



December 2017/January 2018



UNIVERSITY OF BIRMINGHAM

**GIVE.  
VOLUNTEER.  
CHANGE  
10,000 LIVES.**

# Provost's *view*

Winston Churchill once said 'Christmas is not only a season of rejoicing but of reflection.'



Provost, Professor Tim Jones

## YOUR BUZZ

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### Your details

Please let us know if you want extra copies of *Buzz* or if you think we need to amend your distribution details.

Views expressed in the magazine are not necessarily those of the University or a statement of University policy. All submissions may be subject to editing. The Editor's decision is final.

**Front cover image:** Ioana Chiva – one of the faces of 10,000 Lives, is placing a bauble on our Christmas tree in support of the appeal – more detail on page 4!

And as we celebrate and rejoice with our winter graduands and look forward to spending time catching up with friends and family over the Christmas break there is much to celebrate and to reflect on...

Reflection is a recurring theme for me; it was this time last year that I wrote my first article for *Buzz*, having recently arrived at Birmingham. In that piece I reflected on my first few months and the time I spent on my first visits to all our Schools and Institutes; visits that helped me learn at first-hand about our comprehensive range of academic disciplines and to hear from colleagues about our research and educational strengths. The open discussions I had with staff and students were particularly helpful in highlighting opportunities, as well as specific challenges and concerns. Many of those early conversations and observations are reflected in *Birmingham 2026* – the next stage of the process set out in the Strategic Framework 2015–2020.

The academic ambitions of the University are of course central to *Birmingham 2026*, which was developed throughout last year with strong inputs from the Colleges and their Schools and Institutes. This is an important framework for a research-intensive institution such as ours, helping define our size, shape and performance over the next decade. It charts a course for balanced growth of student and staff numbers, underpinned by financial sustainability. Importantly it will also enable us to plan our future space and infrastructure requirements, as well as investments in new activity.

Given the ambitions of *Birmingham 2026* it was particularly pleasing that we have been able to make a number of significant investments in increasing our academic staff numbers and in new facilities for both research and education. One particular highlight has been this year's round of Birmingham Fellows where I am delighted that we have been able to attract 50 new early-career academic staff – the largest cohort recruited through this scheme so far. We are also in the process of recruiting a number of interdisciplinary chairs and Birmingham Professorial

Fellows, thus adding to our significant research leadership capability.

Alongside this investment in people are the exciting developments that are transforming our campus for future generations – underpinned by our commitment to opening one academic building a year for five years.

Those who commute by train will have seen the new Collaborative Teaching Laboratory (CTL) rising from the ground and move towards completion. Our core research capabilities in the chemical, environmental and bio-molecular sciences will also be enhanced with the development of a new Molecular Sciences Building.

We have also committed to extending the Business School to provide much needed facilities for this successful and growing centre of excellence, and are developing a new teaching and learning facility next to the Library, designed to support delivery of outstanding teaching and learning for all students.

2020 will see us open the new School of Engineering, bringing together our engineering disciplines into one state-of-the-art building. It will also incorporate a new centre of excellence in rail innovation, reflecting the achievements of our Centre for Rail Research and Education (BCRRE). Indeed, colleagues there have a great deal to celebrate as they reflect on the last 12 months; a year in which they led a successful £92 million RPIF bid and were awarded the prestigious Queen's Anniversary Prize.

This is one of a number of areas that have excelled in the last 12 months, reflecting our strong performance in research grant capture. A performance echoed in our student recruitment, where we were one of only a handful of institutions who did not enter clearing last August. These successes are a reflection of the outstanding work that takes place across the University.

As we reflect on the past year, look forwards to 2018, and beyond to 2026, we should take time to consider all that we have achieved, to celebrate our successes, and to prepare to make the most of our future plans.

*Provost, Professor Tim Jones*

BIRMINGHAM GLOBAL

## INDIA

NEW UNIVERSITY OF BIRMINGHAM  
INDIA INSTITUTE (UBII) TO BE  
LAUNCHED IN JANUARY 2018!

The University is launching a new India Institute that aims to strengthen the University of Birmingham's historic links with India.

The Institute will provide a focal point for the Birmingham–India relationship, and increase the visibility, impact, and coherence of the University's engagement in India.

The University has increased its collaborative activity with India in the last few years. We have numerous research projects and partnerships in India, in critical areas such as women's cancer, antimicrobial resistance, clean tech, cell biology and autophagy, genomics, cold engines and the cold chain, and sports performance. Indeed, research collaboration with India has increased

nearly threefold since 2012. In addition, we have some 64 Indian-born members of staff, and 180 Indian students currently studying undergraduate and postgraduate courses in a range of subjects.

With so much engagement with India, and with 2017 being the 70th anniversary of India's Independence, and the UK–India Year of Culture, it is timely to reinforce and focus our India engagement. So, we have decided to create the University of Birmingham India Institute (UBII). The primary objective of UBII is to provide an overarching framework for the University's links with India, and to be the focal point

of the Birmingham–India relationship. It aims to increase the visibility, impact and coherence of the University's engagement in India. The Institute's activities encompass academic research and scholarship; teaching and postgraduate research; policy analysis and debate; collaboration with corporate partners; and public engagement in culture.

The UBII will be officially launched on 29 January 2018, with talks and roundtable discussions with distinguished guests, and a cultural evening for all to enjoy.



Professor William Bloss, Professor Robin Mason, Dr Aman Prui, Professor Toby Peters, Dr Martin Toms, Dr Ewa Truchanowicz

BIRMINGHAM'S BIOTECH  
BOOST FOR INDIAN  
SCIENCE LEADERS

In early September, a delegation of Indian biotech company leaders visited the University to see the life sciences cluster, where the University's world-leading research is translated into new medical therapies.

The delegation travelled to Birmingham as part of bioConclave 2017 – an annual gathering of Indian life science business leaders, who come to the UK to explore investment and partnership opportunities.

Professor Robin Mason, Pro-Vice-Chancellor (International) said: *'Birmingham is one of the UK's most important sites for life sciences.'*

*'The University's engagement in India is extensive, dating back to 1909 when we welcomed our first students from India to our Edgbaston campus. For both these reasons, we are very pleased to be hosting this delegation visit as part of bioConclave 2017.'*

Later in the term, in collaboration with the Department for International Trade, the University demonstrated the breadth and depth of our life science facilities, expertise and capabilities to Indian healthcare experts.

Dr Ewa Truchanowicz, Business Engagement Manager for the BioHub Birmingham, said: *'Birmingham brims with opportunities for commercial and research collaborations, and the visit of this Indian delegation holds the prospect of further introductions and dialogue.'*



## SPONSOR A CHRISTMAS BAUBLE AND HELP CHANGE LIVES



With Christmas just around the corner, the University's Bauble appeal is back in support of 10,000 Lives. There is still a magnificent 15-foot-high tree outside the Bramall music building, but also watch out for the first Trail of Trees across campus.

Staff, students and the local community can sponsor a bauble and personalise it with their Christmas message for a suggested gift of £10. Funds raised will help young people in the region access life-changing educational experiences.

For example, donations could fund bursaries for Access to Birmingham students. Check out the 10,000 Lives interview with Simon Lerwill on the back page for more information.

You can sponsor baubles at [www.birmingham.ac.uk/alumni/Giving/Christmas-Bauble.aspx](http://www.birmingham.ac.uk/alumni/Giving/Christmas-Bauble.aspx) or by texting UNIB17 followed by £10 to 70070, then click through the reply text to leave your message. Thank you! For further information, please contact Joe McDowell at [j.m.mcdowell@bham.ac.uk](mailto:j.m.mcdowell@bham.ac.uk).

*Nominate your graduates for*

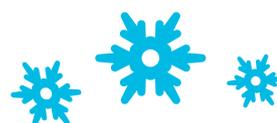
## ALUMNI OF THE YEAR 2018

Do you know a Birmingham graduate with an outstanding achievement, or who has made a difference to others? Nominate them now for 2018's Alumni of the Year Award.

We are looking for nominees who make important things happen, turn ingenuity into reality and are persuasive, persistent and bold.

Previous winners have supported young people, investigated how artificial intelligence can drive businesses, set up a charity, created online services, overcome personal tragedy to help others, and much more.

**Nominate by midnight on Monday 8 January 2018 at [www.birmingham.ac.uk/alumnioftheyear](http://www.birmingham.ac.uk/alumnioftheyear)**



### Date for the diary

#### Birmingham Professional Festive Forum 2017

Wednesday 20 December

11.00am–12.30pm

Great Hall, Aston Webb Building

Put on your best Christmas jumper, enjoy some festive treats and a glass of festive cheer, and join us as we celebrate another successful year for our University, and the outstanding achievements of staff from all areas of Professional Services.

Hosted by the Registrar and Secretary, Lee Sanders, the Birmingham Professional Festive Forum, in conjunction with BUAFTAs 2018, will culminate in the revealing of the BUAFTAs 2018 shortlisted nominees.

Stalls hosted by colleagues from across the Birmingham Professional community will offer the opportunity for you to learn more about the latest developments from across the University and share in some of the highlights of the past year.

You can also help to support the University's vital transplant science research by purchasing BUAFTA raffle tickets – so please remember to bring some change!

We look forward to welcoming you.

The Vice-Chancellor's Distinguished Lecture Series

## Frank Gardner OBE

Monday 5 February 2018

### 'The Middle East'

Frank Gardner is a BBC Security Correspondent, journalist and author. In 1999 Frank was appointed BBC Middle East correspondent in Cairo and it was in this capacity that he responded to the September 11 attacks on New York. On 6 June 2004, while reporting from a suburb in Saudi Arabia, Frank was shot six times and was seriously injured in an attack by terrorists. After numerous operations and hours of rehabilitation he returned to reporting for the BBC and wrote his book *Blood and Sand*. In 2005 Frank was awarded an OBE for services to journalism.

This is a FREE event and is available to everyone.

Book your ticket at [bham.ac.uk/frankgardner](http://bham.ac.uk/frankgardner)





## John Lloyd CBE *on Happiness*

On November 9, John Lloyd CBE delivered the 39th annual Baggs Memorial Lecture on the theme of *'Happiness – what it is and how it may be achieved by individuals as well as nations'*.

**John Lloyd's career spans four decades of iconic TV and radio comedy. He has penned a number of popular books, including *The Meaning of Liff*, with Douglas Adams. As *QI* 'head elf', John can currently be heard presenting *The Museum of Curiosity* on BBC Radio 4, now in its eleventh series. *Buzz* spoke to him before his lecture on the theme of happiness.**

### On comedy...

To cheer people up every day is a wonderful thing to be able to do. I think that it is the moral duty of comedy. That's what we are there for. Jobs are boring, marriages are tricky, life is hard. At least you can go and watch a sitcom, and fall off the sofa laughing.

Sometimes I think that I have only ever really had one idea – taking dull or controversial subjects and making them funny and interesting. I learned this first with topical comedy such as *Weekending*, and later with *The News Quiz*. *Not the Nine O'Clock News* took contemporary culture and made it funny and interesting. *Spitting Image* did the same with politics, *Blackadder* with history... and then I made everything funny and interesting with *QI*.

### On the creation of *QI*...

It's no secret that I had a terrible mid-life crisis in my early forties. I suddenly found myself in the position, at the age of 42, where I had everything that one could

possibly want – houses, money, cars, lots of prizes. I couldn't think of what else to aim for. I had a kind of collapse, and I didn't see the point of going on. So I deliberately set out to find the meaning of life.

As a producer, you're a problem solver. Solving problems is what I do. I suddenly thought: 'I am the problem'. Like a programme that wasn't working, I needed to fix it. So I read a lot of science, philosophy, comparative religion, and along the way I kept finding out all these extraordinary things; in particular, the things that I thought were true, the kind of things you learn in school, turned out to be wrong, or only partly right. Towards the end of the nineties I had this wonderful epiphany where I suddenly thought 'Q! That's a *thing*'. It's Quite Interesting. It is IQ backwards – a different, upside down way of thinking.

I'm a comedy producer, so it turned in to a panel show. But really, it was a result of a search for meaning. And entirely by accident, it was as Reithian as these things come. It seeks to educate, entertain and inform, often all within the same sentence. It's an effortless way of teaching people. You don't realise you're learning as you go along.

### On education...

The *QI* team are starting a project with a group of schools, to see if we can teach the *QI* research method to sixth-formers. We have a system of result-driven

education, where people are forced in to boxes, and learn things that they are not interested in. I believe education should be child-centred – find out what the person is interested in and start from there. When you give a child confidence in one thing, they suddenly have the confidence to have a go at something else.

### On happiness...

I think happiness is essentially a by-product of something else. It's not something you can look for. But you can behave differently, to perhaps the way the weight of modern culture suggests you should behave.

Happiness results from interacting with people. Have friends you like, and a family you love. My son, Harry, once asked why I have a habit of talking to everybody I meet. Well, you learn from *QI* that if a potato can be interesting, imagine how many times more interesting a person could be. By being open with other people, you discover that they are much nicer than they might first present themselves, and they are much more interesting. You learn much more from people that way. You have great fun.

It's a kind of joiny-uppy thing. Do something you love, because there is nothing like becoming so absorbed in something or someone that time dilates and you forget where you are. There's a peculiar thing that I sometimes say: *'You're most yourself when you're not there'*.

# THERE'S A starman

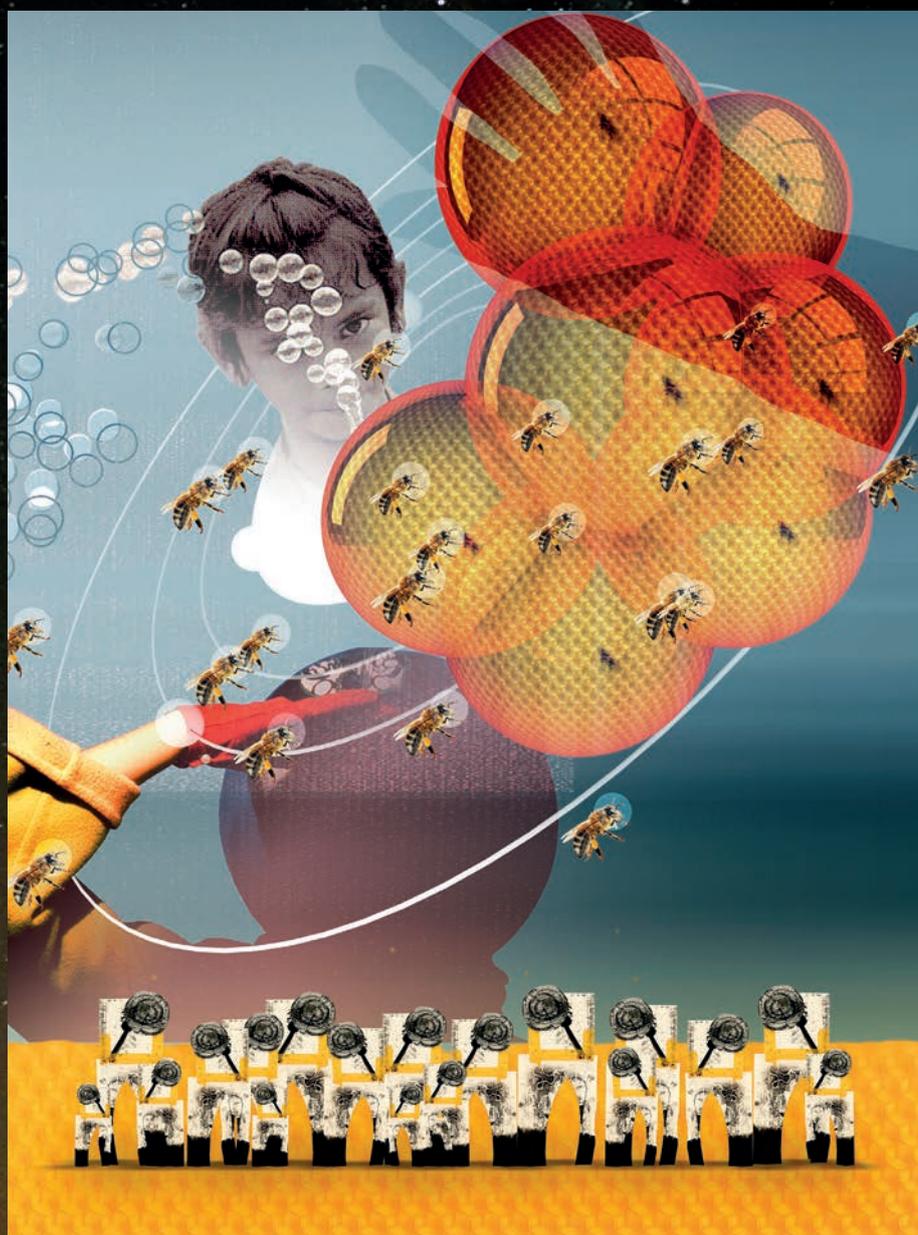
When the team of astronomers operating the Belgian Transiting Planets and Planetsimals Small Telescope (TRAPPIST) discovered a new planetary system, they toasted their discovery with a round of Belgium's famous Trappist beer; and so the TRAPPIST-1 system was born into human consciousness.

A co-discoverer of TRAPPIST-1, the University of Birmingham's Dr Amaury Triaud, from the School of Physics and Astronomy, has – incredibly – discovered over one hundred exoplanets. Here, he writes about his search for life beyond Earth...

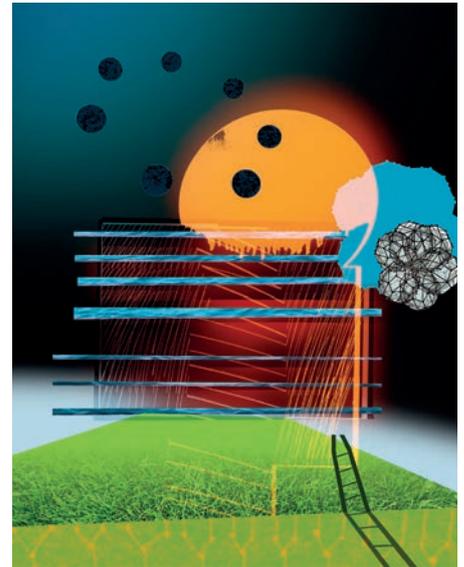
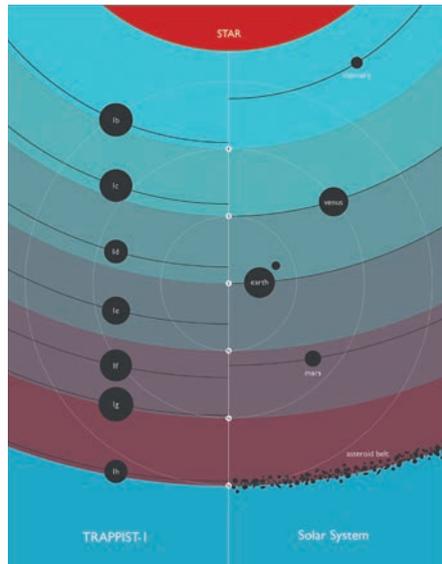
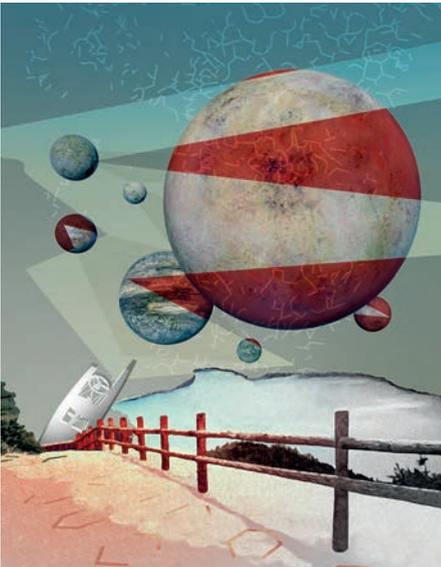
Written speculation about life beyond the confines of Earth dates back thousands of years, to the time of the Greek philosophers Epicurus and Democritus. Unrecorded curiosity about this question undoubtedly goes back much further still. Remarkably, we might soon get an answer from the study of exoplanets – planets orbiting other stars than the Sun.

Recently, I contributed to discovering the TRAPPIST-1 planetary system, composed of seven planets that are similar in size and mass to Earth. All seven worlds are temperate, meaning that under the right atmospheric and geologic conditions, they might sustain liquid water. TRAPPIST-1's discovery received ecstatic and gratifying news coverage around the world, earlier this year. In many ways TRAPPIST-1 is an odd place to look for life. The central star is just 1/12th the mass of the Sun and scarcely larger than the planet Jupiter. It gives off just 0.05 per cent as much light as the Sun. Its central star, TRAPPIST-1A, belongs to a class that we call ultra-cool dwarfs, the very smallest stars that exist.

Searching for habitable planets around ultra-cool dwarfs has long been considered a waste of time. Even as astronomers found that exoplanetary systems are generally different from the solar system, old attitudes lingered. The Earth and Sun appear so normal and hospitable to our eyes that we get blinded by their attributes. Major programmes are therefore directed at finding an Earth twin: a planet the mass and size of our own, orbiting a star just like the Sun, at the same Earth–Sun distance. The detection of such a world remains decades away.



All images are visual art inspired by the TRAPPIST-1 system. ALL IMAGE CREDITS: IoA/Amanda Smith.



In the effort to answer the question: 'Is there life elsewhere?', the focus on Earth twins is perceived as a safe path, since we can expect that similar conditions will lead to similar results (at least part of the time). However, my thought is that this is far too conservative a goal, considering the huge number and diversity of available planets. Research should be about finding what we don't already know. While identifying a life-bearing Earth twin would be a resounding scientific success, it would teach little about the overall emergence of biology in the Universe.

Instead, I seek an answer to: 'How frequently is life found elsewhere?' This simple change of words means that we should also be investigating planetary systems unlike the solar system. It would be disappointing and surprising if Earth were the only template for habitability in the Universe. Sun-like stars represent just a small fraction of the whole.

Once we reset the goal to measuring the total frequency of biology, ultra-cool dwarfs become an obvious target. Half the stars in the Universe have masses less than one-quarter of the Sun's. Our preliminary results suggest that rocky worlds are three to five times more likely to orbit low-mass stars than Sun-like stars. Ultra-cool dwarfs also open a much easier route to detecting and studying temperate, Earth-like planets.

The scientific advantages of ultra-cool dwarfs come from their stellar properties, helping us identify exoplanets, and investigate their atmospheres. Because ultra-cool dwarfs are so small, the signal of an Earth-sized planet passing in front of TRAPPIST-1A is approximately 80 times larger compared to an Earth twin, and happens 50 times more frequently. Similarly, our ability to extract atmospheric signatures of these worlds is boosted by a

factor 80. The atmospheric composition of the TRAPPIST-1 planets will be detectable using current and upcoming facilities, unlike the decades of technological development needed to study an Earth twin.

Astronomers, including myself, have already begun investigating the chemical compositions of giant planets around other stars. Thanks to TRAPPIST-1, we can extend those explorations to Earth-sized worlds. Our first efforts will be to characterise the greenhouse gas content of atmosphere, and assess whether the surface conditions are conducive for liquid water. Then we will seek out signs of biologically produced gases, analogous to ways that living organisms have transformed the composition of our Earth's atmosphere.

The TRAPPIST-1 planets were found during a pilot-run for an ambitious planet survey called SPECULOOS, which is currently starting operations. We expect to detect a few dozen Earth-sized, rocky planets around dwarf stars within the next five years. With this sample in hand, we will explore the many climates of such worlds. The solar system contains two: Venus and Earth. How many different types of environments could we discover?

Using SPECULOOS, we will begin to address objections scientists have raised about the habitability of planets around ultra-cool dwarfs. One argument is that such planets will be tidally locked, meaning that they have permanent day and night sides. Planets orbiting in close proximity around small stars could excite each other's orbits, leading to major instabilities. Ultra-cool dwarf stars frequently flare up, emitting ultraviolet and X-rays that might vaporise a planet's oceans into space.

Far from holding us back, those arguments motivate us. Finally, we can

empirically assess the actual conditions, and explore counter-arguments that Earth-sized planets like TRAPPIST-1's might in fact be hospitable to life. Oceans and thick atmospheres could mitigate the temperature contrast between day and night sides. Tidal interaction between close-orbiting planets might provide energy for biology. Some models suggest that planets forming around ultra-cool dwarfs start out with much more water than Earth has. Ultraviolet radiation could help to produce biologically relevant compounds... I am optimistic.

No matter what we find by studying planets orbiting ultra-cool dwarfs, we cannot lose. We can only learn. If we manage to identify the presence of life on a planet similar to those in the TRAPPIST-1 system, then we can start measuring how frequently biology emerges in the Universe. We could have the first clues of extraterrestrial biology in a decade! If we find that none of those worlds is habitable, or that they are habitable but barren, we would learn that life is rare and precious. It will vindicate the Earth-twin approach without delaying it.

In either case, we will define the context of our existence: as one among many, or as an isolated outlier. Both possibilities are humbling. Both are thrilling.

Dr Triaud's article has been adapted from an article published in *Aeon Magazine* ([www.aeon.co](http://www.aeon.co))

## LEARN MORE

[www.trappist.one](http://www.trappist.one)  
[www.speculoos.uliege.be](http://www.speculoos.uliege.be)  
[www.amaurytriaux.net](http://www.amaurytriaux.net)

# transforming OUR campus

## Changing the face of campus

The Edgbaston campus is a hive of building activity at the moment, with the old library now demolished and the Green Heart beginning to take shape. This is a period of major change for the University, with the biggest investment in the estate since the institution's inception in 1909. It will, ultimately, strengthen the University's facilities for staff, students and the community.

We are now entering into a phase of work which will see the Munrow Centre being demolished in order to eventually make way for a new Molecular Sciences building in 2021. The new Hotel and Conference Park, which includes the restoration of Hornton Grange and Garth House, will be complete in Summer 2018 and will be followed by the opening of the Collaborative Teaching Laboratory next autumn. 2019 will culminate in the Green Heart's launch, the opening of the Business School Extension, and the new Teaching and Learning Building.

It's a packed schedule which will change the face of the campus to enhance research and teaching for generations to come.



Artist's impression of the Green Heart



Green Heart ground breaking

## Bournbrook Pavilion: sport, socialising and community

Opening early 2018, the new Bournbrook Pavilion will complete the transformation of our sports facilities.

Sports clubs will enjoy eight new pitch-side changing rooms for home matches, and physiotherapy rooms.

Brook's Sports Bar and Kitchen will be open seven days a week until late, and will also offer a function room with AV facilities; ideal for footage analysis

and training, VIP events for sponsors, and conferences. Contact [conferencesandevents@contacts.bham.ac.uk](mailto:conferencesandevents@contacts.bham.ac.uk) to book.

A Community Living branch will give local residents a point of contact with the University, and help make Selly Oak a better place to live and work. Submit your ideas for how this space should be used to Kirsty Wade: [k.l.wade@bham.ac.uk](mailto:k.l.wade@bham.ac.uk).

Zena Wooldridge OBE, Director of Sport, said: *'This is the first time we've been able to provide a proper social base for our outdoor team sports in the form of a pavilion with a clubhouse, bar, catering and social space. It will transform the quality of our students' experience, and that of community clubs who share our facilities.'*

## Green Heart breaking ground

With the old library now demolished, it is full steam ahead for the Green Heart's creation. In September, the Vice-Chancellor, Professor Sir David Eastwood, performed the ground breaking ceremony.

The Vice-Chancellor said: *'This is one of the most ambitious redevelopments of the University of Birmingham's campus in a generation. I am very proud to place the first spade in the ground here today, and look forward to watching the Green Heart come to life.'*

Landscaping work has begun in earnest on the part of University Square closest to Arts and Muirhead Tower. The University's team and the contractors carrying out the development are working in partnership to keep disruption to a minimum and maintain accessibility.

Tree planting is currently taking place, with mature trees being craned into place so that the finished space carries a sense of the campus's heritage and history. 144 existing trees will remain as part of the Green Heart, and a further 160 will be added to the area.



*The Vice-Chancellor performs the ground breaking ceremony*

## Reaching the top for STEM



*Signing the girders*

The Collaborative Teaching Laboratory (CTL) took another step closer to completion in October when it celebrated topping out. The £40 million teaching laboratory will change the way students study Science, Technology, Engineering and Mathematics (STEM) subjects.

The CTL will bring together practical teaching activities across a broad range of sciences and engineering disciplines for undergraduate and postgraduate students when it opens in autumn 2018. University of Birmingham Pro-Vice-Chancellor, Professor Tim Softley, joined the development team to sign the building's girders to mark the occasion.

He said: *'The University of Birmingham aims to deliver the best possible learning experience for our students. This is not simply a building, but a change in the way we deliver engineering and science-based education in the University.'*

The CTL will incorporate a wet lab, dry lab and e-lab in a new purpose-built facility, as well as a refurbished heavy engineering lab, which has already been completed within the existing mechanical and civil engineering building.

Guests at the ceremony were offered virtual reality headsets in order to see how the laboratories and study areas will look and feel once completed.

# A HEALTHY SPACE

Birmingham is undergoing a renaissance. The city has a redevelopment masterplan that aims to revitalise the city by attracting companies and people to relocate to the Midlands.

One of Birmingham's key benefits is that it provides room for growth. This is particularly attractive to the life sciences sector, where small companies need access to a large range of services and expertise in order to grow and flourish.

The University is also aiming to capitalise on that opportunity. Our £606 million investment in infrastructure is building assets that will bring together the clinical, academic and commercial strengths of the region, and make Birmingham a destination of choice for the life sciences.



## THE LIFE SCIENCE ECOSYSTEM

The life science sector is one of many sectors where the University is poised to reap benefits from Birmingham's expansion. The Edgbaston Medical Quarter hosts 64% of the city's healthcare economy and is home to 550 medical companies, over 180 medical organisations, 80 hospitals and specialist care centres, 44 GP clinics and routine care facilities, and 23 training facilities. In addition to the expertise, the medical assets that are embedded in and around the University are particularly attractive to overseas companies.

*'This blend of expertise and infrastructure is making Birmingham increasingly visible as a destination for early-stage medical and life science companies', says Dr James Wilkie, CEO of the Birmingham Research Park, which hosts the BioHub Birmingham®, a bio-incubator for early stage companies. 'In the last month alone, we had 12 enquiries from overseas companies who are looking seriously at Birmingham as the location for their UK operations.'*

### LEARN MORE

BioHub Birmingham: [thebiohub.co.uk](http://thebiohub.co.uk)

## REDEVELOPMENT

The BioHub, which opened in 2015, has already filled its existing bench space and will now be fitting out its first floor to provide six further units of conventional office/laboratory space for pre-revenue life science companies. The new development will complete in 2018, and will go some way to accommodating the smaller of those enquirers.

At the other end of Vincent Drive, the redevelopment of the former Battery Park into the Birmingham Life Sciences Park started in August this year.

Co-located with the University, University Hospitals Birmingham and the Birmingham Women & Children's Hospital NHS Foundation Trusts, the Birmingham Life Sciences Park will build on Birmingham Health Partners' clinical-academic vision to accelerate life sciences research, taking new treatments and technologies from early development to real life application.

### LEARN MORE

Birmingham Health Partners: [birminghamhealthpartners.co.uk](http://birminghamhealthpartners.co.uk)  
Birmingham Life Sciences Park: [birmingham.ac.uk/university/building/life-sciences-park.aspx](http://birmingham.ac.uk/university/building/life-sciences-park.aspx)

## OPPORTUNITIES ON CAMPUS

These specialist life science spaces have not been created solely to attract external businesses. Alta Bioscience, founded in 1973, initially provided analytical biochemistry services to research groups at UoB. For many years, however, it has supplied custom syntheses of peptides, antibodies and DNA primers in addition to accredited analytical services to academic and industrial research laboratories worldwide.

So when the lease on its current premises expires next year, where will the company move to? Director, Chris Hand says: *'We don't intend to move away from Edgbaston. The research base on campus, coupled with the influx of early stage companies into the ecosystem, is too good an opportunity to miss.'* The company will be taking space at the Birmingham Research Park, which is also being considered as a relocation destination by several other small companies currently located on campus.

### LEARN MORE

AltaBioscience: [altabioscience.com](http://altabioscience.com)  
Birmingham Research Park: [birminghamresearchpark.co.uk](http://birminghamresearchpark.co.uk)



*'Universities have a key role to play in shaping Britain's business future – nationally and globally – with the national Industrial Strategy calling for more research and innovation to drive productivity growth and for high-value, high-income jobs requiring different skills and expertise.'*

**Professor Tim Softley, Pro-Vice-Chancellor for Research and Knowledge Transfer**

# '10 ways we're transforming business'

The Business Engagement team has been showcasing how experts at the University of Birmingham are transforming business through innovative research partnerships.

Delegates at the Confederation of British Industry (CBI) Annual Conference, held in London on 6 November 2017, heard how the University is revolutionising business in 10 ways through collaborations with industry and business partners in Britain and beyond.

The University hosted a special lunch and an insight seminar at the Conference, of which it was the sole HE sponsor. Speeches and discussions included research and development, skills and education – including curriculum enhancements and employability and graduate recruitment activities – and collaborative, profile-raising initiatives. Speakers from the University included: Professor Tim Softley; Professor Ian Thomson, from Birmingham Business School; and Professor Anne Green, from City-REDI. They were joined by Alison McGregor, CEO for HSBC Scotland, and Juergen Maier, Chief Executive of Siemens UK.

The Business Engagement team also had an exhibition stand (see above) to showcase the '10 ways we're transforming business' (see right), which was seen by over 1,250 delegates at the Conference.

The social impact achieved by the Business Engagement team was also impressive, with 52,000 impressions for its digital content, and a global reach of 153,000 users on Twitter across eight University accounts.

## LEARN MORE

Please contact the Business Engagement team via:

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**1. Transforming responsible business practice** – the University has teamed up with Lloyds Banking Group to establish a £2.5 million research centre.



**2. Transforming perceptions** – the Centre for Research in Ethnic Minority Entrepreneurship (CREME) is working with policy influencers to revolutionise how ethnic minority businesses' £32 billion contribution to UK plc is viewed.



**3. Revolutionising UK rail** – Birmingham is leading a £92 million research programme to transform UK rail infrastructure and systems.



**4. Leading the world in clinical trials and healthcare systems** – our world-class clinical trials capability is helping to bring lifesaving medicines and techniques to market. We're also building a new Life Sciences Park to further drive innovation.



**5. Accelerating innovation in cold chain systems** – Birmingham Energy Institute is bringing together research and industry to develop the energy technologies of the future; working with national companies to create greener, more efficient transportation and storage.



**6. Reducing business risk with quantum technology** – from sensing buried infrastructure on large-scale construction projects to providing precise timing for financial market transactions through the Quantum Technology Hub.



**7. Making air travel greener** – working with Rolls-Royce, our High Temperature Research Centre is developing components for the aero engines of the future.



**8. Developing products for extreme environments** – our Extreme Robotics lab is working with government and industry to create smarter, safer ways of working in the nuclear industry and other extreme environments.



**9. Transforming productivity in the future workforce** – working with business to get the most out of the degree apprenticeship levy and create a productive and innovative workforce.



**10. Shaping the future for creative industries** – Birmingham is working with private, public and policy organisations to create new relationships between the creative industries and the higher education sector.

# FEMALE SPORTS COACHING STANDARD AT ALL-TIME HIGH

Following the announcement earlier this year that the University has been selected as one of eight official FA High Performance Football Centres, it's fair to say that we're firmly on the map for world-class facilities, athletes, and opportunities for young and aspiring sportspeople. But it's the behind the scenes support that truly makes us exceptional in our offering. Recently, the level of coaching expertise was increased further for netball and triathlon.

This year, the University's Lead Triathlon Coach, Lou Barron, enrolled on the latest cohort of UK Coaching's 'Women into High Performance' programme, securing one of the 18 coveted places. Lou became the Lead Triathlon Coach at the University in 2011, where she still coaches and runs a club of 106 triathletes, including a high performance squad. With few women operating in the performance pathway, it will be hugely beneficial to the University's triathlon club.

Adding to the University's high performance coaching team is Dannii Titmuss, recently recruited as Head of Netball. Dannii, who is also the Wasps U21 coach and has eight years of performance coaching under her belt in both the UK and Australia, will oversee all four of the netball teams, creating a fantastic alliance with the West Midlands Superleague team.

Having these two high-class coaches on board highlights the exceptional standard of coaching available to students and scholars, as well as showcasing the offering of both the netball and triathlon clubs. We met with them to see how they got to where they are today.

*Dannii (left) and Lou (right)*



## DANNII:

### Tell us about your early netball life?

I was destined to be involved with netball before I was born! My mum was a keen player and also a coach – I'm pretty sure I was on the sidelines in my pram! I've been at Turnford Netball Club since I was eight years old.

### What do you love most about the sport?

Everything! I love that people play, and can be ruthlessly fierce on court, whilst at the same time super supportive and tight off it. I love the excitement of game day, how hard people work in training, and seeing that effort transfer into success. But mostly, it's really fun to get to hang with a bunch of super-cool women.

### What is your most memorable sporting moment?

I was a student at Brunel and we were playing UoB (for whom my sister played) in the semi-final. I came on at half time with the scores level, and the game continued to go goal for goal. I made an interception with 30 seconds to go, which would have taken us into the lead... instead I knee'd the ball out of my hands, UoB got possession back and they scored to win by one!

### How did you get into coaching?

Again, it was my Mum. She coached my sister's team and I coached their B team. I really loved it, felt I was quite good at it and then (being a precocious 14-year-old) decided I wanted to be the England Coach! I was a good, but not a great player, so I figured if I wanted to go to a Commonwealth Games I'd have to be the coach (I'm still working on that!).

### Did you pick up anything from your coaches when you were training that you use?

Heaps and heaps and heaps. Everyone you meet can teach you something you don't know. My mum instilled in me from the beginning that anything was possible if you worked hard. Jo Webb, who was the ex-U19 NA Coach, taught me that athletes will meet the expectations you set, so set them high. Karen Atkinson said that passing and movement underpin everything, so spend time honing those basic skills under pressure. Tamsin Greenway (Director of Netball at Wasps) is a tactical mastermind – she just really understands the game and can break it down, so it all seems so simple.

### What do you find most rewarding about coaching?

Seeing players achieve their potential, and feeling like you were part of their journey.

### How do you balance both Wasps and UoB coaching?

The competition seasons are different, which helps. It's also fortunate there's a lot of crossover between the athletes (UoB have three scholars in the Wasps squad). Plus I love netball, I feel fortunate to be able to spend my time doing so much of it.

### What excites you most about being the Head of Netball?

I really enjoy working with collegiate-level athletes. They work really hard, are committed and are a really fun group of girls. It's nice to

be part of something bigger – it's not just a squad, but a whole club. The 1s are ambitious this year, and we're hungry for a place in the BUCs semis. The 2s, 3s and 4s are currently undefeated in the league, and the development squads are also performing well. I'm incredibly proud of the journey we've started and I cannot wait to see how the club develops in the next few years.

## LOU:

### Tell us a bit about your early triathlete life, when did it start, what did you get up to?

I was a latecomer to triathlon at 28-years-old. I came from a mountain biking, running and swimming background, but I'd never put them together until someone suggested that I do a triathlon. I said: 'what's that?!' And the rest is history.

### What's your favourite event out of the three, and why?

I actually love the transitions – the bit in between the swim and bike, and bike and run, as I would always overtake people on them.

### What is your most memorable sporting moment (good or bad)?

My first ever triathlon, in my swimming costume, with frost on the ground. I thought was going to die of hypothermia! My best moment was finishing my Half Ironman distance race – it was such a relief.

### How did you get into coaching or what made you want to coach instead of compete?

Coming from a teaching background, it was really natural that I wanted to help others have a great experience. I was lucky to get involved with elite juniors soon into my career and I helped to coach the Brownlees (British Triathletes) on training camps.

### Did you pick up anything from your coaches when you were training that you use nowadays when you coach?

I was pretty much self-coached, but I picked up tips and advice from anyone I could. I worked a lot on sports psychology as I was crippled with nerves in my first season. I still use a lot of this now.

### What do you find most rewarding about coaching?

It's a privilege to help people dream big and achieve their goals. By taking on challenges, athletes develop as people as well as in their sport – I love being part of their journey.

### Tell us about how it feels to be selected into the Women in High Performance programme?

It's a real privilege. I'm loving the course so far and I'm taking all I can from the experience.

### What would you say to someone who has never tried triathlon before but wants to get involved?

Triathlon is a sport for life. We have all ages and all abilities, and so many different distances and types of events – you never stop learning or challenging yourself. Find your local triathlon club and see what a friendly bunch we are.

# BIRMINGHAM 2026

## DELIVERING OUR VISION FOR THE UNIVERSITY

Birmingham 2026 is the next stage of the process set out in the Strategic Framework 2015–2020. It is an ambitious yet achievable plan to raise the academic performance of the University by growing research activity and increasing our student and staff numbers over the next decade. It provides clear and challenging goals, charting a course for balanced growth led by our excellence in research and teaching, underpinned by financial sustainability.

### IN 2026 THE UNIVERSITY OF BIRMINGHAM WILL BE:

- **A multi-site global university with Edgbaston at its heart.** Students will be able to study for a Birmingham degree at a number of dedicated sites, other institutions and online.
- **A recognised 'rising star' institution,** ranked among the top 100 in all major international league tables and among the top 50 in the majority of fields.
- **A more research-intensive environment** with at least 40 per cent of our income from research, enabling a significant growth in research output and strengthening the translation of research into economic and societal benefit.

- **A place of transformative education** at the cutting edge of educational delivery. Our teaching and curriculum will be continually reinvigorated and grounded in research.
- **A destination of choice** for the best researchers and students in the world.
- **An anchor institution in Birmingham,** playing a major civic role at the heart of the city, the West Midlands and the wider Midlands region.
- **Financially strong,** with a healthy surplus to continue investment in our academic mission and the student experience.

### WE WILL DO THIS BY:

- **Investing** in people and the intellectual environment
- **Strengthening** our research position
- **Extending** our global footprint
- **Leading** innovation in education

### WE AIM TO:

- **Increase** research awards by 10 per cent per annum to £350 million
- **Secure** a top 100 position in all major international rankings
- **Enhance** student:staff ratios
- **Grow** our student numbers by around 11,000, many of whom will be studying overseas
- **Recruit** 1,400 additional academic and research-focused staff
- **Be among** the UK's top five research-intensive universities

LEARN MORE: visit [www.birmingham.ac.uk/2026](http://www.birmingham.ac.uk/2026)

## Chancellor's column

In November, I was delighted to host the University's 14th Annual Alumni Reception at the House of Lords, with attendance from over 250 alumni, friends and supporters.

The turnout was incredible, with alumni spanning more than 60 years of the University's history, from 1945–2017!

I have now completed three years as Chancellor of our outstanding institution, which continues to sustain its place in the world's top 100 universities, according to the QS World University Rankings. In that time, I have been continually awed by what the University achieves.

When looking to the future, I'm proud of the increasing global reputation, despite the challenging backdrop created by Brexit.

Our University contributes £3.5 billion every year to the economy. Every £1

million invested in our research generates an extra £12 million to the economy.

More locally, almost one in every 50 jobs in Birmingham depends on the University.

We are continuing to grow. Last year we increased our Nobel prizes by three, to a total of 11, and this year, at the alumni reception, the Vice-Chancellor announced the launch of the University's '10,000 Lives' appeal, which will change the lives of domestic students, foreign students and our young graduates.

For the past, present and future, at the annual Alumni Reception I was so proud to be able to highlight the phenomenal impact that our University has made, and the opportunities that it has provided for so many of its alumni and staff.

*Lord Bilimoria is the founder and chairman of Cobra Beer, Chancellor of the University of Birmingham and the founding Chairman of the UK India Business Council.*



# news+views



Our regular feature gives *Buzz* readers a quick tour of the latest University news hitting the headlines and activity among our online community.

If you would like to work with the press office, or find out more about how they can help you promote your research, email [pressoffice@contacts.bham.ac.uk](mailto:pressoffice@contacts.bham.ac.uk) or call 0121 414 6029

## in the news...

Many articles about Birmingham research and expertise appear in local, national and international press every day. Here are just a few examples of our recent highlights.

The Birmingham Qur'an interactive exhibition opened at Sharjah International Book Fair and was widely reported by UAE and global media including *Gulf News*, *Khaleej Times*, *The National*, *Arabian Business* and *Gulf Today*, as well as *BBC Arabic*, *Brazil Business Today*, *Business Standard India* and *Newsweek (USA)*.

**Dr Shireen Kanji's research into grandparent childcare and its impact on the workforce received wide media coverage including articles on *BBC News online*, in *The Telegraph*, *Daily Mail*, *The Mirror*, BBC local radio, *Express and Star* and 300 other regional newspapers.**

Research showing that so-called 'healthy obesity' is harmful to cardiovascular health was reported in over 45 global media outlets. The work by Professor Neil Thomas, Dr Rishiraj Caleyachetty and Dr Krishnarajah Nirantharakumar was covered by *The Independent*, *Daily Mail*, *Hindustan Times*, *The New York Times*, *Sydney Morning Herald* and *Business Standard India* among others.

**Research into clean cooling systems and its impact on sustainability was discussed by Yahoo! UK, with Professor Toby Peters writing for *Huffington Post* on the subject – coinciding with Climate Week NYC.**

**A study into mass extinction events, led by the University, was covered by the BBC, *Daily Mail*, *Science*, *Dotemirates (UAE)* and *Malaysian Digest*. Professor Richard Butler explained how such events were followed by periods when certain new species dominated wide regions of the Earth.**

Research by Dr Samuel Finnikin, which found that statins are not always prescribed to patients who could benefit most from them, featured in more than 360 media world-wide, including *The Times*, *the Guardian*, *Daily Telegraph*, *ITV online* and *Irish Sun*.

**Dr Katrien Segaert spoke to the *Daily Express* about her research linking a delay in word processing to the onset of Alzheimer's disease, which was also covered internationally by *Hindustan Times*, *Deccan Chronicle*, *Business Standard India* and *New Zealand Herald* among others.**

Professor Andreas Freise commented to *the Guardian*, *AFL (Turkey)*, *BuzzFeed* and *MSN (USA)*, among others, about how, for the first time, scientists have directly detected gravitational waves from the spectacular collision of two neutron stars.

**Dr Danielle Fuller's research into the standard of bereavement care for women who have experienced loss through miscarriage and stillbirth received national coverage on *BBC News online*, *The Huffington Post*, *Yahoo News* and various medical trade press.**

## CAMPUS CURIOSITIES



### What is it?

Child's doll, Yoruba (Nigerian).  
Danford Collection of West African Art and Artefacts, Research and Cultural Collections

### Where is it?

Danford Room, Arts Building  
(accessible by appointment, please email [rcc@contacts.bham.ac.uk](mailto:rcc@contacts.bham.ac.uk))

As it is the festive season, we have been thinking about gifts for loved ones. There are many objects which could be considered as 'gifts' in the Research and Cultural Collections – such as objects presented to Vice-Chancellors, works of art given to the University, or toys like this

child's doll from the Danford Collection of West African Art and Artefacts.

This toy is an 'omolangidi' or 'child of wood'. Young girls carry these dolls on their backs as though they were infants; their flat, limbless shape, as well as their relatively small size (this doll being 20cm in length), facilitating the carrying. They range in style from very plain to incredibly decorative, and are one of the first things apprentice carvers are tasked with making, due to their simple structure.

### Learn more

You can find out more about gifts (and festively-themed objects) by visiting our blog: <http://rcc-redmarley.tumblr.com/>

## Simon Lerwill ... on changing 10,000 Lives



The University's youngest Senior Officer, leading the University's youngest department within the youngest city in Europe. *Buzz* spoke to Simon Lerwill, Director of Development and Alumni Relations (DARO) and Birmingham alumnus, about the new 10,000 Lives appeal.

The University was founded on Joseph Chamberlain's ambition to use education to change the lives of the people of Birmingham. 10,000 Lives very much embodies this founding vision. We hope to create 10,000 life-changing opportunities for young people aged 11–25 through the support of donors and volunteers. Talented young people, regardless of their background, should have equal chances in life. I believe passionately in this because when I look back at the support I received as a child, it really was life-changing.

As a boy I was fortunate to receive a scholarship on account of my father being in the army, which gave me the fantastic opportunity to attend an independent school. It led me to study Geography and Planning here at the University, which kick-started my career. I think it's rather unusual for a Director of Development and Alumni Relations to be an alumnus themselves – for me it's really special. The 10,000 Lives appeal offers an opportunity to give something back, to acknowledge the support I received, and extend that helping hand to today's young people.

Knowing that you can help change a life is very rewarding and something that stays with you. As a fundraiser you always remember your first gift. I can still remember mine back in 2005, when I worked for DARO first time around. I was standing under Old Joe when the donor agreed to give £1,000 to support an A2B Scholarship. It felt great, knowing that it would make a real difference to somebody. What makes 10,000 Lives great is its inclusivity; it's a collective effort, and everyone – whether they offer a monetary gift, big or small, or offer their time to mentor a young person – can make a real difference to young lives.

Our previous campaign was hugely successful to the sum of £193 million. The buildings we've erected as a result of *Circles of Influence* will enhance our campus for generations of students. Indeed, it is buildings such as the Bramall that people often point to when asked about our biggest achievements – these are our most visible representations of philanthropy. But 10,000 Lives is different. 10,000 Lives will leave its own mark because its success will be determined by the number of lives changed. We believe that it's the only UK Higher Education appeal to measure impact in this way.

Here in DARO the theme of youth permeates, and we feel a strong connection with the 10,000 Lives appeal, but the response from across the whole

University has also been overwhelmingly positive. The recipients have already benefited enormously. Donovan Simpson, a medical student who's pictured on page 4, was the first in his family to go to university. Thanks to our donors and volunteers, we have been able to help support him to apply, have given him a mentor and provided scholarships so that he can buy vital textbooks. All this has helped to ease some of the pressures that being a student from a less affluent background can sometimes bring.

We hope to hit the magic 10,000 mark within three years, but staff can help us get there more quickly in a number of ways. In May I will be running the Birmingham 10k and I hope to do it with 499 other members of staff, so we could really do with some help! Staff interested in running can sign up via the 10,000 Lives web page (see below). We're also encouraging people to buy a brick for the donor pathway in the Green Heart. It's £200 for a brick, but staff can also donate as a team and fundraise towards this. This year's annual Christmas bauble campaign is in support of 10,000 Lives. For £10 you can sponsor a bauble, add a bit of sparkle to campus and help to change a life (see page 4 for more information)!

I'm determined to help students make the most of the university experience. As a student I was part of the Guild's radio station, wrote for *Redbrick* and I also enjoyed sports. I'll let you into a little-known fact: I was once President of Raftsoc, the University's short-lived white water rafting society. We won best student society in the Guild awards one year, but the society folded soon after. It turns out that Birmingham isn't the best place for white water rafting. In truth, it was less about the rafting and more about the camaraderie of like-minded thrill seekers! Nowadays, life offers a different kind of challenge. My wife and I have two young children, and a new cocker spaniel puppy, leaving little room for hobbies; but sport still plays a part. I've found that the pool in the new Sport & Fitness club is a great way to cool off from the frustrations of being an Arsenal supporter. It really is a great place to go swimming. Perhaps we should be asking people to swim 10,000 metres for 10,000 Lives!

To find out more about the 10,000 Lives appeal, sign up to run the 10K or sponsor a bauble, visit [www.birmingham.ac.uk/10000Lives](http://www.birmingham.ac.uk/10000Lives)