Sew on
and sew on

Beneath
Birmingham

Comic chameleon

Building futures
Changing families’ fortunes
For more than 100 years research at the University of Birmingham has had a major impact on the world; our researchers advanced transplant surgery, developed the use of microwaves, and created artificial Vitamin C. Finding innovative solutions that address big issues and benefit society is a key priority and we continue to break new ground.

The recent Research Excellence Framework (REF) showed that 87% of the University’s research activity has a global impact, confirming our position among the world’s top research universities in a broad range of areas from History and Education to Chemical Engineering, Dentistry, Philosophy, and Psychology. The REF measures the quality and impact of research conducted in UK universities against international standards of excellence, on the basis of the quality and volume of research as well as its wider impact. The results ranked more than 81% of all research carried out by the University as internationally excellent or world leading.

Examples of the breadth of our innovative research are featured in this edition of Old Joe. From the Birmingham Centre for Railway Research and Education (BCRRE) preparing rail for the future (page 32) to Dr Jackson Kirkman-Brown’s pioneering procedures in fertility treatment (page 24), Birmingham continues to have an impact on lives, culture, industry, and society.

Of course, excellent research and teaching requires constantly improving facilities. As we enter the final months of our Circles of Influence fundraising campaign, I would like to thank again those of you who have chosen to support our campus developments, scholarships, and research projects over the last few years. You can find out more about the campaign and our changing campus on pages 3 and 16.

To return to research, I am delighted that at this midpoint in our ten-year research strategy we have confirmed our place amongst the very best universities across a number of disciplines. We could not have achieved this without our alumni and friends, as well as the hard work of our staff and students, and I would like to take this opportunity to thank you for your support.

Best wishes,

Professor Sir David Eastwood
Vice-Chancellor and donor to the University

If you have difficulties reading any part of this publication, please contact us to request a plain text version.

The views and opinions expressed in Old Joe are not necessarily those of the Alumni Office or the University of Birmingham. The University is an exempt charity under Schedule 3 of the Charities Act 2011. An exempt charity enjoys all the tax exemptions and other benefits of a charity, but is exempt from certain requirements, including the need to register with the Charity Commission. The University is not on the Register of Charities, but it is tax-exempt. Inland Revenue charities reference number: X7237.
3

100-day countdown

Time is ticking for the Circles of Influence fundraising campaign, which enters its final 100 days on 23 April. Since 2005, support from more than 10,000 alumni and friends has enabled the University to make an incredible difference, from completing campus developments the size of 9.6 football pitches to funding 570 scholarships for students from less privileged backgrounds. There is still time to be part of the most successful fundraising campaign of any kind outside of Oxford, Cambridge or London: visit www.bhamalumni.org/givenow to show your support.

The University has planned a special online celebration to show the impact of Circles of Influence and to thank alumni and friends for their incredible generosity. Find out more from 23 April at www.UoBpartofit.com

100-day countdown

Time is ticking for the Circles of Influence fundraising campaign, which enters its final 100 days on 23 April. Since 2005, support from more than 10,000 alumni and friends has enabled the University to make an incredible difference, from completing campus developments the size of 9.6 football pitches to funding 570 scholarships for students from less privileged backgrounds. There is still time to be part of the most successful fundraising campaign of any kind outside of Oxford, Cambridge or London: visit www.bhamalumni.org/givenow to show your support.

The University has planned a special online celebration to show the impact of Circles of Influence and to thank alumni and friends for their incredible generosity. Find out more from 23 April at www.UoBpartofit.com

CONTENTS | ALUMNI MAGAZINE

Contents

Regulars

The first word 2
Your year in pictures 4
News 6
My favourite books 8
B15 faces 12
Spotlight 19
Alumni events calendar 30
Campus connections 37
School and department news 38
Your news 44
Honorary graduates 46
Win 47

Features

Eyes on the enterprise 14
How entrepreneurial alumni are shaping their futures by founding their own businesses

Dressed for success 18
Alumna Rebecca Telfer replaces her cap and gown with a new working wardrobe in the Class of 2014 graduation competition

Track to the future 32
Researchers in the Birmingham Centre for Railway Research and Education are preparing the industry for the future

Lord of the Manor 35
After Manor House was badly damaged in a fire in Summer 2014, Old Joe pays tribute to this fondly remembered hall of residence

The fight against Ebola 40
Dr Paul Arkell has witnessed the deadly impact of Ebola in Sierra Leone
YOUR YEAR IN PICTURES
1. FASTER THAN THE SPEED OF RAIL: Alumni James Heptonstall (BSc Geography, 2006; MSc Water Resources Technology and Management, 2007) and Noel Carroll (BSc Sports and Materials Science, 2006) became YouTube sensations with ‘Race the Tube’. The videos showing them racing, and beating, London trains have received almost 6 million views.

2. DINOSAUR DISCOVERY: Dr Richard Butler, of the School of Geography, Earth and Environmental Sciences, was part of an international team to make the first dinosaur find in the north of South America. The species is named Laquintasaura venezuelae after its location in Venezuela.

3. THINK CORNER: The University hosted a pop-up shop to showcase research from across the sciences, arts and humanities. Visitors of all ages enjoyed a wide range of fun and thought-provoking activities and talks from Birmingham researchers.

4. DRAMA TURNS 50: The Department of Drama and Theatre Arts is celebrating its 50th anniversary with special events throughout 2015. This important milestone comes as the Department continues to achieve widespread recognition. It was rated the number one UK Drama Department in the Guardian university league table 2015, and has recently announced an exciting partnership with the Royal Shakespeare Company.

5. 50 GOLDEN YEARS: Alumni gathered on campus to celebrate the 50th anniversary reunion in September when The Rt Hon Ann Widdecombe (BA Latin, 1969; DUniv, 2012) spoke at the Guild of Graduates and Alumni Association’s AGM and Forum.

The University has become the first European institution to partner with the US publishing giant Wiley in developing a set of new online courses. The initial set of courses is due to launch in September 2015 and will include a Masters in Public Administration, a Masters in Business Administration (MBA) and an MSc in International Business.

Ian Myatt, Director of Educational Enterprise, says: ‘This bold alliance underlines the University’s pioneering approach to distance learning and marks a significant shift in the provision of new modes of education in the UK.’

To register your interest and find out more, please email: onlinecourses@contacts.bham.ac.uk

A group of alumni have joined forces to share memories of a World War Two refugee who was a much-loved academic in the now defunct brewing school.

Known affectionately by her students as ‘Auntie Dora’, Dr Dora Kulka (1899–1983) was a Jewish chemist who came to Birmingham in 1938 after the British Federation of University Women helped her leave Nazi-occupied Austria.

A box containing hundreds of her postcards was purchased for Dr Paul Minton by his parents at a Telford auction during the mid-1980s, and was rediscovered recently when his parents cleared their loft. The correspondence dates from 1910 to 1974 and Dr Minton has set about tracing her former students to find out more about her.

Biochemistry alumnus Professor Michael Lewis recalls her as an intensely shy individual, who spoke English with a thick accent and taught practical microbiology in the laboratory. His classmate Dr Brian Wood says: ‘She would occasionally let slip memories of Jews forced to scrub the streets on their knees, and other indignities imposed on them by the brutal Nazi regime but she never seemed particularly bitter about her experiences, and was sometimes even nostalgic about the good old days in Vienna.’

Dr Minton would be very interested to know how Dora Kulka’s postcards came to be in Telford and why the collection suddenly stopped in 1974, almost ten years before she died.

If you have any memories of Auntie Dora, or can help solve the mystery, contact alumnirelations@contacts.bham.ac.uk or Dr Minton directly at thedorakulkaproject@gmail.com.

The alumni who shared memories with Dr Minton were:

• Professor Michael Lewis (BSc Biochemistry, 1957; PhD Biochemistry, 1960)
• Dr Brian Wood (BSc Malting, Brewing and Applied Biochemistry, 1956; PhD Biochemistry, 1959)
• Dr John Woodward (BSc Applied Biochemistry, 1956; PhD Biochemistry, 1959)
• Professor Keith Cooksey (BSc Applied Biochemistry, 1956; PhD Biochemistry, 1959)
• Dr Malcolm Watts (BSc Applied Biochemistry, 1956; PhD Biochemistry, 1959)
• Dr Donald Robb (BSc Biochemistry, 1960; PhD Biochemistry, 1964)

Image: Staff and students at the School of Malting and Brewing, May 1957. Dora Kulka is seated on the bench at the front. (Picture courtesy of Dr John Woodward).
The latest in our series about the equipment staff at the University simply couldn’t do without takes a glimpse into the medical laboratories of the future...

Professor Mark Drayson, Director of the Clinical Immunology Service:
We hope that hospital laboratories in the future will be using an exciting new set of laboratory equipment that could enable us to measure the previously unmeasurable in routine clinical practice.

Birmingham Health Partners’ Institute of Translational Medicine (ITM), opening in 2015, will make this a reality, applying state-of-the-art equipment to translate recent scientific discoveries into clinical practice. Initially efforts will focus on blood cancers and inflammatory conditions like rheumatoid arthritis, liver and kidney diseases.

This lab of the future will include next generation single cell DNA sequencing, deep examination of the molecular nature of cells with Mass Spectrometry (MS) and use of MS and Nuclear Magnetic Resonance to study the metabolic signature of cancer and inflammatory cells.

Integrating all of the information from these diverse, in-depth investigations will identify how disease affects individual patients and direct us into tailoring the best therapy for each patient, guiding the way to new therapeutic discoveries.

Find out more about the ITM at www.birmingham.ac.uk/ITM

Alumni across the world have been connecting with the University, and each other, through social media.

Old Joe
Lots of alumni used Twitter to share their views on the last edition of Old Joe.

@gracesurman:
Look what arrived! Perfect with a coffee. Thoughts on reintroducing the @unibirmingham blazer?

@zoecobdenjewitt:
The view as I read the latest Old Joe #happydays #goodtimes

@violin_sarah:
Thanks for fab ‘Old Joe’ alumni mag. Always makes me feel so proud to have studied @unibirmingham but very nostalgic too!

@kerrinebryan:
Thanks for the mention in the latest issue of Old Joe and glad to see fellow alumni doing well! #lovebirmingham

Send us your views on, and news for, Old Joe by tweeting @birminghamalum or emailing alumnicommunications@contacts.bham.ac.uk
Narinder Dhami (BA English, 1980) is a children’s author, best known for the *Bindi Babes* series and *Bend It Like Beckham*. *Thirteen Hours*, her new book for nine–12 year olds, came out this month.

*Persuasion*
Jane Austen
Published posthumously, *Persuasion* is not as showy as *Pride and Prejudice* or *Emma*, yet it is the most polished and delicately beautiful of her novels with its witty, elegant prose. Anne Elliot, who has lost her ‘bloom’ at the advanced age of 27, is no longer considered marriage-worthy, until the re-appearance of an old flame revives her hopes.

*Frost in May*
Antonia White
Originally published in 1933, this cold, clear-eyed examination of convent school life is a semi-autobiographical classic. Spirited Nanda Gray is nine when she arrives at the Five Wounds Convent. She struggles to subdue her passionate nature and to accept the nuns’ endless demands and small cruelties, all designed to make her a good Catholic.

*Five Children and It*
E. Nesbit
Published in 1902, this story by the author of *The Railway Children* is still a wonderful read. Five children discover a grumpy sand-fairy who can make all their wishes come true. What can possibly go wrong? Beautifully written and laugh-out-loud amusing.

*We Need To Talk About Kevin*
Lionel Shriver
Several authors, including Jodi Picoult, have tackled the subject of Shriver’s break-through novel – a massacre at school, perpetrated by a student. Shriver’s book blows all the others away. Eva is worried about her inability to bond with her son, Kevin, a child who is disturbingly self-contained from birth. Shriver is not afraid to plunge into the nature/nurture debate, producing a brilliant, powerful study of motherhood.

*Frost in May*
Antonia White
Originally published in 1933, this cold, clear-eyed examination of convent school life is a semi-autobiographical classic. Spirited Nanda Gray is nine when she arrives at the Five Wounds Convent. She struggles to subdue her passionate nature and to accept the nuns’ endless demands and small cruelties, all designed to make her a good Catholic.

*Five Children and It*
E. Nesbit
Published in 1902, this story by the author of *The Railway Children* is still a wonderful read. Five children discover a grumpy sand-fairy who can make all their wishes come true. What can possibly go wrong? Beautifully written and laugh-out-loud amusing.

For your chance to win these five books, answer the following question:
What is the full name of the lead female character in *Bend It Like Beckham*?
Email your answer by 31 May 2015 to alumnicommunications@contacts.bham.ac.uk
Alumni and freshers celebrated the start of term by sending their selfies for #UoBmugshot.

@saraharmes1: winner of our student #UoBmugshot competition.

First it was longlisted for the Booker Prize and now a conspiracy novel penned by a Birmingham academic is to be adapted for television by the BBC.

The Kills, written by Senior Lecturer in Film and Creative Writing Dr Richard House, is currently in production.

Dr House has also written a film, Murmur, which is currently being developed by Film4 and Revolution Films, and had a story aired on BBC Radio 4 in December.

Learn more about Film and Creative Writing courses at Birmingham at www.birmingham.ac.uk/schools/edacs/departments/fcw/index.aspx

Research into sensors, information and communication at Birmingham will be developed after the University was awarded government funding for a Quantum Technology Hub.

Birmingham received the award within a £270 million UK quantum technology initiative, and the research will have broad real-world applications including non-invasive measurement of dementia patients’ brain functions, detecting leaking water pipes underground, and developing extremely accurate clocks for high frequency trading in financial markets.

Quantum mechanics led to the development of the lasers and integrated circuits that form the basis of most modern technology and Kai Bongs, Professor of Cold Atom Physics, says there is now a second quantum revolution.

‘This will lead us to exploit the spooky features of quantum technology, for example, the possibility of particles being in two places or two internal states at one time. We can open up wide parameter spaces for technology to operate in and enable novel ways of computation, secure communication, and precise sensing,’ he says.

Learn more at www.birmingham.ac.uk/quantumtechnology

Image: Professor Kai Bongs (right) and Greg Clark, Minister for Universities, Science and Cities

Exploiting the spooky effects of physics

@sunathanlater: Our #UoBMugShot selfie after filming @GuildTelevision’s Birmingham Goes Live today hellobrum iloveyourguild

@quayprman: #uobmugshot ‘coz it’s stood the test of time! need I say more?

@ljphysio: #uobmugshot iwantamug iloveyoubirmingham
A legacy from a Birmingham alumna is helping the University to build a new library that will benefit thousands of students.

Audrey Brown (BA Geography, 1946) bequeathed more than £740,000 in her will for ‘educational projects’ to benefit the University. Allocating these funds to the new library will allow the University to honour Audrey’s passionate support for education by providing outstanding study spaces and facilities.

Diane Job, Director of Library Services, says: ‘After graduating from Birmingham, Audrey worked as a school teacher for many years, a career that gave her a strong belief in education and a desire to inspire students. Through her legacy this passion will live on and help to inspire the next generation of Birmingham students.’

The £60 million new library, opening in 2016, will provide outstanding facilities for students and researchers, improving access to the University’s extensive collection of e-books and journals, and creating a variety of learning spaces for different modes of study. There will also be a dedicated space within the library for the general public to learn more about the University’s research and creative outputs. This development would not be possible without the generous support of alumni like Audrey.

The University will recognise Audrey’s legacy, and generous gifts received from other philanthropic contributors, throughout the new library. This will include a donor wall and spaces named after supporters.

Visit www.birmingham.ac.uk/legacies, call +44 (0)121 414 7957 or email legacies@contacts.bham.ac.uk to find out more about how you can remember Birmingham in your will.
The University campus will continue to develop when a state-of-the-art laboratory for teaching students science, technology, engineering, and maths (STEM) subjects opens in 2017.

Centrally located, flexible and incorporating the latest technologies, the Collaborative Teaching Laboratory (CTL) will be aimed at undergraduate and postgraduate students, but will incorporate a Discovery Lab designed to attract school pupils into STEM subjects.

The £40 million building will enhance and expand the work of the University’s STEM Education Centre, which opened in 2012 and leads STEM teaching at a national level.

Collaborative and cross-discipline working and teaching, targeting all undergraduates and Masters students, is the vision behind the building and ownership of the space will be shared.

Professor Jon Binner, Deputy Head of the College of Engineering and Physical Sciences, says: ‘These exciting new facilities will be critical for the future by helping Birmingham develop talented graduates who can make a real difference to industry. We’re making good progress on the physical design of the lab and, just as importantly, the creative thinking needed to introduce this new approach to student learning.’

The USA Alumni Society is run by volunteers who support alumni group activity across America. To find out about groups in your area, visit www.uob-usa-alumni.org. If you could help organise an event or would like to get involved, please email Brian Beeston at bpebeeston@gmail.com.

If you live in the USA and are looking to meet fellow Birmingham alumni, why not join an alumni group?

After a new Houston group launched in October, there are now 14 USA groups which host a variety of events, from monthly pub nights in New York to family picnics in North California.

USA Alumni Society Chair and New York City group leader Dave Drinkwater (BSc Chemical Engineering, 1987) says: ‘Getting together with other Birmingham alumni to socialise, network and catch-up with University news is always appealing, whether you have lived here for years like me, or are fresh off the plane and looking to meet new people’.

If you are interested in finding out more about the Collaborative Teaching Lab, please contact Carys Lewis on c.lewis@bham.ac.uk or +44 (0)121 414 7829.
Which song always gets you on the dance floor?
15 alumni tell *Old Joe* the one song that’s guaranteed to get their toes tapping . . .


Nourredine Yahia Cherif (MSc Transport and Traffic Planning, 1982)  ‘...Purple Rain, Prince.’

David Teague  (BA Medieval and Modern History, 1985)  ‘...Hi Ho Silver Lining, Jeff Beck.’

Caroline Hall (BA English, 1978)  ‘...Mr Saturday Night Special, Lynyrd Skynyrd, and there are more!’

Charles Widjaja  (BEng Chemical Engineering, 2010)  ‘...the Augustus Gloop song from Charlie and the Chocolate Factory.’

Nicola Davenport (BA German Studies, 1998; MA European Studies, 2000)  ‘...Common People, Pulp.’

Nikolas Vellisaris (MSc Engineering Project Management, 1999)  ‘...I Luv U Baby, The Original.’

Eileen Dunstan (BSocSc Public Policymaking and Administration, 1997; MSc Local Governance, 1999;)  ‘...it has to be Come on Eileen, Dexys Midnight Runners.’

Gregory Roumeliotis  (MSc Local Governance, 1999;)  ‘...Insomnia, Faithless.’

Graham Johnston (BA Physical Education and Social Administration, 1987)  ‘...I Will Survive, Gloria Gaynor.’

Iain Lazenby (BSc Physics, 1976)  ‘...Brown Sugar, The Rolling Stones.’

Rosie Nash (BSc Civil Engineering, 1978)  ‘...Free Electric Band, Albert Hammond.’

Joe Durrant (MBChB Medicine, 2013)  ‘...A Message to You Rudy, The Specials.’

Julia Cooke (MBChB Medicine, 2014)  ‘...A Little Respect, Erasure.’

Eustine Green  (MEd Professional Studies, 1999)  ‘...any number by Prince!’

DO YOU WANT TO BE A B15 FACE?

What do you miss most about the University of Birmingham? Tweet your answer and photo to @birminghamalum and the best will appear in the next edition of *Old Joe.*
Action is needed to protect athletes from brain injury, according to University experts on second impact syndrome.

Better protecting sportspeople from brain injury is the goal of two academics calling for more research into concussion and subsequent head injuries. The duo are studying second impact syndrome — where a person who has had one concussion has a second blow to the head which is magnified by the first. ‘Second impact syndrome is not that well known but we must get the message through that if a player has a concussion they must not play on,’ explains Professor Tony Belli from the School of Clinical and Experimental Medicine. ‘The ramifications of a second blow can be as severe as injuries sustained in a car crash because the brain has not sufficiently recovered from the first injury.’

The team plans to develop a better test to aid the crucial decision about whether and when to return to play. Current guidance suggests rest with a phased return, but tests are subjective, making the return to play decision very difficult. Dr Michael Grey from the School of Sport, Exercise and Rehabilitation Sciences says: ‘If we had tests based on physiological responses to brain injury, there would be no argument – our aim is to deliver a pitch-side test that will categorically show whether or not a player can carry on.’

The three-year study takes athletes within 48 hours of a concussion and uses transcranial magnetic stimulation (TMS) to scan the brain for physiological changes. Scans are repeated in the following days and weeks to monitor how the brain is healing. Professor Belli says: ‘TMS is quick, semi-portable, inexpensive, safe and repeatable. We hope to show that it could be applied in sports clinics as an addition to current methods of guiding the timing for safe return to play.’

Learn more:
www.srmrc.nihr.ac.uk/research/research-projects/recos

DID YOU KNOW?

This research appeared in The Birmingham Brief, a weekly email providing intelligent thought from University of Birmingham academics on the latest policy issues. To find out more visit www.birmingham.ac.uk/news/thebirminghambrief

Learning to live well: support sport research at Birmingham

The University’s £55 million new Sports Centre will specialise in rehabilitation from injury and illness, capitalising on the breadth of expertise in this field at Birmingham. The centre will open its doors in early 2016, and there is still time to make a gift. Visit www.birmingham.ac.uk/alumni/giving/Sports-Centre-development.aspx or call Paul Moore on +44 (0)121 414 5210 to give.
I wanted to create a fun brand that would change the way people did things forever.

Threading is a technique to shape eyebrows using a length of pure cotton thread twisted into a double strand to remove unwanted hairs.

BROW PIONEER PLUCKS WINNING IDEA
Blink Brow Bar founder Vanita Parti MBE (BA History and Political Science, 1990) is largely responsible for bringing the ancient Indian technique of threading into the 21st century. After resigning from her marketing position at a global airline, she single-handedly launched the first ever UK walk-in brow bar in 2004.

Fast forward ten years, and Blink has more than 22 walk-in bars in the UK and another newly launched in SAKS New York, as well as an award-winning line-up of beauty products and services. Vanita was awarded an MBE for services to the beauty industry in the 2015 New Year’s Honours.

Learn more: www.blinkbrowbar.com

PERSONALISED CARDS ARE SIGNED, SEALED, DELIVERED
Nick Jenkins (BA Russian Language and Literature, 1990) would always buy greeting cards and white-out the captions to write his own. Following an epiphany that he could use the internet to do the same on a mass scale, Moonpig.com was born, creating a business sector almost from scratch. Gaining its unusual title from its founder’s childhood nickname, the company made a loss for its first six years before the risky step of television advertising paid off and the business turned a corner. Moonpig is now the world’s largest online personalised greeting card site and Nick sold the business to Photobox for £120 million in 2011.

Learn more: www.moonpig.com

THE GREAT THING ABOUT RUNNING YOUR OWN BUSINESS IS YOU CAN CHOOSE WHAT LIFE YOU HAVE.
DON’T BE AFRAID OF FAILURE BECAUSE YOU LEARN SO MUCH EVERY TIME YOU FAIL.

GLIDING TO DOMESTIC BLISS
Frustrations with collecting money from housemates for domestic bills led James Villarreal (Economics, 2006) and Sandeep Krishan (Mathematics, 2005) to set up Glide Utilities during their first year at Birmingham in 2006. Offering tenants and landlords a simplified billing service, Glide has become one of the fastest growing businesses in Birmingham with more than 40,000 customers. The partners’ newest venture, ROAR, offers a bespoke VoIP (Voice over Internet Protocol) telephony service to businesses in Birmingham after seeing the benefits of the technology at Glide.

Learn more: www.glide.uk.com and www.weroar.co.uk

FLAT IDEA SCALES GREAT HEIGHTS
Unimpressed with the residential lettings operation in the company she was working for, Nicola Fleet-Milne (BA English and Classics, 2000) decided to set up on her own. With good client relationships and a reputation for reliability, Nicola quickly established FleetMilne Property as a major player in Birmingham, smashing her projected first year income by more than 200%. A decade on, the business is Birmingham city centre’s premier independent residential property agency with national expansion planned in the near future.

Learn more: www.fleetmilne.co.uk

THIS GIRL MEANS BUSINESS
Setting up a company with no staff that can be run from anywhere with a phone and laptop had advantages, but it also meant Carrie Green (LLB Law, 2007) quickly discovered that being an entrepreneur can be lonely. Her online business providing customers with the correct phone codes to unlock their handsets grew to a turnover of £500,000, but it was the unhappiness of working in isolation that sparked her next venture. The Female Entrepreneur Association and its digital magazine, This Girl Means Business, is a support network for other women who decide to go it alone in business, and now has a network of 185,000 women from all over the world.

Learn more: FemaleEntrepreneurAssociation.com

A GREAT IDEA IS A FANTASTIC STARTING POINT BUT IF IT WILL NOT MAKE MONEY THEN IT IS NOT Viable AS A BUSINESS AND YOU WILL STRUGGLE TO ATTRACT INVESTORS.

Have you set up your own business?

Do you have success stories or cautionary tales to share with fellow alumni? Send details of your entrepreneurial experiences to alumnicommunications@contacts.bham.ac.uk
See the walls rise and learn more about five new buildings that will transform both the University campus and people’s lives.

1 The University of Birmingham School
Principal Mike Roden stands in one of the corridors in the new school building in Selly Oak.

Did you know?
More than 30% of University School pupils will be eligible for free school meals, meaning that they will come from backgrounds where progression to higher education is disproportionately low. The school has proved very popular with the Birmingham community, with more than six applications for each of the places available.

2 The Library
Sam Griffiths completed a work experience placement on the new University Library site and will be one of the first students to use the new building.

Did you know?
When the existing library was built in 1959, there were just 3,400 students at the University. Today, the student population numbers almost 30,000 people. The new library will house 2,788 visitors and will include 1,569 student desks.
3 The Sports Centre
Fitness instructor Claire Cleland will lead exercise classes at the new sports centre.

Did you know?
The new Sports Centre will have 2,000 more community members than the Munrow Sports Centre and three times the number of community groups will be able to use the facilities. There is still time to vote for which sporting hero you would like the gym in the new centre to be named after. Learn more at www.birmingham.ac.uk/notg

4 The Lapworth Museum of Geology
Curator Jon Clatworthy move a mammoth tusk as the museum is packed up for its refurbishment.

Did you know?
The refurbished museum will greatly improve public access to more than 250,000 geological specimens of national and international importance, ranging from rocks, minerals and dinosaur bones to historic artefacts such as the Milne-Shaw Seismograph, the first instrument ever invented to measure earthquakes.

5 The Institute of Translational Medicine (ITM)
Leukaemia survivor and former England footballer Geoff Thomas (right), and Cure Leukaemia co-founder Professor Charlie Craddock, outside the new Institute of Translational Medicine.

Did you know?
The ITM will be a unique centre where patients, doctors, researchers and businesses will work together to develop and test drugs through clinical trials, and get effective treatments to patients like Geoff as quickly as possible.

Your support
All of these projects are due for completion in either 2015 or 2016. Time is therefore of the essence. Any donation at this crucial stage will have a profound, long-lasting impact. To donate £10, text GIVE to 70111 or complete the donation form enclosed and be part of something amazing.

Texts cost £10 plus standard rate text message charge. A minimum of 97p depending on your service provider, will be received by the University of Birmingham, charity exemption number X7237.

Helpline: +44 (0)121 414 8894.

All of these projects are due for completion in either 2015 or 2016. Time is therefore of the essence. Any donation at this crucial stage will have a profound, long-lasting impact. To donate £10, text GIVE to 70111 or complete the donation form enclosed and be part of something amazing.

Texts cost £10 plus standard rate text message charge. A minimum of 97p depending on your service provider, will be received by the University of Birmingham, charity exemption number X7237.

Helpline: +44 (0)121 414 8894.
Replacing her cap and gown with a new working wardrobe, Rebecca Telfer (Interc BMedSc Clinical Sciences, 2014) was the lucky winner of £300 of Debenhams vouchers in the Alumni Office Class of 2014 competition.

‘Graduating was such an exciting experience that it was fantastic to be able to share and preserve the celebrations on social media using #UoBgraduation. My selfie being selected as the working wardrobe winner was the icing on the cake of a wonderful time at Birmingham.

‘I have so many great memories; from making friends for life, to nights at Fab in the Guild of Students followed by a trip to Rooster House takeaway. I also represented the University in Judo, travelling to tournaments in Spain, and winning BUCS gold and silver trophies.

‘I was incredibly lucky that the University’s new Chancellor, Lord Karan Bilimoria, received his honorary degree in the same ceremony as me. I find the story of his life and career completely fascinating, and his speech really inspired my entrepreneurial spirit. Now I just need to figure out a way to combine that with my surgical skills!

‘I supported my studies by working in care homes, and spent my summer gaining work experience in a Birmingham hospice. When I found out I’d won the #UoBgraduation competition I was just starting a 12-hour shift. I started dancing in my chair, and called my mum straight away to tell her the good news. It certainly made the shift fly by!

‘I loved the shopping trip, it was great to have a personal shopper, and £300 to spend on clothes is something I could never have imagined as a student. I’ve picked some perfect outfits for my upcoming modules in paediatrics and general practice.’

To find out more about postgraduate opportunities and how you can stay in touch with the University after graduation visit www.birmingham.ac.uk/alumni
This city is somewhere all Old Joe readers will know and love and, much like the University campus, Birmingham is undergoing an unprecedented period of transformation. As the city’s motto, ‘Forward’, suggests its culture, economy and people never stop evolving.

2015 is important for Birmingham as it builds its position as a leading global destination. Major developments include:
- Completion of Birmingham New Street station’s £600 million redevelopment
- Indulge in Birmingham’s amazing food scene, from cocktails at Brindleyplace and The Mailbox, to fine dining at the city’s four Michelin-starred restaurants.
- Check out the street art at the city’s creative quarter the Custard Factory.
- Check out one of the most important archaeological finds in modern history, the Staffordshire Hoard, at Birmingham Museum and Art Gallery.
- The new Library in Centenary Square is an architectural icon!
- Opening of ‘Grand Central Birmingham’ shopping and leisure centre including a flagship John Lewis store
- A £50 million redevelopment at leisure and retail destination The Mailbox
- Opening of exciting University developments: the University School, new-look Lapworth Museum of Geology and Birmingham Health Partners’ Institute of Translational Medicine
- Rugby World Cup 2015 matches at Villa Park, during which the University will host the South African team
- 25th anniversaries for Birmingham Royal Ballet, and Cadbury World
- 50th anniversary of Birmingham’s iconic Rotunda building

What do alumni recommend to see and do in Birmingham?

**Tom Hemmings** *(BSc Geography, 2009; MSc Urban and Regional Planning 2010)* works for Marketing Birmingham, the city’s strategic marketing partnership.
- Indulge in Birmingham’s amazing food scene, from cocktails at Brindleyplace and The Mailbox, to fine dining at the city’s four Michelin-starred restaurants.
- Check out the street art at the city’s creative quarter the Custard Factory.
- Check out one of the most important archaeological finds in modern history, the Staffordshire Hoard, at Birmingham Museum and Art Gallery.
- The new Library in Centenary Square is an architectural icon!
- Send your tips and pictures to alumnicommunications@contacts.bham.ac.uk and the best will be featured on this page in the next issue of Old Joe.

**Lindsey Keys** *(BA Ancient and Medieval History, 2009)*
- Definitely visit the Barber Institute.
- Walking along Birmingham’s canals gives a different experience of the city.
- Also visit the Rag Market, go to Vale Fireworks, and hug the Bullring bull!

**Clarence Ke** *(MA Teaching English as a Foreign/Second Language, 2012)*
- The University’s Winterbourne House and Garden is a must visit. Through the little iron gate you enter a secret garden full of bluebells, crocuses, and daffodils.

Next up it’s...
The most unchanged tool in history is a needle and thread. I enjoy showing people the huge variety of techniques that are possible, and opening their eyes to embroidery as art.

I don’t believe in straight line progression. I’ve done everything from running a programme including pantomime and wrestling at the Fulcrum Centre in Slough, to being involved in the naming of two roses. I’m amazed by all the opportunities I’ve had.

The Cambridge admissions tutor said: ‘Why would you want to come here? You’ve already been accepted at the best place in the country.’ So that was how I came to study at Birmingham’s Shakespeare Institute.

Knitting can be done on autopilot: with stitch, you have to clear your mind and concentrate so it is an excellent way to de-stress. It has such a recognised therapeutic value that it was used by recuperating servicemen during both World Wars.

Embroidery isn’t always considered academic but we are a school; that is our raison d’etre. We can teach anybody. We offer day classes, a Certificate and Diploma, our Future Tutors Programme, and the only full-time BA course in hand embroidery in the country. Last year we had students from 27 countries aged from 18 to 80 plus.

Never a seat goes cold is one of our mantras. Queen Victoria’s funeral pall was completed in 21 continuous hours, with one stitcher immediately replacing another until the work was done.

I get very little chance to do embroidery now. Last year, my total output was a section on a sampler for a member of staff who was retiring. It had the letters A–Z and numbers one to ten and, since the letter S was taken, I embroidered the number one.

The Duchess of Cambridge’s wedding gown was absolutely fantastic for the RSN to be involved in. It was designed by Sarah Burton for Alexander McQueen, and we were commissioned to appliqué lace motifs onto the tulle for the skirt panels, the bodice, six metres of veil edging, and shoes. We weren’t allowed to announce our involvement until 11.00am on the day of the wedding, but we are rather good at keeping a secret.

Goldwork is the pinnacle of embroidery. The RSN is renowned for traditional goldwork (which uses metal threads) including our work on Queen Elizabeth’s coronation train in 1953. The embroidery was designed by the RSN and featured olive branches and wheat ears, to represent peace and plenty, and used 18 varieties of gold thread across the 18-feet-long train.

There’s a little snail embroidered in the corner of one commission, which took five years to complete. We receive commissions and conservation work from all over the world, but that particular work was so intricate, it took somewhat longer than we anticipated.

Learn more: www.royal-needlework.org.uk
To win a day class of your choice at one of the Royal School of Needlework’s five teaching venues, just answer this question: How many feet long was Queen Elizabeth’s coronation train?

Send your answer with your name, contact phone number and degree information via alumnicommunications@contacts.bham.ac.uk by 31 May 2015.
From haunted corridors to underground societies, the subterranean secrets of the tunnels beneath the University’s Edgbaston campus have become folklore amongst Birmingham students, alumni, and staff. But the subways are real and serve a useful purpose.

‘The tunnels carry steam, heating, water and power to most campus buildings,’ explains Kevin George, Director of Engineering for the University’s Estates Office. ‘The earliest tunnels date from 1900, while the most recent additions were built in 2011 and include the award-winning steam bridge which supplies heat to the Medical School.’

Today the system stretches for more than three kilometres and helps to keep the University running. The Estates staff who maintain them are highly trained and wear full safety gear to ensure they do not expose themselves to any dangers while they work, as you can see in the photos from Old Joe’s guided tunnels tour.

Each section of the subway carries its own intriguing history. The labyrinthine corridors below the Aston Webb Building once served as a mortuary for the hospital set up in the Great Hall during the First World War. Other sections have allegedly played host to illicit meetings of secret clubs and even served as a means of escape for a student accidentally locked in the main library after hours.

Whether they are fact or fiction, tall tales about the tunnels reach as far back into the University’s history as the subway itself.
What’s your favourite tall tale about the tunnels?
Did you ever tour them (by accident or design)? Send your memories of the Birmingham subways to alumnicommunications@contacts.bham.ac.uk

“WE’VE HEARD PLENTY OF STRANGE NOISES DOWN HERE, SOME PEOPLE SAY IT’S THE GHOST OF A NURSE WHO WORKED HERE DURING THE FIRST WORLD WAR; I THINK IT’S MORE LIKELY TO BE STEAM ESCAPING FROM THE PIPES!”

Ray Staniland, University Services Mechanical Team Leader
Growing up on a hill sheep farm meant Dr Jackson Kirkman-Brown had an early introduction to the mechanics of reproduction. From just six years old, he had pet lambs and quickly learned how a ram could make a ewe pregnant, and the implications if the animals had fertility problems.

Thirty four years on and the childhood spark of interest has fuelled a research career at the University that has already given hope, and babies, to hundreds of couples.

‘Reproduction as a field has always been interesting to me and when I graduated from Birmingham, I looked for where I could make a difference,’ remembers Jackson.

‘IVF was very new then, even now it’s only 36 years old, so there are still enough advances left that I feel anyone can have a real impact.’

According to NHS figures, infertility affects up to 3.5 million people in the UK yet it remains somewhat taboo. ‘People generally don’t talk about it but when you look at the statistics — one in six couples — all of us have a friendship group of more than that so we will all know someone who’s got a fertility problem,’ says Jackson. ‘And because it isn’t talked about, sperm and egg donors don’t get the same respect as blood donors for example.’

Hope, health, and celebrating the wonders of sperm are all in a day’s work for Dr Jackson Kirkman-Brown (BSc Biological Sciences, 1993; PhD Biological Sciences, 2001).
Much of Jackson’s research has focused on sperm, including his part in introducing the world’s first over-the-counter home fertility kit in 2006. And it was while leading one of the West Midland’s main centres for banking sperm for cancer patients that his work took a new turn.

‘A young soldier who had lost his testicles through a blast injury from an IED (Improvised Explosive Device) was referred to me wanting to know whether he may still have sperm in his ejaculate,’ remembers Jackson. ‘Unfortunately, as this was a number of weeks after his injury, he didn’t; but through talking to him and the senior nurse, Major John Clark, I became aware for the first time of how many soldiers were returning from Afghanistan and Iraq with extensive groin injuries, and what that meant for their future.’

Jackson and Major Clark resolved to help, aided by the fact that all injured British service personnel were then brought back to Selly Oak Hospital. ‘In the beginning, we would go into theatre and try to take any damaged testicular material to recover sperm. Over time we’ve evolved that into a new operation where we harvest the vas deferens (the tube that carries sperm which is cut during a vasectomy) because we realised that the vas has quite a lot of sperm in it, and as it’s inside the body, it’s away from the blast. So we could remove that section and harvest the sperm to be frozen for future use.’

The groundbreaking procedure gained the Yorkshireman recognition including an MBE and Healthcare Scientist of the Year 2014 but, more importantly for Jackson, it has already seen the birth of four babies with more on the way.

WE WERE OVERJOYED TO FIND OUT WE WERE PREGNANT. WE JUST COULDN’T BELIEVE IT. WE ARE SO GRATEFUL TO JOHN AND JACKSON FOR THEIR VISION, THEIR PERSEVERANCE, AND FOR GATHERING SUCH WONDERFUL PEOPLE TO HELP THEM REALISE AN INCREDIBLE THING.
One soldier’s wife, who has asked to remain anonymous, explains: ‘The team were convinced of how vitally important it would be for these men to still have the option of fatherhood not only to enjoy the wonders this could bring, but also to preserve their manhood in the fullest sense.

‘We were overjoyed to find out we were pregnant. We just couldn’t believe it. We are so grateful to John and Jackson for their vision, their perseverance, and for gathering such wonderful people to help them realise an incredible thing. Without them, we would not have our child or the hope of any more.’

For Jackson and the surrounding team, their interest does not end with a successful pregnancy as they also want to positively affect the health of the resulting child. The team introduced a pre-implantation genetics service at Birmingham Women’s Hospital with a single cycle in 2010, and are now approaching three cycles a week with NHS funding. Jackson explains: ‘Where couples have genetic conditions such as cystic fibrosis and myotonic dystrophy, we can test and only give them an embryo without those conditions. For families who would otherwise have children who would severely suffer or die at birth, or for women having miscarriage after miscarriage, that’s amazing.’

But Jackson and his colleagues still want to do more and, through a multidisciplinary research group in the School of Clinical and Experimental Medicine, have identified their next three areas of focus. ‘We would like to carry out further studies into the effect of blast injury on the testicle and look at developing pelvic protection systems for soldiers,’ he says. ‘And, to help give couples who need fertility treatment the greatest possible chance of success, we want to pursue novel research relating to sperm DNA quality and factors from sperm affecting implantation. This would allow us to investigate a cause of miscarriage and help couples understand which treatment will work best for them.

‘This research could have enormous benefit if we could offer PhD studentships, but funding for research into the diagnosis and treatment of infertility is very small in comparison with cancer or cardiovascular research, for example. Fertility issues affect a significant proportion of the population causing considerable emotional distress for those affected, so any and all funding really does change families’ lives.’

Jackson is a consultant and presenter on television series such as Channel 4’s Embarrassing Bodies, working to improve public understanding of reproduction.
Get involved

Could you help Jackson and his team change families’ lives? To support his research or find out more, please contact Laura Fairbanks via l.fairbanks@bham.ac.uk or +44 (0)121 414 8894.
Why did you choose to study at Birmingham?
The English Department was (and I daresay still is) one of the best in the country. My friend Simon came here before me and I loved it when I visited him. Plus, I wanted to be in a big city and at a campus university. I loved everything about Birmingham, and look back on it as an almost impossibly happy time. The campus life, the friends I made, the extra-curricular shenanigans in the Guild, and even the work!

How did university prepare you for your career?
Tom Davis taught me throughout my three years at Birmingham and hugely influenced how I work. He gave us the most practical, cleverest way of structuring and writing up research, and I've used it in pretty much every stand-up show I've put together. It seems odd, equating stand-up and an essay, but the most successful examples of either draw their audience along with a through line. That's a hard trick to pull off – especially in a stand-up show, which has to appear almost as though it's just coming to you as you go along. Although the most important thing is to make it look like you're not doing that at all.

As an actor, director, writer, comedian and author, Chris Addison’s (BA English, 1994; DUniv 2013) work has included wars of words in The Thick of It and wars of worlds with Doctor Who. Chris told Old Joe how Birmingham helped to shape his career.
You’re seen as somewhat of an ‘entertainment polymath’; but what are you most proud of?
I’m incredibly proud of *Trying Again*, which is the show I created with my brilliant friend Simon Blackwell. It was a grown-up romantic comedy. ‘Warm but never soft,’ as a mate of mine called it. We only did one series, but it was everything we set out to make it, which is a regrettably rare thing to be able to say in TV.

What would be your advice to people pursuing a career in comedy or acting?
Actors: get as many strings to your bow as you can. Do you write? Good – write yourself a show, don’t sit about waiting for it all to happen to you. That happens to about 0.0005% of the people who go into acting. Comedians: get yourself five minutes of material and gig it as often as you can. The only way to learn comedy is by doing it. There are no shortcuts, whatever anyone tells you.

Is there anything you would still like to achieve?
Loads! I’ve a huge pile of books by my bedside that want reading, for a start, and I still haven’t got round to tidying my office. Other than that, I’d love to direct a film and I would really like to play a straight role in a period drama, for the change of gear and the dressing up.

What is in store for 2015?
I’m not sure, yet. There’ll be a lot of *Veep*, the HBO sitcom I’m currently directing and producing, to edit, and that will take up most of the early part of the year. Then I might have a glass of wine.

Find out more about Chris’s career at www.chrisaddison.com
Alumni events calendar
There are a wide variety of events and other opportunities for you to visit campus, get together with friends, network with fellow professionals, or simply come along for a drink.

Alumni events

Department of Drama and Theatre Arts is 50,
George Cadbury Hall, various dates
Drama is celebrating its 50th anniversary this year with a wide variety of events. For all listings and to purchase tickets, please visit www.birmingham.ac.uk/drama

May

Birmingham Heroes Lecture, London, May
Hear Professor Clive Roberts, Director of the Birmingham Centre for Railway Research and Education, discuss Birmingham’s contribution to railway research followed by a networking drinks reception. Please register your interest by email now.

June

Alumni Sports Day, Edgbaston campus, 13 June
Join your fellow alumni for a day of sporting action. For further information follow us on Twitter @alumnisportsday

EPS Reunion, Edgbaston campus, 20 June
Miss your alma mater? Get together with your former classmates at the College of Engineering and Physical Sciences’ annual alumni reunion. Book your place at www.birmingham.ac.uk/EPSreunion

Access Alumni event, Birmingham and London 29 June
Get practical advice on making the next step in consulting, management, finance and careers from those who have been there, done that. Networking events are planned for Birmingham and London. Further details will be available soon.

August

Medicine 50 Year Reunion, 11–13 August
Join Medicine classmates from 1965 to celebrate your 50th anniversary at the Medical School. Details to be confirmed. Please register your interest by emailing mds-alumni@contacts.bham.ac.uk

For full details on all events visit: www.birmingham.ac.uk/alumni/events
September

Community Day, Edgbaston campus, 6 September
As the University’s historic Circles of Influence campaign comes to a close, join alumni, supporters, and local residents in exploring campus and learning more about the great things that the University has achieved both regionally and across the world.

Medicine 20 Year Reunion, 26 September
Join Medicine classmates from 1985 to celebrate your 20th anniversary of graduating. Details to be confirmed. Please register your interest by emailing mds-alumni@contacts.bham.ac.uk

Golden and 50th Anniversary Reunion and GGAA AGM and Forum, Edgbaston campus, Saturday 12 September
Alumni who graduated in 1965 or before are invited back to campus for a special reunion lunch. The reunion will also coincide with the University’s Open Day and the Guild of Graduates and Alumni Association’s AGM and forum.

General Events

The Imperial Legacy in Coinage and Culture, Barber Institute of Fine Arts, until 24 January 2016
Visit www.barber.org.uk for details on all Barber events and exhibitions.

Civic Science: Oliver Lodge and Birmingham, Muirhead Atrium, until Monday 18 May
This informative exhibition from the Cadbury Research Library highlights the career of physicist and former University Principal (1900–1919), Sir Oliver Lodge.

Vice-Chancellor’s Distinguished Lecture Series, Edgbaston campus, Wednesday 25 March, 6.00pm
World-renowned human-rights campaigner Shami Chakrabarti CBE is the speaker.

Trust, Diplomacy and Conflict Transformation, Edgbaston campus, 13–17 April
This week-long training course includes lectures delivered by internationally renowned academics, small group role-plays, mediation training and a crisis simulation game. Alumni who register will receive a 10% discount.

Wines from the Hedgerow, Winterbourne House and Garden, 16 April, 7.00pm
Find out more about this spring talk and wine tasting at www.winterbourne.org.uk

EPS Societies’ Awards, Edgbaston campus, Tuesday 9 June
Come and celebrate the outstanding achievements of student societies from the College of Engineering and Physical Sciences.

The Baggs Memorial Happiness Lecture, Edgbaston campus, Monday 22 June, 6.30pm
Journalist Matthew Parris will deliver the 2015 Baggs Memorial Lecture. A private reception will be held for those who have remembered the University in their wills.

For a full listing of all events on campus, visit www.birmingham.ac.uk/events

Expand your learning

If you can’t make it to an event, why not stay connected to the University and expand your knowledge by signing up for a Massive Open Online Course (MOOC). The courses are free and cover a wide range of subjects, from the First World War to character and values, and liver disease.

If you enjoy Shakespeare, why not try the new Much Ado About Nothing: In Performance MOOC, produced in collaboration with the Royal Shakespeare Company and the Shakespeare Birthplace Trust? To sign up for a course, visit www.birmingham.ac.uk/moocs
Future

With the imminent start of major projects such as the HS2 high-speed line, Britain’s railways are set for the biggest change in a generation. Researchers in the Birmingham Centre for Railway Research and Education (BCRRE) are preparing the industry for the future.

Systems go

Led by Professor Clive Roberts, the BCRRE has international-level expertise in all railway systems, and stands out for its interdisciplinary research.

‘One of the major challenges in railways today is how you make all the different systems work together,’ Professor Roberts explains.

‘For example, we do lots of work on traffic management, which ensures that the trains run to schedule, but to do that it’s beneficial to understand energy optimisation and timetabling. We’re good at integrating different aspects of research to solve industry problems.’

International

In China, 10,000 kilometres of high-speed rail have been built in the past ten years but there have been a number of high-profile accidents caused by poor systems integration. BCRRE has developed an international programme in railway risk and safety management at Zhejiang University in Hangzhou, in collaboration with the University of York. The programme is sponsored by the Lloyd’s Register Foundation, a charity whose motto is ‘life matters’.

Birmingham’s Masters programme is also making an international impact. Students have travelled from around the world to study here and alumni from Rwanda are about to start work on the country’s first railway. In Ethiopia, alumnus Biniyam Abera (MSc Civil Engineering, 2014) is working on a railway project which could potentially reduce national carbon dioxide production by 30%.

But why does the world come to Britain for railway expertise? Professor Roberts says: ‘The UK has a heritage of building railways overseas, and although many Brits don’t think we have a particularly good railway, it actually performs very well considering its age and condition.’

Education

Birmingham is training the next generation of railway engineers through innovative Masters and undergraduate courses, run in conjunction with industry.

BCRRE launched the undergraduate programmes in September 2014 in response to a skills shortage in an industry where many senior people are due to retire in the next decade. The Masters course then gives a broader technical understanding to enable engineers to progress through management.

‘I think there’s a passion in youngsters about the rail industry today,’ says course leader Professor Felix Schmid, who has 20 years’ experience with rail companies in the UK and Switzerland. ‘Projects such as HS2 and Crossrail [London’s new high frequency railway] have captured people’s imagination. So the industry needs new staff, but equally there’s demand to study in this area.’
The future

Driverless trains and smart signalling systems could become a reality if plans for a £50 million new digital railway innovation centre at BCRRE are approved.

The national centre will bring together new technologies to improve communications, information management and energy optimisation, and enhance passenger experience.

‘There is a step-change in what the railways must do to deliver the capacity and dependability that everyone expects, and new digital technologies will help,’ Professor Roberts says.

‘Railway systems have become integral to how people live and economies grow in the 21st century, so our work will have an impact across the globe.’

Delays solved

Disgruntled with your commute to work?
Take comfort in the knowledge that BCRRE is working on new technologies to tackle the most common problems experienced on UK railways.

<table>
<thead>
<tr>
<th>Problem</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Points (sections of track that move) failures</td>
<td>5,000 of Britain’s 26,000 sets of points are operating with Birmingham software that uses sensors to predict failures before they happen.</td>
</tr>
<tr>
<td>Leaves on the line</td>
<td>Leaves cause delays by sticking to the tracks and making them slippery, increasing the braking time trains need. Birmingham researchers are looking at ways of removing residue from the line.</td>
</tr>
<tr>
<td>Delays due to congestion</td>
<td>BCRRE’s work on traffic management helps with traffic fluidity through busy stations and junctions. The software is being embedded in systems that Network Rail will roll out in 2016 as part of a £750 million project.</td>
</tr>
<tr>
<td>Blockages on the line</td>
<td>Researchers are working with the European Space Agency using satellite imaging to identify areas of the railway where trees have fallen down, or where a line is blocked after severe weather.</td>
</tr>
</tbody>
</table>
Why is HS2 needed?

The need for HS2 in the UK has been long-debated, but Professor Schmid believes the project is essential. ‘We need more capacity on Britain’s railways, which currently carry about 10% of all traffic, but could potentially carry up to 40%,’ Professor Schmid explains. ‘The west and east coast mainlines will be saturated in ten years’ time, and the motorways will be unable to handle the predicted volume of vehicles unless rail travel increases.

‘We could generate capacity by building a conventional two-track railway and running it at 200 kilometres per hour – 125 miles per hour – and, for many things, that would be very satisfactory. However, you won’t find anyone to fund something that is just adequate.

‘Brunel built his Great Western Railway for speeds of 100mph, even though the fastest train available at the time could only reach 30mph. We need to have the same foresight.’
After Manor House was badly damaged in a fire in summer 2014, Old Joe pays tribute to this hall of residence that holds a special place in the hearts of many alumni.

Neil Bryant (BSc Physics with Astrophysics, 1987) was Joint Junior Common Room President at Manor House from 1985–86, leading a committee of students responsible for residents’ welfare and social activities. ‘My wife and I readily admit they were the best years of our lives. There were definitely highs and lows, and I was never shocked but I was constantly surprised. Living above 325 undergraduates, you never know what’s going to happen.’

Professor Clive Neal-Sturgess looks back affectionately at his 23 years at Manor House from 1982 to 2005. As Senior Common Room President, he and his wife Elle were responsible for the welfare of students living in the hall. ‘Based in Northfield, we were a long way off campus and that isolation helped generate a sense of community spirit. We were a very traditional hall and I did everything I could to keep it that way.’

Manor House traditions included Senior Common Room staff processing into dinner each evening, a ritual which continued until the Cadbury Wing extension opened in 1993 and a cafeteria was introduced. The hall also hosted several formal dinners each year, with guests ranging from the Chancellor to local parliamentary candidates.

Ghosts were another tradition and stories included a phantom maid who tucked students up in bed. The day when three students asked permission to form an anarchy society is one of many highlights of Professor Neal-Sturgess’ tenure, and he remembers with pride the residents’ charity work and musical prowess. ‘Students are generally very gifted and certain environments bring out the best in them. We were that kind of environment,’ he says.

After Manor House was badly damaged in a fire in summer 2014, Old Joe pays tribute to this hall of residence that holds a special place in the hearts of many alumni.

MANOR HOUSE MOMENTS

Neil Bryant (BSc Physics with Astrophysics, 1987) was Joint Junior Common Room President at Manor House from 1985–86, leading a committee of students responsible for residents’ welfare and social activities. Here are his top five memories from his time at Manor:

1. Clive and Elle as in situ parents looking after us all
2. Amazing social events, from casino nights to The Bang fireworks display and The Ball dance
3. Queuing for the telephone to call home (no one had a mobile)
4. Ghost hunting in the attic
5. Watching the historic England vs Argentina World Cup game (beer was 55p per pint!)

If, like Neil, you have memories and pictures of Manor House, please send them to alumnicommunications@contacts.bham.ac.uk

The Manor House Association alumni group is hoping to hold a final reunion for former residents in 2015. If you would like to attend, please email the address above.
The University has been challenging and developing great minds for more than a century, and this year the 300,000th University graduate will complete their degree. To celebrate this momentous occasion the University launched a search for a student, due to graduate in summer 2015, to act as the symbolic 300,000th alumnus.

Many outstanding students applied, and Old Joe is delighted to introduce Shenaid Tapper (Planning and Economics, final year) as the University’s 300,000th alumna. Old Joe will follow Shenaid through her final months as a student, from the suspense of waiting for results to the excitement of graduation.

Visit www.birmingham.ac.uk/300k to follow Shenaid throughout her final year.

A robot developed by Birmingham researchers is one of the first in the world to manipulate objects with a similar grasp to humans. The project’s goal is to enable Boris to complete manual tasks such as loading a dishwasher. He will also be capable of a whole range of everyday tasks requiring the controlled movement of objects including those that are completely unfamiliar.

Boris uses multiple sensors such as depth sensors in order to retrieve the geometry of an object and evaluate up to 1,000 possible ways to grasp a particular item.

As well as Boris, the team from the School of Computer Science is also developing Bob – an autonomous, mobile robot that operates in dynamic and constantly changing human environments (such as care homes or offices) for long periods of time. ‘Bob and Boris represent a new generation of robots,’ explains Professor Jeremy Wyatt, Professor of Robotics and Artificial Intelligence. ‘The old generation is typified by industrial robots that manipulate objects in a precisely controlled environment. The new generation includes mobile robots like Bob and airborne robots that are mobile in an uncertain and changing world. Boris is also part of this new generation in that he can manipulate objects in unstructured settings, such as a factory or warehouse where the robots and humans work together rather than separately.’


One in 300,000

The University is aiming to bring engineering to life through robotics in a new Royal Institution masterclass for children. Funded by IBM and an Ingenious grant from the Royal Academy of Engineering, the modules will be developed with consultant support from Senior Birmingham Fellow Dr Rustam Stolkin from the School of Mechanical Engineering, and Lecturer Dr Michael Mistry from Birmingham’s Intelligent Robotics Lab.

Ingenious project to inspire children

Each of the University’s 300,000 alumni will have unique memories of their time on campus – what is yours? Send in your photos and memories to alumnicommunications@contacts.bham.ac.uk. A selection will be featured in the next edition of Old Joe.
The University holds strong family links for many alumni, as shown by some of your stories of the Birmingham bond across generations.

Peter Cadogan (BSc Chemistry, 1969) enjoys three generations of University family connections. His mother-in-law Margaret Barber (BA Geography, 1933) was an alumna, and Peter met his wife Christine Gaskell (BSc Mathematics, 1970) on campus. Their daughter Lucy graduated with a first in BSc Mathematics and Statistics in 2004. ‘Our oldest granddaughters are aged seven,’ says Peter, ‘we hope there will be a fourth generation of Birmingham alumni in 14 years!’

Cadogan

Raphael Barnett-Ward (First year, Theology and Religion) followed family tradition when he joined the University this year, almost 70 years after his grandparents Honor Shedden (BSc Physics, 1947) and Alan Ward (DEG BSc Physics, 1946; PhD Physics, 1950) met on campus. Honor was also an early member of the Birmingham University Evangelical Christian Union as shown in this photo from a visit to Wilderhope in 1946.

Ward
From UBSport

Alumnae help England win Women's Rugby World Cup
University of Birmingham alumnae Kat Merchant (BSc Sport and Exercise Science, 2007) and Laura Keates (BSc Zoology, 2010) were crowned champions in the Women’s 2014 Rugby World Cup final as England beat Canada 21-9 at Stade Jean-Bouin, Paris.

It was England’s fourth consecutive World Cup final, having lost three previous finals to New Zealand, and their first win in the tournament for 20 years.

From the College of Medical and Dental Sciences

Breath of fresh air for asthma treatment
Treatment for the 5 million asthma patients in the UK could be improved thanks to research collaboration between the Schools of Pharmacy, and Geography, Earth and Environmental Sciences.

The team used a laser beam trap to examine how drug particles from asthma inhalers behave as they are projected through the air.

Around 73 million inhalers are in use nationally and this new research could lead to an improvement in their formulation, increasing their effectiveness while reducing negative side effects.

Gene genius
The University is helping to deliver a world-leading genomics project set to transform diagnosis and treatment for patients with cancer and rare diseases.

The 100,000 Genomes Project involves collecting and decoding 100,000 human genomes – complete sets of people’s genes – that will enable scientists and doctors to understand more about specific conditions.

The West Midlands Genomics Medicine Centre (WM GMC) will deliver up to 18,000 of the total number of genomes, drawing on its unique population demographic through a collaboration of 18 healthcare organisations.

Learn more at www.genomicsengland.co.uk/genomic-medicine-centres

From the College of Life and Environmental Sciences

Brummie water fleas prepare for trip to space
Daphnia water fleas are being prepared by scientists at the University for a trip to the International Space Station.

The ‘Brummie water fleas’, from Edgbaston Pool, will be the first animals from UK waters to go into space and are currently being prepared for their transit to the US and their flight.

Dr Kay Van Damme, from the School of Biosciences, says: ‘Little is known of Daphnia in zero gravity. Their swimming behaviour in space can teach us how they experience gravity on Earth and their reproduction is a good indicator of stress.’

The fleas’ space mission is part of a schools’ educational science project by the International Space School Education Trust and Mission Discovery, in coordination with King’s College London and the University of Birmingham.
From the College of Social Sciences

Conflict course
The Institute for Conflict, Cooperation and Security is running a training course in April 2015 introducing cutting-edge research on international trust-building and applying it to contemporary political conflicts. Participants will take part in a series of lectures, seminars and small group role-plays, including a two-day mediation training course led by the NGO Responding to Conflict. The week will culminate with a Harvard simulation game on the Israeli-Palestinian crisis. Alumni receive a 10% discount on the conference fee. Learn more at [www.birmingham.ac.uk/iccs/tdct](http://www.birmingham.ac.uk/iccs/tdct)

Business research showcase
In November the College held ‘Birmingham Means Business’, an event to demonstrate how academic research can help businesses. The evening featured keynote speakers Lord Digby Jones and Professor Simon Collinson, Dean of Birmingham Business School. Learn more at [www.birmingham.ac.uk/dls](http://www.birmingham.ac.uk/dls)

From the College of Arts and Law

Choirs on song at festival
Birmingham University Singers and the University Women’s Choir competed at the Llangollen International Music Eisteddfod for the first time in 2014.

The women’s choir won their category and secured a place in the Choir of the World final. The Birmingham University Singers were against some tough competition but placed 6th overall.

The International Eisteddfod is a renowned choral and dance festival, comprising a number of competitions and concerts. The festival was an opportunity for students to showcase their own talents and also to witness other culture’s traditions and music.

Staff news
- Professor Erika Rackley, of Birmingham Law School, has been awarded a Phillip Leverhulme Prize for her achievements in the field of law. She will use her prize to support and advance a number of research projects including an oral history project on the progress and prospects of women in law.
- Luke Kennard, of the Department of Film and Creative Writing, has been named a next generation poet tipped to dominate the next decade by the National Poetry Book Society. Luke’s poems include *The Harbour Beyond the Movie* and *Salt*.

From the College of Engineering and Physical Sciences

Stellar discovery
Asteroseismologists from Birmingham have led the discovery of a planetary system with five Earth-sized planets, dating back to the dawn of the galaxy. Using the NASA Kepler mission, the team observed a Sun-like star (called Kepler-444) hosting five planets, with sizes between Mercury and Venus.

The host star was characterised by detecting oscillations caused by sound trapped within it, which lead to minuscule pulses in its brightness, allowing the measurement of the star’s diameter, and also its mass and age.
Dr Paul Arkell (BMedSc International Health, 2007; MBChB Medicine, 2010) witnessed the deadly impact of Ebola when working in Sierra Leone.

‘This is a huge moment in global health, with potential to have devastating and long-lasting effects in West Africa. I don’t want to look back in a few years’ time without having at least tried to do something.’

‘Why did you go?’ This is a question Dr Paul Arkell is often asked. But for Paul, it is easy to justify why he stayed in Sierra Leone as the Ebola crisis took hold, and why he put his training on hold again to return a few months later.

‘I’m interested in infectious diseases, both from a clinical and public health point of view. We’ve never faced this kind of health emergency before, and it’s fascinating to be part of the Ebola response. I also have the skills required to make a positive impact. I want to do some good.’

The 28 year old worked for King’s Sierra Leone Partnership (KSLP) in Connaught Hospital from February to July 2014. He saw Ebola slowly creep into the country, and helped government and the hospital prepare for the outbreak.

Reports of Ebola reaching the neighbouring country of Guinea were first received in early March. Paul attended meetings of the Sierra Leone government’s Ebola Task Force to help develop an action plan.

By June, Connaught Hospital had begun to see more and more suspected cases. With only a small isolation room which was full, and the knowledge that results took several days to process, Paul and his colleagues created an Ebola isolation ward, and began training local staff in how to manage cases safely. ‘We basically worked through the night, putting up plastic sheeting, covering mattresses in plastic, preparing buckets and bleach.

‘When getting into personal protective equipment (PPE) and going face to face with someone who has Ebola there’s anxiety, but that’s not a bad thing. If you’re anxious, you’re careful and if you’re careful, you’re safe.’
Coming back to the UK in mid-July to continue his medical training was a moral dilemma for Paul, who again put his training on hold to return to Connaught Hospital in December 2014. By that time, there had been over a thousand cases in Freetown, and the city was a hotspot for the disease.

The isolation ward had quickly become an assessment centre for patients with suspected Ebola, and although international aid had started to make an impact, there were still too many cases and not enough beds. Patients, who were sometimes extremely unwell, would have to wait outside the hospital or go back to their homes.

Paul’s typical day was spent working with a team of Sierra Leonean nurses and cleaners, admitting and testing suspected cases, arranging transfer of positive patients to treatment centres, and deciding how best to treat those who tested negative.

The work also involved providing nursing and medical care for patients in the assessment centre, everything from given injections to helping people drink, making beds, cleaning floors and moving dead bodies. All this had to be done in full personal protective equipment, which left him hot, uncomfortable, and drenched in sweat.

‘I’ve obviously seen really shocking things but I tried not to think about it; everyone working in Sierra Leone sees things like that. I was part of a very strong team and being able to talk about it and support each other helped.

‘It’s best to concentrate on the good things. The way the staff stepped up to the challenge was amazing. The hospital’s nurses and cleaners all turned up every day and did a really incredible job.’

During his five-week placement, Paul also worked in a similar assessment centre in Rokupa Government Hospital, also in Freetown. By the time he left in January, he said there were no longer people queuing up outside the hospitals, and the proportion of suspected cases that were positive had reduced from 50% to about 20%.

‘The main reason I love being part of KSLP is the really unique approach of partnering and working alongside Sierra Leonean organisations and colleagues. Those five weeks were tough for me, but the local staff have been doing this work for many months. They should be credited with the impact that we made.’

So, does he think Ebola can ever be fully contained? ‘There’s a lot more work to be done. If the current level of effort is sustained, I think all the cases can be found and treated. After this though, rebuilding Sierra Leone’s damaged health system will be a huge challenge. We must begin looking at this now.’

Learn more: kslp.org.uk/about-kings-sierra-leone-partnership/ebola

Ebola research
Research into the Ebola virus’s genetic mutations by a team from the University will influence vaccine development and help prevent future epidemics.

Birmingham academics are part of a new treatment centre being set up by the Ministry of Defence in Kerry, Sierra Leone. Using state-of-the-art genetic sequencing technology the size of a USB stick, they are recording real-time genetic code for Ebola.

To find out more about this project and how you can support it, visit www.birmingham.ac.uk/ebola
HIGH SOCIETIES

Whether it’s Redbrick or Rag, battle re-enactments or ballroom dancing, being part of a student society is a great way to enhance your university experience and make friends and memories for life. Thank you to everyone who sent in photos of their society celebrations after the Wayfarers Hiking Club was featured in the last edition of Old Joe.

Dr Edward Inett (BSc Mining, 1950; PhD Mining, 1954) has fond memories of Rag Week, as shown in this photo of the Carnival parade of 1948 (top right). ‘The parade was followed by Carnival Ball in the Great Hall’ he remembers. ‘The dress code included everything from Carnival attire, uniforms of all shades and ranks, and flowing evening gowns – mainly made from surplus parachute silks!’

The Officer Training Corps, pictured here (bottom right) at University House in the mid-1960s, holds many memories for Robin Stevens (BSc Electronic and Electrical Engineering, 1967). ‘We would parade on Wednesday afternoons, and were even paid a few shillings which were usually spent in the NAAFI bar,’ he says.

Thanks to alumni donations, current University societies, groups, and individuals were recently given the opportunity to bid for up to £2,000 each to make their dreams a reality with the Hands Up fund.

Hands Up asked students to come up with a great idea of benefit to the student community, and the breadth of applications displayed the diversity and innovative interests of Birmingham students. The Hands Up panel, comprising University staff and alumni, was delighted to award funds to 19 projects.

Winning bids included a PhD career day, Ballroom and Latin American dance competition and cheerleading squad development.

Find out more about the Hands Up finalists and watch short videos from some of the projects at www.birmingham.ac.uk/handsup.

The Hands Up fund will return next year; if you would like to find out more about how you can support this and other initiatives for current students please email giving@contacts.bham.ac.uk or visit www.birmingham.ac.uk/alumni/giving.
Get on your bike

Could you cycle from London to Paris for the University and Cure Leukaemia? Your participation in London 2 Paris 2015 could inspire a revolution in the treatment of blood cancer at the Centre for Clinical Haematology and Institute of Translational Medicine (see page 16). Find out more at www.birmingham.ac.uk/cureleukaemia

Vow to help
When Linda and Trevor Pell got married in October 2014, they decided against a traditional wedding gift list, and instead asked guests to donate to the Institute of Translational Medicine (ITM). The happy couple had become aware of the ITM through Trevor’s sister Gill, who was previously Birmingham’s Director of Finance. Wedding guests raised more than £1,400, which will save lives by helping the ITM accelerate research findings from the laboratory to patients.

Prize keeps memories alive
Family, friends and colleagues set up an annual student prize at Birmingham in memory of former staff member Professor Helen Lester, who died in 2013. More than £4,200 has already been raised for the Helen Lester Prize, which is awarded to a student on a clinical course who shows insight and originality in fields such as adverse mental health through a piece of academic work. Colleague Sarah Hinton says: ‘We want to keep Helen’s name and achievements living on at the University, and it warms my heart as the donations increase.’

Cycle of events
A team of cyclists (#teamisobel) rode 400 miles across Britain in support of four-year-old Isobel, who was diagnosed with childhood cancer neuroblastoma in February 2014. The team cycled from St David’s in Wales to Lowestoft in Suffolk in August, and a fundraising fete and charity football match were also organised, raising £1,663 in total. The money will be split between Birmingham Children’s Hospital and the University’s Mussai laboratory, which is developing new drugs to starve cancer cells of nutrients and reactivate the immune system.

Over to you
If you have an idea to raise money for the University, contact Laura Fairbanks for a Fundraise for Us pack via l.fairbanks@bham.ac.uk or +44 (0)121 414 8894. To donate to any of the pages listed here, visit www.justgiving.com/universityofbirmingham

From cycling for miles to tying the knot, there are few limits on how you can fundraise for the University. If you have an idea for how you could raise money, get in touch to see how we can help you to make it happen.
Where are you now? These pages are for you to share your stories and celebrate your successes with fellow alumni. Tell us what you’re up to and update your contact information by using the enclosed form or emailing alumnicommunications@contacts.bham.ac.uk. We will print as many updates as we can.

**1960s**

**David Brewster**  
(PhD Psychology, 1967)  
After working in pharmaceutical research, developing new drugs for use in psychiatry, I moved from the laboratory to the marketplace where I could work with clients face to face as a psychotherapist. My latest book *With Truth on Your Journey: The Pathway of Self-Realisation* was published in 2013. Joyce and I are enjoying retirement in Woking and celebrated our Golden Wedding anniversary in 2011.

**2010s**

**Jamie Carey**  
(BSc Economics, 2011)  
After graduation I started working for atom42 ([www.atom42.co.uk](http://www.atom42.co.uk)) a London-based online marketing agency. After two years of hard work, I’ve earned a promotion from assistant to specialist status and am thrilled to be employed here.

**Gillian Adamson**  
(MA Creative Writing, 2012)  
I am part of a writing group The Barber Writers and we recently published an anthology called *Fragments – Stories and Poems Reflecting Experiences of the Great War*. I also have interest from a publisher to complete a novel for children that I began as part of my dissertation. My course has led me to be able to take time out to write full-time.

**2000s**

**Dr Valerie Langfield**  
(PhD Music, 2004)  
I am a founding member of Retrospect Opera, an innovative group devoted to recording landmark British operas of the 19th and early 20th centuries. A comic opera by the redoubtable Dame Ethel Smyth, and a gothic opera about two young lovers, a wicked guardian and a ghost, by Edward Loder, are our starting ventures. Visit [www.retrospectopera.org.uk](http://www.retrospectopera.org.uk) for details.

**Dr Luke Evans**  
(MBChB Medicine, 2007)  
I worked for two years in hospitals around the West Midlands before returning to the Medical School as an Anatomy Demonstrator. I now work as a GP in the local community, and have been nominated to stand as the next MP for Edgbaston.
Congratulations to all alumni who received New Year awards:

- Sir (George) Adrian Hayhurst Cadbury DL MA HonDSc HonLLD CH (Hon LLD, 1989; Hon DSc, 1996) KBE
- Sir Simon Campbell CBE FRS (BSc Chemistry, 1962; PhD Chemistry, 1965; Hon DSc, 2004) KBE
- His Honour Judge Brian John Barker QC (LLB, 1966) CBE
- Mr Michael D L Chowen DL (Civil Engineering, 1959) CBE
- Mr Alan Davey (BA English, 1982; Hon DLitt, 2011) CBE
- Professor Judith P Kelly (BA Drama and Theatre ArtS, 1975); Hon DLitt, 2012) CBE
- Professor David A Purser (BSc Zoology, 1966; PhD Neurocommunications, 1969) CBE
- Dr Meera Syal (Hon DLitt, 2003) CBE
- Mrs Elizabeth Jones (BDS, 1977) OBE
- Mr Joseph H L Seelig (BSocSc Political Science and International Studies, 1971) OBE
- Mr David J Ashmore (MBA Public Service, 2000) MBE
- Dr Keith G Buckler (MBChB, 1955) MBE
- Dr Gillian M Davies (BDS, 1982) MBE
- Mr Frank W Letch (BA French Language and Literature, 1967) MBE
- Dr Caron M Morton (Occ PG Healthcare Commissioning (West Midlands), 2011) MBE
- Miss Vanita Parti (BA History and Political Science, 1990) MBE
- Mr Nigel M Stratton (LLB, 1976) MBE
- Mrs Deborah J Withers (BPhil Special Education: Multi-Sensory Impairment, 2000) MBE
- Mrs Judith A Stephens (BA History, 1960) BEM

Paddy Cope (MBA, 2012) took a few minutes to share advice with students completing dissertation questionnaires. He said: ‘This is something alumni can do to help students coming after us. Be it careers advice, dissertation questionnaires or even a metaphorical pat on the shoulder to say: “It’ll be okay”, taking ten minutes can make a lot of difference.’

Learn more: www.birmingham.ac.uk/alumni/microvolunteering

Apology

We would like to apologise to Jane Slowey CBE (BA French Language and Literature and Italian, 1974; DUniv, 2014), Chief Executive of the Foyer Foundation, whose information was incorrectly listed as CEO of the Birmingham Voluntary Service Council in the September edition of Old Joe.
Eight outstanding individuals received honorary degrees in December 2014.

1. **Kevin Gell** – Doctor of Science
   Kevin is a Fellow of the Institute of Physics and a member of the Institute of Management Accountants. He founded Tessella in 1980. It has become an international analytics, software services and consulting company serving governments and major corporations.

2. **Samuel West** – Doctor of Letters
   Sam is an actor and director. He has played Hamlet and Richard II for the Royal Shakespeare Company (RSC), and was artistic director of Sheffield Theatres from 2005–2007. He is an Associate Artist of the RSC and Chair of the National Campaign for the Arts.

3. **Nitin Sodha** – Doctor of the University
   Nitin founded Knights Pharmacies, chairs Lexon (UK), and is a Non-Executive Director at the National Pharmacy Association. He has also been involved with the Career Academy, the Oxford Centre for Hindu Studies and the Royal Army Medical Corps (V).

4. **The Rt Hon the Baroness Hayman GBE** – Doctor of the University
   Helene was a Labour MP from 1974–1979 and entered the House of Lords in 1996. She served as a Government Minister, and became the first elected Lord Speaker in 2006. She is currently a Trustee of the General Medical Council, and several NGOs involved in health in the developing world.

5. **Sir David Logan** – Doctor of the University
   Sir David was British Ambassador to Turkey, and in the Foreign and Commonwealth Office he served as Under Secretary for Central and Eastern Europe, and for Defence Policy. He was an Honorary Professor at the University of Birmingham, and is Chair of the British Institute at Ankara.

6. **Ambassador Dr Desra Percaya** – Doctor of the University
   Desra is the Ambassador and Permanent Representative of Indonesia to the United Nations in New York. He began his career at the Indonesian Ministry of Foreign Affairs in 1986.

7. **Professor Christopher Clark** – Doctor of Letters
   Christopher is a Fellow of St Catherine’s College where he is Regius Professor of History. He has been awarded the Wolfson History Prize and the ‘Order of Merit of the Federal Republic of Germany’ for his contribution to German–British relations.

8. **Professor John Nolan** – Doctor of Engineering
   John is Chairman of consulting engineers Nolan Associates, and Vice Chairman of the Construction Industry Council. He is also Director of a property company, and is an RAE Visiting Professor at the University of Birmingham.
Have you been paying attention?

For your chance to win University merchandise, just answer this question:

What is the name of the show that Chris Addison created with his friend Simon Blackwell?

Email your answer, with your name, address, and telephone number to: alumnicommunications@contacts.bham.ac.uk, or post them to Old Joe, Alumni Office, University of Birmingham, Birmingham Research Park, Edgbaston, Birmingham, B15 2SQ, by 31 May 2015. Terms and conditions apply: www.birmingham.ac.uk/alumnicompetitions

Competition winners

Thank you to everyone who entered last issue’s competitions. David Long (BSc Psychology, 1983) correctly answered that Rodolfo Neri Vela went into space in 1985, and Hayley Emery (BA Childhood, Culture and Education, 2013) won S J Watson’s top five books. Dr Elizabeth Henzel (OccUG Occasional Undergraduate, 1999; ClinPsyD, Clinical Psychology, 2000; OccUG Centre for Modern Languages – Open Access, 2009) was the lucky winner of a unique piece of 3D printing, and John Marshman (Diploma Social Sciences, 1976) had the opportunity to relive many happy times in the Gun Barrels when he won signs from the pub.

Thank you also to everyone who sent their #UoBmugshot for a chance to win an exclusive University mug. The standard was so high that everyone who entered will receive a mug!

Children’s corner

The University’s academic experts rose to the ‘Rattle a Researcher’ challenge featured in the last issue of Old Joe. Congratulations to our winners Eloise and Sam, who each receive £25 in vouchers for their questions:

Are we alone in the universe? (Eloise Cole, aged 11)

We don’t yet know. Over the coming years, space missions will search our solar system for evidence of life beyond the Earth. We have also now detected thousands of planets orbiting other stars in our galaxy, and in your lifetime we will be able to study the atmospheres of rocky, Earth-like planets orbiting stars many light years away. These studies might just reveal tell-tale signs of life. Watch this space!

Professor Bill Chaplin (BSc Physics, 1990; PhD Physics, 1994) Professor of Astrophysics, School of Physics and Astronomy

How many atoms are there in the human body? (Sam Bradley, aged eight)

The answer is going to be a very big number. When scientists write big numbers they write them like this: $6 \times 10^{23}$ which means a 6 with 23 zeros or $600,000,000,000,000,000,000,000$. That big number is how many molecules there are in 18g of water and we are mostly made of water. So let’s take an eight year old boy weighing 25 kg:

$$\frac{25000g}{18g} \times 6 \times 10^{23} = 8.3 \times 10^{26}$$

But each molecule of water has three atoms in it.

So that is $25 \times 10^{26}$ atoms. That is 25 with 26 zeros!

Dr Julia Lodge, Senior Lecturer, School of Biosciences
CONTINUE YOUR STUDIES
WITH AN ALUMNI SCHOLARSHIP

Are you interested in Masters study at the University during 2015? Why not apply for an alumni scholarship.

Up to 50 scholarships of £2,000 each will be awarded to outstanding candidates based on academic performance in their previous studies at the University. Applications to Masters courses across all subjects are welcome.

Application deadline: 30 April 2015

FOR FULL ELIGIBILITY DETAILS AND TO APPLY, PLEASE VISIT:
www.birmingham.ac.uk/alumnischolarship