

nonesuch



Bristol's vision

Innovators
of tomorrow

Sir Paul Nurse

A curious journey

Temple Quarter

New campus plans
unveiled



Bristol's dynamic new degree programmes for those who want to change the world

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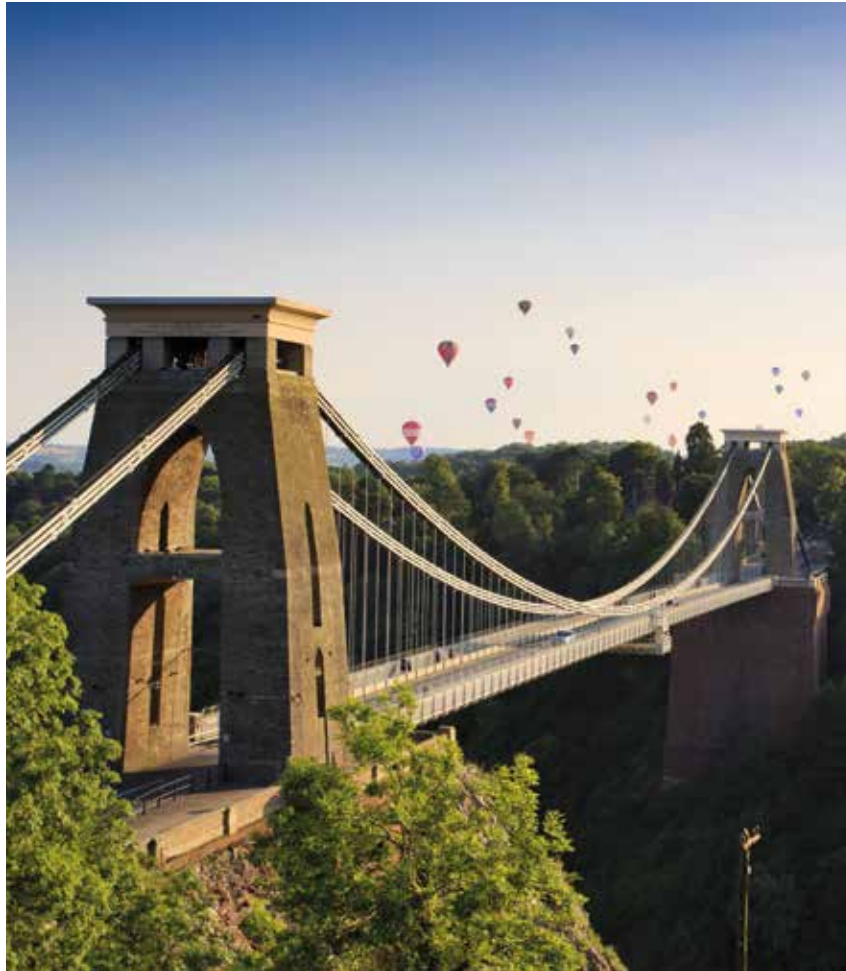
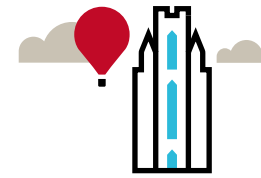
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City

Bristol ranked fourth most inspiring city in the world

Famed for Banksy, Brunel and the invention of Ribena, Bristol combines the tradition of a historic port city with the atmosphere of a fast-paced, dynamic and modern metropolis.

In a recent survey of the most inspiring cities in the world, Bristol was placed fourth alongside Miami, Bruges and San Francisco, thanks to our city's vibrant creative culture and innovative arts scene. Among UK cities, Bristol came out on top. The figures were compiled by Amsterdam-based package holiday company TravelBird, which also placed Bristol in the world's top 10 for the number of performing arts companies and the number of film industry facilities per 100,000 citizens.

For alumni living all over the world, the city of Bristol holds many fond memories.

With its friendly people, green spaces and buzzing centre, it's an exciting place to call home – all packed into an area you can explore on foot. Many of our students love Bristol so much that they stay here after graduation, with a fifth of our graduates finding work with local employers.

What did you discover about the city of Bristol in your student days? Write to us at Development and Alumni Relations Office, University of Bristol, Senate House, Tyndall Avenue, Bristol, BS8 1TH or email nonesuch-team@bristol.ac.uk.



University

Law students help local families

Bristol Law Clinic students are helping parents of children living with cancer negotiate some of the legal obstacles that come with the diagnosis.

The financial impact of cancer can be devastating for families, with many parents spiralling into debt. In partnership with CLIC Sargent, Bristol offers regular Law Clinic drop-in sessions through which students provide pro bono legal advice to parents on topics such as benefits rights for carers and the Disability Living Allowance. The clinic also helps students gain the very best clinical legal education.

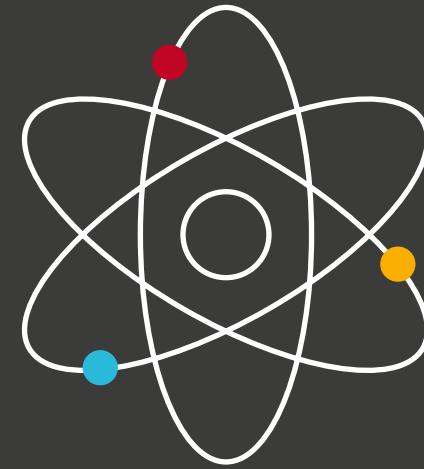


University

Volcanology research boost

George Elliston (LLB 1971) has helped to set up a new scholarship for research into volcanology in memory of his friend Michael Dreyfus (BSc 1971).

The new scholarship will give an Ethiopian student the opportunity to learn from Bristol's first-rate volcano specialists. Tesfaye Temtime Tessem will focus on the Ethiopian Rift. 'People are used to living with the risk of earthquakes in Ethiopia but it isn't a top priority for the government,' he says. 'Research like this is really important for improving people's understanding and assessing the threat they pose.'



Research

Turning nuclear waste into energy

Marking the start of a 'diamond age' of power generation, a Bristol team has developed new technology that uses nuclear waste to generate electricity in a nuclear-powered diamond battery.

A team of physicists and chemists from the University of Bristol have grown an artificial diamond that, when placed in a radioactive field, is able to generate a small electrical current. The development could solve some of the problems of nuclear waste, clean electricity generation and battery life. Unlike the majority of electricity-generation technologies, which use energy to move a magnet through a coil of wire to generate a current, the artificial diamond is able to produce a charge simply by being placed in close proximity to a radioactive source. The UK currently holds almost 95,000 tonnes of graphite blocks, and extracting carbon-14 from them would decrease their radioactivity, reducing the cost and challenge of storing this nuclear waste safely. Tom Scott, Professor in Materials in the University's Interface Analysis Centre and a member of the Cabot Institute, says: 'By encapsulating radioactive material inside diamonds, we turn a long-term problem of nuclear waste into a nuclear-powered battery and a long-term supply of clean energy.'



Alumni

Gift of a lifetime

The foundations of John Partridge's life and career were laid at Bristol. Now he is laying the foundations for future generations of engineers.

A record half-a-million-pound donation has been gifted by John Partridge (BEng 1962, Hon DEng 2016) towards Bristol's new £13 million facility. The vital space forms a major part of the new extension to the Queen's Building, which houses world-leading engineering research and is where John began his studies in 1959.



Research

20,000 babies saved by research

Research carried out at Bristol has saved the lives of an estimated 20,000 babies in the UK after changing official advice about safer sleeping for babies.

Together with local health visitors and GPs, Bristol's Peter Fleming discovered 25 years ago that if babies were placed on their backs – and not their fronts – to sleep, lives could be saved. His groundbreaking research informed the high-profile 'Back to Sleep' campaign in the early 1990s, which has since been described as the UK's single most effective health campaign ever.

In brief

In a recent study by High Fliers Research, Bristol was ranked ahead of Oxford and Cambridge as the **third most-targeted university** by Britain's top 100 employers.

Seventeen Bristol alumni were recognised in the **Queen's New Year Honours List** in January, among them Professor Richard Burdett CBE (BA 1978) for services to Urban Planning and Design, and Arjuna Fernando MBE (BEng 1992) for services to the Digital Economy.

The *Times Higher Education* ranked Bristol as **one of the most international higher education institutions in the world**, at joint 29th place alongside the University of Copenhagen.

Bristol has launched **Specialist Research Institutes** to reflect its strength and depth in seven key specialisms: biodesign; composites; cardiovascular disease; migration; populations; poverty; and quantum information.

News

Alumni

1 Honorary degree for Matt Lucas
Little Britain's Matt Lucas (Drama 1993-95) has been awarded an honorary Doctor of Letters degree from Bristol – 24 years after he started studying drama here.

University

2 University Challenge quarter finals
 Bristol's team led by student Alice Clarke (Medicine 2014-) fought off fierce competition from the UK's brainiest students to reach the quarter-final stage of the famous quiz show.

Research

3 400-million-year-old worm discovered
 A previously undiscovered species of a giant 'monster' worm with terrifying jaws has been discovered by Bristol researchers studying ancient fossils in a Canadian museum.

University

4 Shaun the Sheep in Guangzhou
 The much-loved character has a new home in China to mark the 15th year that Bristol and Guangzhou have been sister cities, which includes a partnership between universities.

Alumni

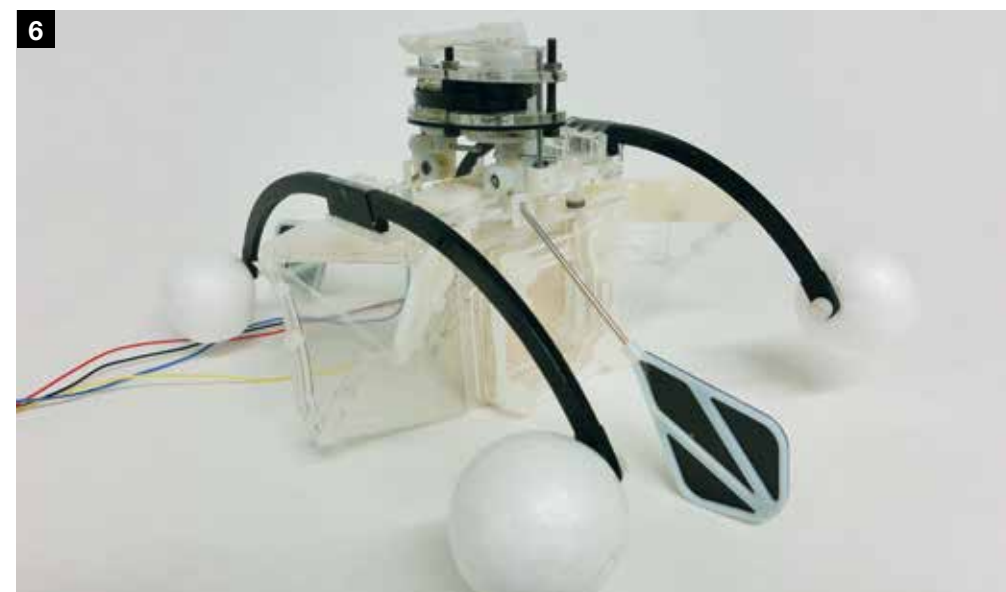
5 Bristol alumna as NPG Trustee
 Award-winning filmmaker and entrepreneur Rachel Wang (BA 1996), co-founder of Chocolate Films, has been appointed by the Prime Minister to be a Trustee of the National Portrait Gallery.

Research

6 Robot feasts on dirty water
 A robot developed at Bristol marks a crucial step towards autonomous robots capable of long-term self-power, technology that could play a major role in environmental clean-up efforts.

Students

7 Bristol divests from fossil fuels
 Working with staff, students and representatives from the University's Fossil Free Society, Bristol has announced plans to divest from the most carbon-intensive sectors of the fossil fuel industry. This move is part of the University's sustainability ambitions outlined in the new Strategic Plan.





Education

Bristol Scholars is the widening participation scheme that has been turning heads since its launch earlier this year, providing alternative entry routes into the University of Bristol on the basis of potential. *Nonesuch* finds out more.

Capturing talent

With a proud Russell Group tradition, solid academic reputation and geographical position in a diverse, pioneering culture, the appeal of Bristol is clear – yet the number of students from the local area going on to study in their home city has historically been low. Lucy Collins (BSc 2000, MSc 2004), Head of UK Student Recruitment at the University of Bristol, recognises the need for change. ‘Bristol has performed relatively poorly in its intake of the number of local students,’ she says. ‘We’ve seen progress in recent years, but there’s a need for us to do more and to do something different – a view shared by students, staff and alumni.’ Diversifying the student population is a key aim of the University’s new Strategic Plan. One of the ways in which the University

hopes to level the playing field is through the launch of Bristol Scholars – and following calls for top universities to improve social mobility, the timing of this radical new admissions scheme couldn’t have been more perfect. **Level playing field** The task of seeking out students in the community who could flourish at Bristol, but who may not have been accepted due to the high entry requirements, begins with developing a close working relationship with the post-16 institutions in the city: each of these schools and colleges is invited to nominate up to five students for the scheme. ‘We’ll need to develop close working relationships with students and with their parents, too,’ explains Collins. ‘Together, we’ll find the potential in our city’s schools and

colleges and provide alternative routes to our programmes, recognising that the students’ predicted results, or performance in Year 12, may not reflect their academic ability.’ Eligibility for the scheme will be based on head teachers’ assessments of potential and progress, rather than examination results alone. A submitted statement from the head teacher or director will explain why a student’s potential is not reflected in their predicted grades, along with details of their exceptional circumstances. **Removing the barriers** Economic disadvantage is one of a range of issues that the scholars may have faced, and financial assistance will be available to students whose household income is below £25,000. Priority will be given to students who

have overcome educational or domestic disadvantage and meet a range of widening participation criteria such as being the first in their family to attend university, being part of the Free School Meals cohort, living in care or being a young carer. ‘No two situations are the same,’ says Collins. ‘But all scholars will have shown their individual potential to succeed on our programmes of study, against the odds, and places will be offered to the most able students, regardless of their background.’ **Over the threshold** This September, the University of Bristol will open its doors to up to 40 talented and motivated Bristol Scholars, who will have proven academic potential in the face of considerable challenges during their studies

Above Lucy Collins, Head of UK Student Recruitment at the University of Bristol, hopes Bristol Scholars will level the playing field

Lucy Collins © Dave Pratt Photography

‘The University provides a table of offers, tailoring the standard offer by up to four grades’

at GCSE and A Level. Enabling aspiration is key to the scheme’s success.

Collins says: ‘We want our lecture theatres and libraries to be welcoming places for academically gifted and highly motivated students from a wide range of backgrounds – inclusive learning communities, equally supportive of all students. To that end, we’re delighted to be welcoming so many promising young students from our local schools and colleges who would otherwise not have got into Bristol.’

However, the scheme is not one of unconditional offers, as Collins explains: ‘The University provides a table of offers, tailoring the standard offer by up to four grades. The scholars will have proven their ability to succeed and contribute, and will continue to demonstrate that aptitude onto their programme of study.’

Transformative education

Bristol Scholars is the first scheme of its kind in the UK and the latest in a suite of widening participation initiatives in place at the University.

It has attracted much interest from other institutions, alongside a positive response from the press and from alumni.

‘Looking at talent only via grades is an outdated approach to student admissions,’ says Collins. ‘As alumni, we know the transformative effect the University of Bristol had on us – and we know that grades aren’t everything. That’s why the Bristol Scholars scheme strikes a chord. A university education changes lives and creates possibilities. Together, we can achieve a step-change in the diversity of Bristol’s student population, hopefully encouraging other UK universities to follow suit.’

Every chance of success

In addition to a guaranteed offer, scholars from under-represented backgrounds will be provided with a tailored package of academic and pastoral support to guide their development and ensure that they thrive at Bristol, as Collins explains: ‘We want to

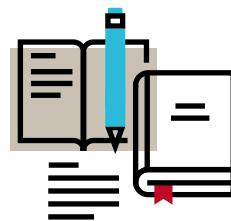


Above Education Secretary Justine Greening at the launch of Bristol Scholars in December

ensure that the students have every chance of succeeding. Once on to their programme of study, academic and pastoral mentoring will be provided along with administered support in the form of peer mentors, financial aid and skills sessions.’

Collins believes the next steps after having gained access to the University are critical in ensuring that the new cohort has the best opportunity to successfully integrate into student life.

‘We’re keen to develop a cohort effect, where students will work and socialise together so they don’t feel isolated, should they continue to live at home,’ she says. ‘Knowing each other before they start will make the transition that little bit easier.’



The 2017 intake

‘This year’s scholars who will be joining us in September are a varied, talented and engaging group – ingredients of brilliant students,’ adds Collins. ‘Bringing with them diversity of experience and perspective, they’ll no doubt enrich the University of Bristol. We can’t wait for them to arrive.’

The scheme has undergone thorough planning built on ten years of experience in fair access programmes such as Access to Bristol, IntoUniversity, and Bristol’s widening participation research which is sector-leading.

Ongoing research will be conducted to track the progress of Bristol Scholars, which will influence future admissions policies. ●

Did your Bristol education transform you? Could you help a Bristol Scholar? You could play an important role in strengthening our programmes and supporting current students. Email alumni-volunteers@bristol.ac.uk for more information.

Close to home

‘I am delighted that the University of Bristol is recognising and supporting the talents of students in our great city. It makes sense for Bristol to hold onto this talent and encourage these young people to study closer to home, providing the nurture and encouragement they need to take that next step and make their dreams a reality.’

Elisabeth Gilpin, Head Teacher of St Mary Redcliffe and Temple School

Lucy Collins © Bhagesh Sachania

Opening doors

Help bring the best and brightest students to Bristol

Bristol’s widening participation activities, and the research that underpins them, are recognised as sector-leading.

This September, we’re proud to be opening our doors to our first cohort of Bristol Scholars – talented and motivated students who will have proven academic potential in the face of considerable challenges.

‘A University of Bristol education changes lives and creates possibilities’

Lucy Collins, Head of UK Student Recruitment



Find out more and give online today at: bristol.ac.uk/alumni/give-back



Canary Wharf meets Copenhagen

City

Professor Hugh Brady, Vice-Chancellor and President of the University of Bristol, unveils plans for a new campus in the heart of the city's new Temple Quarter Enterprise Zone.



Visualisation of Bristol Basin View
© Richard Carman and City Design Group

Twenty years ago, nobody could have imagined that over two billion people today would be carrying around a small, yet powerful computer that can connect you with almost anyone, anywhere. That life would be dominated by apps, social media and big data.

The world is well and truly in the midst of a digital revolution. With new horizons and opportunities, we've been given a once-in-a-generation chance to re-imagine the future of our University. One where technology, policies, practices, business models, and businesses fit for our digitalised society, come together.

Bristol is at the beginning of a new era. With our partners, we've been working on an ambitious plan for a new campus at the heart of the city's Temple Quarter Enterprise Zone. It will be completely porous with the city, serving the social, economic and talent needs of the region, which will position both the University and the city for continued success on the world stage.

Our plans include a major new initiative in business education, pioneering a new suite of degree programmes at the interface of disciplines such as mathematics and computer science. Positioned hand-in-glove with this initiative will be our Digital Innovation Hub – an ambitious research and innovation platform – co-created with industry. It will

marry the strengths of the local economy with our own academic strengths in new and imaginative ways.

We know this approach works. Our vision is built upon our established strengths such as the Engine Shed. The enterprise hub contributed £7 million to the economy in its first year, and has supported 72 companies through the Bristol SETsquared Centre, raising £76 million and creating 410 jobs. It was a hugely successful collaboration between the University and the City. Our new Digital Innovation Hub will do this and more, providing a thriving digital economy with the pipeline of talent, ideas and technologies that it will need.

Bristol is one of the most beautiful, liveable and vibrant cities in Europe, and as a university we have a unique relationship with our city. We share dreams to secure the international recognition we deserve and, more importantly, we share the desire to serve all communities, ensuring that Bristol students are the most talented and able regardless of their background.

Our Temple Quarter Enterprise Campus (a working title) will be a beacon for collaboration, evolution, and opportunity. It will be the place where the most exciting, revolutionary ideas will spring from. It's where the future will be written, with Bristol, the city and the University, at the forefront of discovery for the next one hundred years.

'Our Temple Quarter Enterprise Campus will be a beacon for collaboration, evolution, and opportunity'

Professor Hugh Brady, Vice-Chancellor and President

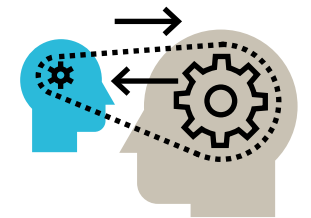


Opposite Professor Hugh Brady, Vice-Chancellor and President of the University of Bristol, and Bristol Mayor Marvin Rees
Left The site where the new Temple Quarter Enterprise Campus will be built



'Bristol's melting pot of culture and talent make it the perfect place for innovation and forward thinking'

Marvin Rees, Mayor of Bristol



Marvin Rees, Mayor of Bristol

When visitors come to Bristol they will no longer be greeted with a derelict building, but by a flourishing and inclusive home for digital excellence, innovation, education and industry – the University of Bristol's new campus. The old is making way for the new.

Over the past few years, I've seen Bristol racking up the awards as one of the happiest, most creative, coolest, kindest, and most inspiring places to live. This is true, but it is not the whole truth. Like all cities, we have our challenges. The city's success does not reach everyone living here and there is a long-standing inequality that needs resolving. But, we are willing to face these challenges head-on, meaning there is hope for the city.

People recognise a culture in Bristol – a drive to ask questions and push boundaries, one that doesn't accept the status quo. This culture, alongside Bristol's supply of world-class talent and its globally connected population, make it the perfect place for innovation and forward thinking.

The future of UK industry relies on the ability of cities to lead in the digital and technological sectors, and we have become one of the world's leading digital cities. In 2014 *The Guardian* named Bristol as the UK's

smartest city, and in part this is down to our partnership with the University. Some of the most exciting programmes are happening here; from the trialling of driverless cars, to SPHERE – the healthcare sensor platform that will bring care into the home, to Bristol is Open, which will see Bristol become the first programmable city.

The Temple Quarter Enterprise Zone will play an important part in growing Bristol by being open and inclusive so that everyone can be part of Bristol's prosperity and vision. Diversity and education are essential for the future of Bristol and meeting our challenges. Our success will be determined by our ability to bring people together in new ways, connecting local people, businesses, academics and students both to each other and to a vast range of opportunities, now and in the future.

Fully developed, the Enterprise Zone has the potential to add a further £100 million a year to the city's economy, and will attract even more investment as people and industry begin to set their sights on Bristol. Working side-by-side with the University, our untapped potential is being realised, and I've no doubt that together, as a whole, united, Bristol will be a more inclusive city benefitting all who live, work and visit in the years to come. ●

In numbers

2021/22

The campus will hopefully be open in time for the start of the 2021/22 academic year

£100m

The development has the potential to add £100 million a year to Bristol's economy

70

The area covers 70 hectares of land, including the derelict site of the former Royal Mail Sorting Office

The University of Bristol has shown 2020 vision when it comes to developing students with the skills they'll need to thrive in their future careers. **Dr Kirsten Cater** from the Centre for Innovation talks to *Nonesuch* about the radical new programmes offered at Bristol.



Bristol's 2020 VISION



Posing for a picture in a cap and a gown, proudly clasping a degree from Bristol, graduation marks the start of an exciting new journey for thousands of alumni every year. But long before this special day is in sight, the pressure is on to stand out from the crowd. It's not just about passing exams; employers are looking for graduates who can think on their feet.

Bristol is the first university in the UK to combine in-depth subject specialisms with innovation and entrepreneurship built into the curriculum, taught at its newest academic hub, the Centre for Innovation. And it wastes no time in setting out its ambitions for its first cohort – who are set to graduate in 2020 – asking students right off the bat: do you want to change the world?

Fifty-five students got off the starting blocks in September 2016 on 11 four-year integrated Master's courses combining the intensive study of their chosen academic specialism with experience of entrepreneurship, design and innovation.

Academic Director Dr Kirsten Cater explains: 'It's a radical departure from traditional higher education courses in that these students will approach their core subject from an interdisciplinary angle throughout their degree – and learn how to apply those skills to real-life situations.

'By the time they graduate, they'll be thoroughly equipped with the entrepreneurial skills, knowledge and experience to bring about positive changes to their world – whether that's through innovating and starting their own businesses or becoming leaders and influencers in a variety of industries and social enterprises.'

World-changing potential

As part of the Innovation side of their course, Centre for Innovation students are set real-world projects and given briefs from external clients which so far have included global challenges such as recycling, flooding, education and transportation.

Dr Cater continues: 'They work in teams to come up with innovative solutions to real-world challenges. In order for us to achieve this, it means breaking down barriers: students today are hesitant to take risks, to come up with ideas, and it's because they're scared of failure. That's where our Innovation

'We often learn far more from our mistakes than we do from our successes'

Above With a new dynamic degree programme, the University of Bristol will propel and develop the innovators of tomorrow

programmes really come into their own. We've created a course where it's okay to take risks and it's okay to fail, but to learn rapidly from it and to pivot their thinking exploring other opportunities and ideas.

'We often learn far more from our mistakes than we do from our successes. What matters is how quickly our students can reflect on why the failure happened, adapt quickly in their thinking and move on.'

The academic team at the Centre for Innovation will use the next four years to instil a seismic shift towards an innovative solutions-driven mindset. In that time, students will also be expected to take their innovative ideas through to entrepreneurial development and implementation with confidence. As the innovators of tomorrow, they will be encouraged to collaborate, pursue and embrace opportunities, explore new ideas, and take intellectual risks.

'They might not know it yet, but creativity and agility will become their greatest assets, putting them in a better position to cope with and thrive on whatever challenges come their way,' says Dr Cater. 'And in an ever-changing world where decisions are being made that can't be predicted, the importance of being agile and adaptable can't be overstated.'

The driving themes of the programmes stem from some of the University's main research areas: sustainability and the environment, health and healthcare, and education and learning. Centre for Innovation graduates will be known for their ability to engage with and contribute effectively to some of the world's key

challenges, uninhibited by the accepted and traditional way of approaching things.

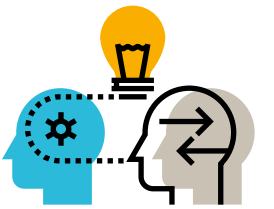
Dr Cater explains: 'We follow a studio-based applied teaching approach for the Innovation part of their curriculum. Students move the tables and chairs to wherever they want them, sometimes spending significant time standing up scribbling on whiteboards or sitting on the floor making paper prototypes to visualise their ideas. We've had one workshop where we ended up throwing paper everywhere, one where the students had to create a dance routine, and often the whole studio is covered in post-it notes, including the windows.'

'At the end of the day it's what students are looking for. I'm not saying that formal lecture theatres don't have their place but when you're talking about delivering this kind of applied content and learning, it's in doing it themselves that has real impact.'

Sought-after graduates

Innovation students will be taught and mentored by industry experts and world-leading academics, providing them with a blend of practical and theoretical knowledge. Dr Cater hopes that the Centre will become a catalyst for connection, facilitating networking opportunities, partnership engagements and outreach, both internally and externally.

'We're delighted to have external partners mentoring the students, helping them to develop the courage to take risks and the curiosity to explore different ideas and opportunities. They're also on hand to support business plan competitions, access to investors and angel networks, and to



Aspiring entrepreneurs

'It's so motivating to work with students from different disciplines and it works really well. We all bring a different perspective to our group work, and I love it when together we can create an idea that we would never have thought of individually. Of course, not all of our ideas are that great – but it's interesting looking at something from all angles, just in case it might be.'

Holly Simpson (Anthropology with Innovation, 2016-)



Left Holly Simpson's degree programme will deliver the depth of an Anthropology degree with the breadth and experience of working beyond it through the Innovation part of her course



'All great companies are constantly innovating to stay ahead of the game'



offer their expertise in person through guest lectures and workshops. All the way through their course, our Innovation students will be able to draw on a network of mentors and investors, and for those students who are ready to start their own venture that network will be ready to support them.'

Dr Cater also recognises the benefit of an academically rigorous and industry-focused curriculum.

'They will be some of the most sought-after graduates entering the workforce,' says Dr Cater. 'All great companies are constantly innovating to stay ahead of the game and our graduates will fit right in with their core subject strength as well as their ability to innovate and think about future markets and opportunities. The most successful innovators and entrepreneurs understand a subject area in detail so that they are able to create a suite of products or services to solve problems in that area, rather than just being a one-hit wonder.'

Bristol's innovators

The University of Bristol is proud to count among its distinguished alumni entrepreneurs Will Dean (BSc 2003), CEO and Founder, Tough Mudder.

'When I was at Bristol as an undergraduate, I'd have jumped at the opportunity to have been able to access a programme like this,' says Will. 'These students are learning what it means to write a business plan and pitch to investors, to take an idea and put it into action. It's all about execution. Tough Mudder isn't the only company of its type out there, and we didn't invent mud runs or obstacle courses. There are a set of steps that aspiring entrepreneurs can follow – and those steps can be taught. It is a pleasure to be in a position to offer Bristol students access to people who have been there and done that. People who have tried, made mistakes and learned from them – it's all part of it.'

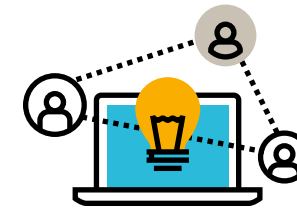
Another alumnus who has shown exemplary entrepreneurial zeal is Paul Lindley (BSc 1989), Founder of Ella's Kitchen.

'I was intrigued and excited by the University of Bristol's own innovative thinking in establishing a degree course in innovation,' says Paul. 'Having spent a day immersed with the staff and students, and after giving a lecture and workshop, I'm hugely impressed by the potential to inspire and encourage world change-makers to think new thoughts; to fail, learn and iterate and to develop the people with the creativity and resilience our 21st-century society and economy cries out for. It shows Bristol continues to lead in the relevance, variety and application of its courses and support.'

Sky's the limit

Other universities offer modules on entrepreneurship or opportunities to work on real-world challenges with students studying other subjects but no other university has gone as far as embedding this in the curriculum over a four-year integrated Master's degree, making the courses offered by the Centre for Innovation uniquely attractive to prospective students. Dr Cater explains: 'There's nothing we can find that is similar to what we have created and we know from enquiries, open days and applications that the demand is high.'

Opposite above Innovation students will push discoveries out of the classroom and into the world
Opposite left Universities play an ever more central role in incubating new ideas and technologies
Right Students like Megan will learn how to use multidisciplinary approaches to solve complex problems



Aspiring entrepreneurs

'This unique course seemed ideal for me, as I was always interested in Psychology, but combined with Innovation it allows me to understand how I can apply the psychology learnt in real-world situations and business ideas. I'm really enjoying the programme. So many of the projects we've done are centred on understanding your user and asking the right questions. It's really applicable to the Psychology part of my degree.'

Megan Florence
 (Psychology with Innovation, 2016-)

The successes of entrepreneurial alumni such as Will and Paul serve to inspire current and future students who aspire to follow in their footsteps.

'Students today aren't short of role models in the media,' says Dr Cater. 'It can seem like famous entrepreneurs and innovators have set a superhuman benchmark but all it takes is one face-to-face conversation to realise that they're just people – people who have had an idea and the guts to go for it. Gradually, our Innovation students are coming around to the idea that they've got it in them. The line of questioning is: if not you, who? If not now, when?'

Alumni and friends have helped in a variety of ways to get the Innovation Programmes up and running, through gifts, advice on curriculum and extra-curricular development, setting real-world challenges and briefs, acting as mentors and offering internships as well as providing connections and access to networks.

Dr Cater says: 'I have been working on developing these programmes over several years and it is difficult to express how proud I am: of the University of Bristol for embarking on this new venture, of our staff across the University who helped to make it possible, and of the students who are just beginning their innovation and entrepreneurial journey.'

'We're looking forward to the day our Innovation students become alumni and hearing about their achievements. And we'll certainly be inviting some of them back as guest lecturers and mentors, and so the cycle continues.' ●





7 things you didn't know about Sir Paul Nurse

University

Bristol's new Chancellor **Sir Paul Nurse** is not one to shy away from a challenge. *Nonesuch* reveals some surprising facts about one of the world's most celebrated scientists.

1 Spiders and satellites sparked his early curiosity in science

Were it not for the long, lonely walks from his childhood home in North London to primary school, Nurse might never have had the opportunity to wonder why spider webs were located where they were, or why plant leaves grew to different sizes in the shade and sunlight. In 1958, aged nine, he went running out into the street to watch Sputnik speed across the sky, which sparked a lifelong amateur interest in astronomy. This early curiosity would eventually lead him to answer one of the most significant questions about the nature of living organisms and how cells divide.

2 He's far from a conventional academic

Nurse didn't take to the academic system instinctively, failing French GCE at school six times and being turned down by Cambridge, Sussex and York universities as a result. He almost gave up experimental biology in favour of philosophy because of the often unrewarding demands of experiments, although these experiences toughened his resolve and his empathy for how students experience research today.

3 He sold the Socialist Workers Party newspaper as a student

During his time at university, Nurse met his wife Anne. Her influence, along with the 1960s climate of social activism, the Vietnam War and his family background, gave him the confidence to challenge prevailing ideas in society. Today, as head of Europe's largest biomedical research centre, Nurse's vision is one of 'gentle anarchy'.

4 The woman he thought was his sister was actually his mother

When the US Department of Homeland Security challenged Nurse's application for a green card, he discovered that his grandparents had brought him up as their own after his mother became pregnant aged 17. To this day, the blank space where his father's name should be on his birth certificate remains a mystery.

5 In 1997, he single-handedly crash-landed an aeroplane

While flying in Oxfordshire, the undercarriage of Nurse's plane jammed up so his propeller wouldn't clear the ground; he was forced to make an emergency landing with no wheels down and with the engine off.

6 He sees science as a 'liberalising and progressive force for humanity'

Nurse doesn't shy away from challenging bureaucrats who stand in the way of scientific evidence: while President of the Rockefeller University of New York, he publicly criticised former US President George Bush for banning public funding for stem cell research, which Nurse said put science 'under siege'.

7 And he thinks scientists should speak up

Nurse has long been a champion of the need for science to demonstrate its own worth, once saying: 'We as scientists cost a lot of money – we have to justify what we do. We have to engage with politicians if we are to maintain support for science, which is for the public good and promotes the economy.'



Accolades

Became a Fellow of the Royal Society in 1989, knighted ten years later for his contributions to cell biology and cancer research. Awarded the Copley Medal of the Royal Society in 2005, and the Nobel Prize in 2001 along with Leland Hartwell and Tim Hunt for their discoveries of the network of genes that control cell division. Elected as a member of the US National Academy of Sciences in 1995, a Fellow of the UK Academy of Medical Sciences in 1998, and President of the Royal Society in 2010. Appointed an Honorary Fellow of the Royal Academy of Engineering in 2012 and of the British Academy in 2016.

Opposite Sir Paul Nurse is a Nobel-prize winning cell biologist and geneticist with an impressive list of credentials (60 honorary degrees and fellowships to date)

Bristol's Dr Emma Brennand (PhD 2008) was part of the team that created *Planet Earth II* with Sir David Attenborough. The nature enthusiast talks to *Nonesuch* about her Bristol years, the highs and lows of filming, and why nature documentaries should feature more ants.

A natural progression

If you'd told me ten years ago that I'd be in an Attenborough series, I'd never have believed you. I never had a career plan as such, but I liked environmental chemistry because it helped me to understand what was going on in the world; my PhD focused on fertilisers in the soil system, and knock-on effects on greenhouse gases. While at Bristol, I was lucky enough to work with two world-renowned professors, who are still there now – Richard Evershed and Richard Pancost. I lived in a house in Southville with other PhD students and in my spare time I joined the University of Bristol Underwater Club where I did a lot of scuba diving. I went from having no experience of it at all to becoming an instructor. Back then, we had two boats and we'd go off on adventures around the Isle of Mull. I still offer to help out when I can. It's nice to be able to give something back.

'More people have stood on the top of Everest than have stepped foot on Snare's Island'

For me, going from science to journalism felt like a natural progression. I wanted to share these fascinating things I'd been learning about with everyone around me, scientists or not. Starting with my family, and later doing outreach in schools, I made it my mission to make science accessible and interesting. I was already used to critically analysing facts as a scientist, making sure that whatever I say is well-referenced and checking multiple sources, and that's really similar to journalism. You need all of that in

order to present a balanced argument and a story worth telling. I think some of the most interesting stories are about insects – especially ants. Their world is absolutely fascinating and terrifying in equal measure, filled with back-to-back episodes of merciless violence, brutal rivalry and globe-spanning armies that wouldn't sound out of place in *Game of Thrones*. And that's why we love watching them so much.

Leaving only footprints

I started off at the BBC working on web resources for teachers writing about building hedgehog homes. I moved from project to project until I eventually got offered a role on TV for a show called *Animals Behaving Badly* and have never looked back. *Planet Earth II* took about three and a half years to produce. I worked on two of the episodes: 'Mountains', and 'Islands'. The most challenging shoot for me was probably the Buller's albatross because of the logistics of getting a crew to a sub-Antarctic island. There are zones of the Southern Hemisphere where there are hardly any landmasses to act as windbreaks, so the air currents are exceptionally strong.

Add to that New Zealand's environmental regulations protecting the Snares Islands: we were the first film crew to ever be granted permission to land, after a lot of negotiation, so it was a huge privilege. Before we could set sail, our kit had to be unloaded, vacuumed and disinfected, and our boat had to be scrubbed down and put into strict quarantine. A single seed or insect could lead to the establishment of a new pest species that can alter the islands forever. More people have stood on the top of Everest than have stepped foot on Snare's Island. Two days from the end of our visit, we were relieved to finally witness and film the courtship dance of a pair of albatrosses. It was a very special moment. ●

Dr Emma Brennand © Mark MacEwen

Bristol graduate and documentary filmmaker Dr Emma Brennand on location for BBC's *Planet Earth II*



Scaling the wall

Support

Big White Wall, a safe online community offering peer and professional support, is allowing Bristol to help more students with mental health difficulties get the assistance they need to achieve their full potential.

In common with the rest of the higher education sector, the University of Bristol has seen a significant increase over the past few years in the proportion of our student population seeking support for emotional, psychological and mental health issues.

‘Students these days feel under increasing pressure to perform,’ says Mark Ames, Director of Student Services. ‘Coming to university is now a major financial investment, and students are aware that competition for good quality graduate jobs is increasingly fierce. The prevalence of social media also means that today’s students are constantly comparing and contrasting the edited highlights of each others’ lives which can sometimes have negative effects on their confidence and mental health.’

The University provides a range of support to students throughout their time at Bristol: each residence has a pastoral team comprising a warden, deputy warden and student support adviser; and, within their Schools, students are allocated a personal tutor to help with their academic, professional and personal development. A range of more specialist services is also available for those needing further assistance, including the Students’ Health Service, Student Counselling Service and Chaplaincy.



Illustration © Peloton Design

'It can seem less intimidating to share your problems online than speaking to someone face to face'

Safety and anonymity

However, with one in two GP appointments in the Students' Health Service being mental health-related, the Student Counselling Service working at the limits of its capacity, and the Vulnerable Students' Support Service handling a 70 per cent increase in casework since last year, additional ways of providing individual support are clearly needed. Moreover, students themselves have indicated that they want a place outside other University services where they can raise mental health issues.

That's where the Big White Wall (BWW) comes in. Available 24/7 and completely anonymous, BWW is an online community for people who are anxious, down or not coping. It provides a space where they can share what's troubling them, and offer help and support to each other. Professionally trained 'Wall Guides' operate in the background to ensure the safety and anonymity of members.

Established in 2007 by social entrepreneur Jen Hyatt, BWW is used across the UK by other universities, the NHS, service personnel and various employers. It was inspired by a project on a London housing estate where, prior to demolition, the local community painted their homes white and were encouraged to express their thoughts about the estate through words and pictures applied directly to the walls.

Last year, a pilot study, part-funded by alumni donations, was undertaken at Bristol to test BWW's suitability as a supplement to the University's existing mental health support provision.

The site proved popular with students, who particularly valued the fact it can be accessed anonymously and is available all the time, with half of logins taking place in the evenings, overnight and at weekends when the University's other services are closed or significantly reduced.

'You can vent how you're feeling, in a safe way, when it might not be a good time to call friends or family, such as the middle of the night,' says one Bristol student who used BWW. 'The anonymity also makes it easier to talk about things that you might not feel you can share with people you know for fear of worrying them more than necessary.'

The online aspect of BWW was also part of its attraction: 'It can seem less intimidating to share your problems online than speaking to someone face to face,' another Bristol user says. 'Such forums have made finding those with similar issues to you easier than ever, and it's only a short step between reading about the issues of others and posting your own.'

Around half of students who responded to a pilot project questionnaire said the support they had received from BWW helped them do better in their academic work. More than two thirds said it had improved their student experience and just over half said it had helped them seek further support. As a result, Big White Wall will now be available to all Bristol students this year, thanks in part to funding from our generous community of alumni and friends.

'It was really helpful that alumni were prepared to support the pilot study of Big White Wall, both financially and by offering advice on the evaluation,' adds Ames. 'This is a great example of how we can use alumni donations to test new approaches and get an evidence base for something that could become a core part of University provision.' ●

To find out more about BWW, visit: bigwhitewall.com.



In memoriam

Alumni in memoriam

The University extends its sincere condolences to the friends and families of those listed below for whom we have received notification of death.

Joan Pennison (née Hopkins) (BA 1937, Diploma 1938) died November 2016

Professor Edward Trimble (BSc 1944) died October 2016, aged 92

Veronica Macmillan (BSc 1945, Cert Ed 1946) died December 2016, aged 91

Geoffrey Stoate (LLB 1945) died November 2016, aged 91

Dr Charles Pengelly (MB ChB 1946, MD 1959) died 2016, aged 93

Joan Pentelbury (née Parsons) (BA 1946, Cert Ed 1947) died January 2016, aged 89

Edna Walford (née Evans) (BA 1946, Diploma 1948) died June 2016, aged 91

John Whiteley (BA 1947, Cert Ed 1948) died October 2016, aged 95

Betty Bennett (née Jones) (BA 1949) died December 2016, aged 87

Eunice Pickard (BA 1949) died July 2016, aged 91

Eileen Rivington (BSc 1949) died 2016

Dorothy Russell-Smith (née Taylor) (BA 1949) died 2016, aged 89

Dr Glyndwr Walters (MB ChB 1949, MD 1958) died October 2016, aged 90

Dr Catherine C Walters (MB ChB 1949), died December 2016, aged 91

Trevor Wright (BA 1949, PGCE 1950, MEd 1970) died October 2016, aged 95

Brenda Bardgett (née Pilkington) (BA 1950) died April 2016, aged 86

Derek Stirland (BSc 1950) died April 2016, aged 87

Ann Birkby (née Rowley) (BA 1951) died February 2016, aged 87

Eric Manley (BSc 1951) died December 2016, aged 89

David Rex (BA 1951) died November 2015, aged 86

Arthur White (BSc 1951, Cert Ed 1952) died August 2016, aged 89

Dr Kenneth Fawcett (MB ChB 1952) died October 2016, aged 93

Rosemary Humpherson (née Arbuthnot) (BA 1952) died December 2012, aged 82

Barbara Jester (née Bateman) (BA 1952, Cert Ed 1953) died November 2016, aged 86

Beryl Smith (née Chamberlain) (BA 1952) died March 2015, aged 85

Professor Mambillikalathil Menon (PhD 1953) died November 2016, aged 88

John Minihane (BA 1953) died October 2016, aged 85

The Rev Mr Cyril Payne (BA 1953) died December 2014, aged 88

Michael Symons (BA 1953) died December 2016, aged 85

Dr Geoffrey Bond (MB ChB 1954) died October 2016, aged 86

Derek Colman (BSc 1954) died October 2016, aged 86

Dr Derek Priest (BSc 1954, PhD 1959) died August 2016, aged 85

Richard Burnett (BSc 1955) died February 2016, aged 81

David Owen (BSc 1955) died October 2016, aged 85

Canon Lisle Sharp (BA 1955, Cert Ed 1956) died November 2016, aged 82

Geoffrey Davis (BA 1956, PGCE 1958) died June 2016, aged 82

John Mellor (LDS 1956) died September 2016, aged 84

Sylvia Wheeler (BA 1956, Cert Ed 1957) died January 2016, aged 81

Dr Louis Billington (BA 1957, MLitt 1967) died November 2016, aged 80

Colin Coates (BA 1957, MA 1960) died March 2016, aged 79

George Ellis (BVSc 1957) died August 2016, aged 82

Dr Thomas Waters (MB ChB 1957) died August 2016, aged 86

Roger Anstey (BSc 1958) died October 2016, aged 82

Wilson Barrett (BA 1958, Cert Ed 1960) died September 2016, aged 79

David Machin (BA 1958) died August 2016, aged 79

Dr John Cook (BSc 1959) died October 2016, aged 81

Margaret Sellin (née Carter) (BSc 1959, MSc 1962) died May 2016

Peter Carr (BSc 1960, PhD 1971) died October 2016, aged 78

Dr Jeffery Nicholas (MB ChB 1960) died September 2011, aged 76

Frank Burrow (BSc 1961, Cert Ed 1962) died February 2015, aged 74

Beryl Howard-Allen (BA 1961) died March 2016

Anthony Lees (BDS 1961) died 2016, aged 78

Edward Hossell (BSc 1962) died 2016, aged 75

Kevin Lyonette (BA 1962) died 2016, aged 77

Simon Pascoe (BSc 1962) died September 2016, aged 76

Malcolm Ridley (LLB 1962) died August 2016, aged 75

David Lloyd (BA 1964) died 2016, aged 77

Michael Milan (BA 1964) died June 2014, aged 73

Professor Brian Moss (BSc 1964, PhD 1968) former staff member died May 2016, aged 72

Anthony Clarke (BDS 1965) died October 2016, aged 77

Professor Antony Rest (BSc 1965, PhD 1968, DSc 1985) died June 2016, aged 73

Dr Paul Wallace (PhD 1965) died November 2016, aged 79

Nicolette Dixon (née Household) (BA 1966) died March 2016, aged 71

Peter Jones (BA 1966-1969) died November 2015, aged 68

Alexander Bjornson (BVSc 1967) died 2016, aged 71

Barry Shears (BSc 1967) died June 2016, aged 70

Dr David Williams (LLB 1967, LLM 1975, PhD 1979) died September 2016, aged 70

Peter Carter (BSc 1968) died July 2013, aged 66

Victoria Winks (née Dean) (BA 1968, PGCE 1970) died 2016, aged 69

David Moon (BEd 1969) died October 2016

Hilary Morgan (née Lewis) (LLB 1969) died January 2016, aged 68

Dr David Neville (BSc 1971) died April 2016, aged 66

Robert Davies (BSc 1973) died 2016, aged 66

Hind Makiya (BA 1973) died March 2016, aged 63

Christopher Orchard (BSc 1973) died September 2016, aged 64

Dr David Woodcock (DSc 1973) died October 2016, aged 101

The Rev David Bain (BA 1975) died August 2016, aged 62

Dr Tony Edwards (BA 1975, PhD 1979) died May 2016, aged 84

Jeremy Lewis (BSc 1975) died December 2016, aged 63

Elaine Millward (née Edwards) (BSc 1975, MSc 1976) died July 2015, aged 61

David Cuss (BSc 1977) died July 2016, aged 60

Patrick Korrane (BSc 1978) died 2016, aged 60

Stephen Speak (BA 1978) died 2016, aged 63

Phyllis Perrin (née Syngge) (BA 1979, Cert Ed 1980) died December 2016, aged 86

Dr Ian Scott (BSc 1979) died February 2016, aged 57

Richard Wilson (BSc 1979) died August 2016, aged 59

Hannah Richards (BVSc 1980) died January 2017, aged 63

Susan Porter (Cert 1981) died 2017, aged 63

Richard Routledge (BSc 1982) died November 2016, aged 57

Sara Hamilton (BA 1984) died August 2016, aged 54

Howard Jeffrey (BSc 1984) died October 2016, aged 53

Sir Peter Maxwell Davies (Hon DMus 1984) died March 2016, aged 81

Lisa Dance (née Cowell) (BSc 1986) died February 2016, aged 50

Joanne Moller (BA 1986) died January 2017, aged 51

Dr Florence Evans (MPhil 1990) died November 2016, aged 89

Margaret Thomas (MEd 1993) died 2015, aged 60

Barry Barnes (MSc 1996) died September 2014, aged 66

Dr Ding Ding (BSc 1998, MBChB 2012) died 2015, aged 40

Anbalagan A/L Munusamy (MEd 1998) died November 2015, aged 59

Elizabeth Erlund (MSc 2002) died December 2016, aged 36

Rossano Sollazzi (MSc 2002) died June 2016, aged 36

David Tweed (PhD 2002) died January 2017, aged 42

Hannah Hotston (née Woor) (MSc 2008) died July 2015, aged 41

Oliver Brown (MEng 2010) died August 2016, aged 33

Nicholas Russell (PhD 2016) died August 2016, aged 28

.....
Jean George former staff member died March 2016

Emeritus Professor Robert (Bob) Chambers former staff member died December 2016, aged 92

Professor Roy Parker former staff member died January 2017

Dr Sue Porter former staff member died January 2017

.....

Please email any notifications for alumni in memoriam to alumni@bristol.ac.uk



Calendar May 2017 to December 2017

Make sure you're invited to relevant events in your area by updating your details at bristol.ac.uk/alumni/mydetails.

MAY

**Saturday 20 May
Charter Day
(invitation only)** // Bristol



JULY

**Friday 14 to Sunday 16 July
Best of Bristol Alumni
Weekend 2017** // Bristol
Bristol's new Chancellor
Sir Paul Nurse will be giving
a talk at the University of Bristol
on 15 July

OCTOBER

**Saturday 7 October
Cambridge Branch annual
dinner** // Cambridge

**Tuesday 17 October
London Branch AGM &
Olympian panel** // London

**Thursday 19 October
Wills Hall Association annual
reception** // London

NOVEMBER

**Saturday 18 November
Officer Training Corps annual
dinner** // Bristol

DECEMBER

**Thursday 7 December
Alumni Association Student
Awards and reception** // Bristol

**Monday 11 December
London Branch carol service**
// London

SEPTEMBER

**Friday 15 to Sunday
17 September
The Student Scout and
Guide Organisation
(SSAGO) 50th Anniversary
Reunion and Celebration
camp** // London

**Saturday 23 September
Benefactors' Reception
(invitation only)** // Bristol

**Friday 29 September to
Sunday 1 October
Eastern Canada reunion**
// Pictou, Ontario

Don't miss your chance to vote for your 2017 Alumni Association (Convocation) representatives on Court, and on the Alumni Association Committee. You can find out who's standing for election, and vote, at bristol.ac.uk/take-part.

Online and postal voting close at midnight on Friday 14 July. If you would like a paper ballot form, please contact the volunteers team on +44 (0)117 394 1051. You will also be able to vote in person at the AGM on Saturday 15 July, part of the Best of Bristol Alumni Weekend.



Julie Goldstein (BSc 1978)
Chair of Convocation and the Alumni Association

This has been another remarkable year for our University and I would like to express my warmest thanks to all our volunteers around the world who have contributed their time, expertise and resources in so many ways by organising events and working with the Development and Alumni Relations Office to help build an engaged alumni community.

I am delighted to report the high level of commitment expressed in response to the launch of the new Strategic Plan. As alumni we represent a significant stakeholder group and there are many ways that we can get involved. The members of the Convocation and Alumni Committee and the Development and Alumni Relations Office are working together on several new programmes especially those targeted to support the launch of the Bristol Futures initiative and development of student employability skills.

We are looking forward to getting together for the Best of Bristol Alumni Weekend 2017 on Friday 14 to Sunday 16 July offering another stimulating programme of events. We will be hearing about the University's developments from our Vice-Chancellor and President, Professor Hugh Brady and we are very excited that our new Chancellor and President of Convocation and the Alumni Association, Sir Paul Nurse FRS will be joining us for his first Alumni Weekend.

The 2017 AGM will be held on Saturday 15 July. This is your opportunity to vote for your representatives on the CAAC and on Court. We continue to look for more diverse representation and welcome hearing from alumni with an interest in supporting the student experience and employability initiatives.

Reasons to be proud of Bristol

Bristol was the first higher education institution in England to admit women on an equal basis to men

Our heritage: in 1929, Sir Winston Churchill became the University's third Chancellor

13 Nobel Prizes have been awarded to Bristol graduates and members of staff

'Beating heart' surgery technique pioneered at Bristol is now used in 20% of operations worldwide

Today, Bristol is rated in the top 50 universities in the world (QS World University rankings 2016)

Keep in touch

Telephone **+44 (0)117 394 1046**

Email alumni@bristol.ac.uk

Website bristol.ac.uk/alumni



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Did you know that you could benefit a specific department or subject area with your legacy gift? Directing your legacy this way means that you can help future generations of students to thrive and support cutting-edge research at Bristol in an area that is most important to you. We also continue to be grateful for unrestricted legacies, which provide us with the flexibility to support areas of greatest need across the University.

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