

BLUEPRINT

Staff magazine for the University of Oxford | September 2016



CHEMISTRY'S ORGANIC GROWTH | SECRETS OF SUCCESSFUL SPELLING | OXFORD TIME



NEWS IN BRIEF

◆ Oxford has topped the *Times Higher Education* World University Rankings for 2016–17 – the first time in the 13-year history of the rankings that a UK institution has secured the top spot. The rankings judge research-intensive universities across five areas: teaching, research, citations, international outlook and knowledge transfer. In total UK institutions took 91 of the 980 places, with the University of Cambridge (fourth) and Imperial College London (eighth) also making the top ten.

◆ The University and local NHS partners have won £126.5m to support medical research. The money, from the National Institute for Health Research, includes £113.7m for the existing University of Oxford/Oxford University Hospitals Biomedical Research Centre, and £12.8m for a new Biomedical Research Centre specialising in mental health and dementia, run by the University and Oxford Health NHS Trust. The two BRCs will work closely together, and with the Oxford Academic Health Science Centre, to develop innovations in areas such as personalised medicine, working with big data, and tackling the problems of multiple long-term conditions and dementia.

◆ A pioneering centre for the study of nanoscale materials has opened at the Harwell Science and Innovation Campus. The electron Physical Science Imaging Centre (ePSIC) is the result of a collaboration launched in 2014 between the University, the UK's national synchrotron science facility, Diamond Light Source, and the speciality chemicals company Johnson Matthey. The centre contains two electron microscopes for the physical sciences, designed to provide scientists with atomic-level images which will significantly enhance the development of new materials.

◆ Harris Manchester College has raised £1m for student support through an Oxford to Cambridge bike ride. Eight members of the college undertook the ride on 12 September, following an 86-mile route which took in Islip, Marsh Gibbon, Woburn and Gamlingay. The group, headed by Principal Dr Ralph Waller and accompanied by the Vice-Chancellor and her husband Dr Thomas Jevon, who is a senior

research fellow at the college, set off at 6.30am and arrived at Homerton, Harris Manchester's twin college, in the afternoon.

◆ The University's phone system is being replaced by a new service called Chorus. The service is being rolled out on a building-by-building basis between autumn 2016 and spring 2018. Chorus will deliver replacement phones together with access to a web portal, which will provide additional functionality such as managing your voicemail, accessing your call history, and sending and receiving instant messages. Details at <https://projects.it.ox.ac.uk/icp>.

◆ The University has opened a new nursery on the Old Road Campus in Headington, bringing the total number of University-owned nurseries to five. The Triangle Nursery has 98 full-time-equivalent places for children aged between 4 months and 5 years. For information on how to apply for a place at one of the University nurseries or one of the community nurseries across the city with University-supported places, visit www.admin.ox.ac.uk/childcare.

◆ Academic Services and University Collections (ASUC) has changed its name to Gardens, Libraries and Museums (GLAM). The GLAM group comprises the Bodleian Libraries, the University's museums and the Botanic Garden, and is led by Pro-Vice-Chancellor Professor Anne Trefethen. The role of GLAM is to represent these areas in the University's governance structure and to coordinate budgets, policy and strategy in support of the University's teaching, research and widening engagement activities and its heritage and legal responsibilities.

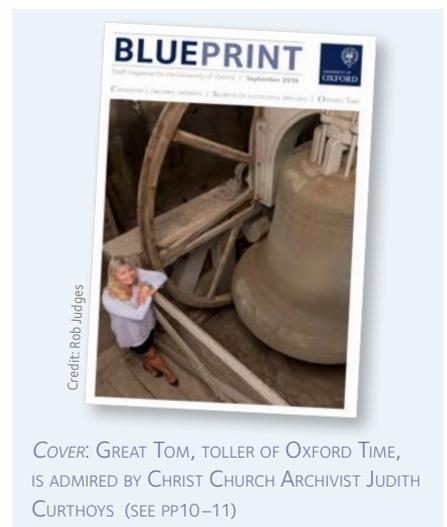
◆ The Museum of Natural History has found a new home for its Utahraptor model. After a public call was put out for a new home for the four-metre-long dinosaur, over 200 submissions were received from across the world. The winning entry was from the Children's Hospital at the John Radcliffe Hospital, where the model will take up residence shortly.



FROM TOP: THE VC, RALPH WALLER AND FRIENDS RIDE TO CAMBRIDGE; NEW NURSERY OPENS; THE UTahraptor HEADS FOR THE JR



◆ Building work has started on the new £8.5m Acer Nethercott Sports Hall at Iffley Road Sports Centre. The sports hall, which will be sited next to the track where Roger Bannister broke the four-minute mile, will include four courts, changing facilities and a multi-purpose activity room for fitness classes that will be open to the community. It is hoped the hall will also incorporate a light smart floor, which will allow LED floor markings to be changed at the touch of a button.



COVER: GREAT TOM, TOLLER OF OXFORD TIME, IS ADMIRER BY CHRIST CHURCH ARCHIVIST JUDITH CURTHOYS (SEE PP10–11)

RESEARCH ROUND-UP



◆ New research suggests that Polynesians, Europeans and the Chinese have had a penchant for black pigs because of the novelty of their colour. Pigs have played an important cultural role in Hawaii since Polynesian explorers first brought them to Hawaii 800 years ago. Researchers led by Professor Greger Larson examined the DNA sequences of modern feral Hawaiian pigs and discovered that a novel mutation is responsible for their black coats – a significant finding, because the pigs were expected to have either the Asian or the European genetic mutation leading to their black colour. The study, published in the journal *Open Science*, says wild pigs would naturally have camouflaged coats. However, human societies have independently selected domesticated pigs that express the trait of black coats on at least three separate occasions.

◆ Our brains have a detailed picture of our hands and fingers, and that image persists even decades after an amputation, researchers have found. This new information could have implications for next-generation prosthetics, controlled directly from the brain. Dr Tamar Makin and Sanne Kikkert, from Oxford's Hand and Brain Lab, used an ultra-high-power MRI scanner to look at brain activity in two people who had lost their left hand through amputation 25 and 31 years ago but who still experienced vivid phantom sensations, and 11 people who retained

both hands and were right-handed. Each person was asked to move individual fingers on their left hand. While there was less brain activity related to the left hand in the amputees, the specific patterns making up the composition of the hand picture still matched well to the two-handed people in the control group, overturning an established theory in neuroscience.

◆ Researchers at the Oxford-led hub for Networked Quantum Information Technologies (NQIT) have achieved a quantum logic gate – the fundamental building block of quantum computers – with record-breaking 99.9% precision. That is the benchmark required theoretically to build quantum computers, which have the potential to dwarf the processing power of today's conventional computers. Logic gates place two atoms in a state of quantum entanglement – a phenomenon described by Einstein as 'spooky' but which is at the heart of quantum technologies. Entanglement occurs when two particles stay connected, such that an action on one affects the other, even when they are separated by great distances. Professor David Lucas, of Oxford's Department of Physics, described the new record as an 'important milestone' on the road to quantum computers.

◆ A joint Oxford and UCL team has identified part of our brain that helps us learn to be good to others. The discovery

could help understanding of conditions such as psychopathy, where behaviour is extremely antisocial. While being scanned in a MRI machine, volunteers had to work out which symbols were more likely to give them, or someone else, a reward. Researchers, led by the Department of Experimental Psychology's Dr Patricia Lockwood, found people readily learn to make choices that benefit others, but not as quickly as they learn to benefit themselves. They also identified the brain area involved in learning to get the best result for others – the subgenual anterior cingulate cortex. Interestingly, people with higher empathy also showed increased activity there when benefiting others.

◆ A high-tech scanner acquired by the Faculty of Classics and the Bodleian Libraries has been used to uncover the details of a rare Mexican book dating from before the colonisation of the Americas. Researchers from the Bodleian and the Netherlands found the book, known as a 'codex', behind a layer of plaster and chalk on the back of a manuscript held in the Bodleian. The hyperspectral imaging scanner was bought in 2014 after the Bodleian and Classics made a bid to the University's John Fell Fund. Oxford classicist Dr Charles Crowther says it will allow academics from across the humanities 'to resolve details that previously have been unattainable and to bring to light significant new texts'.

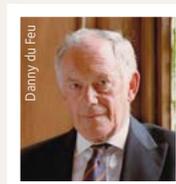


HYPERSPECTRAL IMAGING REVEALS RARE TEXT

► For more information, visit www.ox.ac.uk/news and www.ox.ac.uk/staffnews

PEOPLE AND PRIZES

Dr Charis Antoniades, associate professor of Cardiovascular Medicine, has been awarded the Outstanding Achievement award of the European Society of Cardiology. His current research interests include the interplay between adipose tissue and vascular/myocardial redox signalling.



Professor Peter Atkins, Supernumerary Fellow of Lincoln College, has won the 2016 Grady-Stack award for science journalism, presented by the America Chemical Society for interpreting

chemistry for the public. Professor Atkins is the author of more than 70 books, both seminal textbooks and books aimed at increasing public understanding of chemistry.



Jo-Anne Baird, Pearson Professor of Educational Assessment and Director of Oxford's Department of Education, has been appointed

Standing Specialist Advisor on Education to the Select Committee on Education. The Education Committee is appointed by the House of Commons to monitor the policy, administration and spending of the Department for Education and its associated arm's-length bodies, including Ofsted and Ofqual.



Dr Manuel Berdoy of Oxford University Biomedical Services has been awarded the Sir Patrick Moore Award by the RSPCA for outstanding

contributions to the understanding of laboratory rodent behaviour and reducing the numbers of animals used in experiments through better design and statistical analysis.



Elleke Boehmer, Professor of World Literature in English and Director of The Oxford Research Centre in the Humanities (TORCH), has won a

2016 ESSE Book Award for Literatures in the English Language, presented by The European Society for the Study of English, for her book *Indian Arrivals 1870–1915: Networks of British Empire*.

Barbara Casadei, Professor of Cardiovascular Medicine, has been elected President of the European Society of Cardiology; she is the first woman to be elected to the post.

Ben Davis, Professor of Chemistry, has been awarded the Ronald Breslow Award for Achievement in Biomimetic Chemistry, one of the American Chemical Society 2017 National Awards.

Alison Etheridge, Professor of Probability, has been named a Fellow of the Institute of Mathematical Statistics. The accolade recognises her outstanding research on measure-valued stochastic processes and applications to population biology, and also her international leadership and service to the profession.

Alex Halliday, Professor of Geochemistry, has won the American Geophysical Union's 2016 Harry H Hess Medal for his outstanding achievements in research on the constitution and evolution of the Earth and other planets.

Angus Kirkland, Professor of Materials, has been awarded the quadrennial European Microscopy Award for Materials Sciences for his outstanding achievements in theoretical and instrumental areas such as pioneering exit-wave reconstruction, EM ptychography and detector design. He has also been awarded the Royal Microscopical Society Alan Agar Medal for Electron Microscopy 2016 in recognition of his expertise in this field.



Dr Franziska Meinck of the Department of Social Policy and Intervention has been awarded the C Henry Kempe Award by the International Society for

the Prevention of Child Abuse & Neglect. The award, which recognises a young professional or researcher for outstanding contributions to the field of child abuse prevention, is primarily for her work in South Africa as part of the Parenting for Lifelong Health Network.

Gero Miesenböck, Waynflete Professor of Physiology, is one of the three joint winners of the Massry Prize 2016. The prize, which recognises outstanding contributions to the biomedical sciences and the advancement of health, is awarded for his work on optogenetics.

Ian Pavord, Professor of Respiratory Medicine, has been awarded the ERS Gold Medal in Asthma by the European

Respiratory Society. His research interests lie in the clinical aspects of inflammatory airway diseases and he pioneered the use of non-invasive measures of airway inflammation in the assessment of these conditions.

Alan Percy, Head of the University Counselling Service, has become Chair-elect of the Heads of University Counselling Services. He will chair the organisation for the 2017/18 and 2018/19 academic sessions.



Emma Potts, Academic Registrar, has been appointed as Chair-elect of the Academic Registrars' Council. She will spend this academic year as Vice-

President and assume the chairmanship next year, for a two-year period.



Lyndal Roper, Regius Professor of History, has been awarded the Gerda Henkel Prize for her 'trailblazing studies on social, gender, and psychological history as well as the history

of the body [which] stand out for their theoretical acumen, masterful command of an impressive wealth of source materials, and their superb prose'.

LASKER AWARD



Professor Sir Peter Ratcliffe has won the Lasker Award, one of the most prestigious prizes in medicine, for his work understanding

the mechanisms by which cells sense and signal hypoxia (low oxygen levels).

Hypoxia is an important component of many human diseases including cancer, heart disease, stroke, vascular disease, and anaemia. A key success was defining the oxygen sensing and signalling pathways that link the essential transcription factor, hypoxia inducible factor (HIF), to the availability of oxygen.

He receives the award jointly with US researchers William G Kaelin and Gregg L Semenza, who worked with him to understand the processes.

BRITISH ACADEMY ANNOUNCES NEW FELLOWS



Professor Sir David Cannadine, Visiting Professor of History at Oxford, Editor of the *Oxford Dictionary of National Biography*, and Dodge Professor

of History at Princeton University, is to be the 30th President of the British Academy. He will take up office in July 2017 for a four-year term.

◆ Eight other academics affiliated with Oxford were among those recently elected as Fellows of the British Academy.



Stephen Broadberry, Professor of Economic History and professorial fellow of Nuffield College, researches the development

of the world economy from 1000AD to the present, using a historical national accounting approach to shed light on the great divergence of productivity and living standards between Europe and Asia. He also studies comparative growth and productivity performance during the 19th and 20th centuries, and wars and economic performance.



Patricia Clavin, Professor of International History and fellow of Jesus College, studies the history of international and transnational

relations in the 20th century, especially the relationship between international security and economic and financial stability, and the role played by international and regional (notably European) organisations such as the League of Nations.

Judith Freedman, Pinsent Masons Professor of Taxation Law, is also Director of Legal



Research at the Centre for Business Taxation (SBS) and a fellow of Worcester College. Her main research areas are tax avoidance, tax and corporate social responsibility, the taxation of small business and the relationship between taxation and accounting. She was awarded a CBE in 2013 for her contribution to tax research and policy.



Elizabeth Eva Leach, Professor of Music and fellow of St Hugh's College, is a musicologist and music theorist. Her research interests lie in songs, counterpoint, and singing, with a particular focus on medieval secular lyrics in French. She also studies music and philosophy, ideas of musical meaning, music analysis, music and gender, and music in literature.



Michael Macdonald, Research Associate in the Faculty of Oriental Studies and Khalili Research Centre and honorary fellow of Wolfson College, works

on the languages, inscriptions, and history of pre-Islamic Arabia and the ways in which literacy was used in the ancient Near East. He is currently academic director of the Online Corpus of the Inscriptions of Ancient North Arabia (OCIANA) Project which is making available over 40,000 inscriptions from ancient Arabia in an easily accessible online database.

Catherine Morgan, Senior Research Fellow at All Souls College and Professor of Classics and Archaeology, specialises in Classical archaeology of the Mediterranean, the Adriatic and the Black Sea; Greek



political organisation; Greek religion; island studies; and Archaic poetry. She was formerly Director of the British School at Athens.



Duncan Snidal, Professor of International Relations and fellow of Nuffield College, researches problems of international

cooperation and institutions – including international law and international organisations – with an emphasis on institutional design. His current projects focus on multi-partner governance of transnational production and the emergence of informal international organisations (such as the G20) as distinctive forms of international governance. He is co-founder and editor of the journal *International Theory*.



Fiona Williams is a Research Affiliate at Oxford's Centre on Migration, Policy and Society (COMPAS), as well as Emeritus Professor

of Social Policy at the University of Leeds. She researches gender, 'race' and ethnicity in social policy and also studies the employment of migrant care workers, the place of care in contemporary society; and how policy responds to this.

◆ In addition, **Justice Kate O'Regan**, former Judge in the Constitutional Court of South Africa and Visiting Professor at the University of Oxford, was elected an Honorary Fellow of the British Academy.

ZSL AWARDS

Oxford zoologists were amongst those honoured by the Zoological Society of London at its recent awards.

Peter Holland, Linacre Professor of Zoology, received the Frink Award – the ZSL's highest award – in recognition of his prolific research on the impacts of gene duplication which has helped shed light on the complex history of vertebrate evolution.

Kevin Foster, Professor of Evolutionary Biology, was one of three recipients of the ZSL Scientific Medal, which is awarded to individuals with the most distinguished 15 years of postdoctoral work in zoology. He was honoured for his work on social behaviours and evolution.

STIRLING PRIZE SHORTLIST

The Blavatnik School of Government and the Weston Library have both been shortlisted for the RIBA Stirling Prize, the UK's most prestigious architecture prize. The winner will be announced on 6 October.

The Blavatnik School has also won the award for the best use of civil engineering in the South East from the Institution of Civil Engineers, recognising both its appearance and its environmental credentials.

NEW HEADS OF HOUSE

Three new Heads of House take office this term:

CORPUS CHRISTI COLLEGE



Steven Cowley FRS, CEO of the UK Atomic Energy Authority, Director of the Culham Centre for Fusion Energy and part-time Professor of Plasma Physics at Imperial

College, London, becomes President of Corpus Christi College on 1 October.

Following an Oxford BA (Corpus 1978) and a PhD from Princeton University, Professor Cowley has had a distinguished career in theoretical physics with a particular interest in plasma physics and nuclear fusion, holding posts at Culham, Princeton, UCLA and Imperial. In 2012 he was awarded the Glazebrook Medal of the Institute of Physics for leadership in a physics context. He is a member of the Prime Minister's Council of Science and Technology.

NEW COLLEGE



Miles Young, Worldwide Chairman and CEO of Ogilvy & Mather, the international advertising, marketing and public relations agency and one of the

world's largest communications groups, has become Warden of New College.

Mr Young, who gained a degree in Modern History at New College, has had a distinguished career in advertising, joining Ogilvy & Mather in 1982 and holding senior positions in the London, Europe and Asia Pacific parts of the company before becoming CEO of Ogilvy & Mather Worldwide in 2008, based in New York, and then Chairman in 2009.

ST CROSS COLLEGE



Carole Souter CBE, until recently Chief Executive of the National Heritage Memorial Fund and Heritage Lottery Fund, has become the Master of St Cross College.

She began her career in the civil service and has over 20 years' experience of policy formulation and operational management in the Departments of Health, and Social Security and the Cabinet Office. She is also actively engaged in the charitable sector and is a trustee of Historic Royal Palaces; Creativity, Culture and Education; the Horniman Museum; and the National Communities Resource Centre. She is a Lay Canon of Salisbury Cathedral.

Mrs Souter has a BA in PPE from Jesus College, and an MA in Victorian Studies from the University of London; she is a Fellow of the RSA, the Society of Antiquaries, and a member of the Academy of Urbanism. She is an Honorary Fellow of Jesus College, and was awarded the CBE in 2011 for services to conservation.

ROYAL SOCIETY

RECOGNITION

Five Oxford academics are among the recipients of the Royal Society's 2016 awards and medals.



Jo Dunkley, Professor of Astrophysics, receives the Rosalind Franklin Award and Lecture for her research in the

cosmic microwave background and her innovative project to support and encourage girls studying physics.



Simon Myers, Professor of Mathematical Genomics, has been awarded the Francis Crick Medal and Lecture for

transforming our understanding of meiotic recombination and of human population history.



Elizabeth Robertson, Professor of Developmental Biology, has won a Royal Medal for her innovative work within the field of mouse embryology

and development, establishing the pathways involved in early body planning of the mammalian embryo.



Henry Snaith, Professor of Physics, has been awarded the Kavli Medal and Lecture for his discovery and development of perovskite solar

cells, which are expected to dramatically increase the efficiency and reduce the cost of solar energy.



Andrew Zisserman, Professor of Engineering Science, receives the Milner Medal and Lecture for his work on computational theory and

commercial systems for geometrical images and as a pioneer in machine learning for vision.

NOTICEBOARD



◆ **Sarah Whatmore**, Professor of Environment and Public Policy and the University's academic champion for public engagement with research, has been

appointed Pro-Vice-Chancellor (Education). A fellow of Keble College, she has previously held posts at UCL, Bristol, Leeds and the Open University. Her research is

broadly concerned with cultures of nature and the relationship between different forms of environmental knowledge and attachment, with a particular interest in the role of evidence and expertise in environmental governance today. She is a Fellow of the British Academy, of the Academy of Social Sciences and of the Royal Geographical Society and is an appointed member of the Defra Science Advisory Council and Chair of its Social Science Expert Sub-group.

VIEWFINDER FOUND

THIS BEAUTIFUL STAINED-GLASS WINDOW (P20) IS IN ST LUKE'S CHAPEL ON THE ROQ SITE. AS SHOWN, IT WAS RECENTLY REMOVED FOR RESTORATION DURING A TWO-YEAR CONSERVATION PROJECT ON THE 1865 BUILDING — THE FORMER CHAPEL TO THE RADCLIFFE INFIRMARY — WHICH REOPENED IN 2016 AS A FLEXIBLE SPACE FOR UNIVERSITY USE. THE GRADE II-LISTED GOTHIC CHAPEL WAS DESIGNED BY SIR ARTHUR BLOMFIELD (ALSO THE ARCHITECT OF THE BANK OF ENGLAND) AND BOASTS SOME NOTABLE STAINED GLASS. THE EAST WINDOW DEPICTS THE NINE MIRACLES OF HEALING AND THE RESURRECTION AND IS ATTRIBUTED TO THE FRENCH-RAIPHAELITE ARTIST HENRY HOLLAY, A RENOWNED STAINED-GLASS DESIGNER AND ILLUSTRATOR OF LEWIS CARROLL'S *THE HUNTING OF THE SNARK*.

ARRIVALS BOARD

BLAVATNIK PROFESSOR OF PUBLIC POLICY



Jonathan Wolff, Professor of Philosophy and Dean of the Faculty of Arts and Humanities at University College London, took up this post in the Blavatnik

School of Government on 1 September. He also became a fellow of Wolfson College.

Professor Wolff's research lies in the broad area of political philosophy, including the history of political thought (especially Marx), contemporary political philosophy (especially equality, distributive justice and disadvantage) and applied political philosophy (especially public policy and health).

CHICHELE PROFESSOR OF MEDIEVAL HISTORY



Julia Smith, Edwards Professor of Medieval History at the University of Glasgow, will take up this post in the Faculty of History on 1 October. She also becomes a fellow of All

Souls College.

Following early publications on Carolingian political and social history, Professor Smith's research today focuses on women and gender and on saints' cults and hagiography. Her current project, *Christianity in Fragments*, locates saints' relics at the intersection of material culture and the cultural history of medieval Christianity, thereby substituting objects for texts as the main field of enquiry. She is a Fellow of the Royal Society of Edinburgh.

FOSTER PROFESSOR OF IRISH HISTORY



Ian McBride, Professor of Irish and British History at King's College London, will take up this post in the Faculty of History on 1 October. He will also become a fellow of

Hertford College.

Professor McBride's research interests encompass Modern Ireland; Memory, Commemoration and Contested Pasts; the British Isles in the Long 18th Century; and Northern Ireland since 1920.

His most recent book, *Eighteenth-Century Ireland: The Isle of Slaves*, is a general history of Ireland between 1688 and 1800, and he is also researching the experiences of Irish Catholics during the 'penal times' and the Irish writings of Jonathan Swift. Other interests include the controversial role of collective memories and commemorations in Irish culture, the debates over truth and reconciliation in Northern Ireland since 1998, and the relationship between political violence, representations of the past and professional historiography.

PROFESSOR OF MATHEMATICAL LOGIC



Ehud Hrushovski, Professor of Mathematics at the Hebrew University, Jerusalem, takes up this post in the Mathematical Institute on 1 October. He will also be a fellow of Merton College.

Professor Hrushovski is a mathematical

logician who has made fundamental contributions to model theory, particularly geometric model theory and its applications. He is interested in connections to algebraic geometry and to additive combinatorics, and one of his major projects is a development of a logical framework for global phenomena in number theory and geometry, such as heights.

He is a Fellow of the American Academy of Arts and Sciences and the Israel Academy of Sciences and Humanities.

CHIEF EXECUTIVE OFFICER, OXFORD UNIVERSITY INNOVATION



Dr Matt Perkins has been appointed as CEO of Oxford University Innovation with effect from 1 October.

He has a background in the space industry and was formerly Group CEO of SSTL (a University of Surrey spinout) and subsequently President, Space Imaging Technology, of e2v Technologies. In 2013–14 he chaired the UK Industry Association for Space.

Dr Perkins has a PhD in RF & Microwave Engineering and is a Fellow of the Royal Academy of Engineering, the Institution of Engineering and Technology, and the Institute of Directors. He is also a visiting professor at the University of Leeds.

WANT TO SAVE ON TRAVEL COSTS?

If you're one of the thousands of people driving into Oxford each day you might want to consider joining the University's car-sharing scheme, where two or more people travel together. The scheme, managed by the Environmental Sustainability team, enables car owners to be matched with travel companions to help share journey costs, or brings together two or more people to buddy up and share the burden of driving and car wear and tear, as well as fuel and parking fees.

Over 470 people are currently registered on the scheme, comprising 45 active budi-teams who have been matched using criteria such as their postcode, route to work and their time and place of work. As well as saving

money, they're doing their bit to help reduce congestion and CO₂ emissions and ease the problem of parking across the city.

Between them, the Oxford budi-teams are estimated to be annually saving over 250,000 miles, £60,000 in fuel costs and wear and tear, and 84 tonnes of carbon. And that's not to mention building friendships and potentially improving their social lives – what's not to like?

There are also other ways to save travel costs or make your life easier getting around the city. If you like cycling but find it hard work, you might enjoy using an e-bike. There's a growing network of these smart electric-power-assisted bikes now included in the

expanding Oxonbike bike hire scheme. You'll find them for hire at seven sites across the city including the Radcliffe Observatory Quarter, Begbroke, Old Road Campus and the Science Area.

Also new on the block is the Science Transit Shuttle, making a regular appearance throughout the day to provide a half-hourly connection service for staff and students between the Science Area, Old Road Campus and Harwell Campus.

Visit www.admin.ox.ac.uk/estates/ourservices/travel to find out more about these and other staff travel initiatives, including season ticket loans, travel discounts, bicycle servicing and safety training.

STEERING A SAFE COURSE

Plans are in place to safeguard the University's financial future, *Julia Paolitto* discovers

AN EARLY HOME FOR UNIVERSITY VALUABLES – THE PAINTED CHEST, USED FROM 1668 UNTIL THE UNIVERSITY OPENED ITS FIRST BANK ACCOUNT IN 1756



Imagine a giant supertanker crossing the ocean that starts to drift ever so slightly off course. It's not very noticeable yet, but hundreds of thousands of tonnes in weight takes a lot of work to steer back on course if not corrected quickly. That supertanker is the best analogy for the current state of the University's financial position, according to Director of Finance Giles Kerr. 'The further you drift off course, the harder it is to get back on track if you don't start nudging things back in the right direction quickly,' he explains.

Oxford continues to lead the UK in generating high-quality research and winning grants, but rising costs and increasing complexities are causing it to miss its key financial target: the 5% operating surplus that is essential to maintain Oxford's core activities. This surplus target, which the University has failed to meet in recent years, reflects the annual costs of renewing the University's infrastructure – the labs, libraries and IT systems that underpin the institution's core teaching and research activities.

So how and where has the University started to go adrift? 'The situation we face now is the result of several gradual changes in our income streams and our cost base,' notes Kerr. 'A number of things just below the surface have been chipping away at our resources and making it cost more to carry on doing what we're doing.' Oxford has been subject to a series of external pressures common to many universities, as well as internal pressures and constraints unique to the way it operates that make responding to those pressures harder. Both government and research councils have cut their funding for equipment and overhead costs, and the University's expanding research

activities have outstripped its ability to recover the fixed costs of those activities.

Oxford's expansion in research activity has also brought with it a rapid increase in academic and especially non-academic staff numbers. Many large institutions develop

'A number of things just below the surface have been chipping away at our resources and making it cost more to carry on doing what we're doing'

economies of scale that ensure they get more efficient as they grow. But at Oxford 'decentralisation means it is much more difficult to reduce costs through economies of scale,' according to Kerr. The increasing complexity of the environment that administrators have to contend with, combined with Oxford's devolved operating model spreading administrative work across departments as well as centrally, has driven the increase in numbers in a way that is not sustainable in the longer term. This expansion has happened alongside greater expenses associated with attracting and retaining academic staff, and an increase in pension and National Insurance contributions for all staff.

Other factors contributing to the University's

lower surplus include a reliance on the annual transfer from Oxford University Press (which has declined in recent years) and an expansion in the University's estate of 25% in the last decade that has quickly added to the buildings and equipment that will need replacing. Taken together, these pressures mean the University is currently achieving a surplus of around 3%, which is about £25m short of the 5% needed.

While this doesn't amount to an immediate crisis, a number of new measures are being put in place to bring University finances back into line. Chief among these will be controls on the number of non-academic staff the University and its departments can recruit until the operating surplus reaches 5% again. The UniForum benchmarking exercise, in which Oxford is participating with a number of other Russell Group institutions, will help us to better understand how administrative services are delivered, and where the University could be structured to run more efficiently.

The University is also attempting to recover more of its research costs by asking all grant agreements with industry to cover the full cost of research. And a new matched endowment fund has been established to support current academic activities.

The impact of Brexit adds another element of uncertainty – in the form of £60m in research income that currently comes from EU sources, as well as the uncertainty in status of some 2,000 staff and 3,000 students from Europe. Both Kerr and Professor William James, Pro-Vice-Chancellor for Planning and Resources, emphasise that, until the terms of Brexit are set, the ways of planning for its impact are limited. James notes, however, that 'in many ways, we have much greater resilience than other UK universities, and our focus at this point is in reassuring staff and students from Europe and elsewhere that they remain as highly valued as ever, as a vital element in our academic life.'

The coming months will see increasing efforts to make University staff more aware of the University's financial position. But the take-home message is still an optimistic one, according to James: 'We are an extraordinarily successful university, with great resources, first-rate staff and a bright future. However, the financial environment is tight and, to ensure we remain the best, we need to make prudent investments and be efficient in everything we do.'

▶ Read more at www.ox.ac.uk/financialsustainability and www.ox.ac.uk/uniform

GETTING THE MEASURE OF BIG DATA

Aiden Doherty tells *Tom Calver* how devices to record physical activity are coming on in leaps and bounds



Television presenter James May can claim (tenuous) credit for bringing Dr Aiden Doherty to Oxford. If he hadn't chosen to feature an Irish research team working on wearable technology on one of his programmes, the team might not have come to the attention of Oxford's leading physical activity researcher Dr Charlie Foster, and the fruitful interaction which eventually brought Dr Doherty to Oxford might never have happened.

Now, Doherty is part of the team at the Nuffield Department for Population Health (NDPH), bringing his expertise as a computer scientist to bear on the large-scale health research programmes run by the department.

One of today's great health challenges is physical activity: the lack of it is associated with around five million deaths worldwide each year. NDPH's cohort studies follow tens of thousands of people, tracking lifestyle and health over years. The huge data resource created is then analysed to find associations between health issues and a range of factors – including physical activity.

One issue is that asking people to record the physical activity they do can give inaccurate results. Technology may have an answer.

Dr Doherty has a range of devices used to get more objective measures of activity. These include wrist-worn accelerometers – 'Think of it as a research-grade Fitbit' – and wearable cameras. Already, over 100,000 participants in the Oxford-led UK Biobank population study have worn the devices, and 200 additional volunteers around Oxford have worn the cameras. The images offer better understanding of the readings from the accelerometers, showing whether people are cycling or walking, for example.

Aiden explains: 'At the moment, health advice is based on gross estimations. The Chief Medical

Officer recommends 150 minutes of moderate to vigorous intensity exercise each week, but there are no guidelines on light activity, and little on the consequences of too much sitting. We don't know whether it should be regular daily activity or if you get the same effect from being a weekend warrior. The new measurement technology will help us in future, informing health guidelines and helping other researchers – for example, if interested in the genetics of obesity, it is important to know about physical activity.'

In the US 50% of adults thought they met the minimum 150 minutes of moderate exercise, while in England 38% did...technology suggested just 5% were hitting the target'

The technology makes a significant difference – studies found that in the US 50% of adults thought they met the minimum 150 minutes of moderate exercise, while in England 38% did. In both countries, the technology suggested just 5% were hitting the target.

The challenge is the amount of data gathered. In just one week, wrist-worn devices return tens of millions of movement readings, while cameras produce tens of thousands of images. That is where Aiden's expertise is vital. He creates the processing techniques that can turn these millions of data points into information useful for health

researchers. For the UK Biobank, an analytical task that could have taken almost 3½ years was reduced to a matter of days.

Following a degree in Computer Science from Dublin City University, Aiden stayed on to complete a PhD on an Irish government research fellowship. He chose to look at the then-emerging field of wearable technologies and 'life-logging'. Supervised by Professor Alan Smeaton and supported by leading tech companies, he looked at how best to process the data from a lifelog of images collected by a wearable camera. Then, in 2010, he received a prestigious Marie Skłodowska-Curie actions Research Fellowship from the European Union, which enabled him to come to Oxford and apply his knowledge to health issues.

'It was an opportunity to have a more applied focus,' he says. 'Population health works on the most important problems. The overall aim is to better measure lifestyle health behaviours. We're only scratching the surface of what we can do. As the technology improves, there will be the opportunity to include it in more studies.'

Now supported by a fellowship from the British Heart Foundation Centre for Research Excellence at Oxford, Aiden adds: 'The key thing for me is to continue learning. The Big Data Centre opens in January and I'll be working with people in genomics, engineering, population health and across medical sciences. Five years ago I was not hopeful about automated analysis of sensor and image data in health datasets. Now, at least semi-automated analysis is possible, and I am very excited about the advances my colleagues and I are making.'

► Find out more at <http://po.st/AidenD>

OXFORD'S OWN TIME LORD

Annette Cunningham investigates the temporal tradition of 'Oxford Time'



FROM LEFT: JUDITH GIVES TOM A RING; GREAT TOM HIMSELF; OSENEY ABBEY AS IT LOOKED IN 1640

Oxford is renowned for its charm and fascinating eccentricities. Beating the Bounds to mark parish territories (originating from a time before maps and deeds were commonplace), city wall inspections carried out by the Lord Mayor in full regalia, penny throwing on Ascension Day and an annual tortoise fair dating from the 1920s – featuring the thrill of a tortoise race – are just a few of the college traditions which are still in existence.

One of the best-known traditions is the tolling of Christ Church's majestic 'Great Tom', the largest of the cathedral's bells, which lords it over the city every evening. Great Tom's 101 peals from Christopher Wren's bell tower have dominated the night air for centuries. Ringing at 9.05pm, they originally served to alert the college's students to return to their lodgings quickly before the gates were locked.

Judith Curthoys, Archivist at Christ Church, says there is no evidence for the exact date this tradition began. 'The ringing of the nightly alert is likely to have originated soon after 1546 when the college was founded and its timing now serves as a reminder of "Oxford Time",' she says. 'Time marked by Tom's chime also helped to mark the daily timetable and was important in a place where lectures, meals and curfews governed the day.'

Judith has carried out extensive research on Christ Church and her book, *The Cardinal's College: Christ Church, Chapter and Verse* (2012), is the first complete history of Christ Church compiled since Henry Thompson's volume back in 1900.

So what is Oxford Time? It dates from the era before the railway, when towns functioned on their own local time, calculated by their position on the line of longitude. The coordinates of Oxford result in the city being five minutes and two seconds precisely behind Greenwich Time.

Following the arrival of trains, providing a new link between the UK's towns and villages, a need arose to bring the time zones together and in 1852 Greenwich Time was adopted nationwide. Christ Church, however, chose to continue to ring its 9pm curfew at exactly the same time every day – which is 9.05pm to the rest of us.

Tom started life along with seven other bells – all with their own charming names including

'Great Tom's 101 peals from Christopher Wren's bell tower have dominated the night air for centuries'

Clement, Marie and Douce – at Oseney Abbey. The abbey was closed by Cardinal Wolsey (who claimed his own Oxford degree at the tender age of 15) to fund his vision of creating a new college aimed at training young men for an active life in the church or state. As Henry VIII's chief advisor, Wolsey closed down several other monasteries including the St Frideswide Priory and this provided the site for his new building. Christ Church was originally named Cardinal College but, with Wolsey falling from favour just four years after its foundation, the college was remade and renamed by Henry VIII.

Moving the bells from Oseney Abbey through the streets of Oxford must have been something of a challenge in 1546, with Great Tom alone weighing in at several tons. 'They were carted through St Thomas' parish and into the city by a Mr Willoughby of Eynsham,' reveals Judith. 'He was paid twenty shillings for his

trouble and he probably felt that he earned every penny.'

People are often curious about why the bells are rung 101 times. 'There was originally a peal to mark and alert each of the 100 Students attached to the college by Henry VIII to return,' Judith explains. 'The extra ring came later when an additional Student was added by bequest in 1663.'

The bells were, of course, originally rung by hand. There are rumours that the bell ringer would quite often lose count and, instead of hazarding a rough guess at where they had got to and continuing, they would start again from the beginning – resulting in numerous peals filling the air, confused Oxonians and a slightly later than normal curfew. The ringing has been automated since the 1960s so there's no danger of that happening now.

Great Tom could be forgiven for having something of an identity crisis. The bell has been re-hung and recast (resulting in substantial weight gain) several times, the first such in 1612, possibly to rid it of a papist inscription. It even spent a brief period known as Mary, when it was renamed in honour of Mary Tudor during her five-year reign.

Interestingly, Christ Church still clings to Oxford Time in other ways too. Dinner starts at 7.20pm and not at 7.15pm as in other colleges, and cathedral services start at five minutes past the hour.

And so, in keeping with tradition, the 101 nightly tolls remain – serving to remind the rest of the city that Christ Church is both loud and proud to be blatantly just a tad behind the times.

► Find out more about the history of Christ Church at www.chch.ox.ac.uk/house/about-christ-church



THE MAGNIFICENT ENTRANCE TO
CHRIST CHURCH HOUSES GREAT TOM



Oxford University Images/John Cairns

A CENTURY OF ORGANIC GROWTH

The Dyson Perrins Laboratory and its successor, the Chemistry Research Laboratory, have been hugely influential in the development of organic chemistry, reports *Stuart Gillespie*

It might seem a little bizarre to attribute the success of Oxford University as a research centre for organic chemistry to the enduring popularity of Worcestershire sauce. But, 100 years since the Dyson Perrins Laboratory (DP) was founded thanks to money from the Lea & Perrins condiment dynasty, organic chemistry at Oxford continues to thrive – these days in the state-of-the-art Chemistry Research Laboratory (CRL) just a few paces from the DP across South Parks Road.

The DP has a rich history, comprehensively detailed in a book by Dr John Jones, an Emeritus Fellow of Balliol College and a former organic chemist at Oxford. At the beginning of the 20th century, Dr Jones explains, there was mounting pressure on Oxford to demonstrate its commitment to scientific research. It was against this backdrop that funding was sought for a new chemistry facility, with the final and crucial sum of £5,000 coming from the

philanthropist Charles William Dyson Perrins, grandson of the pharmacist who co-developed the recipe for Lea & Perrins Worcestershire Sauce.

The near-century from 1916 until the opening of the CRL in 2004 saw four Waynflete Professors take the helm as heads of the DP – the current Waynflete Professor in Chemistry is Stephen Davies, who assumed the post in 2006 and is a leader in the synthesis of asymmetric compounds – and was a time of great progress and innovation in the field of organic chemistry (a discipline involving the study of various types of matter containing carbon). This period included the awarding of a Nobel Prize to Sir Robert Robinson for his work on plant alkaloids, which included discovering the structures of morphine and strychnine and which played an important role in the synthesis of penicillin and antimalarial drugs.

Professor Chris Schofield, the current Head of Organic Chemistry, has worked at the University for more than 30 years. He recalls the passion, enthusiasm and work ethic of the researchers and teachers based in the DP. ‘The international nature of the research was enormously enriching,’ he says. ‘Jack Baldwin’s group, of which I was a member, had scientists from all over the world – a tradition we still promote today in the CRL. And, of course, there was the smell of the DP – a complex mixture of thiol, phenol, ester, hydrocarbon and an infinite number of other molecules accumulated over a century of research that was literally embedded in the fabric of the building.’

Two of the labs in the DP – now recognised by the Royal Society of Chemistry as a historically important national Chemical Landmark and adorned with a commemorative plaque – are still used for teaching chemistry to

undergraduates, and for outreach work. The rest of the building is today occupied by other areas of the University.

Professor Schofield adds: 'The legacy of the work carried out in the DP not only inspires all of our ongoing research in organic chemistry at Oxford, but continues to influence the direction of synthetic and biologically related chemistry worldwide. This is both directly through its scientific output and indirectly through the influence of the young scientists trained there, many of whom have gone on to hold positions of importance in academia and industry.'

'Countless new medicines, agrochemicals and fundamental advances have been enabled by research in synthetic, mechanistic and biological chemistry carried out in the DP,

'The smell of the DP was a complex mixture of thiol, phenol, ester, hydrocarbon and an infinite number of other molecules accumulated over a century of research that was literally embedded in the fabric of the building'

or as a result of work by researchers now working in industry who were trained there. One good example is George Fleet's work on synthetic sugars, which has not only enabled new treatments for metabolic disorders but is aiding development of new foods containing compounds that look like sugar, taste like sugar and cook like sugar, but which have very few calories.'

This important work in organic chemistry continues today in the CRL. 'We are massively fortunate in having, in the form of the CRL and its occupants, what we believe is one of the best environments for organic chemistry research in the world,' Professor Schofield says. 'New buildings don't necessarily result in better science – in its later years the DP was hardly modern, but the science was excellent – but they do help to attract and retain researchers.'

One of the researchers working in this cutting-edge environment is Dr Emily Flashman, a University Research Lecturer. She says: 'My work indirectly builds on some of the founding research conducted in the DP by Jack Baldwin's group, in collaboration with Edward Abraham in the Dunn School of Pathology, on enzymes involved in penicillin and cephalosporin biosynthesis. We are looking at how oxygen-dependent enzymes – nature's biological catalysts – contribute to stress tolerance in plants. Understanding and manipulating their activity may be able to

improve flood tolerance for crops. There is nowhere better to conduct this research than the CRL: as well as the superb facilities, the world-class expertise that surrounds you and the history of what's gone on before you are so inspiring.'

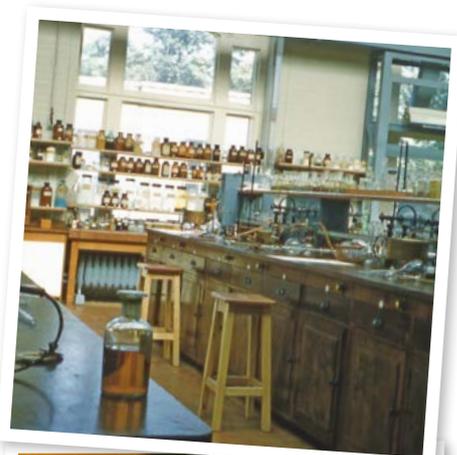
Other important research being carried out in the new CRL includes Professor Véronique Gouverneur's work on fluorine, which focuses on developing new methods of medical imaging that could lead to earlier diagnosis of diseases such as Parkinson's, and Professor Schofield's own pioneering research into the mechanism by which humans sense and respond to changes in oxygen levels, which has contributed to our understanding of how tumours grow and has led to the identification of new targets for the treatment of diseases such as anaemia.

Professor Schofield adds: 'In essence, nothing has changed in our research philosophy since leaving the DP – or indeed since it was built. We aim to support investigators in the long term to do whatever science that interests them, which is a philosophy that we believe history shows works, both in terms of improving basic scientific understanding and delivering benefits for society.'

'Synthesis – making new organic molecules – and mechanism – understanding the principles that govern reactivity – are our core activities, just as they were when the DP was built in 1916 and William Henry Perkin Jr became its first head. These interests have been maintained through subsequent heads and Waynflete Professors, right up to recent lectureship appointments such as Rob Paton and Stephen Fletcher, whose research involves the application of deep mechanistic insights to solving challenging problems in synthesis and biology.'

To paraphrase the Harvard professor Jeremy Knowles, who looked back over 90 years of research at the DP in a comment piece for a 2003 issue of the journal *Organic & Biomolecular Chemistry*: the DP served the University well, but we have now entered a bright new era for organic chemistry at Oxford.

LEFT: TODAY'S CHEMISTRY RESEARCH LABORATORY; RIGHT: SNAPSHOTS FROM THE DYSON PERRINS DAYS: (FROM TOP) A 1950S LABORATORY; USING THE LIBRARY IN THE NEW EXTENSION (1956–58); A GROUP PHOTO IN THE LAB; PROFESSOR PERKIN, FIRST HEAD OF THE DYSON PERRINS LABORATORY



Read more in *The Dyson Perrins Laboratory and Oxford Organic Chemistry 1916–2004* by Rachel Curtis, Catherine Leith, Joshua Nall and John Jones; online at www.chem.ox.ac.uk/history/DP-History/index.html

EXHIBITIONS

Progressive steps: a recognition of early women at the Bodleian

Until 23 October

Proscholium (entrance to the Old Bodleian Library)

www.bodleian.ox.ac.uk/whatson

Set against the timeline of the Bodleian's first permanent female librarian, Frances Underhill, this display looks at the work and lives of the earliest female library staff at Oxford.

Monkey Days

Until 30 October

Ashmolean Museum

www.ashmolean.org/exhibitions

Celebrating 2016 as the Year of the Monkey, this special display showcases images on paper of adventurous and mischievous monkeys in works from Iran to Japan.

Oxford Photographic Society

22 October – 22 January

Oxford University Museum of Natural History, Café Gallery

www.oum.ox.ac.uk/visiting/whatson.htm

The museum is hosting the Oxford Photographic Society's annual exhibition, this year themed on the beauty of the natural world.



CONCERTS

Iannis Xenakis' piano music: Jonathan Powell (piano)

Saturday 29 October, 7.30pm (pre-concert talk 6.45pm)

Gallery £12, stalls £8, students £8/£5, livestream £5

<http://jdp.st-hildas.ox.ac.uk/events/concert-series>

Jonathan Powell presents Xenakis' complete mature piano music, rarely heard together in one concert, plus works by other composers including Hugues Dufourt and Michael Finnissy.

Haydn: *Harmonie Messe*

Wednesday 19 November, 7.30–9.15pm

SJE Arts, St John the Evangelist church

£12, £10 concessions

www.ox.ac.uk/event/haydn-harmonie-messe

Oxford University Press Choir and Oxford Sinfonia perform Haydn's final Mass setting – considered by many to be his finest.

LECTURES AND TALKS

Oxford Mathematics public lectures

October 2016 to January 2017

Andrew Wiles Building, ROQ

www.maths.ox.ac.uk/events/public-lectures-events

A series of public lectures, enabling everyone to enjoy the experience of witnessing the best mathematicians in action, including Stephen Hawking and Roger Penrose (also available online).

Shakespeare and the Victorians

Wednesday 19 October, 1–1.40pm

Lecture Theatre, Weston Library

www.bodleian.ox.ac.uk/whatson

Robert Douglas-Fairhurst explores how the Victorians worked to keep Shakespeare alive in the 19th century through theatrical revivals, literary allusions, paintings and photographs.

Black History Month Annual Lecture: Baroness Doreen Lawrence

Thursday 20 October, 5.30–7pm (refreshments from 5pm)

Pembroke College

Free, but booking essential

www.admin.ox.ac.uk/eop/race/bhm

Baroness Lawrence is a co-founder of the Stephen Lawrence Charitable Trust, which works to promote fairness and justice in memory of her murdered teenage son.

LEFT: THE MAGIC OF MONKEYS; RIGHT: BARONESS DOREEN LAWRENCE WILL GIVE THE BLACK HISTORY MONTH ANNUAL LECTURE



Human Rights, Global Ethics and the Ordinary Virtues

Thursday 27 October, 5–7pm

Merton College

www.ox.ac.uk/event/human-rights-global-ethics-and-ordinary-virtues

Michael Ignatieff investigates the impact of human rights on the ordinary virtues of daily life.

FAMILY FRIENDLY

Through the Lens

Monday 24 to Wednesday 26 October, 1–4pm

Oxford University Museum of Natural History

www.oum.ox.ac.uk/visiting/whatson.htm

Explore the museum through the eyes of people and animals. Exciting activities all about vision, photography and the eyeball.

Object handling

Every Saturday, 11am–1pm

Pitt Rivers Museum

www.prm.ox.ac.uk/family-friendly-events-activities-and-workshops

Free family-friendly object handling to discover more about the museum's unique and fascinating objects.

Museum trails

Ashmolean Museum

www.ashmolean.org/plan/families/resources

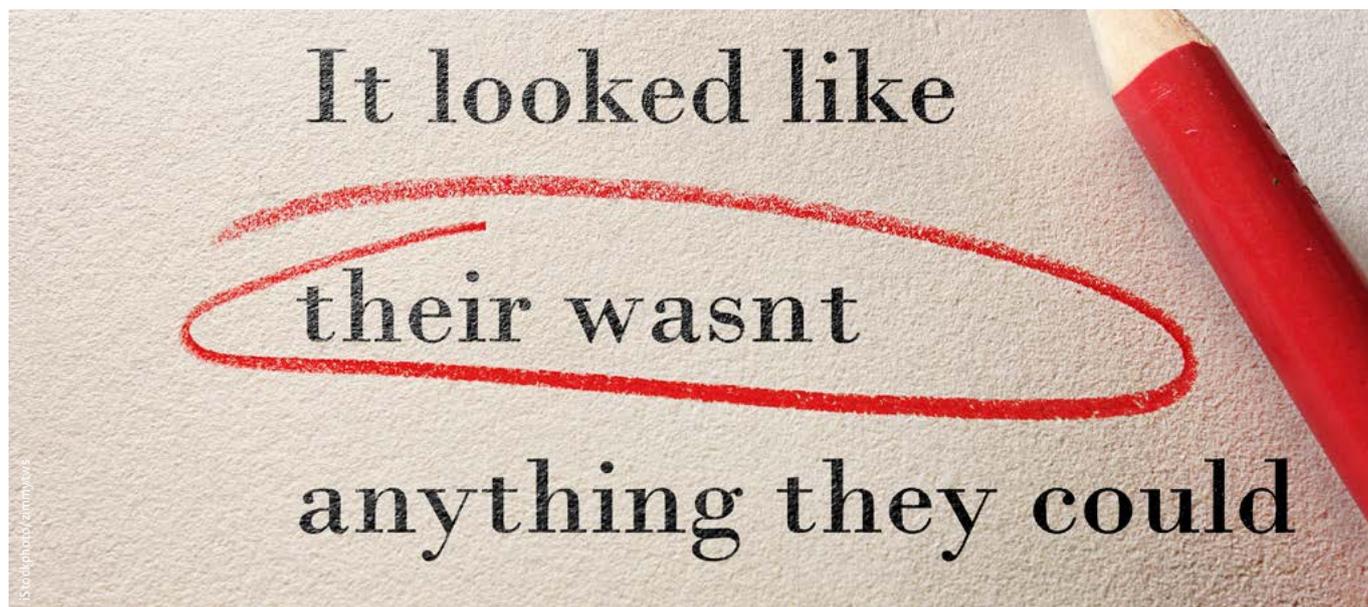
Take one of the museum's favourite family trails, available (together with sketching materials) from the Families Activity Station during museum opening hours.

Visit www.museums.ox.ac.uk/content/family-friendly-events for more family activities

Compiled by Rose Downton of Wheatley Park School on a work experience week with the Public Affairs Directorate

SECRETS OF SPELLING

Matt Pickles investigates a new approach to teaching children to spell



'Is the correct spelling "definitely" or "definitely"? "Supersede" or "supercede"?' Readers of *Blueprint* might have been asked these questions by their children – or perhaps struggle with the distinctions themselves.

These struggles could become a thing of the past, thanks to a new project called Supporting Spelling. It has been created by Simon Horobin, Professor of English Language and Literature and fellow of Magdalen College, to teach children to spell difficult words by learning why they are written in a certain way. He has created a collection of online electronic resources designed to help schoolchildren and their teachers prepare for the primary school Year 6 Spelling, Punctuation and Grammar Test.

'The aim of the project is to help children learn to spell by giving them a better understanding of why words are spelled as they are,' explains Professor Horobin. He says that if children learn the etymology, or origin, of tricky words, it will make it easier for them to remember the correct spelling. For example, 'definitely' comes from the Latin word *finis* meaning boundary or end, which is also found in the words 'finish' and 'finite'. 'If we know this, we are less likely to spell it "definitely",' Professor Horobin says.

The project builds upon Professor Horobin's research for his book *Does Spelling Matter?*, published by Oxford University Press in 2013. On the project website he will upload podcasts, information sheets, downloadable worksheets and interactive quizzes specifically targeted at Year 6 pupils. He says that by making

spelling more interesting and fun, pupils will be more likely to learn how to spell certain words.

Professor Horobin's research found that children have a natural propensity to play around with language from an early age. Knock-knock jokes, riddles and rhymes are commonly heard in school playgrounds across the country. Rather than telling children to stop making up words and 'talk properly', Professor Horobin thinks children should be encouraged to be creative with words. 'Language play is an important means of

'The idea that there should be just one way to spell every word is relatively recent'

developing metalinguistic awareness,' he says. 'Roald Dahl did this through the BFG, who came up with "delumptious", "catasterous disastrophe" and "fizzwiggler". Encouraging children to form their own nonsense words helps them learn about word structure – what linguists call morphology.'

You might think an English professor at Oxford would be very strict about the correct use of spelling and grammar, but Professor Horobin argues that less emphasis should be placed on uniformity of spelling. 'I'm keen to take away some of the pressure placed on children learning to spell, or at least to try to

get it in perspective,' he says. 'Modern society places a huge weight upon orthography – spelling and punctuation. But the idea that there should be just one way to spell every word is relatively recent – an invention of the printing press and the formalisation of the printing process in the 19th century.'

There are often complaints in the media that the rise of electronic communication has led to young people using 'text speak' rather than properly spelled words. Twitter's requirement for people to fit messages into 140 characters encourages users to shorten words, using 'u' for 'you', 'thx' for 'thanks' and 'cu l8r' for 'see you later'. Others warn that the autocorrect function on phones and computers means young people have become lazy with their spelling. But Professor Horobin urges us to be more relaxed about spelling mistakes. 'Many adults struggle with spelling, or have blind spots that can last them an entire lifetime,' he says. 'Should "acommodation", "embarassment" or a misplaced apostrophe be sufficient reason to dismiss someone as illiterate? Does an ability to spell necessarily signal a more accomplished writer?'

He points out that children who find spelling difficult are in good company. 'Roald Dahl's letters reveal his spelling was little better than that of the BFG,' he says. 'Yet he was one of the most successful writers of the 20th century.'

► For more information about the project, visit www.facebook.com/spellingtrouble

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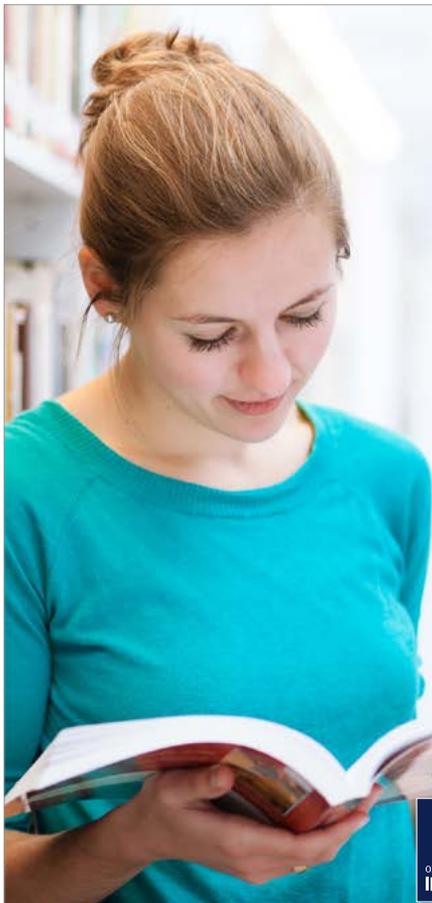
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Independent Schools Inspectorate report



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WHY AM I HERE?

LAURA HODSDON

Researcher Development Officer in the Oxford Learning Institute and Policy Advisor, Race Equality, in the Equality and Diversity Unit

Two jobs? How do you divide your time?

Fluidly. I tend to work out which tasks need doing on a week-by-week basis, and divide my days depending on what meetings I have for which job – much easier than having set days, given how much I work with colleagues across the University. This flexibility is especially valuable since I've recently rather ambitiously added a commute from Bristol into the logistics. Both of my managers are incredibly supportive in allowing me to work flexibly and it really helps me to be productive.

Tell us first about your role in the Learning Institute

The Oxford Learning Institute provides free training and resources to support the personal and professional development of University staff. I support research staff to get the most out of their time at Oxford and help them ensure they are best placed to move on to their next step, whatever that is. For example, I work with the researchers who run the Oxford Research Staff Society (OxRSS), help with a mentoring scheme in the Medical Sciences Division, am a trainer for the Springboard women's development programme and run the termly Welcome Event for research staff (see www.ox.ac.uk/supportforresearchers).

And what do you do wearing your Race Equality hat?

This is a job share with Dr Machilu Zimba, and we work to advance race equality across the University. We're currently aiming to achieve the Race Equality Charter Mark in July 2017 and are using this as a framework to advance our own race equality objectives, working with staff and students in departments and colleges. This means looking at issues such as race and the curriculum, the recruitment and progression of Black and minority ethnic (BME) staff and students, and their experiences at Oxford. We want to use the charter as a tool to encourage frank conversations about race in the University.

It's Black History Month in October – what's planned?

The highlight of BHM is an annual lecture at Pembroke College by a high-profile BME speaker – this year it's Baroness Doreen Lawrence on 20 October (see p14). The Women of Achievement Lecture will be given by Baroness Valerie Amos on 24 October and on 2 November Professor Ruth Simmons,

President emerita of Brown University, is speaking for our Race in the Curriculum lecture series.

We'd really like everyone to get involved with race equality. There's more information at www.admin.ox.ac.uk/eop/race, where there are also links to our Twitter account @OxfordRace, blog, and the mailing list for our fortnightly (termtime) Race Equality Newsletter.

What do you most enjoy/dislike about your mixture of jobs?

There's always something new to do, and having two different offices to work in is good to mix things up. There's actually a lot of crossover between the work of the OLI and the EDU so it's very helpful to be able to see things from both angles and make connections that I might not otherwise make. Job sharing is also a great way of working – I'd always thought it might be hard to divide up work but with my fab colleague Machilu there is always someone to share thoughts with and bounce ideas off which really helps us both. (I'd recommend this more fluid way of working to any managers considering it!)

A downside is that I often forget which hat I'm wearing – awkward when I'm trying to introduce myself and appear to have no idea what my job title is.

So how do you come to be doing this?

After an English Literature degree, I did my doctorate in Classics. I started temping at the Higher Education Academy while I was writing up my thesis and now I've been working at Oxford for five years – first full-time at the OLI and for the past year dividing my time across both jobs.

As a child, what did you want to be?

While every child at some point dreams of growing up to be a Researcher Development Officer, I wanted to be various things depending what I was watching on TV, but mostly an archaeologist – the combination of history and being in a muddy field is pretty enticing. I've ended up where I am by a series of accidents but I've always wanted to help people and so what I do now is very fulfilling.

I think that equality is something that involves everyone – whether they're white or BME, male or female, gay or straight, have a disability or not – in reflecting on how we can all as individuals make the University a place where everyone is happy and productive.



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VIEWFINDER

WHERE'S THIS WONDERFUL WINDOW?
SEE P6.

