Gazette Supplement



Vice-Chancellor's Oration 2018

Colleagues, good morning.

Introduction

Thank you for making the time to attend the ceremony this morning, and to listen to my reflections on the year that has passed, and on our plans for the years to come.

It has been a year of highs and lows, of great achievements and deep concerns.

The highs have included the fact that, for the third consecutive year, we have been ranked the best university in the world by the Times Higher Education Global Ranking. Many of us have reservations about these rankings and the different metrics they use. It has hardly gone unnoticed, for example, that British universities tend to do best on rankings conducted by British organizations, while American universities do best in the US rankings. That said, there is remarkable consensus around the world, and across the rankings, on which universities belong in the very top group of global universities, and Oxford is one of them.

Another high point was the successful issuance of the University's first bond, a century bond of £750,000,000 at an interest rate of 2.5%. This was the largest and longest bond in the history of British higher education, 'a double first', as described in the press. At one point in the course of the sale we had offers from investors amounting to £3.6 billion. This was an emphatic statement of confidence by the markets in the future of Oxford and of higher education. I am acutely conscious of our responsibility to present and future generations of Oxford academics and students to invest this bond wisely to ensure that we pass on to our successors an even stronger university.

Without a doubt, the low point last year was the dispute over the proposed reforms to the USS pension scheme which caused such deep fissures in our community. I very much hope that the report of the Joint Expert Panel (JEP) consisting of representatives of the Universities and College Union (UCU) and Universities UK (UUK) working with an independent chair, has identified a way forward that can preserve existing pension benefits without undermining the financial security of member institutions.

The achievements of the last year are too many to list but standouts include the fact that Professor Kim Nasmyth, Whitley Professor of Biochemistry, was awarded the 2018 Breakthrough Prize in Life Sciences and Dame Jocelyn Bell Burnell, Professorial Fellow in Mansfield College and Visiting Professor in the Department of Physics, is to be awarded a special Breakthrough Prize in Physics later this year. In addition, six colleagues were elected to the Royal Society, eight to the British Academy and 21 were recognized in the Birthday and New Year's Honours.

Along with the perennial concern about the future of university funding and the proliferation of university regulators, this past year was a period of deep concern at the lack of progress in negotiating an exit from the European Union. We wish to see an exit arrangement that secures the status of our EU staff and their families, as well as our access to EU research funding and the academic exchanges and research collaborations that it enables, and that poses no impediment to the free movement of scholars between universities.

The University, and especially the make-up of our student body, continues

to evolve. This year, for the first time, we admitted more postgraduate students than undergraduates. This year, for the first time, we admitted more female undergraduates than male (appropriate on the 100th anniversary of women's suffrage.) This year, for the first time since we started keeping records, over 60% of our incoming British undergraduates come from the state sector.

Change

As we look beyond the University and endeavour to see beyond the dysfunctional national politics, it is clear that the pace of change has never been so fast. It is also the case that technological developments will ensure that it will never again be so slow. If we wish to ensure that your successors and mine are in this room delivering and listening to the VC's Oration in 10, 30, 50 years' time, and still celebrating our membership of the elite group of top global universities, we must be able to adapt to that change.

The beautiful old architecture in the centre of Oxford and the quaint old ceremonies like this one (the role of Proctor, I've read, dates back to 1267) may give the impression that we are averse to change, but in fact this University has been changing constantly, even if it is not always evident at the surface. Nor have we always been the academic powerhouse we are today. Professor Laurence Brockliss in his new history of Oxford describes the period from the Reformation to the 1850s as 300 years of 'intellectual slumber'.

After the end of the Second World War demand for higher education in the UK increased dramatically and participation rates soared after the 1962 Education Act. Oxford student numbers more than tripled between 1951 and 2017. The growth in graduate students is particularly striking; their numbers grew 11-fold between 1951 and 2017 with much of that growth occurring in the past 20 years. Growth hasn't only been in student numbers. Between 2006/7 and 2016/17 the University's total income doubled, from £676 million to £1.4 billion (excluding OUP). Research income grew by 128% over the past decade.

As student numbers and research have grown so has the University itself. After World War II it occupied two main sites: the Bodleian and its surrounding buildings housed the University administration. The areas around the University Museum had developed into the Science Area between the wars. By 2008, the University's estate comprised over 520,000 square meters including the Begbroke Science Park, an area 44% greater than a decade earlier. Over the past decade the University's functional estate has grown 17%. Today it comprises 240 buildings across 13 sites in and around Oxford, and that does not include the colleges. 40% of our estate has been built since 2000, including buildings such as the Blavatnik School, the Saïd Business School, the Big Data Institute, the Hans Krebs, Andrew Wiles and Beecroft buildings, and many, many more.

The University of Oxford has not been standing still. Our commitment to research, to pushing at the frontiers of knowledge, to teaching, to educating the next generation, and to disseminating our knowledge for societal benefit has not changed. The physical environment in which we do so has, notwithstanding these glorious surroundings of Convocation House.

At this point I should also mention some personnel changes. I have been in Oxford less than three years and yet I predate three of the four Heads of Division, Professors O'Brien, Screaton and Whatmore. The fourth, Professor Donal Bradley, predates me by only a few months. Due to retirements, external appointments and conclusion of terms we also have an entirely new team of Pro-Vice-Chancellors. We have a brand new Registrar this month, Ms Gill Aitken, two new Pro-Vice-Chancellors, Professors Patrick Grant (Research) and Professor Chas Bountra (Innovation) and the responsibilities of Professor Anne Trefethen (People and GLAM) have been

expanded to include responsibility for personnel. Last year we also had three new Pro-Vice-Chancellors, Professor Martin Williams (Education), Dr David Prout (Planning and Resources) and Dr Robert Easton (External Affairs). We are a new team but I know I speak for all of us when I say how committed we are to implementing the ambitions articulated in the University's Strategic Plan, to advancing the University's interests, and to providing the environment in which our researchers, teachers, staff and students can thrive, and do their best work.

Strategic Plan

Over the past year our colleagues have been working on a new Strategic Plan to help us manage this change and to plan for the future. We are required by OfS (the Office for Students) to have such a five-year plan and the current iteration covers the years 2013-18. Very often these documents reflect generic aspirations but we have sought in this case to set out a coherent agenda that commands widespread support across the University. The draft plan, which still requires approval by Congregation, is based on extensive consultations in open fora, focus groups, committees and online surveys. 450 staff took the time to send written submissions, over 400 people attended six open fora and about 40 Committees across the University have discussed the plan. Unusually for us, the Strategic Plan is underpinned by a strategic implementation plan which makes firm commitments to concrete actions to realize the objectives set out in the plan. Perhaps the most striking feature of the consultation process thus far, was just how much consensus there has been on the fundamentals.

The draft Strategic Plan outlines a strategy for growth, but this growth will be planned and it will be sustainable. The proceeds from the bond will enable us to commit to investing £1.5 billion in our estate over the next 15 years. The plan commits to a capital investment programme in the estate and in IT of £500 million in the next five years. These buildings will allow us to conduct the research on which our reputation rests and they will allow us to compete globally in the recruitment of top researchers. We have already seen how the new maths and physics buildings are helping us to attract academics from our global competitors.

The plan articulates an ambition, by 2023, to increase the intake of postgraduate research students, who are vital to the work of our researchers, by up to 400 a year, and to increase the intake of postgraduate taught students by 450 a year, while never compromising on the quality of our students. The draft plan also articulates an ambition to increase by 2023 the undergraduate intake by 200 a year, with a focus on strategically important subjects such as computer science, engineering, biomedical science, and joint degrees in economics.

We are fully aware of the strains the growth in graduate student numbers has already placed on many of our colleges and on the rental market in the city. (I should say that we are very grateful to those colleges that have generously made space for the growing number of graduate students.) For this reason we commit to having started, within the next five years, the construction of 1,000 additional graduate student rooms including the establishment of at least one new graduate college. We will work with partners, colleges, philanthropists and the private sector to ensure the construction of rooms to accommodate this student growth. One example of the type of creative partnership we have in mind is a recent agreement between the central University and Hertford College to negotiate a transfer of ownership of several buildings and jointly plan the development of an area between Woodstock and Banbury Roads. The draft plan also commits to creating 300 graduate student scholarships, in addition to the 1,000 we already offer, and 2,000 additional funded internships for students at all levels. While we anticipate growth in many areas this will not come at the cost of nationally vulnerable subjects which we have long felt a responsibility to protect.

While the plan envisages growth it also commits to an investment in the people and the resources to support that growth. Priorities include enhancing the opportunities and support for early career researchers, improving support for the personal and career development of all our staff, embedding a supportive inclusive culture, and increasing the diversity of staff at all levels by implementing the action plans such as Athena SWAN, the Race Equality Charter, the Stonewall Workplace Equality Index and Mindful Employer. We will amplify the voices of under-represented groups in leadership and decision making and work to eliminate barriers to their success. We commit to ensuring that our reward arrangements, including pension provision, are robust, transparent and competitive.

One of the biggest difficulties encountered by our staff, and one of the serious impediments to recruiting and retaining both academic and support staff, is the high cost of housing in Oxford. Since the year 2000 house prices in Oxford have risen 67%, 11% above the national average. The plan commits to having started construction on at least 1,000 new subsidised homes for University and college staff by 2023. It also commits to developing an equitable and transparent means of allocating these new affordable homes among our staff.

Through the Strategic Plan we commit to investing in the research environment, increasing the scale and scope of the central research fund, fostering an entrepreneurial environment, expanding the innovation districts around Oxford, including the Begbroke Science Park and Osney Mead, and expanding international research collaborations. For those of you who have not yet read the draft Strategic Plan which was approved by Council in July and will be submitted to Congregation this term, I encourage you to do so. I would like to take this opportunity to thank the great many people across the University who have given so much thought and so much of their time to drawing up this plan, which sets goals that are both ambitious and realistic, for the next five years.

There is one point I would like to make as we consider using the proceeds of the bond for capital projects. In universities we teach an appreciation of nuance, we operate in a world of grey. We live in a complex world and our responsibility as educators is to prepare our students for that world. Crude dichotomies are the stuff of newspaper headlines; they may sound good on TV, they don't belong in universities. One such dichotomy I've heard recently is that we should invest in people not buildings. We know that our people are our biggest asset and we are committed to supporting them. An investment in buildings is an investment in people; it is an investment in the people who work in these buildings and in the research and teaching they do there. This plan proposes to invest in the environment in which our people live and work.

A dichotomy that does makes sense to me is the distinction between a capital and a recurrent cost. A capital cost takes place once, a recurrent cost takes place year after year. I've been told that we should put the proceeds from the bond into salaries, not buildings. In these difficult financial times, after years of national austerity, I fully understand the sentiment, but financially it is the equivalent of taking out a mortgage to pay the electricity bill. A building cost occurs once, a salary cost occurs year after year. Last year our pay costs increased by over 5%, combining inflationary pay increases, automatic annual increments and growth in staff numbers. A 5% salary increase is not the equivalent of building a new Institute for Developmental and Regenerative Medicine. It is the equivalent to building a new IDRM every single year.

Take this building in which we are sitting today, Convocation House. (I know the benches are very uncomfortable; I'm sorry. If it makes you feel any better, I've learned from the University Archivist that until 1929 the Oration was delivered in Latin.) Convocation House, together with the Library floor above (now 'Selden End' in Duke Humfrey's reading room) and the Chancellor's Court at the north end, was built between 1633 and 1636. The total cost was £2,500 for the House, the Library extension and the Chancellor's Court. Here we are, using this room over 382 years later. A capital cost lasts a very long time, and many people, in many different ways, benefit.

That said, we are keenly aware of the financial pressures faced by many of our staff, especially those with young children. I know from personal experience just how hard it is to combine having a challenging career and a young family. It's the most difficult thing I've ever done. The Strategic Plan commits to developing our childcare provision and flexible working policies and enabling academic staff to vary their duties over the course of their career. We care deeply about the wellbeing of our staff and are committed to ensuring that Oxford remains an attractive place to work. Our people are the bedrock of our success, without them, without you, we will never be able to achieve our mission of advancing learning by research and teaching and improving the world around us locally, nationally and internationally.

One Oxford

In these annual orations I have taken to using the term One Oxford, by which I simply mean colleagues across the collegiate University working together for the benefit of all, to advance mutual interests and shared values. It is about breaking down divisional barriers and departmental protocols and harnessing the strength and depth found all across the University. It is also to acknowledge how those outside the University see us. Unless they are alumni, they do not appreciate the distinctions that are so important to us internally. Our collegiate system and our devolved structure have long been sources of strength. The colleges provide an unrivalled, personalized, educational environment fostering interdisciplinarity and a deep sense of community. Our devolved structure and departmental autonomy foster agility, innovation and ownership of decisions. And yet these distinctions are lost on the outside world who tend to perceive one monolithic Oxford.

This time last year I spoke of the advantages to be gained by sharing backoffice functions, reducing duplication and providing career paths for our support staff. I spoke of how much money, and far more importantly, how much time, we could save by reducing complexity and simplifying our processes. In May we launched the Focus programme which is designed to improve the efficiency of our administrative processes, simplify policies, and embed a culture of continuous improvement and working across boundaries. This year the Focus team will, among other projects, review the graduate admissions process aiming to improve the experience of student applicants by consolidating academic, funding and college decisions into a prompt response. In the spirit of One Oxford, colleges, departments and UAS are working together to make this a reality.

One Oxford is not just about working together to improve processes and save time and money. There are already a great many wonderful examples of One Oxford at work around the University. One of the newest is the Oxford Foundry founded to support and encourage student enterprise. The Foundry was established by Saïd Business School for the benefit of the entire University. If you visit the Foundry you won't even see the SBS logo. In its first ten months of operations the Foundry has achieved a membership of 2,000 students of 87 nationalities from across all four divisions, 38 colleges and six PPHs. More than 1,200 students have engaged with the Foundry's events and learning programmes.

The Foundry is also a rare example of a project being completed quickly and shows what can be done. In early summer the building was fitted out as a nightclub; by October Apple CEO Tim Cook was speaking at the launch. This must have set a record for the University. It was possible because SBS had a clear idea of what they wanted to achieve, a vision that benefited both the school and all departments, and built alliances of support across the collegiate University.

The **Oxford Martin School** is another example of One Oxford in action. James Martin looked at many universities when considering where to make his donation. He believed that the biggest challenges facing humanity can only be solved by collaboration across disciplines. It was the breadth of talent in so many departments in Oxford that persuaded him to make what was at the time the biggest donation in Oxford's modern history to establish the Oxford Martin School.

Since it was founded in 2005, the school has brought together more than 500 academics from over 100 disciplines across the University. It has nearly 60 research programmes tackling urgent global challenges like infectious disease, ocean sustainability and food security. In its first ten years it raised and invested £50 million in research programmes which helped researchers leverage a further £184 million in funding. The school and its academics contribute to government inquiries and reports and advise, among others, the World Bank, OECD and the UN Intergovernmental Panel on Climate Change.

Scholarship programmes provide another example of One Oxford. Michael Moritz and Harriet Heyman initially supported bursaries at Christ Church but then launched a major initiative in 2012 which has involved every division, department and college. The central University and colleges have worked together to a common framework and students have been the beneficiaries. To date there have been 775 Moritz-Heyman scholars but this will increase significantly this year as the scholarship is extended to every student from a UK household earning less than £16,000 a year. When operating at full capacity it will fund about 10% of the home-student population each year. The University and colleges raise the matched funding, OUEM invests it, colleges distribute it and the student fees office monitors it; that's an example of working together.

Our graduate students also benefit when the central University and colleges have collaborated on fundraising. The Oxford **Graduate Scholarship Matched Fund** has raised £127 million for graduate scholarships which is being matched by £92 million of University funds. 468 students from 30 colleges have received scholarships to date. Similarly the Teaching Fund has provided longterm financial support for core teaching posts and promote joint Universitycollege fundraising. Today more than half of the colleges and PPHs as well as the University use the DARS electronic database system to co-operate on fundraising. This isn't quite one Oxford, but we are moving in that direction.

OUEM, Oxford University Endowment Management, is another example of the benefits of working together. OUEM began in 2009 with £600 million under investment. Today there is £3 billion in the Oxford Endowment Fund. £1.2 billion of this is growth through performance, the remainder comes from fundraising across the collegiate University. This has marked a dramatic improvement in how the University manages its money. OUEM has contributed enormously to the research and teaching of the University, almost half a billion pounds has been distributed to the University and colleges in the last nine years and the amount is increasing every year, from £25 million in 2009 to £93 million in 2017. OUEM now invests the endowments of 26 of the colleges, the latest joining only yesterday.

Doctoral Training Centres (DTCs) have transformed doctoral teaching at the University. The Life Sciences DTC brings together students from across MPLS and Medical Sciences and gives them freedom to innovate in their projects, from research into cancer and animal behaviour to 3D printing of artificial eyes. It involves 40 departments, more than 400 academic supervisors, and hosts more than 500 DPhil students. It has created more than 20 spin-out companies and raised over £65 million in funding. It will soon have trained 1,000 DPhil students. We must make it easier for fabulous activities like this to operate and to flourish.

One final example of different entities working together as One Oxford to mutual advantage is provided by the Gardens Libraries and Museums. Not only have they formed the GLAM structure but last year they launched the first joint marketing campaign 'Mindgrowing'. It produced suggested itineraries for tourists which involved all the GLAM venues. The result was a 13% increase in visitor numbers in 2017, a significant achievement, especially given that London's venues only had a 1.8% increase. This means that 3.2 million people visited the Ashmolean, Bodleian, Botanic Garden, Museum of the History of Science, Museum of Natural History and the Pitt Rivers Museum.

Access

One Oxford is not always in evidence. One area in which we are held unfavourably in the public eye, and in which the public does not draw distinctions among us, is on the issue of fair access to the University. This year, for the first time, and in an effort to set the record straight, whether or not that record reflected well on us, we published our first Annual Admissions Report. It revealed that between 2013 and 2017 the proportion of admitted British undergraduates who identified as BAME (Black, Asian and Minority Ethnic) rose from 14% to 18%. The proportion from socio-economically disadvantaged areas from 6.8% to 10.6%. The proportion from areas of low progression to higher education rose from 9.5% to 13%. The proportion from state schools rose from 56.8% to 58.3%. This year, 2018, the number of state school students admitted increased a further 2%.

This evidence of slow but steady progress has done little to satisfy our critics.

Many hundreds of academics across the University invest enormous amounts of time and energy to ensure a fair and open admission process. Many colleges have innovative outreach programmes designed to attract applications from under-represented groups. 870 pupils from across the country participated in the UNIQ summer school last year and 135 of them will begin their studies here this month. We have committed to increasing the size of UNIQ, already the largest programme of its kind in the country, by 50% next year. We spend £18 million a year on bursaries and outreach activities. A recent UCAS analysis found that, when adjusted for prior attainment, there was no statistically significant difference between Oxford's admission data and what would be expected, except in the case of black students where we accept more than would be expected by prior attainment. Our admissions figures clearly reflect the deep societal inequalities on regional, ethnic and socioeconomic lines. None of these facts serve to ameliorate the constant criticism, nor the public perception that we are unfair.

We recently commissioned a public attitudes study by the firm Populus. They found that half the population believes the University favours those who have attended private schools or come from high-income families. Only 20% of the population believes that we are accessible to students of all backgrounds and fair in how we choose our students. Perhaps even more worrying, Populus also surveyed members of Parliament. 78% of MPs think we make a difference in the world. 67% believe that we engage in cutting edge scientific and technological innovation, 75% believe us to be a leader in arts and the humanities, 39% believe we are accessible to students of all backgrounds and 36% believe we are fair in how we choose our students. There are significant differences along party lines. Only 12% of Labour MPs believe we are accessible to students of all backgrounds and only 12% consider us fair in how we choose our students. 78% of MPs trust us to provide an exceptional education to our students. 50% trust us to increase the number of students admitted from state schools.

I mentioned crude dichotomies earlier. I find the state vs independently educated barometer to be another oversimplified maxim. I speak as someone whose entire education was in the state sector until I attended graduate school at Harvard. We are constantly criticized for the number of independently educated students we admit, although focus groups in northern England revealed that people thought over 90% of our students are privately educated. The correct figure is 40% and this year's figure is the lowest ever. We are told that by comparison only 7% of schoolchildren are independently educated. As we don't recruit across all age groups that really is not a relevant figure. 16% of 17-year-olds and over attend independent schools in England, and that is the relevant figure.

Parents choose to send their children to independent schools for all kinds of reasons. Many, yes, because they are fabulously wealthy and privileged. Other parents make enormous personal sacrifices to be able to pay the fees. Some pupils in the independent sector have parents who are in the Services or working overseas, and many are the products of access programmes run by the schools. Close to 10% of our British students come from families eligible for free school meals. In recent years between 20% and 30% of them have been educated in the independent school sector.

That said, there are challenges which we must address. There are many gifted students from deprived backgrounds and poor schools who do well enough to have a competitive chance at Oxford, and they do not apply. We must reach and attract these students. Moreover, there are gifted students from deprived backgrounds who do apply to Oxford, and who meet or exceed our requirements, but who are not admitted. We need to understand why not, and do something about it. Finally, there are gifted students from deprived backgrounds who do apply, who are admitted, and who do not accept their offer. (This year and last 20% of UNIQ offer-holders did not accept their offer.) Again, we need to understand why not, and do something about it.

I believe that a more co-ordinated approach to outreach and admissions might help us to attract and retain these students. Some departments, such as medicine, already have a coordinated approach. Individual admissions decisions by individual tutors may be unassailably fair, but when all these decision are put together, the collective result may not appear fair. I have been meeting with departments and divisions to discuss approaches and share best practices. I am not sure that we will ever be able to satisfy our critics, but we must be able to satisfy ourselves that we are doing all we can to ensure that we - as a University, not just as a department or a college - really are recruiting the very best students from every background. This is another area in which acting as One Oxford will help us all to achieve our shared ambition. Whatever we do will be closely monitored by a sceptical press and our new regulator, the Office for Students.

Research

Notwithstanding all our challenges, it is worth pausing for a moment to reflect on our successes. Our extraordinary skill in securing resources for research though a system based on open competition and peer review is testament to the sheer brilliance and deep commitments of so many of our researchers all across the University. Over £720 million of the University's income, that's over half the £1.4 billion turnover (excluding OUP), is associated directly with our research activities, a total that exceeds that of any other British university by over £100 million.

Just to give you a single example from each division:

- Oxford, under the leadership of Professor Jim Naismith, is undertaking a leading role in the new £103 million Rosalind Franklin Institute, a national centre of excellence that will harness disruptive engineering and physical science technologies, such as artificial intelligence and robotics, to improve dramatically our understanding of biology as a means of underpinning advances in medicine leading to new diagnostics, medicines and treatments.
- A new three-year flagship partnership is creating exciting opportunities for interdisciplinary Oxford research, knowledge exchange and public engagement with the National Trust's Inspiring Places. Brokered by colleagues in the Humanities Division, and led by Ms Alice

Purkiss, the partnership is bringing innovation, cutting-edge science, and heritage together to address 21stcentury concerns about deepening engagement and emotional connection with culture.

- The British Heart Foundation awarded a total of £7.6 million to research programmes at the world-leading Burdon Sanderson Cardiac Science Centre led by Professor Manuela Zaccolo and colleagues in the Department of Physiology, Anatomy and Genetics.
- In April the UK Centre for Research on Energy Demand (UKCRED), a multi-institutional centre led by Oxford's School of Geography and Environment, was launched with £19.5 million of funding from two research councils. The centre, directed by Professor Nick Eyre, will bring a multidisciplinary approach to energy demand and assist in a transition to a secure and affordable low-carbon energy system.

Since the launch of the Global Challenges Fund by UK funding agencies in 2016, Oxford has been the number one recipient of funds, with successful bids over £48 million. The success is testament to our long track record of exceptional research addressing the challenges faced by developing countries.

In the past 12 months there have been a number of external developments that will have a significant impact on the research-funding landscape in the coming years.

In November the government published its Industrial Strategy which signalled a commitment to increase public investment in R&D to 2.4% of GDP. This is very good news. The investment will be directed in large part towards industryled challenges and initiatives that seek to deliver increased prosperity and industrial productivity.

In April, as foreshadowed in the Higher Education and Research Act, a new national funding agency, UKRI (UK Research and Innovation) came into being, subsuming the existing research councils and Innovate UK. One of the earliest tasks of this new super-agency will be to examine the balance of funding within the research and innovation system, including the balance between curiosity-driven and directed research, the balance between project funding and unhypothecated quality-related funding, and the balance of public investment in university and industry-based research. Decisions that emerge from this review will play a major role in shaping the future landscape for British research.

We have become victims of our own success. Our sustainability challenge is the reality of declining contributions by government and other funders to the true costs of research. This raises serious issues for the health of the UK research base and especially for us. To give you an idea, since the start of the present decade the direct costs of research supported through external funding has grown on average 7.5% per annum. The rate of growth of the overheads that contribute to the full costs, by contrast, has grown by 5.5% per annum. The critical underpinning funding for research that we receive from government, the qualityrelated or QR stream, has grown at just 2% per annum.

In effect we lose money on almost every research grant we accept, just as we lose money on every home-undergraduate student we accept. We rely on philanthropy and OUP to fill the gap. This is not a sustainable strategy.

External engagement

There is so much more that could be said about the vast array of dynamic activities that have taken place across the University this past year, such as the spinout activities facilitated by OUI which are bringing the work of our academics into the marketplace and generating jobs and revenue for the local economy. The investors of OSI have ignited a step change in the pace of our spinout activities. Oxford spinouts have raised £1.9 billion in external funding since 2011 and over £500 million of that has been in the past 12 months.

Oxford University Press also advances the mission of the University by playing a major role in education worldwide. In the last year OUP sold products in 216 countries, published in 103 languages, trained 440,000 teachers, delivered 4 million books to 8,500 teachers in Kenya and donated 1,100 books to Syrian refugees. Its English Language Teaching content is hosted on an open- source free platform which delivers content across East Africa. More than 40 million people use the platform. OUP also contributes significantly to the University here at home. Over the last decade OUP has contributed over £1 billion to the University. It funds the Clarendon Fund, which has supported more than 2,000 scholars since the year 2000. It also supports our incomparable libraries and the John Fell Fund which provides seed funding for academics with creative research ideas. It also, of course, publishes books by Oxford academics. Last year, it published a book by Martin Kemp, Emeritus Professor in the History of Art, which revealed the identity of Leonardo da Vinci's mother.

Other external engagements include cementing our partnership with four universities and cultural institutions in Berlin. Led by Professor Alastair Buchan, we are fostering research collaborations and ensuring that academic links will survive whatever Brexit brings. By forging this partnership we are also asserting our status as a European university.

Internal environment

Issues of diversity do not only pertain to our students, they also pertain to our staff. In May we received a Race Equality Charter Bronze Award from Advance HE making us one of only ten British universities to hold the award. It recognizes our efforts and commitment to improve the representation and success of minority ethnic staff and students. In the latest Athena SWAN round we successfully renewed our institutional Bronze Award and a new Silver Award was given to Primary Care and Bronze Awards to Engineering and Anthropology. Our departments now hold 19 Silver and 11 Bronze Awards.

Individuals are also doing their part to improve awareness around diversity issues. There are many I could mention but a highlight of last year was Dr Clara Barker from the Department of Materials being awarded a Points of Light Award by the Prime Minister's Office. This was in recognition of her contribution to LGBT awareness-raising both in the University and the community. Dr Barker, who identifies as trans-female, manages a Centre for Applied Superconductivity run by two Oxford departments, Materials and Physics. Outside of the lab she has volunteered with Stonewall and helped the Council to run an anti-bullying initiative in local schools.

We are committed to fostering an inclusive, welcoming community and in doing so to balance our responsibility to defend freedom of speech.

We are committed to ensuring that Oxford is an attractive place to work and the commitments in the Strategic Plan outline concrete steps we plan to take to ensure it remains one.

We are committed to our European staff and students. This term Personnel Committee will consider proposals for providing further assistance to European staff as they grapple with the uncertainties around Brexit. I will hold an open meeting with our European staff to discuss with you how best we can support you during this time of transition.

The dispute over pension reforms last year was deeply damaging to our sense of community. Many of us underestimated the deep concerns of our colleagues, and the sense of betrayal they felt by the effort to change the pension system on which they had long counted. I know that people are worried and I really hope that we can find a mutually acceptable solution this year. I am hopeful that we will. The Pensions Working Group has been working all summer to explore options and feed in to the national discussions. The Joint Expert Panel has proposed a constructive way forward. We all believe that we have the best interests of the institution, and everyone in it, at heart. We may disagree about how best to advance these interests, but let's not challenge one another's motives. Let's recognize that we are all here out of a shared commitment to the advancement of knowledge and the power of education to transform lives and a shared belief that universities, and especially this one, can be a powerful force for good in the world.

Conclusion

I believe that we will be more effective in realizing the ambitions of the Strategic Plan if we operate as one university. One Oxford is not about centralization, it is not about accreting power to the central University, it is about recognizing that we are all part of one great university. It is about recognizing that we will all benefit when we work together, it is about realizing that we all do well when some part of the University does well, and we all suffer when one of us does badly. It is about reflecting before we act on the impact of what we do on the rest of the University. It is, above all, about trusting one another, and realizing that we are all here for the same reason: to advance the store of human knowledge. It is about ensuring, for example, that when we make our submission to the Research Excellence Framework we look to the good of the whole University, when we speak publicly we reflect on the whole University. When we compete against one another for property, or indeed for students, or refuse to share information, when we insist on particular interests over the University's interest, we are undermining all of us. As FDR once said: 'Competition has been shown to be useful up to a certain point and no further, but cooperation, which is the thing we must strive for today, begins where competition leaves off.' We operate in a keenly competitive external environment. I believe that we will compete much more effectively externally, if we co-operate much more effectively internally.

The external competition we face is not just competition with other universities for resources, for staff, for rankings and research funding. We face competing claims for the value - even the purpose - of education. Increasingly we face demands to demonstrate our 'value for money'. I know that we believe that the value of an Oxford education cannot be reduced to the size of a graduate's salary, that the choice of a subject of study should not be dictated by the price the market will pay for it. I know I am not alone in being dismayed by the progress and the tone of the Brexit negotiations. It is hard to believe that, as things stand, this will be the last oration by any Oxford VC while Britain is a member of the European Union. While we in Britain face a challenging environment it is benign when compared to the environment faced by our colleagues in other parts of Europe, most notably Hungary and Turkey. Governments in these countries are attempting to shut down universities they see as bastions of liberal values and independent voices of dissent. Let us stand together firmly against the voices of illiberalism and be trenchant in our defence of tolerance, equality, internationalism, individual liberties and freedom of speech. We owe it to our forebears and to our successors to do no less.

Addendum to the Vice-Chancellor's

Oration

This year has seen the retirement of many distinguished colleagues who have contributed to the University's intellectual life over the years: Professor Sir John Ball, Sedleian Professor of Natural Philosophy; Professor Elizabeth Bikoff, Professor of Mammalian Genetics; Professor James Binney, Professor of Physics; Professor James Byrne, Professor of Neuroradiology; Dr Khalil Chamcham; Professor Gordon Clark, Director of the Smith School; Professor Craig Clunas, Professor of the History of Art; Professor Stephen Cobbold, Professor of Cellular Immunology; Professor Stephen Darlington; Dr Janet Delaine; Professor Grigory Dianov, Professor of Molecular Biochemistry; Dr Laurel Edmunds; Professor Christopher Fairburn, Professor of Psychiatry; Dr Roger Firth; Professor Simon Gardner, Professor of Law; Dr Jennifer Hislop; Professor Joanna Innes, Professor of Modern History; Dr David Levy; Professor David Limebeer, Professor of Control Engineering; Professor Ernesto Macaro, Professor of Applied Linguistics; Professor Ursula Martin, Professor of Computer Science; Dr Julie O'Donnell; Professor Barry Parsons, Professor of Geodesy and Geophysics; Dr John Peacock; Professor Sir Richard Peto. Professor of Medical Statistics and Epidemiology; Professor Steven Roberts, Professor of Materials; Professor Pamela Sammons, Professor of Education; and Professor Bryan Wordsworth, Professor of Rheumatology.

I would also like to mention those colleagues who have retired from important administrative, library or service posts in the University: Mrs Christine Black, Mr William Colquhoun, Mrs Joy Cooke, Mr Paul Cox, Ms Ruth Davis, Mrs Sally Dawson, Mrs Julie Evans, Mrs Susan Jane Fells, Miss Christine Fry, Dr Peter Gambles, Ms Elisabeth Gardner, Ms Linda Greig, Dr Catherine Hawkins, Mrs Ros Hayward, Ms Vanessa Howe, Mr Michael Hughes, Ms Lynn Hutton, Mrs Kathleen Jayne, Mrs Angela Jenkins, Mr Stephen Kemp, Mr Michael King, Mr Trevor Lambert, Ms Janet Leatherby, Mrs Joan Lee, Ms Deborah Mason, Dr Ian McArthur, Mr Phillip North, Miss Susan Pemberton, Mrs Sarah Phibbs, Ms Geraldine Pocklington, Miss Monica Price, Ms Sabina Pugh, Ms Catherine Quinn,

Mr Roger Street, Ms Geraldine Surman, Mr Gerald Walker, Ms Susan Walker, Mrs Helen Wilton-Godberfforde and Mr Christopher Young.

This year the University community has lost valued colleagues whose early deaths have been a source of great sadness: Professor Douglas Altman, Professor of Statistics in Medicine at the Botnar Research Centre; Mr Tsering Gonkatsang, Instructor in Tibetan Language at the Faculty of Oriental Studies; Miss Rose Wharton, Medical Statistician at the Nuffield Department of Clinical Neurosciences; and Dr Mark Whittow, Associate Professor of Byzantine Studies at the Faculty of History.

Finally, we pause to remember the contributions of those colleagues who have died in retirement over the past year: Professor Patrick Atiyah, Mr Cyril Band, Mr Peter Bell, Dr Graham Booker, Mrs Hilda Booth. Dr Norman Booth. Mr Edward Brookes, Mr David Chapman, Dr Alison Chapple, Mr Terence Denton, Sir Roger Elliott, Dr John Fresen, Professor Michael Gelder, Professor Derek Gray, Professor Douglas Gray, Mr Anthony Green, Dr Richard Green, Dr Miriam Griffin, Dr Ann Hackmann, Professor Barbara Harrell-Bond, Mrs Rita Harris, Miss Margaret Haswell, Professor Jack Hayward, Mr Donald Hogg, Mr Charles Hollinshead, Dr Patricia Ingham, Mr Anthony Kirk-Greene, Dr Michael Lockwood, Mrs Joan Loupekine, Dr Valerio Lucchesi, Mr Gerald Metcalf, Mrs Barbara Mitchell, Professor Ian Moore, Mr James Morwood, Dr John Mulvey, Ms Pamela Nieto, Mr David Pattison, Dr Roger Pensom, Professor David Pettifor, Professor Rebecca Posner, Mr John Prest, Mr James Railton, Mr Adib Romaya, Professor John Rowlinson, Professor Ali Sheikholeslami, Mr John Shorter, Professor Eric Stanley, Mr Peter Swift, Dr Viktor Thaller, Mr Peter Tolley, Dr Kenneth Warren, Miss Nita Watts, Professor Lawrence Weiskrantz, Mrs Kathryn White, Dr Gordon Whitham, Dr Bertram Willis, Mrs Gina Wilson and Dr Marjorie Wright.