Gazette Supplement



Vice-Chancellor's Oration 2020

Academic Connections in a Time of Social Distance

Colleagues, thank you for making time to attend this meeting of Congregation to hear my Oration, an address that traditionally reflects on our achievements over the past year and points forward to outline our direction of travel for the future. I am especially grateful to you for convening today in an environment in which we are obliged to spread ourselves across the vast Sheldonian Theatre to minimize risk of spreading infection. There is a certain irony in our having to abandon the usual setting of the Oration, Convocation House, as that was where the London Parliament met during the plagues of the 17th century. In those days, members of the University were also obliged to practise social distancing, and our academics led the national effort against the plagues then, too.

COVID-19

This has been a year unlike any other. A year of fire-fighting to contain a global pandemic and to continue our vital research, teaching and administration under new and challenging circumstances. I would like to begin by taking a moment to acknowledge the enormous debt of gratitude the University owes to you, and to all of its staff. Firstly, I'd like to thank our cleaners. They are at the front line of keeping our buildings safe to use. One positive effect of this crisis has been to heighten awareness within all organisations that our daily well-being depends on those whose work is, too often, as invisible as it is invaluable. Today, I want to pay particular tribute to those who have kept the lights on, the computer networks running, the advice to staff and students flowing: our caretakers and caregivers whose support underlies all aspects of the study we engage in and the learning we share.

I doubt there is anyone among us who has not felt a sense of loss during the pandemic. Some of you may have lost family or friends to COVID-19: if so, my heart goes out to you. Even if that is not the case, most of you will be feeling the loss of certain freedoms - to travel without restrictions, to use certain libraries or laboratories, to attend conferences, to socialise freely with friends and colleagues. We have missed the subtle ecology of academic life, where chance meetings in the dining hall or the hallway can lead to significant initiatives. Our homes have had to serve in many different roles: sometimes doing duty as nursery, school, library, office, hairdressing salon and gym. Scholarship has been a quick-change act, particularly for those with caring responsibilities. I appreciate how weary you may be feeling after six months of uncertainty and upheaval. Yet I also know that we have learned a great deal and made significant gains during this pandemic: that it has shown the very best this University can be and can do. So, without for a moment downplaying the difficulties this academic year has brought us, I do want to celebrate our achievements and to speak positively, indeed glowingly, of the work Oxford is doing.

I would like to recognise the enormous effort that colleagues have made to adapt to new ways of working when COVID-19 hit us, and how rapid and successful our adaptation has been. When asked how Trinity term had gone for them, most departments said the transition to remote teaching had been remarkably - some said surprisingly - smooth, notwithstanding the Herculean efforts in difficult circumstances. In general, a combination of recorded lectures, Canvas tools and online meetings enabled students to undertake all their planned teaching. To give a sense of the scale of the operation: in a single month in Trinity term, 61,000 hours of content was delivered to students

via Panopto, and the students were overwhelmingly content with the content. Student evaluations showed satisfaction rates of over 80% for online tutorials and supervisions, and 75% for recorded lectures. That is a tremendous accolade.

Running exams remotely was also a major achievement, with over 1,000 exams made available in more than 18,000 exam sittings over 10 weeks. The e-Assessment project will ensure that we have a secure and sustainable digital assessment service throughout the period of disruption, and will offer exam boards a greater range of choices for digital assessments in the future.

It is too soon to say what the financial impact of the pandemic will be on the University. Our initial estimates suggested that it would cost us £90 million in the first year. This cost related principally to lost student income, research income and exhibition, conference and trading revenue. It also reflects our necessary investment in preparation for Michaelmas term, with COVID-19 testing for staff and students, adaptations of the learning environment, funding research extensions for postgraduate research students to ensure that they have time to complete their degrees, and an enhanced 'returning carers' fund to ease the return to work. We have also made significant additional investment in IT and in our library system.

Oxford is fortunate in having unrestricted reserves to draw down, of which Council has approved our using up to £60 million to cover our lost income. We can thereby avoid the more radical financial steps other institutions have taken and protect our current staff. We are making savings by cutting costs, deferring planned capital expenditure, and freezing recruitment and merit-based awards. The University remains resolutely committed to protecting existing jobs, to going ahead with the implementation of the Oxford Living Wage, and to ensuring that all staff on furlough receive 100% of their salary.

There is every hope that our budgets have been conservative in projecting possible loss of income and that the extremely robust - indeed unprecedently high - student numbers we are seeing this term herald the beginning of economic recovery. We remain cautious in our budgeting plans, however, aiming always to protect the University's mission and care for current students and staff, while being mindful of our responsibilities to future generations.

Emergencies take us out of our familiar environments. I am sure that each of us can individually think of things we have had to learn over the past six months that we would not otherwise have learned. Nouns like 'Teams' and verbs like 'Zoom' have acquired entirely new meanings for us all. I'd like briefly to reflect on what the University has learned during the pandemic and what we can take forward from this period to enhance our work in the future.

In educational terms, we have learned from the successful move to open-book exams and to some forms of e-assessment. We now know that small-group and one-to-one tutorials work well online: students working remotely particularly appreciate the ability to replay recorded lectures to consolidate their notes and revise complicated topics. We know that larger groups are trickier to teach online and we have enhanced Microsoft Teams with added features in preparation for the new academic year. We have also modernised and integrated our digital library resources. The 4,000 new e-books we purchased for Trinity term, and the digital platforms we have invested in, have proven invaluable, and will enhance the creativity of our teaching in the years to come.

We have learned from the provision of a range of remote student services, from counselling to careers. These will continue to be enabling in future. We will also continue to run compelling online access and outreach events. The pandemic has forced us to reach out urgently to students who were affected by financial hardship and other difficulties - we have improved our safety net, DDH and mitigating circumstances processes. The University has set aside funds to support students facing financial difficulty as a result of COVID-19: an Emergency Assistance Fund in Trinity term to assist with unexpected costs, and a more substantial COVID-19 Hardship Fund for the coming academic year.

We have learned that the myth that Oxford is slow moving and cumbersome is just that: a myth. Not only did we adapt our teaching at lightning speed, we also adapted our research - and the entire world has benefited. In January, hearing that colleagues in the Jenner Institute - under the leadership of Professors Adrian Hill and Sarah Gilbert - had been working on MERS, and believed their work could be adapted to develop a vaccine for COVID-19, the University immediately agreed to provide a £1 million underwrite from the recently established Strategic Research Fund to enable the team at the Jenner to ramp up their work. We judged that, if the venture proved successful, other funding would follow, as indeed it has. Government, international organizations and generous private individuals, who contributed over £27 million, have invested in Oxford's vaccine.

Within 100 days of learning the genetic sequence of COVID-19. Professor Gilbert and her team had a vaccine candidate so that Professor Andy Pollard and his team in the Oxford Vaccine Group could begin clinical trials. This vaccine has now successfully passed through phase 1 and 2 trials and results from mid-July show that the vaccine is safe and effective in triggering an immune response involving both antibodies and T cells. Phase 3 trials are underway. People across the globe held their collective breath when the vaccine group, adhering to the strictest safety protocols, made the decision to pause work when a volunteer fell ill. But trials have now resumed in the UK, Brazil and South Africa and, along with people across the globe, we await the results with hope and admiration.

On April 30, we announced an agreement with the global biopharmaceutical company AstraZeneca for further development, large-scale manufacture and potential distribution of the vaccine. We were anxious to ensure on the one hand that we not be a party to profiteering during a pandemic, and, on the other hand, that we not repeat the mistake of the early 40s when Oxford academics discovered penicillin but handed all rights off to American companies. We required that any partner would agree that a vaccine, if proven effective, would be distributed at cost for the duration of the pandemic, and in perpetuity in the developing world. AstraZeneca agreed and are now overseeing trials around the world and manufacturing at risk so that if the vaccine proves effective, distribution can begin immediately.

In a related development, Professors Peter Horby and Martin Landray are leading the large COVID-19 Recovery trial. Over 12,000 patients have been involved in testing therapeutics for COVID-19. In June the trial demonstrated that an everyday, inexpensive steroid, dexamethasone, cut the risk of death by a third for patients on ventilators and by a fifth for those on oxygen, making it the first proven drug for treatment of COVID-19. It has been estimated that this discovery alone has already saved many thousands of lives. The trial has also demonstrated that hydroxychloroquine and lopinavirritonavir are not effective treatments, while examination of other treatments continues.

We have learned, or rather, we have demonstrated, that, while our medics and those in STEM subjects are at the forefront of the national effort against COVID-19, our colleagues in the Social Sciences and Humanities have valuable contributions to make too. In the Social Sciences, to give just two examples, Professor Melinda Mills has been working on social behaviour around face coverings and Professor Lucie Cluver has been investigating parenting in a pandemic.

Our Humanities academics have also shone a powerful light on present anxieties, putting them in historical context. Professor Michael Parker has been advising the NHS on the ethical considerations needed for public trust in a contact-tracing app. Professor Emma Smith has written about the plague as a backdrop to Shakespeare's work, and Dr Helen Lacey has spoken about what the Black Death can tell us about the global economic consequences of a pandemic.

Thanks to the work of all these extraordinary colleagues, and many others, the research profile of the University has never been higher. We are all proud to be associated with these projects. Our vaccine development has attracted global attention and global funding to the University. Of still greater importance, it has highlighted the essential service universities provide to society as practitioners of cutting-edge research. At a time when universities often feel obliged to fight to defend our central role, these projects make a powerful case for how necessary it is to support wide-ranging university research that can prepare us for new trans-national threats, whether these come from infectious disease, rising sea levels or cyber-crime. We have learned that there is no such thing as left field when your perspective is 360 degrees.

Institutional Progress

TS Eliot's character J. Alfred Prufrock famously said that he had measured out his life in coffee spoons. League tables can sometimes seem to be the institutional equivalent of coffee spoons; there are many of them and mostly they stir up controversy. Nonetheless, it is my pleasant duty to report that Oxford continues to be regarded as the leading UK university and maintains its international reputation, in the face of stiff competition. We lead the Times Higher Education rankings for 2021, making this the fifth consecutive year in which we have won first place. For the first time in several years, we have also taken top spot in the Guardian university ranking. In the international QS rankings for 2021 we take 4th place; we are the highest-ranked university in the world outside of the United States. To top it off, we were named University of the Year by the Sunday Times a fortnight ago. We were awarded this place, we were told, for two reasons: in recognition of our research on COVID-19 and in recognition of our progress in diversifying our undergraduate student body.

These rankings are a tribute to the sheer quality of the work you do - in research, in teaching, and in the many forms of pastoral, administrative and technical support that make University life possible. It is hard to avoid concluding that if Oxford were a currency, it would be a gold standard. The fact that we have come to expect from you academic mettle of this quality does not in any way diminish its value or the astonishing feat of maintaining this calibre of research and educational experience, year after year.

We continue to build, quite literally, on our success. While many minor capital projects are delayed, construction and planning continue on our major capital projects. Work has continued on Hans Krebs 2 - home of Biochemistry - which we expect to be complete next February. The dramatic demolition of the old Tinbergen has been taking place, and construction will begin on the new Life and Mind building in summer 2021. The new building will provide 25% more usable space than Tinbergen and will become the home of the Department of Experimental Psychology and the new Department of Biology, uniting the Departments of Zoology and Plant Sciences. The building has been designed to meet the performance requirements of the recently introduced University Sustainability Design Guide, including Passivhaus principles, which will achieve a 40% carbon reduction.

Plans for the new Schwarzman Humanities Centre have also proceeded apace despite COVID-19. We appointed Hopkins Architects in February and a renowned acoustician, Ian Knowles, to make sure the acoustics of the concert hall are among the best in the world. Stakeholder meetings have been progressing online throughout the year. Meanwhile, the Humanities Cultural Programme moved its 'Big Tent! Live Events' series online during the lockdown and held 17 events, reaching over 22,000 viewers in 23 countries. Prior to the pandemic, it held successful in-person events including collaborations with the Ashmolean Museum and other local cultural organisations. We look forward to more collaborations in the coming year in support of the arts sector, which has faced particular challenges during the pandemic due to cancelled events and lost audience income.

The new Institute for Ethics in Artificial Intelligence, which will eventually take its place within the Schwarzman Centre, has appointed a Director, two Associate Professors, two postdoctoral researchers and two DPhil students. It has held several seminars, bringing together expertise from Philosophers and leading technical developers and users of Artificial Intelligence in business, academia and government. Our aim is, as ever, to be at the forefront of this emerging field of research - whose modern importance equals that of medical ethics - and to provide an interdisciplinary home for research, study and debate.

Innovation

In the midst of all these ancient dreaming spires, Oxford excels at innovation. I am delighted to report that by the time of this Oration, OUI, Oxford University Innovation, which launched in 1987, has produced 200 spin-out companies. These have raised an extraordinary £3.2 billion in external investment since 2011, £856 million in the last 12 months alone. The revenues generated by OUI this year are over £30 million, of which over £18 million will return to the University, much of it reinvested in basic research through the new Strategic Research Fund, which made its first awards this year. Moreover, with OSI, Oxford Sciences Innovation, we have the largest university venture fund focused on a single institution in the world. Among recent developments, we are particularly proud of the BioEscalator, which welcomed its first tenants in autumn 2018 and now houses 13 companies employing 110 scientists, innovators and entrepreneurs. A quarter of the companies have female CEOs

- an excellent example for tenant companies - and several companies have 'graduated' from the BioEscalator and expanded to larger premises on the Oxford Science Park. The incubator acts as a focal point for the entrepreneurial biosciences community in Oxfordshire. In fact, the success of the model has led us to plan a BioEscalator2.

To give one illustration of its effectiveness, the BioEscalator has generated several projects with direct relevance to COVID-19. There is a national and global race to identify a fast, accurate, accredited and affordable test for COVID-19. Again our academics are in the forefront of the race and I know that people across the University, the city and the country are willing them on. We are both developing tests ourselves and (thanks to the work of Professor Derek Crook and his team) evaluating tests developed by others. The University has committed to deploying such a test once one is available.

The Strategic Plan

PHILANTHROPY

The historian Miriam Beard wrote that 'the results of philanthropy are always beyond calculation.' She was right, of course. Out of the rocky gully of the pandemic has gushed a spring of kindness, generosity and goodwill. This is particularly apparent in the gifts of smaller donors to our coronavirus research, who have collectively given well over £100,000. Of the £27.6 million donated in response to the pandemic, £16 million is going to medical research, £6.1 million to endow posts in vaccine research and £5.6 million for a planned new Centre for Pandemic Preparedness, which we hope to establish in the wake of the pandemic.

We have also received some extraordinarily generous individual donations. The transformational gift of £80 million from the Reuben Foundation for our newest Oxford college stands out. Reuben College is due to welcome its first graduate students in autumn 2021, thereby meeting the commitment made in the Strategic Plan to open at least one new college within five years. The college aims to generate novel insights into the biggest questions of our time by bringing academics and graduate students from traditionally different disciplines together. The college's initial research themes are: Artificial Intelligence and Machine Learning; Environmental Change; and Cellular Life, which includes ongoing work in understanding the current pandemic. The gift to Reuben College further expands the existing Reuben Scholarship Programme, which was established in 2012 for disadvantaged undergraduate students.

ACCESS

This brings me to the subject of access, on which we have also made very significant progress this year. 68% of British undergraduate students starting in Oxford this term were educated in state schools. That's a 6% increase on last year and an increase of 13% over five years ago. We do not yet have this year's figures, but between 2015 and 2019 the presence of BME students in our student community rose from 14.5% to 22%. This year we also had a 4% increase in the percentage of students coming from the two most socially disadvantaged areas (ACORN 4 and 5), who now make up 16% of the entering class, up from 8.6% five years ago. These are stunning figures and a testament to the extraordinary work by dedicated admissions tutors and admissions officers across the collegiate University.

This year we unveiled the Oxford-Arlan Hamilton and Earline Butler Sims Scholarship - our first dedicated, fully funded scholarship at undergraduate level for Black British students from disadvantaged backgrounds. We have also agreed to introduce a BME track in the UNIQ and UNIQ+ programmes.

We continue to work on building digital resources to support young people, including UNIQ Digital, Target Oxbridge and Oxplore. All of these have reached out during the pandemic to help prospective students, particularly those from underrepresented backgrounds, who might not initially have considered Oxford to be a place that would welcome their talents and where they would feel part of our community. Opportunity Oxford - which aims to help bridge the gap between school and university for such students - ran for the first time this year with 100 participants, a number that we plan to double by 2022.

Having made such progress on undergraduate admissions we are increasingly turning our attention to recruiting a more diverse student body at postgraduate level. We have made progress. Our new endowment matching scheme, known as GEMS - the Graduate Endowment Matched Scholarships - has led to the creation of 30 new graduate scholarships in its first round. Further rounds will take place in the coming year. We have launched a Crankstart Master's programme, which will provide financial assistance to selected scholars continuing their studies at master's level. Thanks to the generosity of the Crankstart Foundation we are also expanding our summer residential programme for prospective graduate students, UNIX+. We are also delighted to

announce the launch of a new initiative, Black Academic Futures, with the creation of ten new scholarships for Black British postgraduate students for entry next academic year. We plan to expand this programme in the years to come.

RACE EQUALITY CHARTER

This brings me to the Race Equality Charter. 2020 has been an important year for global demonstrations against police injustice and other aspects of systemic racism. It is heartening that, in the midst of a pandemic that confined so many people to the inwardness of their homes, people of all races have looked outward, feeling so passionately that we need to move forward in tackling racial injustice that they have gathered and marched in large numbers to affirm that belief. I want to affirm here my own deep personal and professional commitment to the cause of racial equality and to making the University of Oxford as diverse, inclusive, fair and respectful an institution as befits a modern, world-leading university.

In my younger days, I was heavily involved in the Anti-Apartheid Movement in Ireland and I have marched myself on many occasions both for and later with Nelson Mandela to oppose the political oppression of Black people. I was thus particularly pained last spring when words were attributed to me that I have never spoken, and when certain newspapers sought to stoke tension within this university and beyond. While there may be internal debate as to whether we retain, reinterpret, replace or mothball particular historical objects that reflect the legacies of colonialism - we are absolutely united in our condemnation of racism and in our determination that it will play no part in Oxford's future.

To that end, we have stepped up our actions to reflect our shared belief that ending racism requires not merely an absence of prejudice, but a continuous presence of mind with regard to racial equality. Our current and planned actions include using our application for renewal of our Race Equality Charter Mark as a framework for conversations about race across the University and for discussions of practical steps we can take. I know that many of these discussions are already taking place within the divisions and GLAM but I would like to see a University-wide task force convene to engage, to listen, to share ideas and together to make recommendations for ways that we can address the under-representation of racial minorities at all levels - especially the most senior levels - within the University. I have asked Professors Anne Trefethen and

Martin Williams, Pro-Vice Chancellors for People and Education respectively, to cochair this task force.

As well as increasing the numbers of ethnic minority staff and students, the well-being of those students and staff is also high on our agenda. We have increased the number of BME counsellors; we have introduced new online training modules on race inequality; and we are working to ensure greater BME representation on all committees. But there is much more that we can do together.

Our community engagement programmes are working to increase inclusion of Oxford's local BME community in the University's activities, and efforts are ongoing to encourage routine visits by Oxford city primary school children. In terms of resourcing and organisation, TORCH'S race and resistance programme provides a focus for research, while funding is available through the Diversity Fund, the Van Houten Fund and the John Fell Fund to increase resourcing for BME-focused research and other related activities. I am mindful of the writer James Baldwin's words: 'History... does not refer merely, or even principally, to the past...on the contrary, the great force of history comes from the fact that we carry it within us...and history is literally present in all that we do.' In Oxford, we are surrounded by history in our architecture, landscapes, dining halls, libraries and chapels. We cannot wholly change that historic landscape, but we can address the history we carry within us. We can acknowledge its presence in all we do, and aim with personal integrity and collective effort to improve the future.

The Role of Oxford in the World

At a time when physical connections with colleagues near and far are difficult, on the eve of severing our ties with the European Union, it is worth reflecting on our role in the world, on our international connections, and on how much a part of our DNA they are, always have been, and always must be. Indeed one could argue that a university exists to enable connections, to investigate them, to understand them; that a university is the spiritual home of the idea that no problem, no subject, no historical period, no country and no person exists in isolation.

The value of internationalism – of a connected, collaborative, coherent approach to the shared problems of the world – has never been more apparent than in the current crisis, where sharing data and expertise freely and openly has quite literally translated into saving lives. Sadly, this is also a moment when internationalism

is routinely scorned by governments intent on pushing the line that power lies in protectionism and identity in isolation.

Universities, in my view, have an ethical and intellectual responsibility to demonstrate the falsity of the logic that exiles blame, scapegoating outsiders, and withdrawing from international agreements that hold nations to the high standards of a joint account. We can also model the power of collaboration. The pandemic has highlighted the vital role played by universities in meeting global emergencies and finding solutions to problems at a speed and on a scale for which national governments often find themselves practically unprepared. We have the expertise, the experience, the infrastructure and the existing international networks to join the dots, sometimes before they become clusters.

Across the University, more than 500 research staff have been working on COVID-19, most with at least a degree of international collaboration. Professor Horby, who chairs the UK's New and Emerging Respiratory Virus Threats Advisory Group, has been collaborating with the World Health Organization since early January to develop an international database of COVID-19 cases, which is hosted on servers at Oxford. Tao Dong of the Nuffield Department of Medicine has been working with the Chinese Academy of Medical Sciences to gain a better understand of the course of the disease at a genetic. molecular and cellular level. Wei Huang and Zhanfeng Cui of Engineering Science have been developing a new COVID-19 test that requires only a heat-block and can be seen with the naked eye, making it especially suitable for use in rural settings.

Professors Nick Day and Guy Thwaites have been involved in trials of antimalarial drugs in Thailand and Vietnam to protect health workers in the region from COVID-19, while Professor Richard Maude has been working with the Royal Thai Government, among multiple other actors, to model human movement restrictions to control COVID-19 spread in Thailand, using mobile phone data.

In Africa, the Oxford Vaccine Group has collaborated with the University of Witwatersrand on the first COVID-19 vaccine trial on the continent. At the same time, the group began vaccine trials in Brazil, in collaboration with the Federal University of São Paulo. Meanwhile Nuno Faria of Zoology has been co-ordinating the CADDE project in Brazil, which aims to detect outbreaks before they become pandemics, through rapid generation of genomic data. Professors Christophe Fraser and David Bonsall have provided European governments with evidence to support the feasibility of an instant contact-tracing mobile application. Dr Moritz Kraemer has been working with researchers at Harvard Medical School and elsewhere to produce a real-time map of all confirmed cases of COVID-19. Professor Trudie Lang has created an area on the Global Health Network supporting evidence generation by pooling protocols, tools, guidance and research standards.

In the Social Sciences, the Blavatnik School of Government has compiled a Government Response Tracker that systematically collects information from over 180 countries on several different common policy responses to the pandemic. Our international connections permeate every part of this university.

We are all aware that 2021 will see the practical effects of Brexit. Like family bereavement, it is something one can prepare for, for many years, and yet find quite shattering when it actually happens. The University of Oxford is determined to support all those in our community whose lives and research will be practically affected by the coming changes and continuing uncertainties. I want to reiterate the University's, and my personal, commitment to those members of staff who do not hold British passports and their families, as well as a wider commitment to maintaining and strengthening our many ties and partnerships with Europe and the global research community.

Freedom of Speech

Universities have a unique ability to generate, gather and test ideas from leading researchers in multiple disciplines, producing concrete benefits for the common good. The immense value of the University of Oxford to society has never been more obvious than in these testing months of public fear, restriction and rapid change to which we are all still adjusting. A more subtle, yet equally vital, role that universities play is to champion free speech and provide a platform where diverse, competing modes of thought and opinion can be openly espoused and examined.

Freedom of speech has come under worrying strain in recent times from noplatforming campaigns and from social media, where cascading catcalls, threats and other kinds of trolling can deter even the hardiest from canvassing an unpopular view. Polling from the Policy Exchange on academic freedom suggests that students are becoming warier of expressing views that they perceive to be controversial. Nevertheless, a significant portion of those polled also said they wanted to learn in an environment in which they were free to hear diverse views. I am strongly committed to maintaining Oxford's proud tradition of free speech and academic freedom of expression, modelling a society that is tolerant, open-minded, willing to listen even where it doubts or disapproves. There is no doubt that, where public discourse supports free speech within universities, we also uphold its value beyond the University: this is another crucial way in which Oxford contributes to the wider world.

At a time of ever-stricter border control, the University must be a bastion of intellectual free movement. We must foster debate, diversity, tolerance and creativity. We must keep reaching outward. At a time when physical touch is risky, we are more important than ever in allowing people's minds to meet, their words to travel, and their work to break down those barriers that prevent positive change.

Honours

The elevated place achieved by the University in the rankings is entirely due to the work of our colleagues. It is a pleasure to acknowledge just a few of the numerous members of our academic community who have won honours and awards over the year.

Just an hour ago the Nobel Prize in Physics was awarded to Roger Penrose, Emeritus Professor of Mathematics and Fellow of Wadham, who shares the prize with Andrea Ghez, to whom we gave an honorary degree this year, and Reinhard Genzel.

In November the University was awarded the Queen's Anniversary Prize for the development of innovative poverty measurement for more effective policymaking. Seven members of the University were recognised in the New Year's Honours List for 2020. Ten of our colleagues were elected to Fellowship of the British Academy and six to the Royal Society. Four of our researchers received Royal Society awards for outstanding contributions to science and medicine and it was announced that three British Academy Global Fellows were joining Oxford. A team of engineers from Oxford were awarded the President's Special Award for Pandemic Service by the Royal Academy of Engineering. Four of our postgraduate students also received the rare 2020 Rising Star awards. I congratulate you all.

One Oxford and the Year Ahead

Oxford has sometimes been compared to a federation of states within a nation. When internal competition trumps cooperation it weakens our identity. But when we stand united in aims and policies with the shared interests of our whole community in mind, we strengthen every aspect of our collective body and our voice in the world.

One could not hope for a better illustration of the power and importance of One Oxford than the manner in which the collegiate University has come together these past six months, to work on the fiendishly complicated tasks of responding and adapting to the constraints of COVID-19, and planning for an academic year unlike any we have faced in modern times. Colleagues in colleges, departments and the central University have volunteered their time, sacrificed holidays and worked through weekends in order to protect the mission of the University and the health of all who study and work here.

I would like to exhort us all to continue in this spirit of working together for the common good as we enter a new and enormously challenging academic year.

Our first goal for the year to come must be to protect the research and teaching that is our reason for being. To achieve that goal we must protect the health of our students and our staff. The pandemic has exposed the deep inequalities in our society but also the deep inequalities in our community. For some studying and working from home is comfortable and enjoyable, for others it is exceedingly difficult. As a university, we cannot redress all these inequities, but we can do our best to support everyone in our community through policies that are generous, coherent and consistent; policies that balance our responsibilities to one another, to the University, to the city, and to future generations; policies that are developed through a process that is evidence-based, transparent and consultative; and policies that are constantly and openly communicated.

Sustainability

While most of our energies will necessarily be engaged in adapting to the evolving impact of the pandemic, we must not lose sight of our other plans for the year. I have already mentioned our plans to work for a more diverse and inclusive community. We also intend to advance our work on sustainability.

Perhaps the clearest lesson coming from the pandemic is the folly of ignoring known

risks. There have been eight near-pandemics since 2000 and yet we were unprepared when finally one struck. The risks of climate change are becoming daily more apparent; we cannot afford to ignore the warning signs. This time last year I suggested that we examine our practices and our targets on sustainability and ask ourselves if they are enough. We convened a Sustainability Roundtable in November, created a working group, and conducted a consultation with staff and students. The answer was a resounding 'No'.

In April we announced landmark plans, based on the Oxford Martin Principles for Climate-Conscious Investment, both to divest formally from the fossil fuel industry and to engage with fund managers to request evidence of net zero carbon business plans across their portfolio. Throughout the year the working party and the University's Sustainability Team have been developing a draft Sustainability Strategy setting the ambitious target of achieving net zero carbon and biodiversity net gain by 2035. There will be a consultation on this strategy, and the policies required to meet it, in Michaelmas term and we hope to have a new strategy, in which we can all take pride, in early 2021.

Celebrations

In addition to doggedly dealing with every challenge COVID-19 throws our way, and forging ahead with policy initiatives on access, diversity and sustainability, I hope we will make time this year to celebrate. And we have much to celebrate. We hope we will be able to celebrate having developed an effective vaccine. We hope we will be able to celebrate more life-saving discoveries from the RECOVERY trials. We hope we will be able to celebrate other cardinal contributions by our academics to the battle against COVID-19.

We know that we will be able to celebrate the 400th anniversary of the Botanic Garden and the 700th anniversary of the University Library. We know that we will be able to celebrate the centenary of the matriculation of women at Oxford. 100 years ago tomorrow, October 7, 1920, women were admitted to full membership of the University. Martin Luther King famously said at the National Cathedral in Washington: 'The arch of the moral universe is long but it trends towards justice.' It took a very, very long time, many hundreds of years in fact, for women to earn the right to an Oxford degree. We plan to celebrate loudly and jubilantly, from this month on, though perhaps not as loudly as originally

planned as so many of the celebrations will have to be virtual.

It is a profound personal pleasure for me to be able to announce that one of the initiatives that will mark this seminal anniversary is the inauguration of the Hillary Rodham Clinton Chair in Women's History. The first holder of this statutory chair is Professor Brenda Stevenson, a noted historian of African American women. For far too long women have been written out of history. Thanks to the generosity of the 60 donors who have endowed this professorship, and to the extraordinary woman who lent it her name, Oxford will be at the forefront of educating generations of historians who will write women right back in, where they have always belonged.

It seems apt that 2020 also sees the graduation from Oxford of Malala Yousafzai, a campaigner for women's right to education who survived an assassination attempt by the Taliban and became the youngest Nobel Peace Prize laureate. In reflecting on this year of difficulty and oddity, of rapid adaptation to unwelcome new realities, I am inspired by the young people around us who have risen to the occasion with strength and resilience and who are meeting the future with courage and imagination. The University does not look precisely the same as it did last year. There are Perspex screens and one-way systems. We are sitting in socially distanced positions and night-life is not (I am told) what it was.

But when I look around at what this year has brought to the University, what I am most aware of is not increased distancing, but enhanced community. People have pulled together during this pandemic: as researchers, as teachers, as colleagues, as neighbours and as friends. Whether they have been buying groceries for an elderly neighbour, providing extra support for students who couldn't go home, recording lectures with tumbling toddlers in the next room, or working day and night to find a vaccine, everyone in the community of this extraordinary university has played a part in our continued health and success. I remain enormously proud to be your Vice-Chancellor.

Congratulations on all you have achieved and all you have demonstrated this year. The success of our medics shows how fortunate the University is to be sure footed, through its breadth of long-term experience; well connected, though its global research partnerships; and nimble, able to react quickly without always having to wade through innumerable committees before decisions can be made. We aim to remain surefooted, well-connected, and nimble in the future.

Thanks to the calibre of the work of our colleagues, the research profile of the University is renowned across the globe. I believe we owe it to ourselves and to others in the Higher Education sector to use this moment to make the case for research universities, to advocate for better funding of research. I doubt there is anyone in this country today who doubts the value of our expertise. I think we should also use this moment to emphasize the role we play not only in finding vaccines and graduating future scientists, but in maintaining a rich ecology of thought and study where ideas grow from all sides and all subject areas, cross-fertilise, bloom, set seed. Now is the time to advocate for the broadest possible understanding of the 'value' that universities generate. It should not be defined by highly paid graduate jobs, or patents, or spin-out companies, valuable as these all are. Universities also generate value through being networks that power enlightenment, that enable a richer sense of relationship, of selfhood in community, of global responsibility.

This crisis has taught us that as a research community, we can act extremely fast to solve urgent problems with international reach: we can rally funds, we can bring teams together, we really are - world leading.

This crisis has taught us, too, about the enormous strength and humanity in our social community. People have gone out of their way to help students who could not go home, to run errands for those who were self-isolating, to make a wine delivery to a colleague home alone. You have risen to this challenge with all the ingenuity of brilliant thinkers and all the compassion of a family of scholars bound by ties of affection and respect.

I have every confidence that these same qualities will sustain us as we navigate the challenges of the year to come.

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, as well as the retirement of members who have retired from administrative, library or service posts in the University: Martin Ackland, Support Team Manager, Biochemistry; Professor Oreste Acuto, Sir William Dunn School of Pathology; Professor Robert Adlington, Lecturer in Organic Chemistry and Fellow, Lady Margaret Hall; Dr Anita Avramides, Associate Professor of Philosophy; Simon Bailey, Keeper of the University Archives, Bodleian Special Collections; Dave Baker, Head of the IT Learning Centre; Professor Alison Banham, Director of the Monoclonal Antibody Unit and Senior Research Fellow, Clinical Laboratory Sciences; Dr David Barron, Associate Professor of Management Studies, Saïd Business School; Ian Barton, Clinical Trial Service Unit; Jill Barton, Clinical Trial Service Unit: Dr Kunal Basu. Senior Teaching Fellow in Marketing, Saïd Business School; Professor Peter Battle, Fellow and Tutor in Inorganic Chemistry, St Catherine's; Professor Tony Bell, Atomic and Laser Physics Senior Research Fellow and Professor of Physics; Clive Berry, Clinical Trial Service Unit; Dr Nigel Berry, Senior Assistant Registrar (Governance), Planning and Council Secretariat; Professor John Blair, Professor of Medieval History and Archaeology; Robert Bouse, Projects Accountant, Finance; Steven Bowden, Development Officer, Blavatnik School of Government; Mark Bowen, Head of Supplier Management, Purchasing; Professor Philip Candelas, Rouse Ball Professor of Mathematics; Dr Yunhong Cao, Postdoctoral Researcher, Oncology; Dr Martin Carter, Systems Administrator, Physics; Dr Kam Yuen Chan, Primary Care Health Sciences; Garry Cooper, Front of House Manager, Bodleian Enterprises; Jeremy Coote, Curator and Joint Head of Object Collections. Pitt Rivers Museum: Professor Vincent Crawford, Drummond Professor of Political Economy; Dr Alison Crossley, Senior Research Fellow, Materials; Professor Stephen Davies, Waynflete Professor of Chemistry, University Lecturer in Chemistry and Fellow of New College; Professor Sir Peter Donnelly, Professor of Statistical Science; Lyn Dziewulski, Biomedical Services; Professor Stuart Ferguson, Professor of Biochemistry and Senior Research Associate; Dr Roger Firth, Associate Professor of Education (Geography); Alice Fuller, Primary Care Health Sciences; Professor Robert

Gildea, Professor of Modern French History; Trevor Godfrey, Engineering Science Instrumentation Technician; Dr Andrew Graham, Facilities Manager and Safety Officer, Clinical Laboratory Sciences; Professor Jane Green, Professor of Epidemiology, Cancer Epidemiology Unit; Professor Adrian Harris, Professor of Medical Oncology; Catherine Hartshorne, Specialist Mentor, Disability Advisory Service; Professor Tran Hien, Professor of Tropical Medicine and Director of Clinical Research, Clinical Research Unit, Vietnam; Professor Guy Houlsby, Professor of Civil Engineering; Jenny Houlsby, Personal Assistant, Organic Chemistry; David Howell, Head of Heritage Science, Conservation and Collection Care; Alexander Huber, Metadata Service Coordinator, Bodleian Digital Library Systems and Service; Douglas Irvine, Systems Administrator, Bodleian Digital Library Systems and Services; Dr Christine Jackson, Associate Professor in History, Continuing Education; Marie Johansson, Mindfulness Based Cognitive Therapy Teacher and Coordinator. Psychiatry; Dr Lalit Johri, Senior Fellow in Executive Education, Saïd Business School; Maurice Keble-Smith, Head of Staff Student Workshop, Engineering Science; Professor Ewart Keep, Professor of Education, Training and Skills; Professor Robert Keller, Professor of Microeconomics Theory; Dr Marina Kurkchiyan-Banks, Associate Professor, Centre for Socio-Legal Studies; Dr Russell Leek, Facilities Project Officer, Clinical Neurology; Dr Graham Leeson, Oxford Institute of Ageing: Walter Mattli, Politics and International Relations; Isabel McMann, Reader Services Librarian and Weekend Duty Officer, Radcliffe Science Library; Dr Robert McNamee, Director, Electronic Enlightenment, Radcliffe Science Library; Dr Jane McNicholl, Associate Professor, Education; Rosie Mortimer, Head of Administration, Chemistry; Lynne Munro, IT Manager, Weatherall Institute of Molecular Medicine; Professor Ruth Muschel, Professor of Molecular Pathology; Professor James Neary, Professor of Economics; Dr Sylvain Phaneuf, Systems Manager and Compliance Manager, Medical Sciences Division; Michael Popham, Senior Librarian, Bodleian Digital Library Systems and Services; Professor Nicholas Proudfoot, Sir William Dunn School of Pathology; Juliet Ralph, Open Access Subject Librarian, Bodleian Information Skills; Dr Patricia Rice, Associate Head of Department (Research), Economics; Dr Andrew Riley, Senior Research Fellow, Medicinal and Biological Chemistry: Professor Kevin Roberts, Sir John Hicks Professor of Economics; Philip Rust, Estates Services; Dr Maria Salinas, Primary Care

Health Sciences; Dr Stefano Salvini, Senior Researcher, Engineering Science; Professor Pamela Sammons, Professor of Education; Professor Michael Searle, Professor of Earth Sciences; Professor Judith Sebba, Professor of Fostering and Education; Clive Shepherd, Apprenticeship Manager, Personnel Services; Professor Sally Shuttleworth, Professor of English Literature; Pauline Simpson, CBT Centre Administrative Officer, Saïd Business School; Charles Spencer-Jones, Capital Project Purchasing Manager; Derek Stacey, Gallery Manager, Pitt Rivers Museum; Dr Adrian Stokes, Director of Continuing Professional Development, Continuing Education; Professor Denis Talbot, Professor of Cancer Medicine; Dr Jeremy Taylor, Associate Professor of Human Anatomy; Anne Tennant-Eyles, Personal Assistant, Organic Chemistry; Dr Philippa Towler, Project Portfolio Manager, Atmospheric, Oceanic and Planetary Physics; Alison Trinder, Researcher Training Advisor, Mathematical, Physical and Life Sciences Division; Professor Fritz Vollrath, Research Professor. Zoology: Graham Waite. Risk and Insurance Manager (Research), Research Services; Professor Anthony Watts, Professor of Biochemistry and Senior Research Associate; Jonathan Webb, Social Sciences Divisional Finance Officer; Philippa Whitbread, Primary Care Health Sciences; Anthony Windscheffel, Pensions Officer, Finance; and Professor Jan Zielonka, Politics and International Relations.

This year the University community has lost valued colleagues whose early deaths have been a source of great sadness: Professor Vincenzo Cerundolo, Head of Investigative Medicine in the Investigative Medicine Division, Radcliffe Department of Medicine; Mr John Finney, Database Manager in the Nuffield Department of Medicine, Experimental Medicine Division; Professor Richard Sharpe, Professor of Diplomatic in the Faculty of History; Mr Andrew Teague, Biobanker in Experimental Medicine in the Nuffield Department of Medicine, Experimental Medicine Division; and Professor Stefano Zacchetti, Numata Professor of Buddhist Studies in the Faculty of Oriental Studies.

Finally, we pause to remember the contributions of those colleagues who have died in retirement over the past year: Dr Richard Acheson, Sir Jack E Baldwin, Mr Donald Barrett, Professor Wilfred Beckerman, Dr J Bithell, Miss Susan Bonnington, Mr D Bostock, Dr B Buck, Mr Stanley Buckingham, Professor Christopher Butler, Dr Vernon Butt, Mr Richard Calvert, Mr James Casey, Mr D Chamberlain, Dr J Coulton, Ms Margaret Croucher, Mr M J Day, Dr Peter Dickens, Miss Lesley Forbes (Harding), Mr Peter Garnham, Professor M Green, Professor (Jim) James Griffin, Professor Jasper Griffin, Mr (Ron) Horace Harre, Miss Yvonne Hibbott, Dr D Hopwood, Sir Michael Howard, Mr Henry Hyder, Mr Stephen Kemp, Mrs Vroni Knott-Hunz, Ms Christine Lees-Baxter, Dr Brian Loughman, Mr John Lucas, Dr Virginia MacNeill, Professor Peter Matthews, Professor Lord Robert May of Oxford, Dr Christopher McCready, Mr (Brian) Bernard McGuinness, Professor Ian Michael, Mr Jeremy Montagu, Dr Christine Morris, Mrs K Mullins, Mrs Jean Naish, Mr Anthony Nicholls, Mr Mark Norman, Dr Margery Ord, Professor Stephen Rayner, Dr Harold Reading, Professor Donald Russell, Dr Peter Savill, Mrs Eileen Shaw, Mr Michael Shotton, Mr Barry Silcock, Mrs Audrey Smith, Mr Michael Stanley, Mr W A Sutherland, Professor Sir Malcolm Keith Sykes, Mr E Taylor, Mr Philip Townsend, Dr Ruth Van Heyningen, Dr Jon Whiteley, Mr John Wilkinson, Mr (Bill) William Williams, The Revd Canon Trevor Williams and Mr Robert Wilson.