



UNIVERSITY OF LEEDS

ANNUAL REVIEW 2016–2017





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INTRODUCTION FROM SIR ALAN LANGLANDS, VICE-CHANCELLOR



The University of Leeds is committed to putting the interests of students front and centre, undertaking research of the very highest quality, and making a difference in the world.

During the past year we made further strong progress in delivering on these ambitions and the accolade of being the 2017 *The Times* and *The Sunday Times* University of the Year provides external validation of the progress we are making.

In student education, we received a top Gold award in the new Teaching Excellence Framework (TEF), a top five position in the Times Higher Education Student Experience Survey and a leading position for Russell Group universities in the National Student Survey. We have also broken into the top 10 of the *Good University Guide* for the first time.

In research, we exceeded our target for new research awards by quite a margin and – as evidence of our increased ambition and success – have recently been awarded a total of nearly £16m from the Global Challenges Research Fund for two projects to build resilience in African businesses and communities.

Work began on Nexus – our new £40m innovation and enterprise centre – which from 2018 will enable high growth businesses and corporate research and development teams to access world-class research, students, graduate talent and professional services, opening new opportunities for productivity gains and growth.

And we put in place the groundwork for our new £96m Sir William Henry Bragg Building, which will galvanise the links between physical sciences and engineering, and provide a state-of-the-art research centre for engineered materials. We are also committed to a new technology campus, which will accommodate a dedicated centre for excellence in high-speed rail and systems integration, and other heavy engineering facilities.

We continued to enrich our academic activity on campus by stepping up our recruitment of international students and staff. We are also putting comprehensive plans in place to boost our international research collaborations, engaging in a systematic way with our worldwide alumni, global companies, non-governmental organisations and University partners.

So there is much to be proud of and much to look forward to. This is down to the drive, commitment and ingenuity of our staff and students, which underpins all these achievements and initiatives, and shines out in this account of the past year.

A handwritten signature in black ink, which appears to read 'R. Langlands'. The signature is written in a cursive, flowing style.



THE UNIVERSITY'S TIMELINE

August 2016

The first cohort of Chinese engineering students are welcomed to the University of Leeds and Southwest Jiaotong University Joint School.

The National Student Survey puts the University in joint second place in the Russell Group for student satisfaction.

Alumni Alistair and Jonny Brownlee win gold and silver medals in the triathlon at the Rio Olympic Games. Nine Leeds alumni competed in the Olympics and the September Paralympic Games, winning four gold and two silver medals between them.



The University welcomes Professors Tom Ward, Deputy Vice-Chancellor: Student Education and Lisa Roberts, Deputy Vice-Chancellor: Research and Innovation.

September 2016

The Times and The Sunday Times Good University Guide names the University of Leeds the 2017 University of the Year.

The President of Iceland, on his first official visit to the UK, gives the keynote speech to the University's conference on 'rewilding', The Future of Wild Europe.

Nexus – a new £40m innovation and enterprise centre – is given the go-ahead by planners.



The School of Medicine becomes one of only two medical schools worldwide to receive three ASPIRE-to-EXCELLENCE awards from the Association for Medical Education in Europe.

Professor Hai-Sui Yu, Pro-Vice-Chancellor: International, joins the University, completing the senior academic team.

October 2016

The Leeds Institute for Teaching Excellence opens, creating a centre for research and innovation in education and learning.

The Cultural Institute launches, boosting research, partnerships and student opportunities, and public engagement with the University's cultural treasures and activity.

November 2016

Virtual Landscapes, a tool that uses computer gaming to simulate field trips, developed by the School of Earth and Environment in collaboration with Leeds College of Art (now known as Leeds Arts University), wins the Times Higher Education Award for Outstanding Digital Innovation in Teaching or Research.

A £6m research project led by the University launches to investigate water-related threats to the Yorkshire region. The research into water quality, resilience to drought and flood, and biodiversity, could benefit the Yorkshire economy by up to £50m.

December 2016

A research co-operation agreement is signed with the elite Chinese Shanghai Jiao Tong University.

A research study shows that women taking tamoxifen to prevent breast cancer may be stopping their treatment because of a mistaken belief that it is causing certain side effects.

Drs Sarah Underwood and Rafe Hallett receive National Teaching Fellowships, bringing the total awarded to academics at the University to 24, one of the highest tallies of any university. (The number has subsequently risen to 26.)



January 2017

The Astbury BioStructure Laboratory – the result of a £17m investment in some of the most advanced biological research equipment in the world – officially opens.



High Fliers Research ranks University of Leeds students as the fifth most targeted in the UK by leading employers.

A £6.8m Advanced Medical Imaging Centre – stemming from a collaboration between the Universities of Leeds and York, and the Leeds Teaching Hospitals Trust – opens. The Centre could transform the diagnosis and treatment of patients suffering from cancer, heart disease and musculoskeletal diseases.

February 2017

The Universities of Leeds and Bradford and The Wolfson Foundation combine to invest £3m in The Wolfson Centre for Applied Healthcare Research at Bradford Royal Infirmary to improve the health and well-being of children and the elderly, and improve patient safety.

Composer Samuel Hertz wins the DARE Art Prize, inaugurated to celebrate the 10th anniversary of the world-leading DARE partnership between the University and Opera North.

March 2017

The Leeds Festival of Science and the annual Be Curious research showcase take the University to a wider public audience with a range of events, from songs about science to have-a-go simulated keyhole surgery.

The 25th annual Eye on Asia photographic exhibition in Parkinson Court captures the beauty of Asia and its culture.



Times Higher Education ranks Leeds in the top five universities in the UK for student experience.

April 2017

Alistair and Jonny Brownlee open The Brownlee Centre, a new £5m cycling and triathlon facility, at the University's Bodington Playing Fields in north Leeds.

Researchers discover that 'mini-brains' in the body's peripheral nervous system can help to interpret and modulate pain. The findings have potential implications for the future development of painkilling drugs.

May 2017

Living Well Within Limits, a multi-disciplinary, multi-national project led by Leeds researchers launches to try to answer the question: 'How much energy does it take to achieve human well-being?' The project addresses one of the main challenges of our time: how to balance human development with its environmental impact.

June 2017

The University achieves a Gold rating in the first Teaching Excellence Framework.

Over 2,500 researchers from more than 50 countries attend the International Medieval Congress at Leeds, the largest gathering of medievalists in the world.

Leeds researchers set sail for the Barents Sea as part of a £10m research programme to understand the effect of climate change on the Arctic region.



July 2017



St Gemma's Hospice in Leeds becomes the UK's first formally recognised university teaching hospice, reflecting its long-standing relationship with the University.

Following its multi-million pound refurbishment, the Edward Boyle Library is officially re-opened by University Chancellor, Lord Melvyn Bragg, his last formal engagement after 17 years as Chancellor.



EXCELLENCE IN RESEARCH

Research at Leeds is defined by a passion for discovery and a desire to make a telling impact on the wider world. The University is placed in the top 10 for research power and impact (through the Research Excellence Framework). The scale of its ambition has most recently been underlined by a total of £20m in funding awarded from the Government's £1.5bn Global Challenges Research Fund (GCRF).

To build on its already strong position, the University is making unparalleled investments in its research capability – both people and infrastructure – as highlighted by its new £40m Nexus research and innovation centre, £96m integrated campus for engineering and physical science, the Sir William Henry Bragg Building, and hugely successful 250 Great Minds early career researcher recruitment drive. All of this adds up to an environment in which world-leading research can flourish.

By empowering existing researchers, giving them the support, ambition and facilities to be the best they possibly can be, and appointing new world-class researchers and academic leaders of the future, the University is well placed to become an even more outstanding research institution, securely placed in the UK's top 10, achieving significant increases in research quality, income and impact.



Giving businesses a gateway to world-leading research

Nexus – Leeds' new £40m innovation centre, due to open in 2018 – will give businesses access to the University's greatest minds, world-leading research and outstanding facilities, with tailor-made support to bring innovative ideas to market.

Part of the £520m investment to create a world-class campus, the purpose-built centre is designed to drive collaboration, encourage idea generation and underpin problem solving. It will feature high-quality office and lab space for technology-led companies, corporate research and development, and new product development teams, and areas for networking and collaboration, including exhibition space, a 120-seat lecture theatre, meeting rooms, seminar spaces, a café and a business lounge.

Focusing on tech-led innovation in areas of national and international priority across a range of research strengths, the centre will be a hub for the growing innovation community in Leeds, creating new jobs and investment.

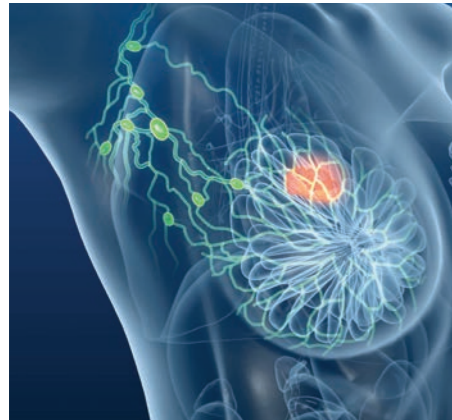
Nexus builds on the University's strong track record in supporting the growth of new and established businesses. The University's economic contribution currently stands at £1.3bn per year and of its more than 100 spin-outs, six are market listed on AIM, which is more than any other university in the UK.

By facilitating a culture of collaboration, innovation and impact, both across the University of Leeds and beyond, Nexus will help bring the University's ideas to the wider world, while addressing significant commercial, societal and environmental global challenges.

"I am convinced that by building on our strengths, and aligning them with ambitious goals articulated through a clear delivery plan, we can produce even more world-leading research that has significant global impact."

Lisa Roberts, Deputy Vice-Chancellor:
Research and Innovation





Research that's improving cancer treatment and prevention

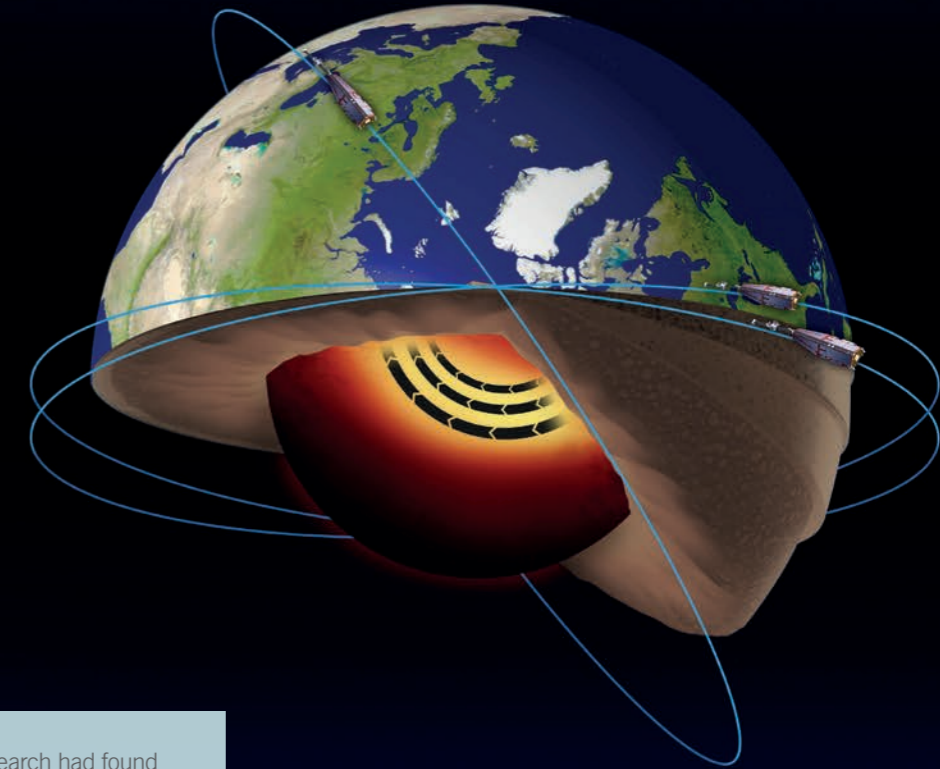
Researchers at the University are helping to save lives through key findings in relation to cancer-preventing drugs.

Breast cancer is the most common cancer in the UK. Researchers at the University found that a misunderstanding about what may be causing certain symptoms could be an important barrier to some women continuing with tamoxifen, a drug that reduces the incidence of breast cancer among those at a high risk by more than 30 per cent.

The drug's preventive effects last for more than 20 years, but more than a third of women enrolled in the Cancer Research UK-funded International Breast Cancer Intervention Study did not continue with treatment for the recommended five years due to nausea and vomiting.

When looking at the data, Leeds researchers found that women given a placebo experienced similar levels of nausea and vomiting and were equally as likely to stop treatment. This suggests that symptoms due to other causes were being mistaken for side effects of tamoxifen.

Examination of the trial data was presented at the San Antonio Breast Cancer Symposium. Sarah Williams, Cancer Research UK's Health Information Manager, said: "Research like this, to understand more about the side effects women experience, and the decisions this leads them to make, is vital to offering them appropriate support so they can make the best choice for themselves."



Latest satellite data has helped to create an 'X-ray' view of the planet

Satellites discover jet stream in the Earth's core

In an exciting step in learning more about our planet's inner workings, University scientists have discovered a jet stream within the Earth's molten iron core. Using the latest satellite data that helps create an 'X-ray' view of the planet, researchers from the School of Earth and Environment and the School of Mathematics explain the jet stream as a "band of molten iron circling the North Pole."

Previous research had found that changes in the magnetic field indicated that iron in the outer core was moving faster in the northern hemisphere, mostly under Alaska and Siberia. New data from the Swarm satellites launched by the European Space Agency (ESA) in 2013 has revealed these changes are actually caused by a jet stream moving at more than 40km per year.

The study found the position of the jet stream aligns with a boundary between two different regions in the core.

"We have gained new insights into the dynamics of the Earth's core and it's the first time this jet stream has been seen. Not only that – we also understand why it's there. Knowledge of the liquid core helps us to understand the Earth's magnetic field, which is important for navigation and protecting the planet's surface from harmful radiation."

Dr Phil Livermore,
School of Earth and Environment

Engaging the public in world-leading research

The University is dedicated to ensuring that research activity and the benefits it brings are shared with the public. Two awards in this year's national Public Engagement with Research Awards demonstrated that dedication.

Staff and students from the Schools of Dentistry and Performance and Cultural Industries won the Engaging Young People Award, whilst Emily Cuming from the School of English was named as a winner in the Arts, Humanities and Social Sciences category.

Other exciting developments are also demonstrating this commitment to engaging the public. The University became a national hub for the Being Human festival of humanities, and the new Museums and University Public Engagement Programme (MUPEP) is connecting researchers with audiences at six national museums to bring Leeds' research to a wider audience. Visitors to the Royal Armouries, the Science Media Museum, Eureka!, the Natural History Museum, Leeds Museums & Galleries, and the Thackray Medical Museum, all of which attract a wide

audience on a daily basis, will gain access to some of the University's groundbreaking work.

Other engagement activities included the University's second Be Curious public research showcase, which invited members of the public to take a look at, and even join in, work being carried out on campus. This year's theme was 'Leeds and Yorkshire', highlighting the relevance of the University's research to the local community.

The University has also been involved with public events including the Leeds Festival of Science, the Leeds Digital Festival, Light Night and Pint of Science.

Dedication to public engagement is not simply about external events, and the University's growing network of Public Engagement champions (now 20) are inspiring their colleagues and helping to spread public engagement expertise throughout the University. In addition, the successful introduction of an undergraduate module aims to embed public engagement at the earliest stages of education for Leeds students.



Frank the cycling skeleton demonstrating joint replacement technology at Be Curious 2017



Performers at Light Night 2016



A young visitor fascinated by some of the research on show at Be Curious 2017



Opening eyes and ears to a lost artistic past

Musical, theatrical and literary works by Jewish artists, lost during the turmoils of the 20th century, have been rediscovered and performed – for the first time in some cases – as a result of the Performing the Jewish Archive project.

Dr Stephen Muir from the School of Music led a multidisciplinary team from across four continents to bring to light works that have been previously lost or forgotten. These have included cabarets, plays, piano music composed in the Warsaw ghetto by a 12-year-old prodigy, and children’s drawings from the Terezin camp.

Works from the archives have been performed at five international performance festivals in the USA, UK, Czech Republic, Australia and South Africa, and before senior politicians and religious leaders at the UK National Holocaust Memorial Day ceremony.

Dr Muir said: “All this work has built up a great deal of momentum at the University. The time is right for us to become a leading centre for the study of Jewish arts and responses to experiences of repression, exile and displacement.

“It’s also a great opportunity for scholars to take a fresh look at what archives are, how they function and how they might best be used in modern society. We seem to have caught the imagination of a huge range of organisations – both Jewish and non-Jewish – all interested in the Jewish artistic past and how it impinges on all of our futures.

“Many of our project partners train the educators and policymakers of the future, so the impact of our activities could become deeply embedded in education on an international basis.”

How ‘green’ is your waterproof jacket?

In the face of unpredictable weather conditions, waterproof jackets have become key items in many people’s wardrobes. Leeds’ research suggests that the use of controversial fluorochemicals in the manufacture of most of these garments may be unnecessary. As well as posing potential risks to the environment, fluorocarbons have also been associated with health problems in humans.

Researchers from the School of Design subjected samples of 22 different fabrics to extensive chemical analysis and testing, and surveyed 575 outdoor enthusiasts who regularly hike, trek, mountaineer and go hill-walking, on how they use such clothing.

The study found that garments are often over-engineered to provide stain and oil repellancy which wearers do not want or need. Wearers are most concerned that their clothing is waterproof, which can be achieved without using fluorochemicals.

Sustainability is a growing concern within the textile and clothing industry, which uses a quarter of all the chemicals produced across the globe.

Pamela Ravasio, Head of Corporate Social Responsibility and Sustainability with the European Outdoor Group, which represents the sector, said: “The European Outdoor Group welcomes this new research, which adds scientific insight and data to this complex and multi-faceted issue. Such knowledge is critical to avoid new chemistries being introduced which turn out to be even more harmful than those they replace.”





Dr Rebecca Thompson overseeing the construction and installation of the University's new electron microscopes

New discovery in antibiotic resistance

Leading scientists from Leeds have uncovered new information about the way hundreds of different types of disease-causing bacteria operate, which could pave the way for overcoming antibiotic resistance.

Professors Sheena Radford and Neil Ranson have uncovered new information about the operation of a protein complex called BAM – the beta-barrel assembly machinery – which helps insert other bacterial proteins into the outermost protective layer of bacteria.

In order for bacteria to spread diseases, they need to form an outer membrane, or they cannot survive in the harsh environments in which they live.

The BAM complex plays a crucial role in this process, facilitating the insertion of a myriad of proteins into this membrane that are required for it to work properly as a barrier, protecting the bug from attack by antibiotics.

Using highly advanced electron microscopes, researchers have now seen the structure of BAM in an open state by rapidly freezing the complex from solution and say it may be possible to design drugs which could target the BAM complex to stop it operating.

The new insight will contribute to ongoing work to find new ways to kill bacteria which have become increasingly resistant to drugs developed in the 20th century.

Antibacterial resistance has become a major issue in recent years, with many drugs that have been developed to combat infections from whooping cough to salmonella, and a wide range of hospital-acquired infections, losing their effectiveness.

A report on anti-microbial resistance, published in May 2016, highlighted that unless the world acts to tackle this issue now, by 2050 there could be up to 10 million deaths due to infections that are non-responsive to antibiotics.

This research was carried out using electron microscopes based at the Diamond Light Source, the UK's national synchrotron science facility, located at the Harwell Science and Innovation Campus in Oxfordshire. However, it is now possible to carry out the next steps in this research on campus in Leeds, following the University's investment in its own state-of-the-art electron microscopes. The two microscopes form a key part of the cutting-edge facilities at the University's world-renowned Astbury Centre for Structural Molecular Biology.



Professor Sheena Radford

EXCELLENCE IN STUDENT EDUCATION



Students in the Laidlaw Library

Innovative research-based education is paramount at Leeds. The University has a steadfast commitment to developing future generations of independent, critical thinkers who make a difference to the world around them.

This dedication has been endorsed by accolades during the year, including being named University of the Year 2017 by *The Times* and *The Sunday Times*, a Teaching Excellence Framework (TEF) Gold award

and two additional teaching fellows, Drs Sarah Underwood and Rafe Hallett, taking the total to 24 (the number has subsequently increased to 26, the highest of any university).

Continued investments in staff, research capability and the campus, all make Leeds a truly remarkable place when it comes to developing knowledge and creating opportunity for students.



“Leeds offers students an innovative and distinctive educational experience thanks to the commitment and talent of our staff working in partnership with our students. We have much to be proud of.”

Tom Ward, Deputy Vice-Chancellor: Student Education



The Brotherton Library



Gold award for outstanding student education and experience

The University has achieved a Gold rating in the Teaching Excellence Framework (TEF), the highest award possible.

The independent panel judged that the University delivers “consistently outstanding teaching, learning and outcomes for its students, of the highest quality found in the UK”.

The assessment found that independent learning is supported by “outstanding physical and digital resources” and underlined the importance of “an embedded ethos of the Leeds partnership with students”, alongside “a creative approach to supporting students in their independent learning”.

The Teaching Excellence Framework was developed by the Department for Education to assess teaching in higher education at undergraduate level. It uses evidence from a set of measures that focus on student satisfaction, retention rates and graduate employment.

Professor Tom Ward, Deputy Vice-Chancellor: Student Education, said: “We can all be proud of this result, which is testament to the hard work, commitment and talents of not only our staff, but also students across the University.”

The award reflects the University’s strengths in its research-based learning. To become Gold-rated, the TEF requires that students are “consistently and frequently engaged with developments from the forefront of research, scholarship or practice”.

The panel also praised the Access to Leeds scheme, one of the sector’s largest initiatives aimed at widening participation and encouraging students to apply to the University, regardless of their background.

Award-winning digital education technology

A tool that uses computer gaming to simulate field trips has won a prestigious Times Higher Education award.

The technology, called Virtual Landscapes, was developed in a collaboration between the University and the Leeds College of Art (now known as Leeds Arts University), and won the award for Outstanding Digital Innovation in Teaching or Research. It enables students on courses with a geology element to prepare for fieldwork. They can explore a virtual landscape as they would a real one, interacting to collect real-time data, determine location, and map regional geology. This means that time can be used more profitably when they are out in the field.

The tool can also be used by students who cannot undertake fieldwork, for example, due to illness or injury, enabling the same skills and processes to be taught in a manner not previously possible.

Dr Jacqui Houghton, from the University's School of Earth and Environment and Director of the Virtual Landscapes project, said: "This is a fantastic example of team working, using experts from different disciplines and institutions to find a solution to a problem we had been grappling with for some time.

"Virtual Landscapes was developed from a pencil and paper exercise into a tool that has revolutionised the way that students learn about geology."

The tool has been so successful it is now being evaluated by other UK universities, including Keele, Durham and Liverpool, and is being used in universities in the USA, South Africa and Guyana.



The new tool helps students to explore a virtual landscape. It was developed by a Virtual Landscapes team at Leeds College of Art (now known as Leeds Arts University).



Degree apprenticeships deliver innovative approaches to education

The University has created partnerships with global firm PwC and three other education providers to deliver innovative new degree apprenticeships.

These collaborations combine invaluable on-the-job training in paid employment with study for a degree qualification, and aim to meet the demands of employers, address skills gaps and enhance UK productivity.

By working with PwC – one of the UK's largest graduate employers – to create the new fully funded undergraduate degree apprenticeship in computer science, the University aims to grow the next generation of technology talent.

Professor Peter Jimack, Executive Dean of the Faculty of Engineering, which encompasses the School of Computing, said: "Deepening the relationship between universities and leading private sector businesses is one of the key ways academia can support the UK's economy.

"These courses are the latest way we are adapting traditional modes of higher education to create a skilled workforce with the experience needed by employers, who can contribute as soon as they begin work."

A Leadership and Management masters level degree is another apprenticeship being developed to support Leeds Teaching Hospitals Trust employees through their careers and build capacity to meet the needs of the NHS in the long term. A Healthcare Assistant Practitioner higher apprenticeship, developed with NHS trusts across Yorkshire, is also underway.

Further degree apprenticeships are planned as the market for this new approach to higher level training and education grows. The University is seeking to work with leading UK and global employers to develop programmes to suit their needs.



A new course has been designed to help address the UK's technology skills gap and improve the industry's diversity



Mary Mulloy at a Christmas concert in the Leeds Trinity shopping centre, performed by children from the In Harmony Opera North programme

Sector-leading partnership offering real-world opportunities

The University is celebrating a decade of DARE, its pioneering collaboration with Opera North.

By working together over the past 10 years, University and Opera North colleagues have delivered more than 250 projects, while more than 10,000 students have connected with the business and production of opera.

Highlights include: the creation of more than 50 new works; two new accredited practice-based learning programmes; more than 80 conferences and symposia; and more than £3m worth of collaborative research projects.

A key part of the collaboration, the Pettman Dare Fellowship, was launched in 2010. Focused on developing skills in music education and engagement, Fellowships provide early career professionals with the opportunity to undertake an intensive year of practice-led research before progressing to the next stage in their career. Fellows spend half their time gaining practical experience at Opera North, and the other half participating in taught modules at the University.

The seven Pettman Dare Fellows who have completed the programme to date are each enjoying flourishing careers in the arts in New Zealand and the UK, in roles including music education, theatre acoustics, music events management and music performance.

2016/17 Fellow, Mary Mulloy, said: “Being able to learn the theory then apply it in practice is so valuable. For example, studying and writing about issues currently facing the arts, such as diversity, then seeing how it manifests in the real world – when Arts Council England is making diversity monitoring a condition of funding – is revealing.”

As well as the Fellows themselves, the partnership has also had a positive impact on organisations, individual researchers and audiences.





International research into making finance work for society

A €10m international research project to look at ways to make the financial system better serve Europe's economic, social and environmental needs has been led by the University.

The project, which was largely funded by a near €8m grant from the European Commission, has brought together economists and other social scientists to look at how financialisation – the increasing dominance of the financial system over other parts of the economy – has affected the performances of national economies and the global economy over the last 30 years. By combining different methods and perspectives, it has sought to address how finance can be reformed in a way that achieves the key objectives of economic, social and environmental sustainability.

Financialisation, Economy, Society and Sustainable Development (FESSUD) involved 13 other leading universities from across Europe and South Africa, and one non-governmental organisation.

Outcomes from the study include predictions on the next decade of European financial growth and suggested practical reforms, such as the formation of a Green Banking Network, to invest funds for environmentally sustainable projects.

Key findings have been reported to senior policymakers, including officials from the European Central Bank, the Organisation for Economic Co-operation and Development, the European Investment Bank, the US Senate Budget Committee and the European Commission.

University of Leeds Professor Malcolm Sawyer, who led the research, said: "Those involved with FESSUD conducted extensive and wide-ranging research which demonstrated the powerful, often detrimental, effects of finance on the economy, society and sustainability. They made substantial contributions to the understanding of financialisation and provided policymakers with recommendations including serious regulation of the financial sector, re-writing the economic rules of the euro area and building financial structures for sustainability."



INTERNATIONAL LEEDS

Leeds is a truly global university which has been welcoming international talent for more than 100 years. Today, the scale of the international community and global reach and impact of the University is significant.

The University's new International Strategy and appointment of a new senior international team underlines its commitment to becoming even more internationally focused.

Creating global opportunities to enrich the student experience and enhance employability, and increasing world-class, scholar-to-scholar research and collaboration are two of the new strategy's main aims. It also seeks to foster strategic global institutional and industry partnerships and engagement to generate international opportunities and raise the profile and reputation of the University across the world.



Professor Hai-Sui Yu, Pro-Vice-Chancellor: International

An exceptional experience for international students

The University's dedication to ensuring international students have an exceptional experience has been consistently recognised by independent organisations.

Leeds won a StudyPortals Award for Excellent International Student Satisfaction 2016, the joint-highest ranking for a UK university.

The University has also achieved some of its highest ever scores in the latest International Student Barometer survey. The survey by i-graduate received responses from 159,959 students from 196 countries. The results enable comparisons between the experience of international students at Leeds with the higher education sector in the UK and overseas, and with other Russell Group universities.

Amongst the 10 Russell Group universities taking part, Leeds ranked in the top five for learning, living and overall satisfaction, the University's highest ever scores in these areas.

Leeds also ranked first for counselling and disability support, in the top three for the students' union and accommodation office, and in the top five, and better than the Russell Group average, for sport, social and library facilities.



“We are a truly global university with nearly 7,000 students from over 150 countries studying with us at Leeds. I want to continue our excellent work in global engagement, encouraging talented students from all over the world to live and study in this dynamic city.”

Professor Hai-Sui Yu, the University's first Pro-Vice-Chancellor: International

Forging powerful partnerships with China

The University has continued to strengthen links with leading Chinese universities and organisations through high-profile collaborations and partnerships.

The University's first overseas school welcomed its inaugural cohort of 200 students during the year. The school is a collaboration with Southwest Jiaotong University (SWJTU) in Chengdu, China, and provides undergraduate degree programmes in: Computer Science; Electronic and Electrical Engineering; Civil Engineering with Transport; and Mechanical Engineering. Teaching takes place in China, and students will earn dual degrees from both the University of Leeds and SWJTU, making graduates exceptionally well prepared for engineering jobs across the world.

The University has also signed a Memorandum of Understanding with Shanghai Jiao Tong University, part of the China 9 alliance of elite institutions, committing both organisations to increasing co-operation on joint research and publications, and organising joint activities, such as research conferences and staff exchanges.

In other meetings spearheaded by the Russell Group and the China 9 group, delegates from the University looked at how to best foster excellence in research, innovation and higher education, and considered the benefits of, and opportunities for, collaboration between universities including Leeds and other Russell Group members and Chinese universities.

The University has also helped to lead a high-level delegation to China to forge partnerships and opportunities between Chinese provinces and Leeds City Council, the Leeds City Region Local Enterprise Partnership, Leeds universities and businesses. This aimed to boost the city of Leeds' profile through an intensive week of meetings and presentations with China's public and private sector leaders, including technology companies Alibaba, Huawei and Dahua in Shanghai and Hangzhou.

These unique partnerships and collaborations ensure the University remains attractive to talented international researchers and students.

Shanghai at night

Five-year collaboration with global leader to help restore vision

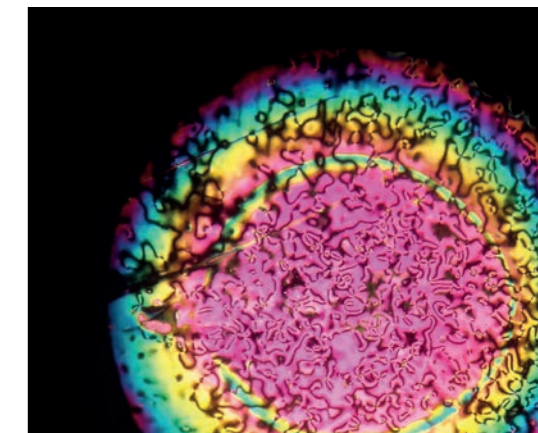
A five-year University partnership with leading international science and technology company Merck is working to expand the use of liquid crystals – commonly used in smartphones and TVs – into optical innovations, such as switchable contact lenses and virtual reality glasses.

Merck, a US-based company operating in 140 countries, has invested £1m in the five-year collaboration with the University.

A global market leader for liquid crystals, Merck is teaming up with Leeds, which has both the expertise and state-of-the-art facilities to conduct feasibility studies and develop prototypes of the devices. The work, conducted by the School of Physics and Astronomy, includes investigating novel approaches to restoring vision, combining liquid crystals and graphene to create switchable contact lenses, and creating liquid crystal elastomers for improved implants for the eye's intra-ocular lens.

Mark Verrall, Head of R&D for the Display Materials business unit at Merck, said: "The University of Leeds is an ideal partner for us, because the research teams have broad expertise and have the means to build prototypes of the future devices."

The partnership coincides with significant investment by the University in both world-class research staff and facilities in this field. Work is well underway on a £96m investment to integrate Engineering and Physical Sciences, bringing together some of the UK's most talented physicists, chemists, materials scientists, engineers and computer scientists to address some of humanity's greatest challenges.



Liquid crystal being tested under heating – credit Devesh Mistry, University of Leeds

A CAMPUS FOR THE FUTURE

Leeds is committed to delivering world-leading research and exceptional student education and experience. The University's £520m investment in its campus is an ambitious plan that will be integral to delivering both in the future.

The £17m Astbury BioStructure Laboratory, home to some of the world's most powerful microscopes, has recently been unveiled, as has the £7.6m new home for the School of Fine Art, History of Art and Cultural Studies. The newly refurbished Edward Boyle Library is providing students and researchers with superb new facilities for study and collaboration and the award-winning students' union has recently undergone a multi-million pound renovation.

Work is also underway on two huge projects. A £96m investment is set to create an integrated campus for Engineering and Physical Sciences, the Sir William Henry Bragg Building. The largest single-project investment ever to have been made on campus, it will position the University as a world-leading research platform. And the £40m innovation and enterprise centre, Nexus, is now under construction and is due to open in 2018.

These investments in an environment that promotes learning, innovation and enterprise, and in facilities that enable world-leading research and excellence in student education, put Leeds on a par with the very best research organisations and universities worldwide.



The Research Hub on level 13 of the refurbished Edward Boyle Library



The School of Fine Art, History of Art and Cultural Studies

The £96m development will be constructed to create an integrated campus for Engineering and Physical Sciences, the Sir William Henry Bragg Building





The Brownlee Centre sits alongside a new 1 mile (1.6km) cycle circuit – one of the longest in the country



An interior wall featuring a quote from British cyclist, Mark Cavendish

£5m investment in sports puts Leeds ahead of the race

The University's new £5m sports facility which includes the UK's first purpose-built triathlon base, has been unveiled. The Brownlee Centre, featuring a 1.6km cycling circuit, is named after Leeds' most successful alumni athletes, Olympic heroes Alistair and Jonny Brownlee.

The facility will provide the first permanent home for the world-class Leeds Triathlon Centre. The six-metre-wide cycle circuit provides a traffic-free environment for cyclists of all ages and abilities – including University students, staff and the wider community – for recreation, coaching and competition.

Partnership funding from Sport England, UK Sport, British Cycling and British Triathlon contributed £1m to the project, with the remaining investment coming from the University.

At last year's Rio Olympic Games, all three of the men's triathlon team were Leeds alumni, with Gordon Benson joining the medal-winning Brownlee brothers. Four of the six Team GB Rio Games triathlon competitors (including the Brownlees and Benson) will be based at the new facilities.

Jonny Clay, British Cycling's Director of Cycling, said: "Leeds – and the wider West Yorkshire region – has produced countless successful elite sportspeople over the years, and one of British Cycling's key aims has always been to ensure that elite success translates into mass participation, and that those inspired by Britain's finest cyclists have high-quality facilities at which to develop their own skills and confidence on a bike.

"This new cycle circuit will deliver exactly that for the people of Leeds, and we look forward to seeing locals, regardless of age, ability or previous level of experience on a bike, take advantage of the facility."



The lecture theatres seek to improve collaborative and technological experiences for staff and students

£2.8m investment in state-of-the-art facilities pays off

A sector-leading redesign of three University lecture theatres in key locations across campus has improved collaborative and technology-enabled experiences for staff and students alike.

The work saw the physical redevelopment of the lecture theatre spaces to allow group discussion, alongside the use of installed technology for teamwork, interaction, communication and recording. Students have now benefited from a full year of teaching in the spaces and have seen the transformative effects of this innovative redesign.

Students were surveyed before and after the transformation, and results show that they have embraced the facilities, with scores above 80 per cent for overall satisfaction, group study and technology provision.

Professor Neil Morris, Director of Digital Learning at the University, commented: “The collaborative spaces with desk-based technology – which is innovative – enables students to work collaboratively through digital means and enriches their learning experiences.

“This first year we have seen a number of staff undertake the type of teaching they’ve wanted to do for many years but haven’t been able to because of the configuration of the space. This impact is huge for teachers as they are actually able to do the teaching that they want to do and from that comes the positive student satisfaction figures.”

The combination of physical space changes and innovative use of digital technology is sector-leading and gives the University a distinctive edge to support recruitment and enhance student experience at Leeds.

Poet Ian McMillan officially opened For All Time: Shakespeare in Yorkshire, at the University’s Treasures of the Brotherton Gallery



Rare Shakespeare treasures on display together for the first time

The University celebrated the legacy of William Shakespeare with a collection of rare items on display together for the first time, including a set of Shakespeare’s folios – the earliest collections of his work.

The exhibition, For All Time: Shakespeare in Yorkshire, includes items from the University’s Special Collections.

Marking the 400th anniversary of the Bard’s death, the exhibition also looks at how Shakespeare dramatised Yorkshire history and explores how today’s theatre directors are still using his work to ask questions about regional identity.

It brings together for the first time the extraordinary material collected by Leeds University Library’s greatest benefactor, Lord Brotherton of Wakefield, who collected the rare set of the four folios in just four years.

The First Folio dates from 1623, only seven years after Shakespeare’s death. The Second, Third and Fourth Folios date from 1632 to 1685, and demonstrate the development of language and printing aesthetics during the 17th century.

Other artefacts on display include A Yorkshire Tragedie, which tells a gruesome tale of a murder that took place in Calverley, near Leeds. This book had Shakespeare’s name on the title page but was in fact by another writer.

Co-curator Kit Heyam said: “So often when people talk about Shakespearean England, they really mean Shakespearean London – but as the exhibition shows, if we ignore the north we ignore some of the most interesting things about Shakespeare’s plays and their legacy.”

“So many of Shakespeare’s most dramatic stories are stories of Yorkshire, and our county’s actors and theatres have a longstanding love affair with his plays. Special Collections has such an amazing collection of books and archive material, which really brings this hidden relationship to light.”

Kit Heyam, Co-curator of the Shakespeare in Yorkshire exhibition

The funding supports research that addresses critical problems in developing countries



£16m for Leeds to tackle global challenges

Two significant research projects have been awarded £16m to build resilience in African businesses and communities as part of the University's commitment to tackling some of the world's most challenging issues.

The first award is focused on creating evidence-based policy to develop sustainable, productive, agricultural systems. Leading an international team, Professor Tim Benton, Dean of Strategic Research Initiatives, aims to support smallholding farmers in Africa to meet food security and economic development needs.

Another award is helping to develop greater weather forecasting precision, and creating more accurate longer-term forecasts which could provide huge benefits to African businesses, small traders and society, strengthening their ability to respond to crises. Weather-sensitive sectors including aviation, solar and hydro-power, and agriculture could all grow as a result.

Professor Doug Parker is the lead scientist of the four-year programme which has been developed by principal investigator Professor Alan Blyth, from the University's Faculty of Environment and the National Centre for Atmospheric Science.

These projects have brought together leading academics with newly appointed University Academic Fellows (UAF), who are embarking on a five-year structured development programme leading to an established position as an associate professor.

Professor Lisa Roberts, Deputy Vice-Chancellor: Research and Innovation, said: "I am pleased to see that these new awards have brought together world-leading professors with some of our University Academic Fellows, which creates a highly sustainable environment for ongoing research success and development of future leaders."

These awards position Leeds academics as among the most successful in the UK at securing funding from the Global Challenges Research Fund (GCRF), a £1.5bn government programme to support research that addresses critical problems in developing countries across the world.

By July 2017, sixteen other Leeds-led initiatives, worth £4.3m, had also received support from individual UK research councils through the GCRF programme.

HONOURS AND AWARDS

Professor Anne Neville (School of Mechanical Engineering) was elected as a Fellow of the Royal Society in recognition of her substantial contribution to the field of corrosion and tribology research.

Dr Rafe Hallett (School of History) and Dr Sarah Underwood (Business School) were made National Teaching Fellows in recognition of excellence in teaching.

Professor Paul Stewart (Dean, Faculty of Medicine and Health) was elected Vice-President of the Academy of Medical Sciences.

Dr Priya Subramanian (School of Mathematics) was awarded one of only five prestigious L'Oréal-UNESCO UK and Ireland Fellowships for Women in Science.

Professor Jane Nixon (Deputy Director, Leeds Clinical Trials Research Unit) was awarded an MBE in the Queen's Birthday Honours for services to Health Research.

Mrs Karen Riley (Simpson) (School of Education) was awarded an OBE in the Queen's Birthday Honours for services to Special Educational Needs and Disabilities.

Professor Anna Madill (School of Psychology) was elected a Fellow of the British Psychological Society.

Professor Alison Ashcroft (School of Biological Sciences) was awarded Life Membership of the British Mass Spectrometry Society in recognition of her notable and lasting contribution to the Society.

Professor John Plane (School of Chemistry) was awarded the Vilhelm Bjerknes Medal by the European Geosciences Union (EGU), for distinguished research in atmospheric sciences.

Mr David Richardson (School of Civil Engineering) was awarded a Fellowship of the Institution of Structural Engineers in recognition of his achievements and experience in the field.

Professor Surya Subedi (School of Law) was appointed an Honorary Queen's Counsel (QC) in recognition of his work in international law and human rights.

Professor John Young, Dr Andrew Clegg and Dr Elizabeth Teale (School of Medicine) were given an Excellence in Patient Care Award by the Royal College of Physicians for their development of the Electronic Frailty Index.



UNIVERSITY OF LEEDS