a further display and exhibition area while other smaller areas throughout the campus are home to art works and sculptures.

From its inception, the University of York has also been pre-eminent in the study and practice of literature. The Department of English Literature and Related Studies, for instance, is ranked as number one in the country in the latest Research Assessment Exercise (2008), and its Department of Archaeology was awarded the Queen's Anniversary Prize in 2011 in recognition of its excellence in research and teaching.



## Window on the past

For six centuries, visitors to York Minster have stood in awe before the Great East Window. 78 feet tall, and about the size of a tennis court, the 311-panelled window is the largest expanse of medieval stained glass in Britain and is regarded as one of the great pre-Renaissance treasures of European art.

For the moment, however, visitors have to make do with a full-scale printed facsimile of the Great East Window instead of the real thing. This towers over an exciting new interpretive display and the futuristic Orb in which, at any one time, five conserved panels from the window can be viewed at close quarters. The work of art is midway through a restoration being carried out by the specialists of the York Glazier's Trust under the supervision of Sarah Brown, a stained glass scholar in the University's Department of History of Art, and the Director of the Trust.

"Each panel is in itself a work of priceless art, painted with the skills of a Van Eyck or a Vermeer," says Sarah Brown, who is also course director for an innovative two-year MA in Stained Glass Conservation and Heritage Management.

Painstaking conservation work is underway on York Minster's Great East Window, the largest expanse of medieval stained glass in Britain. The work is being carried out by specialists from the York Glazier's Trust under the supervision of Sarah Brown, a stained glass scholar in the University's Department of History of Art and Director of the Trust

### Academics as detectives

English Literature academics might seem unlikely sleuths but they have recently used a number of unusual techniques to solve mysteries surrounding the origins of works ranging from Chaucer to the modernist poet, TS Eliot.

Professor Lawrence Rainey, a specialist in Anglo-American modernism, has a passion for the poetry of TS Eliot, and his masterpiece *The Waste Land* in particular.

Like many Eliot scholars he was intrigued by the evolution of the poem but, unlike other scholars, he left no stone unturned in solving the mystery of how and when it was written. For two years he forensically examined documents, visiting libraries and collections around the world. He even enlisted the help of the FBI to help him identify the makes of typewriter that Eliot had used. Professor Rainey's detective work revealed the poem was composed between January 1921 and January 1922 and that the poet did not follow a plan but stitched together more than 50 previous drafts.

Based on palaeographical analysis, Professor Linne Mooney and Dr Estelle Stubbs of the Centre for Medieval Studies at York discovered evidence of the identities of several important scribes of Middle

English literature who were members of the civic secretariat at the London Guildhall. The discoveries, supported by the Arts and Humanities Research Council (AHRC), were the result of painstaking research in the London Metropolitan Archives. There the York scholars matched the handwriting of scribes copying important early English manuscripts of works by Chaucer (such as the *Canterbury Tales*) and his contemporaries, with the hands of Guildhall clerks copying official documents.

### The history of slavery

James Walvin, Emeritus Professor of History at the University of York and the recipient of an OBE in the 2008 New Year's Honours List, is an elder statesman among York academics. The University's first colleges had only just been built when he arrived as a young postgraduate student in September 1965 to study for a PhD on radicalism in the 18th century under his mentor Gwyn A Williams.

It was while he was finishing off some postgraduate research in Canada that a friend from the Caribbean, Michael Craton, mentioned that he had come across a remarkable archive going back 300 years in an old plantation house in Jamaica. The immediate result was the landmark book, *A Jamaica Plantation: The History of Worthy Park 1670-1970*. A year later Professor Walvin published *Black Presence: a Documentary History of the Negro in England*, which again explored a largely ignored part of British history that today seems integral to our national narrative.

### Uncovering the past

The discovery of the oldest house in Britain by a team from the University of York has reshaped our understanding of the post-Ice Age hunter-gatherers who lived on the site over 11,000 years ago. Professor Nicky Milner from York's Department of Archaeology who uncovered the house at Star Carr, along with a team from the University of Manchester, said: "Previously, we thought hunter-gatherers roamed across the landscape with no real connections to any sites or geographical areas. Evidence from Star Carr suggests that in fact this North Yorkshire site was occupied for between 200 to 500 years with the building being repaired and maintained to accommodate the changing needs of the generations who lived there."

Professor Nicky Milner from York's Department of Archaeology examines artist's impressions of the site of the Stone Age house uncovered at Star Carr, near Scarborough





## New horizons

Over the last half century the University of York has grown from a small institution with big ambitions and immense energy, to the first rank of the world's most prestigious universities.

It has done this through a combination of visionary leadership, inspired teaching and a relentless pursuit of research excellence. This has attracted world-class academics to join the ranks of its staff and ambitious students from around the globe to study at its expanding campus as it continues its evolution in the 21st century.

While some of the informality and intimacy that marked the early years has been lost – an inevitable result of growing from a population of 216 students to more than 15,000 – the socially inclusive, open and democratic culture that was fostered during those early years remains everywhere in evidence.

This 50th Anniversary year has given the University pause to reflect on, and to celebrate, the achievements it has made in five short decades. In doing so, it has reinforced the determination to protect what is precious in its heritage, and reinforced the constant drive to excel.

Without the vision and grit of the early pioneers, however, none of this would have been possible. In 1963 it was the boldness and courage of those gifted academics who were willing to sacrifice safe jobs at top-flight universities, that helped create a new university to open up higher education to all the talents.

The narrative thread that runs from 1963 through to 2013 is this abiding belief that education can transform the lives of individuals and the fortunes of societies. As this brief history has shown, York's goal can be summed up by the words of Harvard essayist, Ralph Waldo Emerson who said: "Do not go where the path may lead, go instead where there is no path and leave a trail."

For Professor Brian Cantor, York's greatest contribution is found in the quality of the young people who come to study: "The goal is that they leave York equipped not only with a first-class education, but also with a bundle of attributes that make them potential leaders in their chosen fields. It is they who will rise to the challenges of the future, and they who will help guide the world to new horizons," he said.

**"The goal is that our students leave York equipped with a first class education and attributes that will make them potential leaders in their chosen fields ... it is they who will rise to the challenges of the future."**

Professor Brian Cantor  
Vice-Chancellor



In February 2013, a celebration in York Minster marked the University's 50th Anniversary

For more about the history of the University of York and our 50th Anniversary celebrations visit

**[www.york.ac.uk/50](http://www.york.ac.uk/50)**

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changing the world*

2063  
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