Gazette Supplement



Vice-Chancellor's Oration 2019

Colleagues. Before I begin I would like to ask you to pause for a moment to remember PC Andrew Harper who was killed in the line of duty this summer. His memorial service, organized by Thames Valley Police, is taking place in Christ Church Cathedral as we speak.

Introduction

Thank you for making the time to attend this meeting of Congregation today to hear my annual Oration, a reflection on the activities of the past year and some thoughts on the year to come. By convention the speech is very long – as there is a lot of ground to cover – and the benches are very uncomfortable – as standards were different in 1750 when they were installed. But at least it is no longer in Latin, and there will be a nice lunch at the end.

In recent years I have begun by drawing attention to our position in the *Times Higher Ed* Global University Rankings. I don't doubt that the time will come when I will regret the practice! Nevertheless, to have come first for the fourth consecutive year is quite an achievement. The THE singled out our research success for particular praise:

The THE World University Rankings use 13 separate performance indicators, covering all of a global research university's core missions: teaching, research, knowledge-transfer and international collaboration, and to not only reach to the top of the global list, but to retain the number one position for four consecutive years, Oxford has to excel across all of these areas. Particularly outstanding is Oxford's research: strong across a wide range of disciplines and between disciplines, with huge impact and a powerful global reputation among peers. Oxford is also more international than its close rivals in North America, with deep and rich research collaborations across the world, and a strong record in

attracting the world's leading talent to its doors.

We all have a healthy scepticism for these rankings and it has not escaped our notice, for example, that British universities tend to do best in British rankings. Nevertheless, in the QS global rankings we came 4th, up from 5th last year, and 6th the year before. These rankings are a striking testament to the calibre of the people who work here and the quality of the work that they do. It is also the case, however, that our trajectory is different from that of our peers across the higher educator sector. British universities are declining in the global rankings, in the face of competition from well-funded competitors around the world. In the years to come it will be increasingly difficult to maintain our position as one of the handful of top universities in the world.

If further external recognition of the quality of our colleagues were needed, I would point out that seven of our academics have been elected to fellowship of the British Academy and five to the Royal Society. Professors Peter Donnelly and Alex Halliday have been knighted, and Professors Gideon Henderson and Dame Angela McLean have been named Chief Scientific Advisor to Defra and the Ministry of Defence respectively. Meanwhile, Sir Peter Ratcliffe has been awarded the Nobel Prize in Physiology or Medicine and Professor John Goodenough has been awarded the Nobel Prize in Chemistry. Finally, yesterday in Rome, John Henry Newman, graduate of Trinity, Fellow of Oriel, Vicar of St Mary's, was canonised. A great many more of our colleagues have received more prizes and honours than I can readily fit into this already lengthy Oration.

The reason we are here, the reason Oxford is here - to research, to teach, and to improve the world around us - has not changed. It has not changed in the hundreds of years since we were founded. We have always had to adjust to navigate the rough seas of history, and we continue to do so, but we never deviate from the lodestar of research, teaching and societal impact.

The University remains committed to excellence but we are becoming bigger, more open, and more engaged with those beyond the University, and beyond academia.

The past year has been a busy one. There is a widely held view that change happens slowly in Oxford but, in fact, I see one of the secrets of Oxford's success being its ability to evolve constantly. Last Michaelmas term Congregation approved the Strategic Plan for the next five years. In Trinity term we announced four major initiatives designed to realize some of the commitments made in the plan. Allow me to review them.

Access

One of the many serious challenges facing this university has been the fact that the public perception of us has been so much at variance with the perception we have of ourselves. We believe ourselves to be a meritocracy while many members of the public appear to believe - and the press regularly accuse us of being - a bastion of white privilege filled with underqualified but wealthy students. They believe our admissions practices are arcane (they may have a point there), unfair and biased against worthy applicants from low- and moderateincome families. This matters, quite simply, because as a publicly funded institution we depend on public support.

The truth is that we reflect the deep socioeconomic, racial and regional inequalities in the country. The background of those we admit reflects the background of those who score the highest grades at A levels. But that is not enough to satisfy our critics, or change the public perception. This year we have admitted more state school students (62.4%) than ever before, more female students (52.6%) than ever before, more students from POLAR quintiles 1 and 2 (14%) and ACORN categories 4 and 5 (12.2%) than ever before. But that is not enough to satisfy our critics, or change the public perception. There is a widely held view that we have a responsibility to do more to redress the educational inequality in this country.

The effort to broaden access to the University is not simply a response to regulatory demands or press criticism; it is because we have an interest in attracting the very best students. Too many able students do not apply to Oxford because they think they will not get in, or fit in. Too many talented students apply but do not get in, or do get in but do not come. It is in our interest to attract the very brightest students whatever their background. The greater the diversity of perspective and background of our student and staff body, the more enriched our community will be, and the better the education all our students will receive

Last term we made a public commitment that, in four years' time, 25% of the British students we admit will be from underrepresented backgrounds. This will mark a sea change in our admissions without compromising our high standards. I would like to thank Professor Maggie Snowling, President of St John's, and Professor Martin Williams, Pro-Vice-Chancellor for Education, for working together with colleagues from across the collegiate University to ensure support for this initiative.

To meet this commitment, we will build on the success of two programmes initiated at the college level. The largest programme, Opportunity Oxford, is a bridging programme for students who meet or exceed our entrance requirements. University College has been successfully running a version of this programme for the past three years. The second programme, Foundation Oxford, learning from LMH's Foundation Year, will see a smaller number of talented students whose education has been severely disrupted come to Oxford for a year's study from which they will be able to advance to Oxford degree courses if they reach the required academic standard.

These programmes will supplement the wide range of access initiatives that already take place at college and University level. The largest is the UNIQ summer school. We expanded the programme by 50% this year so that 1,350 pupils were able to spend a week in Oxford. Over 8,500 young people have participated in UNIQ Summer Schools over the past nine years. Those from the 2018 cohort who applied had a 39% acceptance rate, two and a half times higher than the norm. Of those from UNIQ in 2017 who were unsuccessful in their application, 56% gained a place at another Russell Group university.

We should perhaps remind ourselves that our admissions standards and practices were not always what they are now. It is easy to forget that there are still people alive today for whom Oxford entrance was not competitive at all. For most of our history the right background and sufficient funds were all you needed, though there were always the exceptional individuals who had neither and managed to succeed regardless. Among them was the 18th-century vicar John James who had some quite scathing comments to make about some of his contemporaries. He wrote of:

a gentleman of Merton, who being due to take holy orders Sunday last was under the absolute necessity of having his degree. Trifling and farcical as these things exams - are known to be, I never saw a man under more apprehension, or with greater reason, for he protested to us with vehemence that he had not looked in any Latin or Greek book since matriculation, and as for the sciences he was hardly acquainted with their names... and yet he escaped and was rewarded with a certificate.

The national conversation on access tends to focus exclusively on undergraduate students but there are real challenges at the postgraduate level too. The unprecedented level of student debt after an undergraduate degree can serve as a powerful deterrent to postgraduate education for those without financial support. We currently provide about 1,000 scholarships for postgraduate students, but it is not nearly enough to meet the demand. It is a personal priority to raise funds for more graduate scholarships and one of the key goals outlined in the strategic plan.

This summer we launched UNIQ+ and welcomed 33 students, out of over 200 applicants, from around the UK who spent six weeks living in Oxford colleges and participating in a PhD-like research programme. The goal, as in the undergraduate programme, is to introduce students to Oxford, to encourage them to believe that Oxford is a place for them, and to support them to make competitive applications. Given the popularity and success of the programme this summer, plans are already in motion to increase UNIQ+.

Parks College

To meet this ever-growing demand for new graduate places, we announced in May the creation of a new college, our 39th, provisionally named Parks College, as a graduate society, similar to Kellogg and St Cross. Its first president is the distinguished and indefatigable Professor Lionel Tarassenko. The first Governing Body is being constituted and they will oversee the development of the first completely new foundation since Kellogg College in 1990.

I hope that this new college will help to relieve the tension between departments, anxious to recruit more graduate students to advance their mission of research and teaching, and colleges, anxious not to grow so large that they undermine the intellectual and social community that is their hallmark.

Parks College will be located in the heart of the University Science Area, sharing space with the historic Radcliffe Science Library, which will be transformed into a 21stcentury science library, and a new museum collections centre. This will be a new model for an open college library, will make the museums and collections more accessible, and will embed public engagement into the college ethos.

In 1937 a University fundraising campaign described the Old Inorganic Chemistry building as 'architecturally and otherwise unsuitable' for use by the Chemistry Faculty. Now, only 83 years later, it will be reinvented as the Parks College dining hall.

Parks College has a specific focus on addressing the big challenges of the 21st century. While it will draw students and staff from all four divisions, it has identified three research clusters around which it will initially organize academic activities: Artificial Intelligence and Machine Learning, Environmental Change, and Cellular Life.

This is an enormously exciting development for the University. Like other colleges, Parks will be a vibrant research and social community whose members embrace the opportunity to interact with fellow researchers beyond the boundaries of their own disciplines. It will provide the resources to promote entrepreneurial thinking, collaborative working and intellectual exchange among Oxford researchers and the wider public, industry, government and civil society. At the heart of college life will be a programme of academic activities designed to stimulate collaboration and to facilitate societal impact from research activity. We look forward to welcoming the first cohort of students in October 2021.

Schwarzman Centre for the Humanities

The third big announcement last term was the gift to the Humanities from Stephen A. Schwarzman. The gift of £150 billion is our largest single gift since the Renaissance. It will allow us to realize the ambition we have held since acquiring the ROQ in 2003: to create an unrivalled Centre for the Humanities.

I went to see Mr Schwarzman in New York in December 2017 to try to interest him in our work. He had no prior involvement in Oxford but did have a record of philanthropy to other universities and cultural institutions. What attracted him to Oxford Humanities was our commitment to excellence, our global reputation, and the long history of accomplishments in the Humanities.

The new centre will bring together seven of our Humanities faculties in a new 23,000 sq m building. We will have a state-of-theart Humanities Library for the 21st century, along with exhibition space, a knowledge exchange hub, and research, teaching and social space. In addition, we will have a performing arts centre that will include a 500-seat concert hall, a theatre, flexible performing space, and a TV studio. This will be an enormous asset to the city as well as the University and will finally provide badly needed arts space for our students.

Oxford has come a long way since its statute banning funambuli, histriones or gladiators (rope dancers, actors or prize fighters), which even in the 19th century discouraged students from acting on a public stage. Oscar Wilde inquired in 1884, having seen the Oxford University Dramatic Society's first production: 'Why should degrees not be granted for good acting? Are they not given to those who misunderstand Plato and mistranslate Aristotle?'

The Schwarzman Centre will also be home to a number of our research programmes, including a new Centre for AI Ethics. This centre, which will be administered by the Philosophy Faculty, will seek to harness the insights of the Humanities to influence the creators and regulators of new technologies. Oxford played a seminal role in the development of medical ethics. We intend to do the same with AI ethics. We plan to become a global hub for conversations about the ethical implications of new technologies and how to ensure that humans remain in control. We will do cutting-edge research, teach a new generation and proffer independent advice to governments and industry.

The plan is that the new Humanities Centre will open in 2024. There is a great deal of work to be done between now and then: consulting with colleagues and the local community, selecting architects, designing the building, securing planning permission, recruiting artistic and centre directors, initiating the cultural programme and fundraising for academic posts and student scholarships.

I would like to take this opportunity to thank sincerely the many colleagues across the University especially, but by no means exclusively, in Humanities and Estates, who have worked tirelessly to translate a vision into an action plan and in particular I would like to thank Karen O'Brien, Head of Humanities, and Richard Ovenden, Bodley's Librarian.

Over the longer term, our hope is that the last remaining plot on the ROQ could be developed for a centre for informatics and digital health and that, in time, the ROQ will become for the University of the 21st century what Radcliffe Square was for the 18th.

This extraordinarily generous gift is allowing us to do something lasting and truly important for the University. Those of us working on the project in a spirit of One Oxford are acutely conscious of our responsibility to future generations of students, scholars and citizens of Oxford to fashion this golden opportunity into a Centre for the Humanities that will be treasured for generations.

Joint Venture

Oxford heads many league tables. One, however, that we are keen to leave behind is the distinction of being frequently named by Lloyd's 'Britain's most unaffordable city'. Many of you will have personal experience of the difficulties caused by chronic housing and space shortages in the city. Last term, we announced a Joint Venture with Legal & General to address some of these problems. Legal & General have agreed to commit up to £4 billion over the next ten years to build badly needed housing and science parks. The high cost of housing in Oxford undermines the quality of life of our staff and makes it more difficult to recruit new staff. We have long been aware of the problem but have not had the means to address it. Now we do. Through this joint venture we will provide 1,000 subsidised homes to our staff. This will not solve all the unmet need but, in addition to helping the thousand families directly, it should help to depress the escalating cost of accommodation in the city. We anticipate

that much of this new housing will be in Begbroke.

Similarly, the L&G partnership will provide a thousand new units of accommodation for graduate students, which will also serve to decrease the pressure on the local market for student housing. The initial plans are that new student accommodation will be provided in Osney Mead and through redevelopment of Ewert House, Court Place Gardens and graduate housing in Wellington Square.

These projects are the beginning, not the end, of our efforts to ensure that goodquality, affordable housing is available to every member of staff and to every student. Alongside the many innovative projects by individual colleges, they represent a major step forward.

The Joint Venture also plans to build two new science parks, one in Osney Mead and one in Begbroke. Oxford University's success in spinning out new companies over the past few years has been extraordinary. Last year 25 companies were established in Oxford based on the novel ideas and ingenuity of our staff and students. These companies need space to grow and our researchers need more space as they interact increasingly with industrial partners to translate their research. The new science parks - or innovation districts as they will become - will provide that space and will support the regional economy by providing skilled jobs and keeping companies in the region.

I would like to thank my colleague Dr David Prout, the Pro-Vice-Chancellor for Planning and Resources, and the team in Finance and Estates for all their work in securing this partnership.

In the year ahead my colleagues and I will be heavily engaged in ensuring the success of each of these initiatives.

End of Oxford Thinking Campaign

Today I would like to make another announcement, and that is the end of the Oxford Thinking Campaign. We have exceeded our £3 billion target and are closing the Campaign. Some of you may remember that in 2004 a target of £1.25 billion was set and the quiet phase of the Campaign began. The campaign was launched publicly in 2008. The target was reached in March 2012 and a new target of £3 billion was set. This target has now been reached, indeed surpassed.

Of the £3.3 billion raised in the course of the Campaign, the University raised 51%,

colleges 42% and the Rhodes Trust 7%. 24% of the University funds were endowed; 44% of college funds. Of the 24% raised by the University for endowments, £362 million has been invested over the course of the Campaign and now has a value of £533 million, thanks to the talent of our endowment managers at OUEM.

We all owe an enormous debt of gratitude to the alumni and friends of the University, to the individuals and foundations who have so generously donated to the University, its colleges, departments, centres, trusts, students and staff.

The first donations to the University and its colleges are as old as Oxford itself, but we have not always been distinguished by our gratitude to benefactors. Duke Humfrey, whose name was given to Duke Humfrey's Library, donated 280 valuable manuscripts to the University at a time when books were enormously expensive. The other major source of new texts for the libraries, I've read, was scholars pawning individual volumes to pay their living expenses. The Duke's will left the rest of his books to the University as well, but he was arrested on suspicion of 'treason and treasonous necromancy' by the Marquess of Suffolk and his estate given to the royal foundation of King's College, Cambridge, instead. Oxford's response was to write to Suffolk appointing him as the University's new 'Protector at Court'. I expect that our Committee to Review Donations would notice if any of our donors nowadays were treasonous or indeed necromancers, and decline the donation in the first place, but I would hope that we might show a little more gratitude after the fact.

It seems entirely apt that Duke Humfrey's Library – along with colleges' dining halls and quads – have found a new magical incarnation in Hogwarts library in the Harry Potter films, thereby generating a new source of financial support for our colleges. We should be careful lest the spirits of aggrieved benefactors visit us unawares, losing our places in the manuscripts we consult, or causing our laptops to crash.

Back to our Campaign. Allow me to tell you a few of the initiatives we have been able to fund thanks to these generous donations.

Over £300 million has been raised by the University in direct support of students, through the UNIQ Summer Schools, the Crankstart Scholarships, the Ertegun Programme and donations under the Oxford Graduate Scholarship Matched Fund which were matched by the University. 25% of the funds raised by the University were for capital projects and have allowed the construction of:

- The Andrew Wiles Building
- The Beecroft Building
- The Big Data Institute
- The Blavatnik School
- The Earth Sciences Building
- The Institute of Biomedical Engineering
- The Kennedy Institute of Rheumatology
- The Thatcher Business Education Centre

And many others. Indeed, 40% of the core estate of the University has been built, or substantially refurbished, since 2000.

In the course of the Campaign over 66,000 gifts totalling over £900 million were secured to fund academic posts and programmes, GLAM and sports. These included 75 core joint teaching posts (55 in Humanities) and over 100 other academic posts across all four divisions.

New and innovative initiatives such as the Oxford Martin School and the Foundry were established thanks to generous donations, as were new centres of global excellence such as the Hintze Centre for Astrophysical Surveys and the Future of Humanity Institute.

GLAM, Gardens, Libraries and Museums, also benefited, receiving £273 million in gifts from 6,500 donors. This funding has helped to bring almost 25 million visitors to the museums since 2004, as well as nearly one million pupils on school trips and over one million others engaging in museum activities.

The Campaign has also contributed essential funding for the redevelopment of the Weston Library and the Ashmolean Museum as well as support for the digitisation of the collections to make them accessible all over the world.

The colleges have been equally active throughout the Campaign.

Earlier this month the Duke of Cambridge opened the extraordinary HB Allen Centre in Keble. Exeter's fabulous Cohen Quad opened in 2017 and Pembroke's Rokos Quad in 2013, while New College's Gradel Quadrangle is underway.

Other college projects funded in part by the Campaign include Mansfield's Hands Building and Bonavero Institute, Merton's TS Eliot Theatre, St Antony's Investcorp Building, Oriel's refurbishment of the Rhodes Building, Somerville's ROQ buildings and Wadham's McCall MacBain Graduate Centre. In the course of the Campaign generous philanthropists have enabled the restoration and development of four college chapels: Balliol, Trinity, Corpus and Lincoln, and three libraries: Magdalen, Queen's and Brasenose.

The colleges have also raised funds for outreach and scholarships including 11,000 undergraduate scholarships and 1,500 for postgrads.

The Campaign has also led to improved co-operation between the colleges and the University and a professionalisation of our fundraising operations. A major gift to a particular college is a success for all of us. We are all One Oxford; better facilities and more scholarships for one college or department benefits all of us, and raises the bar for graduates of other colleges and departments to do the same.

This Campaign has lasted a very long time, far longer than most fundraising campaigns, but the amount raised, £3.34 billion, is the largest of any European university. We still have a ways to go before catching up with our American peers. But not only have we had a major impact on the intellectual and physical development of the collegiate University and the support for our students, we are engaged in a broader effort to change the culture around education philanthropy in this country.

This university and most of its colleges would not exist in their current form without the historic generosity of benefactors. In the post-war era, however, educational philanthropy declined. This, I expect, was largely an unintended consequence of the generosity of the state in funding higher education. I believe it was also due to high marginal tax rates which led people to conclude that they had paid for their education through their taxes. We have demonstrated through this campaign that the margin of excellence requires private philanthropy.

The end of the campaign will not, in any way, diminish our fundraising efforts. Our Development team will be consulting across the University to develop ideas about how best to organize the next iteration of our permanent fundraising campaign.

For now, however, I would like us to pause for a moment and reflect on the fact that this University has raised £3.3 billion in philanthropy since this campaign was launched. That is a very large amount of money by any standards. (It is the equivalent of over £50 for every one of the UK's 66 million inhabitants.) It demonstrates not just the generosity of our graduates and friends but also their confidence in us. We have a profound responsibility to invest their money wisely and to demonstrate that their confidence is well placed.

I would also like to take a moment to thank my predecessors, Vice-Chancellors Andrew Hamilton and John Hood, and the talented fundraising teams they built who launched and sustained this campaign. Development officers and academics across the collegiate University have worked tirelessly over the years to raise funds for projects that would outlast their time here. We are all in their debt.

The past year

Research There is so much more that could be said about the truly amazing research taking place across the University and the creative and entrepreneurial thinkers who are translating that research for the betterment of society. One example will suffice to make the point. Robert MacLaren, Fellow of Merton and Professor of Ophthalmology in the Nuffield Department of Clinical Neurosciences, began by researching gene regeneration and has gone on to develop gene therapy treatments for patients with retinal diseases. His spinout company, Nightstar, was recently sold to the US biotechnology company Biogen for \$877 million, from which the University is receiving £19.4 million, a significant portion of which will be reinvested in the work of other academics, both fundamental and applied. More important, as a result of Professor MacLaren's work, sight is being restored to patients.

In all Oxford received over £579 million in external research funding in 2017/18: that's over £50 million more than any other UK university and more than half the University's total income. Almost £75 million of this external research funding was from industry, again more than any other British university. This is the fastestrising part of the research portfolio.

Students There is so much more that could be said about our work with students to ensure that they can thrive and do their best work here. We have established a Sexual Harassment and Violence Support Service with specialist staff to provide advice and support in a confidential setting to any student. In recognition of the growing incidence of mental health-related problems we are launching this month a Student Wellbeing and Mental Health Strategy. I would like to thank our student leadership and colleagues in our welfare services and welfare officers in the colleges for working together on these two important initiatives. **Local community** There is so much more that could be said about our work with the local community. Oxfordshire is one of only three counties that make a net contribution to the UK exchequer and the University, which supports 34,000 jobs locally, is a key driver of that economic success.

Serious local problems remain and Oxford is a member of the Oxford Homeless Movement, an umbrella organisation developing an Oxford homelessness charter. This year, through the Small Community Grants Fund, we supported holiday breaks for disabled people and their carers, a community group for Syrian refugees, a book festival for primary school children, numerous small-scale theatre projects, two of Oxford's annual street festivals, the refurbishment of the youth centre's kitchen and, of course, the Christmas Lights festival and the Oxford Open Doors weekend.

We continue our work with local schools through the Education Deanery and a number of other projects such as Oxford for Oxford, go_girl:code+create and Storming Utopia, while the Public Engagement with Research awards recognized some of the extraordinarily creative efforts by our research colleagues to engage with publics around the world.

OUP There is so much more that could be said about Oxford University Press and its contributions to the financial health and educational mission of the University. Over the past decade OUP has contributed £1 billion to the University's bottom line. Over the past year they have trained 260,000 teachers around the world. They published in 43 languages directly and 54 others, including the most vulnerable languages, though third-party licensing deals. They have almost 1 million Twitter followers and 7 million YouTube viewers.

Government policy There is so much more that could be said about Government policy. We welcome the current (at time of writing) Government's commitment to research, science, innovation and research on new energy sources. We welcome the commitment to increase the R&D spend to 2.4% of GDP by 2027. The benefits of this investment will only be fully realized when we have an immigration system designed to ensure we have the most talented people in the UK to capitalize on the opportunities created. We welcome the recent revision of the post-study work visa regime. We welcome the government's stated intention of devising an immigrations system to make the recruitment and retention of global talent simpler and more internationally competitive. We urge that that these

revisions are bold so that the free flow of academics and their families is facilitated. We remain deeply concerned about the impact of Brexit on our EU staff and our EUfunded research.

Brexit There is, of course, so much more that could be said about Brexit. I will refrain from saying much at all as the pace of developments is such that between the writing and the delivery of this speech all could have changed, changed utterly (though I don't detect any beauty emerging). The key points I wish to make are that we value our EU staff and we deeply regret the anxiety the political debates in this country have caused them. We are committed to mitigating the impact of Brexit, with or without a deal (and our strong preference is for the former), on our EU students and staff. We are doing all we can to influence government thinking on a post-Brexit funding regime for research and immigration policy. Above all we are committed to ensuring that Oxford remains global in its make-up, outlook and engagement. We are accelerating our efforts to develop international partnerships as a supplement but not a substitute for our long-standing links with EU universities.

There is so much more than could be said on so many issues but the benches are hard and the speech is long, so let me now turn to the year ahead.

The year ahead

Pensions On the enormously difficult issue of pensions, I can only say that I hope that all the work that has been undertaken locally by colleagues on the USS Pensions Working Group, and nationally by the Joint Expert Panel, will take us closer to a shortterm resolution of the disagreements over recent evaluations, and closer to a longerterm solution that provides a generous, sustainable and affordable pension system.

Climate change As I look to the year ahead there is one issue that I think we have to address, and that is climate change. We have all seen the evidence: the melting icebergs, the rising sea levels, the extreme weather. We have witnessed governments coming together in Paris to sign the Paris Agreement and commit to efforts to reduce carbon emission and limit the rise in temperature to 1.5°C.

It is time to ask ourselves what we should do. At an individual level we can reduce our carbon emissions by how we live, what we consume and how we travel.

At an institutional level, we can examine our own practices and targets and ask if they are

enough. The University has committed to halve our emissions by 2030 from a peak in 2010 and notwithstanding extensive growth of the University. We have invested over £4 million in carbon reduction projects and switched to 100% wind power from Scottish Power. We have installed over 4,200 sq m of solar panels as well as ground source heat pumps and combined heat and power plants across the University. We ringfence all income from parking for sustainable travel initiatives. We have adopted a Passivhaus approach to new buildings and launched a number of initiatives, from the staff Green Impact scheme to the Student Switch Off campaign. We have funded 11 volunteer environmental programmes at the Oxford Hub. It is worth asking ourselves whether we believe these commitments are equal to the gravity of the threat.

Personally, I am not convinced that they are. I think we can do more, and over the next year I believe that we will. I have asked Dr David Prout and the Sustainability Working Group, which he chairs, to review our practices and our targets, to draw on the expertise that resides across the University to suggest new targets and the practices required to reach them. I believe it is time for the University to have a detailed, ambitious Sustainability Policy in which we can all take pride.

This is not a time for gestures. This is not a time for aspirational targets with no means to achieve them. I believe it is time for our community to come together and have wide-ranging discussions about our responsibilities and about the kind of details and effective sustainability strategy we should put in place. It is time for evidencebased policymaking.

One example of the kind of work we will be undertaking is the Conservation Hierarchy Project led by Professor E J Milner-Gulland and funded by the Fell Fund. The aim of this initiative is to provide the scientific foundation and practical guidance necessary to allow the University and the colleges to set meaningful targets and measurably reduce their impact against these targets in the area of food and infrastructure. The Sustainability Working Group will be undertaking similar work in other areas.

It is important to remind ourselves that, whatever we do in our personal behaviour, and whatever institutional actions we take to make ourselves more sustainable, it will have insufficient impact on climate change itself at a time when global emissions of carbon are 35 billion tonnes a year. I believe that, when confronting a problem on the scale of climate change, our primary responsibility as a university is to do what we do best: research, teach and translate the findings of that research for the betterment of society.

Our colleagues are doing extraordinary research that will have an impact on our ability effectively to reduce our carbon emissions. I will mention just a few. Through the Faraday Institution Oxford is leading a consortium of university and industry partners in the Nextrode Project, which will revolutionize the way electrodes for lithium-ion batteries are manufactured. They plan to introduce a new generation of smart, high-performance electrodes that will provide electronic vehicles with more durable and longer-range batteries. Meanwhile, other colleagues in the Oxford Robotics Institute are leading the way in the development of autonomous and energy efficient vehicles.

Physicist Professor Henry Snaith has transformed the efficiency of thin-film photovoltaic cells that can be coated across a glass plate to generate energy. A spinout company, Oxford Photovoltaics, has been set up to commercialize Henry and others' technology and accelerate the global growth of solar energy.

Across the University, through the Smith School, the Oxford Networks for the Environment, the Energy Network, the Supergen Energy Storage Hub, departments from Geography to Plant Sciences, Computer Science to Physics, and the Oxford Martin School, academics are conducting research on the environment and climate change. To provide just one example, our researchers are helping to advance the realisation of civil fusion power, spinning off and working with private companies, and working with the UK's national fusion programme centred nearby at the Culham Science Centre. The Oxford Martin School has convened and funded numerous energy-related projects with both local impact, like Local Energy Oxfordshire, and global impact, such as the Future of Plastics programme and studying the impact of going vegan.

Other colleagues are helping us to understand the impact of climate change by analysing the long-term changes in temperature of the oceans and others through tracking the rings on oak trees for 800 years.

It is through this research, and through our ability to communicate the results of this research through teaching, through our spinout companies, through advising governments and through public engagement that I believe Oxford will make our biggest contribution to addressing the critical challenge of climate change. Nevertheless, I believe we should model both as individuals and as institutions the changes we want to see toward a sustainable future.

Conclusion

Finally, to summarize this Oration, this has been a very good year for the University. We have continued to evolve while never deviating from our abiding commitment to excellence. Each one of us is very fortunate to work in an environment in which we are surrounded by people of such talent and commitment. Notwithstanding the difficulties into which a number of our graduates have managed to plunge the country, the University is thriving. We are thriving because we continue to attract the best academics and the best students and, thanks to the unheralded work of the many talented and dedicated technicians, librarians, professional and support staff, we have created an environment in which they can do their best work.

The fragility of the political situation in this country and in that of our closest ally, the United States, should be a reminder that we cannot take anything for granted. Next month I will be travelling to Vienna to celebrate the opening of the Vienna campus of the Central European University, a university with liberal values just like ours, that was hounded out of Hungary by an illiberal regime tolerated by its EU partners, including us. We must never take our privileges for granted. We must never take our principles for granted. We must practise and defend them and we must ensure that we are passing them on to the next generation we teach.

It is not altogether easy being Irish in Britain these days. This is perhaps why I turn to Oscar Wilde again. He once remarked, with his usual mix of acidity and sweetness: 'In spite of Keble College, and the tramways, and the sporting prints, Oxford still remains the most beautiful thing in England, and nowhere else are life and art so exquisitely blended, so perfectly made one.' It is a privilege to live and work in this most lovely of cities, this most dynamic and talented convocation of people driven by the need to understand the world better, to convey its intricacies to students from every corner of the globe, and to improve it for all, forever. I am, quite simply, proud to be your Vice-Chancellor. I am proud of our shared principles, our shared moral and educational commitment to being the best at what we do. I congratulate you on a wonderful year, recognising the immense hard work that has gone into it. I hope that your projects in the coming year may be graced by inspiration, supported by collegiality and fruitful in their diverse achievements.

Thank you.

Addendum to the Vice-Chancellor's Oration

Oxford University notes the retirement this year of many distinguished members who have contributed to the University's intellectual life over the years: Professor Judith Armitage, Professor of Biochemistry; Esmail Babaahmady, Engineering Science; Dr James Benson, Oriental Studies; Ursula Bowler, NPEU; Professor Jocelyn Boyden, Professor of International Development; Dr Frances Brook, Women's and Reproductive Health; Dr David Bryan, Medical Sciences; Dr Victor Burlakov, Continuing Education; Professor John Cartwright, Professor of Law; Karen Chidwick, Voltaire Foundation; Professor Hugh Collins, Professor of Law; Jane Collins, Saïd Business School; Professor Peter Cook, Professor of Pathology; Professor Amanda Cooper-Sarkar, Professor of Particle Physics; Dr Jenny Corbett, Global Area Studies; Professor Paul Craig, Professor of Law; Dr David Dance, Tropical Medicine; Professor Malcolm Davies, Professor of Classical Languages and Literature; Jose de Sousa, Faculty of Law; Frederick Dickinson, Biomedical Sciences; Pamela Dyson, OCDEM; Brian Eade, Engineering Science; Professor Philip England, Professor of Earth Science; Deborah Evans, Education; Professor Robert Field, Professor of Engineering Science; Professor Susan Gillingham, Professor of Theology and Religion; Professor Richard Gray, Clinical Trial Service Unit; Lynden Guiver, Cancer Epidemiology Unit; Professor Keith Gull, Professor of Pathology; Leslie Hill, Chemistry; Professor Rury Holman, Professor in OCDEM; Alan Hudson, Continuing Education; Professor John Jefferys, Professor of Biochemistry; Dr Lalit Johri, Saïd Business School; Nina Jupp, Chemistry; Angelika Kaiser, Geography; Mrs Janice King, Saïd Business School; Andra Klukowski, Physiology, Anatomy and Genetics; Dr Mary Kroll, NPEU; Professor Julia Lee-Thorp, Professor of Archaeology; Professor Hans Lilia, Professor of Paediatrics; Keith Long, Physics; Christiaan Lourens, Tropical Medicine; Brett Lower, Tropical Medicine; Dr Barry McCormick, Primary Care Health Sciences; Professor Diarmaid

MacCulloch, Professor of Theology and Religion; Deborah McCusker, Engineering Science; Professor William McKenna, Professor of Radiation Oncology; Mrs Lyn Martin, Saïd Business School; Dr Elizabeth Masterman, Centre for Teaching and Learning; Dr Ziyah Mehta, Clinical Neurosciences; Lawrence Mielniczuk, Bodleian Special Collections; Professor Ian Neary, Professor of Politics and International Relations; Dr Collin Perry, Particle Physics; Dr Judith Priestman, Bodleian Special Collections; Susannah Rae, Clinical Neurosciences; Jacqueline Raw, Bodleian Collections and Resource Description; Dr Simon Read, Clinical Trial Service Unit; Professor Mark Robinson, University Museum of Natural History; Lesley Rowley, Clinical Trial Service Unit; Jennifer Sayer, Clinical Trial Service Unit; Professor Gregory Seregin, Professor of Mathematics; Dr Andrew Shacknove, Continuing Education; Julie Sheppard, Computer Science; Professor Mark Smith, Professor of Oriental Studies; Dr Helen Spencer, English: Andrea Tarlton, RDM Investigative Medicine; Janette Taylor, Clinical Trial Service Unit; Keiron Ward, Medical Sciences; Linda Ward, Oncology; Dr Josephine Whitby, Classical Languages and Literature; David Whittaker, Biomedical Services; Catheryne Whittle, Structural Biology; and Marie Yeung-Wo-Ting, Clinical Trial Service Unit.

The University also notes the retirement of members who have retired from administrative, library or service posts in the University: Mr Steve Berry, Mrs Susan Castle-Miller, Mr Adrian Cuthbertson, Ms Philippa Days, Dr William Dunn, Mrs Elena Estraikh, Mr Graham Fryer, Mr Robert Harvey, Mrs Marie Hough, Mrs Adrienne Lingard, Professor Mark McCarthy, Mr George Newman, Ms Jennifer Nix, Mr Michael Pollard, Mrs Ljilia Ristic, Mr Michael Robins and Mr Edward Tippelt.

This year the University community has also lost valued members whose early deaths have been a source of great sadness: Kirk Arndt, Silicon Detector Development Engineer in the Department of Physics; Dr Lindsay Baxter, Clinical Research Fellow in the Department of Women's and Reproductive Health; Professor Stephen Alan Cameron, Professor of Computer Science in the Department of Computer Science; Mrs Jacqueline Davies, Researcher in the Nuffield Department of Population Health; Professor Judith McKenzie, Associate Professor of Late Antique Egypt and the Holy Land in the Ioannou Centre for Classical and Byzantine Studies; Dr Elizabeth Millett, Epidemiologist in the

Department of Women's and Reproductive Health; and Dr Noam Segal, Researcher at the School of Anthropology and Museum Ethnography.

The University also notes with sadness those members who have died in retirement over the past year: Miss Mary Abley, Professor Roger Ainsworth, Ms Shirley Ashmore, Mr Henry Atyeo, Mrs Hilda Booth, Dr Norman Booth, Mr Edward Brookes, Mr Peter Brown, Ms Maggie Burge, Dr Edward Burn, Professor George Cawkwell, Mrs Peggy Cetti, Mr Edward Coker, Mr Gregory Drew, Dr Cyril Edwards, Mrs Muriel Emery, Mrs Jean Fooks, Mrs Gwendolen Hampshire, Mr Michael Harrison, Miss Margaret Haswell, Professor David Hinkley, Professor Antony Honoré, Professor John Iles, Mr Anthony Ingham, Sir John Johnson, Mrs (Anne) Kate Joyce (previously Miller), Dr Harry Judge, Anthony Kirk-Greene, Mr Gopal Krishna, Dr Valerio Lucchesi. Professor David Metcalf. Mr Keith Moulden, Dr John Mulvey, Ms Pamela Nieto, Dr Roy Park, Dr David Pattinson, Professor Ceri Peach, Mrs Alice (Norgaard-)Petersen, Mr Angelo Pezzone, Professor Simonetta Piccone, Professor Rebecca Posner, Dr Margaret Rayner, Mr Richard Rayson, Mr Adib Romaya, Dr Francis Rossotti, Professor John Rowlinson, Mr (John) Michael Shorter, Professor Eric Stanley, Professor Norman Stone, Mr Paul Streeten, Mr Peter Swift, Mr Gerald Thomas, Professor Robert Thomson, Mr Philip Townsend, Professor Guenter Treitel, Dr Trevor Walton, Miss Nita Watts, Professor David Weatherall, Dr Marjorie Wright and Miss Christine Wrigley.